



<p>A01 Horizontal/Vertical Rotary Table</p> <p>HV-4-12</p>	<p>A02 Rotary Table Special Accessories</p> <p>DP-1-5</p>	<p>A03 Tilting Rotary Tables</p> <p>NEW</p> <p>VUT-6-12</p>	<p>A04 Multiple Tilting Rotary Table</p> <p>NEW</p> <p>VUT-250,300</p>	<p>A05 Semi-Universal Dividing Head</p> <p>BS-0, 1</p>
<p>A06 Universal Dividing Head</p> <p>BS-2</p>	<p>A07 Super Indexing Spacer</p> <p>CS-6,8</p>	<p>A08 Simple Indexing Spacer</p> <p>CC-12</p>	<p>A09 Precision Index Table</p> <p>VIT-</p>	<p>A10 Economical Type Rapid Index</p> <p>VSI-4-5</p>
<p>A10 Simple Rotary Chuck</p> <p>NEW</p> <p>VSR-6,8</p>	<p>A10 Precision Universal Angle Chuck</p> <p>NEW</p> <p>VUA-100J</p>	<p>A11 Universal Tilting Rotary Table</p> <p>VU-100-200</p>	<p>A11 Universal Tilting Rotary Table</p> <p>VU-300</p>	<p>A12 Hydraulic Machine Vise</p> <p>VH-4-12 VH-8L</p>
<p>A13 Tilting Hydraulic Machine Vise</p> <p>VHT-4,6</p>	<p>A14 Universal Tilting Hydraulic Machine Vise</p> <p>NEW</p> <p>VHT-4U,6U</p>	<p>A15 Hydraulic Machine Vise</p> <p>VHO-5, 8</p>	<p>A16 Ang-Fixed Vise</p> <p>VA-4-8</p>	<p>A17 K-Type Milling Vise</p> <p>VK-4-8</p>
<p>A18 Super Open Vise</p> <p>VJ-400-600</p>	<p>A18 2-Way Angle Milling Vise</p> <p>VWT-4B,6B</p>	<p>A19 3-Way Angle Milling Vise</p> <p>VW-3-5</p>	<p>A19 2-Way Machine Vise</p> <p>VWT-5,6A</p>	<p>A20 Self Centering Vise</p> <p>NEW</p> <p>VCV-0611,1090</p>
<p>A47 U/N Work Stopper</p> <p>VWS-123,125</p>	<p>A21 Modular Precision Machine Vise</p> <p>VMP-</p>	<p>A22 Modular Precision Hydraulic Machine Vise</p> <p>NEW</p> <p>VMP-</p>	<p>A23 Modular Machine Free Vise</p> <p>VMP-</p>	<p>A24 Lock-Fixed II Precision Machine Vise</p> <p>VMC-4,6</p>
<p>A24 Double Clamp Vise</p> <p>NEW</p> <p>VCV-4D</p>	<p>A24 Compound Precision Vise</p> <p>NEW</p> <p>VCV-44</p>	<p>A25 MC Power Vise</p> <p>NEW</p> <p>VQC-</p>	<p>A30 MC Power Vise Hydraulic Type</p> <p>NEW</p> <p>VQC-</p>	<p>A31 MC Power Vise</p> <p>NEW</p> <p>VQC-</p>
<p>A32 MC Power Vise Hydraulic Type</p> <p>NEW</p> <p>VQC-</p>	<p>A33 Universal MC Power Vise</p> <p>NEW</p> <p>VQCV-</p>	<p>A35 Soft jaws</p> <p>MJ FJ</p> <p>VQC-</p>	<p>A36 Hard Jaws-L Type Jaws</p> <p>MJL FJL</p> <p>VQC-</p>	<p>A37 Precision Compact MC Vise</p> <p>VMC-</p>



A38 Precision MC Power Vise
VMC-

A39 NC Hydro Machine Vise
VNC- **NEW**

A40 Combination M/C Power Free Vise
VNC-100 FV **NEW**

A41 VNC Axial Drive & Plain Jaw
VNC-4AD,5AD,6AD **NEW**

A41 VNC Axial Drive & Plain Jaw
VNC-4AD,5AD,6AD **NEW**

A42 Precision pneumatic Ang-Fixe Power Vise
VMC- **NEW**

A42 Precision pneumatic Ang-Fixe Power Vise
VMC-6PD **NEW**

A43 Convenience Type Machine Vise
VCM-47 **NEW**

A43 Super Opened Ang-Fixe Machine Vise
VMC-4L **NEW**

A44 Quick Setting Vise
VQS-3-5

A44 Machine Vise for Shaping & Milling Use
VSM-

A45 B-Type Milling Vise
VBV-4-6

A45 Free Vise
FV-SV-

A46 Super Open Drill Vise
VRV-4,5,6 **NEW**

A46 Drill Vise
DV-85,100,120 **NEW**

A46 Steel Bench Vis Without Base
BVV- **NEW**

A47 T Slot Clamps
CK- **NEW**

A47 Quick Bench Vise
VQS-40

A48 Universal Vise Jaws With Work Stoper
VWSJ-

A48 Prisma Jaw
VWS-

A49 52-Pc Steel Clamping Kit
CK-

A49 Individually Parts T-Slot Nut

A50 Coupling Nut

A50 Flange Nut

A51 Clamping Studs

A52 Step Clamp

A54 Step Block

A52 C-Clamp Cast Steel
VCL- **NEW**

A53 Ground Parallels
VP-100

A53 Ground Parallels
VP-118A

A53 Ground Parallels
VP-128A

A54 Precision Parallels
VP-136

A54 VP-018 Thin Type Parallels Set
VP-018

A54 VP-163 Precision Parallels
VP-163

A54 VP-064 Precision Parallels
VP-064

A55 VP-050 Precision Parallels
VP-050

A55 VP-033 Precision Parallels
VP-033

A55 VP-146 Ground Parallels
VP-146 **NEW**

A55 VP-168 Ground Parallels
VP-168 **NEW**

A56 VP-200 Ground Parallels
VP-200 **NEW**



A56 Adjustable Angle Plate
VP-180-600

A56 Angle Plate With Swivel Base
VP-250S,380S

A57 Precision Cross Table
VCT-

A57 Precision Cross Table
VCT-830

A57 Cross Table
VCT-512

A57 Precision Cross Table
VCT-520RT

A58 Right Angle Head
VRA-

A58 Horizontal Milling Attachment
VHA-

A59 Power Table Feed X.Y.Z Axis
VPF-

A60 Air Power Drawbar
PD-

A61 Precision Slotting Head
VSH-

A62 Precision Right Angle Plate
VRH-4-8

A62 Right Angle Plate
VR-6-12

A62 Slotted Angle Plate
VR-45-120

A62 Plain Angle Plate
VR-22-1212

A63 Screw Jack
VSJ-

A63 Screw Jack With Magnet
VSJM-

A63 Screw Jack Sets
VSJ-A-B

A64 U-Clamp
VCA-

A64 Pivot Clamp
VCB-

A64 Hand Drift
VHD-

A65 Eye Shield
VH-56

A65 Milling Table Slot Cover
VST-10-36

A65 Vee Blocks
V-2V-8V

A65 Auto Center Punch
VACP-1

A66 Draw Bar
VDR-

A66 Expandable Machine Guard Cover
VGC-

A66 5C.C32.OZ25 Collet Rack
VMS-5

A66 Table Slot Plate
TP-90-18

A66 Parts Storage
VHB-

A67 Universal Cutter Grinder
U2

A68 Chamfering & Deburring Unit
VCF-500

A68 Chamfering & Deburring Unit
VCF-500W

A68 Chamfering & Deburring Unit
VCF-500F

A69 Chamfering & Deburring Unit
VCF-500S

A69 Chamfering & Deburring Unit
VCF-600

A69 Chamfering & Deburring Unit
VCF-700

A70 Chamfering & Deburring Unit
VCF-300A

A70 Ejector Pin Cutting-off Unit
VEC-100

A71 Rods Precision Cutting-Off And End Surface Grinding Unit
VEC-



A72 Dustproof Halogen Lamp Beam
VHL-

A73 Dustproof Halogen Lamp Beam
VHL-

A74 Quartz Halogen Lamp Beam
VHL-

A74 Water - Proof Bright LED Signal Light
VLED-SL
NEW

A75 Cool Light Beam
VHL-

A75 Waterproof Reflector LED Lamp
VLED-W13,W36
NEW

A76 Magnifying Fluorescent Work Light Beam
VHL-

A77 Water-Proof Halogen Lighting Beam
VHL-

A78 Dustproof Halogen Lamp Beam
VHL-

A79 Water Proof LED Lamp
VLED-
NEW

A80 Concentrate LED Lamp
VLED-30L
NEW

A80 Concentrate LED Lamp
VLED-20L
NEW

A81 1/8 HP. Under Water Coolant Pump
VWP-

A81 1/4 HP. Under Water Coolant Pump
VWP-

A81 Self Priming Coolant Pump 1/8 HP. 1/4 HP
VWP-

A82 Coolant Pump Kit
VWP-

A82 Under Water Type Multi-stage High Pressure Coolant Pump
VWP-

A83 Hand Lubrication Pump
LT-4

A83 Hand Lubrication Pump
LT-6

A83 Hand Lubrication Pump
EA-8R

A84 Hand Lubrication Pump
LA-8

A84 Hand Lubrication Pump
SMA-

A84 Hand Lubrication Pump
VL-

A85 Shock Absorber
VSA-25K
NEW

A85 Shock Absorber
VSA-35K
NEW

A85 Hand Lubrication Pump
VSA-150K
NEW



<p>B01 Punch Former</p>  <p>V-PB</p>	<p>B01 Punch Former</p>  <p>V-PS</p>	<p>B02 3-Jaws Punch Former</p>  <p>V-PS-80J</p>	<p>B02 ER Collet Dividing Punch Former</p>  <p>V-PS-ER</p>	<p>B02 Sine Plate For all Type Punch Former</p>  <p>V-PS-SP</p>
<p>B02 ER Collet Dividing Punch Former</p>  <p>V-PS-ER32S</p>	<p>B02 ER Collet Dividing Punch Former</p>  <p>V-PS-ER50S</p>	<p>B02 3-Jaws Punch Former With Sine Plate</p>  <p>V-PS-80JS</p>	<p>B03 Punch Grinder</p>  <p>V-PGS</p>	<p>B03 Punch Grinder</p>  <p>V-PG</p>
<p>B03 Punch Grinder</p>  <p>V-PGM</p>	<p>B03 Punch Grinder</p>  <p>V-PGA</p>	<p>B04 Mine Tool Maker Vise</p>  <p>VMV-10</p>	<p>B04 Tool Maker Vise</p>  <p>VMV-15-60</p>	<p>B04 Tool Maker Vise</p>  <p>VDV-20-40</p>
<p>B05 Sine Vise</p>  <p>SVB-20-30</p>	<p>B05 Sine Vise</p>  <p>SVD-200-300</p>	<p>B05 Precision Universal Angle Vise</p>  <p>VUA-3,4</p>	<p>B06 Precision Universal Angle Vise</p>  <p>VUA-408,510</p>	<p>B06 Precision Universal Angle Chuck</p>  <p>VUA-100J</p>
<p>B06 Precision Universal Angle Collet Chuck</p>  <p>VUA-ER40</p>	<p>B07 Tool Makers Vise</p>  <p>VC-20-30</p>	<p>B07 Tool Makers Vise</p>  <p>V-VE20-VE30</p>	<p>B07 Precision Sine Vise</p>  <p>SVC-100</p>	<p>B07 Precision Sine Vise</p>  <p>SVL-50</p>
<p>B07 Two Way Vise</p>  <p>SVS-100</p>	<p>B08 Sine Bar With Magnetic</p>  <p>V-S50M,S100M</p>	<p>B08 Sine Bar</p>  <p>VS-100</p>	<p>B08 Sine Bar-Inch</p>  <p>V-S25,S50</p>	<p>B09 Angle Plate</p>  <p>VAP-1-3</p>
<p>B09 Micro-Adjustable Angle Plate</p>  <p>VAPM-1-3</p>	<p>B09 Precision V Block</p>  <p>V-3VA-5VA</p>	<p>B10 Precision Angle Blocks</p>  <p>AB-130</p>	<p>B10 Universal Angle Block Set</p>  <p>AB-163,164</p>	<p>B10 Micrometric Tangent Bar & Angle Gauge Block Set</p>  <p>AB-166</p>
<p>B10 Solid Angle Plates</p>  <p>AB-167</p>	<p>B11 Precision Angle Blocks</p>  <p>AB-113</p>	<p>B11 Hardened Steel Squares</p>  <p>SS-304-312</p>	<p>B11 Precision Steel Angle Plates</p>  <p>VRS-</p>	<p>B12 Square</p>  <p>FS-204-208</p>



<p>B12 V-Block With Clamps</p> <p>VBC-</p>	<p>B12 V-Block With Clamps</p> <p>VBC-003</p>	<p>B12 V-Block With Clamps</p> <p>VBC-006</p>	<p>B12 V-Block With Clamps</p> <p>VBC-243</p>	<p>B12 V-Block With Clamps</p> <p>VBC-009</p>
<p>B13 Electrode Vise</p> <p>VEH-20</p>	<p>B13 Electrode Holder</p> <p>VRA-20~100</p>	<p>B13 Electrode Holders</p> <p>VEH-20MS</p>	<p>B13 Electrode Holders</p> <p>VEH-20DS</p>	<p>B14 Tool Maker Vise (STAINLESS)</p> <p>VSTV-10V</p>
<p>B14 Tool Maker Vise (STAINLESS)</p> <p>VBST-30</p>	<p>B14 Tool Maker Vise (STAINLESS)</p> <p>VSTV-25</p>	<p>B15 EDM Tool Marker Vise (STAINSS)</p> <p>VSTV-50W</p>	<p>B15 EDM Tool Marker Vise (STAINSS)</p> <p>VSTV-100W</p>	<p>B15 EDM Tool Marker Vise (STAINSS)</p> <p>VSTV-150W</p>
<p>B15 EDM Tool Maker Vise</p> <p>VSTV-320W</p>	<p>B16 EDM Wire (BRASS & COPPER)</p> <p>VEW-</p>	<p>B17 Wire Dies Guide</p> <p>VWB-</p>	<p>B18 Electrode (Copper & Brass Pipe Electrode)</p> <p>VEB-</p>	<p>B18 EDM Filter For EDM (Oil)</p> <p>NH-</p>
<p>B19 Tangimatic Dresser</p> <p>V-TDA</p>	<p>B19 Tangimatic Dresser Handy Type</p> <p>V-TDH</p>	<p>B19 Radius And Angle Dresser</p> <p>V-TDB</p>	<p>B20 Universal Wheel Dresser</p> <p>V-TDC</p>	<p>B21 Precision duplex Dresser</p> <p>V-TDF</p>
<p>B21 Radius And Angle Dresser</p> <p>V-TDG</p>	<p>B21 Radius And Angle Dresser</p> <p>V-TDE</p>	<p>B22 Optical Radius Angle Dresser</p> <p>V-TDT</p>	<p>B22 Matco Sine Dresser</p> <p>VP-50</p>	<p>B22 Matco Sine Dresser</p> <p>V-50D</p>
<p>B23 Diamond Wheel Dresser</p> <p>V-TDD</p>	<p>B23 Motor type CBN Flat Wheel Dresser</p> <p>V-TDM</p>	<p>B23 Wheel Hanger</p> <p>VWH-</p>	<p>B23 Grinding Wheel Flang</p> <p>FKT-250,FTA-350</p>	<p>B24 Wheel Balancing Stand</p> <p>WBS-300</p>
<p>B24 Level Balancing Stand</p> <p>LBS-</p>	<p>B24 Driving Carrier</p> <p>VDC-</p>	<p>B25 Sine Plate</p> <p>V-47~</p>	<p>B25 Compound Sine Plate</p> <p>V-47S~</p>	<p>B26 Magnetic Sine Plate</p> <p>V-47M~</p>



<p>B26 Magnetic Sine Plate With Fine Pole</p> <p>V-47MF~</p>	<p>B27 Adjustable Sine Plate With Fine Pole Magnetic Chuck</p> <p>V-66SA</p>	<p>B27 double Way Sine Plate With Permanent Magnetic Chuck</p> <p>V-47MS</p>	<p>B27 Double Way Sine Plate With Fine Pole Magnetic Chuck</p> <p>V-47MSF</p>	<p>B28 Rotary Permanent Magnetic Plate</p> <p>VLU-</p>
<p>B28 Rotary Fine Pole Permanent Magnetic Plate</p> <p>VLU-</p>	<p>B28 Hi-Power Mini Type Permanent Magnetic Plate</p> <p>VG-</p>	<p>B29 Angular Permanent Magnetic Plate</p> <p>VG-</p>	<p>B29 Middle Pitch Permanent Magnetic Chuck</p> <p>VGf-</p>	<p>B30 Fine Pole Magnetic Plate</p> <p>VRTW-</p>
<p>B30 Round Type Magnetic Plate</p> <p>VGD-</p>	<p>B30 Fine Pole Round Type Magnetic Plate</p> <p>VGDW-</p>	<p>B31 Permanent-Electro Magnetic Chuck</p> <p>VPE-</p>	<p>B33 Permanent Magnetic Lifter (ON/OFF Type)</p> <p>VML-</p>	<p>B35 Standard Pole Electro Magnetic Chuck</p> <p>VEM-</p>
<p>B35 Super-Powerful Electric Magnetic Chucks</p> <p>VEM-</p>	<p>B36 Chuck Controller (For Rectify & Demagnetize)</p> <p>VCC-705</p>	<p>B36 Chuck Controller (For Rectify & Demagnetize)</p> <p>VCC-805A,815</p>	<p>B36 Chuck Controller (For Rectify & Demagnetize)</p> <p>VCC-820</p>	<p>B36 Variable Speed Rotary Magnetic Chuck</p> <p>VRM-</p>
<p>B37 Magnetic Lifter</p> <p>VGP-</p>	<p>B37 Magnetic Lifter</p> <p>VML-</p>	<p>B38 Magnetic Transisting Block</p> <p>VCP-</p>	<p>B38 Magnetic Transisting Block Set</p> <p>VCP-6</p>	<p>B38 Magnetic Adjustable Link</p> <p>VCP-5</p>
<p>B39 Magnetic Steel Sheet Separator</p> <p>VCP-10,11</p>	<p>B39 Magnetic Chip Collector</p> <p>VCP-15</p>	<p>B39 Magnetic Separating Bar Unit</p> <p>VMS-7B,9B</p>	<p>B40 Demagnetizer</p> <p>VDM-40</p>	<p>B40 Demagnetizer</p> <p>VDM-50</p>
<p>B40 Demagnetizer</p> <p>VDM-68</p>	<p>B41 Demagnetizer</p> <p>VDM-8,11</p>	<p>B41 Mini Type Demagnetizer</p> <p>VDM-9</p>	<p>B41 Tunnel type Demagnetizer And Magnetizer</p> <p>VDM-</p>	<p>B42 Chip collector Mini Handy Type</p> <p>VCC-16</p>
<p>B42 Chip Collector With Adjustable Arm Type</p> <p>VCC-17A</p>	<p>B42 Chip Collector With Wheels</p> <p>VCC-19</p>	<p>B42 Chip Collector With Flexible Arm</p> <p>VCC-20</p>	<p>B42 Chip Collector With LED</p> <p>VCC-21</p>	<p>B43 Magnetic V Block</p> <p>VCP-25</p>



B43 Magnetic V Block
VCP-26,27

B43 Magnetic V Block
VCP-29,30

B43 Magnetic Square Block
VCP-31,32

B44 Magnetic Tools
VMB-

B44 Magnetic Tools
VMB-

B45 Magnetic Tools
VMB-
VML-

B45 Magnetic Tools
VMB-

B46 Magnetic Tools
VMF-,VMS-

B46 Magnetic Tools
VMH-

B47 Multi-Function Mist Coolant System
VCS-500

B47 Mist Coolant With Magnetic Base
VMH-71

B47 Diamond Dressing Tools
VDR-10, 33, 50

B48 Adjustable Magnetic Nozzle Kit
CL-

B49 Adjustable Coolant Hoses & Valves
VHK-

B50 1/4" System

B51 1/2" System

B52 3/8", 3/4" System

B53 Paper Filter
PF-

B53 Magnetic Separator
MC-

B54 Magnetic Separator & Paper Filter
MC+PF-

B55 Coolant Tank
VC-601

B55 Dust Collector
VC-602

B55 Dust-Suction And Coolant Tant
VC-603

B55 Dust-Suction & Coolant Tant W/Magnetic Separator
VC-606

B56 Oil Skimmer With Belt Type
VOS-800,810

B56 Oil Skimmer With Belt Type
VOS-820,830

B56 Oil Skimmer With Rotary Plate Type
VOS-850

B57 Precision Gauge Blocks
VGB-

B58 Ceramic Gauge Blocks
VGB-

B59 Cast Iron Surface Plates
VS-

B59 Black Granite Surface Plates
VSG-

B60 Granite Square Rulers
VQR-400,500

B60 Granite Straight Rulers
VSR-630,1000

B60 Granite Triangle Ruler
VGT-

B60 Granite V-Block
VGV-63,100

B60 Horizontal Leveling Instrument
VLI-200A,300A

B60 Precision Square Level
VSL-200A,300A

B61 Granite Surface Stand
VH-45-47

B61 Cylindrical Squares Steel
VCS-300,400

B61 Cleaning Paper
P-1000



B62 Concentric Test Stand
VCI-

B62 Concentric Test Stand
VCI-

B62 Fixed Speed Punch Former
NEW
V-PS-80M

B62 Pin Gauge
VPG-

B63 Thread Size & Depth Gauge
NEW
VSD-

B63 Precision Vernier Caliper
VVC-6"~12"

B63 Digital Electronic Caliper
VEC-6"~12"

B63 Dial Caliper
VDC-6~12

B63 Outside Micrometer
VOM-

B63 Inside Micrometer
VIM-

B64 Dial Indicator
VDI-1

B64 Dial Test Indicator
VDI-0.8A

B64 Height Vernier Caliper
VHG-12~24

B64 Height Dial Caliper
VHD-12,24

B64 Micrometer Stand
VH-19

B64 Micrometer Stand
VH-19

B64 Measuring Tool Kits
NEW
VVC-20

B65 Angle Level
VAL-

B66 Hardness Tester
NEW
VHT-260

B66 Stainless Steel Ruler
NEW
VSR-150

B67 Plug Gauge
NEW
VPG-3M

B67 Plug Gauge
NEW
VRG-3



C01 ER Spring Collet Chuck System

C02 ER Spring Collet Chuck System

ER-

C04 ER Spring Collet Chuck System

C06 ER Spring Collet Chuck System

C08 ER-GB Top Collets

C09 Collet Chuck Kit With ISO Taper Shank

V-101~226

C10 Extended Collet Holder With ISO Shank

V-231~250

C11 Collet Holders With R-8 Shank

V-301~318

C12 Collet Holders With Morse Taper Shank

V-401~437

C13 Collet Holders With Straight Shank

V-501~530

C14 Collet Holders With Straight Shank

V-601~684

C15 MiniType Straight Shank Holder

V-551~698

C16 Clamping Nuts For Collets

V-800~810

C17 Clamping Wrench For Collets

V-811~824

C18 Collet Holders With BT Taper Shank

V-700~727

C19 Collet Holders With BT Extension Type BT Taper Shank ER-16, ER-20

V-733~779

C20 Collet Chuck Kit With BT Taper Shank

C21 ST/ER Straight Shank With Double Head Spindle

V-830~837

C21 ST/ER Straight Shank With Single Head Spindle

V-841~848

C22 ER-SK Taper Shank

V-741~763

C23 Collet Holder With CAT-Shank

V-870~890

C24 Milling Chuck

VB-

C25 DIN 6388 Collet For Milling Chuck

OZ-

C26 DIN 6388 Nuts & Wrench

OZ-

C27 OZ-25 Collet Holder With BT-Shank

VB-

C28 Collet Holder With BT-Shank OZ-32 MAS 403

VB-

C29 Collet Holder With ISO-Shank OZ-32

VB-

C30 Collet Holder With DIN 69871A & Cat Type

VB-261~291

C31 Posi-Lock Milling Collet Chuck

VC

C32 Multi-Lock Milling Chuck

VB-431~452

C33 Multi-Lock Milling Chuck

VB

C34 C-20,25,32,42 Collet

C34 C-20,25,32,42 Wrenches

C35 Quick-Change Tooling System

VD

C36 TG 100 Collet System

TG10

C37 5C Collet System

5C

C37 R8 Collet System

R8

C38 U2 Collet System

VE

C38 MT3 Collet System

MT3

C38 Drill Chucks Arbor

VJ



<p>C38 Drill Chucks Arbor</p>  <p>VJ</p>	<p>C39 Morse Taper Sleeve</p>  <p>VQ</p>	<p>C39 Morse Taper Extension Sockets</p>  <p>VQ</p>	<p>C39 R8 With Morse Taper Sleeve</p>  <p>VQ-122,123</p>	<p>C40 Face Mill Arbor</p>  <p>VF-101~137</p>
<p>C41 Morse Taper Adapter</p>  <p>VI-101~111,VI-131~138</p>	<p>C41 Jacobs Taper Drill Chuck Arbor</p>  <p>VJ-103,106,109</p>	<p>C41 Tang For Morse Taper Shank</p>  <p>VMT- NEW</p>	<p>C42 Right Angle Heads For Machining Center</p>  <p>VHA</p>	<p>C42 Oil-Feed Holder / Slo</p>  <p>OC,BT</p>
<p>C43 Face Mill Arbor</p>  <p>BT-101~121 BT-150~166</p>	<p>C44 Drill Chuck Holder / APU</p>  <p>BT-180~188</p>	<p>C44 Morse Taper Adaptor</p>  <p>BT</p>	<p>C44 Jacobs Taper Arbor</p>  <p>BT</p>	<p>C44 Lever Checking Holders WELTON TYPE</p>  <p>BT40-M8,BT50-M8</p>
<p>C44 Test Arbor</p>  <p>A30,40,50</p>	<p>C45 Sidelock End Mill Holder</p>  <p>BT</p>	<p>C46 Pull Studs BT30,40,50</p>  <p>BT-501~512</p>	<p>C46 Pull Studs BT40,50</p>  <p>BT-516~521</p>	<p>C47 Pull Studs DIN 69872, A Type</p>  <p>BT-522</p>
<p>C47 Pull Studs ISO-A Type And B Type</p>  <p>BT-529~532</p>	<p>C48 Pull Studs</p>  <p>BT-533~548</p>	<p>C49 Complete NC Tooling Set</p>  <p>VBT</p>	<p>C50 Complete NC Tooling Set</p> 	<p>C52 Face Mill Holder</p>  <p>SK-112~120</p>
<p>C52 Morse Taper Holder-DIN 6383</p>  <p>SK-214~220</p>	<p>C53 Sidelock End Mill Holder</p>  <p>SK-417~431</p>	<p>C53 Drill Chuck Holder / APU</p>  <p>SK-509~514</p>	<p>C54 Face Mill Holder</p>  <p>CAT</p>	<p>C54 Side Lock Holders</p>  <p>CAT</p>
<p>C54 Morse Taper Holders</p>  <p>CAT</p>	<p>C55 HSK-A63(DIN-69893) Tool Holder</p>  <p>HSK-A63</p>	<p>C55 HSK-A63(DIN69893A) ER Collet Chucks</p>  <p>HSK</p>	<p>C55 HSK-A63(DIN69893A) OZ Collet Chucks</p>  <p>HSK</p>	<p>C56 HSK-A63 Morse Taper Holders</p>  <p>HSK</p>
<p>C56 HSK-A63 Face Mill Holders</p>  <p>HSK</p>	<p>C56 HSK-A63 Face Mill Holders</p>  <p>HSK</p>	<p>C57 DC High Speed slim Chuck System</p> 	<p>C57 MAS BT30/40 Collet Chuck</p> 	<p>C58 Cylindrical Shank Of DC Slim Chuck</p> 



<p>C58 Set Of DC Collets And Collet Chuck</p>	<p>C59 Small Collet Of Slim Collet Chuck</p> <p>DC6</p>	<p>C59 Collet For End Mill Shank</p> <p>DC6-3E,4E,6E</p>	<p>C60 High Speed Chuck</p>	<p>C61 SK Spring Collet System</p> <p>SK</p>
<p>C63 BT-SK Collet Chuck System</p> <p>SKB-201~233</p>	<p>C63 Set Of SK Collet And MAS BT Chuck</p> <p>SKB-301~315</p>	<p>C64 ST-SK Straight Chuck</p> <p>SKS-210~214</p>	<p>C64 Set Of SK Collet And Straight Chuck</p> <p>SKS-231~234</p>	<p>C64 SK Nut And Wrench</p> <p>SKN,SKW</p>
<p>C65 ER Collet Chuck System</p> <p>BT30,40</p>	<p>C65 KNT Type Keyless Drill Chucks</p> <p>KNT-</p>	<p>C66 3D-Taster</p> <p>V-3D</p>	<p>C66 Integrated Type Keyless Drill Chucks</p> <p>INT-</p>	<p>C66 Integrated Type Keyless Drill Chucks</p> <p>BT40,SK40</p>
<p>C67 Integrated Type Keyless Drill Chucks</p> <p>INT-</p>	<p>C69 Keyless Drill Chucks</p> <p>TYPE:XHSP</p>	<p>C69 Keyless Drill Chucks</p> <p>TYPE:H</p>	<p>C70 Keyless Drill Chucks</p> <p>TYPE:S</p>	<p>C70 Keys</p>
<p>C71 Key Type Drill Chucks</p> <p>TYPE:G</p>	<p>C71 Ball Bearing Key Type Super Chucks</p> <p>TYPE:H</p>	<p>C72 Key Type Drill Chucks</p>	<p>C72 Keys Type Drill Chucks Stainless</p> <p>NEW</p>	<p>C72 Keyless Drill Chucks Stainless</p> <p>NEW</p>
<p>C72 Keys For Stainless Key Type Drill Chuck</p> <p>NEW</p>	<p>C74 Modular Boring Systems</p>	<p>C74 Taper Shank For Boring Heads Series BST,VBK</p>	<p>C75 Large Diameter Twin-Bit Rough Boring</p>	<p>C75 Large Diameter Finish Boring Head</p>
<p>C76 Indexable Twin-Bit Rough boring Head RBH</p>	<p>C77 Taper Shank For Boring Heads Series BST,VBK</p>	<p>C77 Extension (Reduced)</p>	<p>C77 Extension (Constant Diameter)</p>	<p>C78 Indexable Twin-Bit Rough Boring Head RBH-LA</p>
<p>C78 FBH Finish Boring Head</p>	<p>C79 FBH Finish Boring Head</p>	<p>C79 Small diameter Boring Head CBI4</p>	<p>C80 Carbide tool Holder</p>	<p>C80 Insert Holder For Carbide Tool Holder</p>



<p>C80 RBH Indexable Twin-Bit Rough Boring Head</p>	<p>C80 Indexable Twin-Bit Rough Boring Head RBH-LA</p>	<p>C80 Large Diameter Modular Rough Boring Head With Diameter Over Ø200mm</p>	<p>C81 Precision finish Boring Head Sets</p> <p>NEW</p> <p>VBHD-</p>	<p>C82 Precision finish Boring Head Sets</p> <p>NEW</p> <p>VBHE-</p>
<p>C83 Precision Finish Boring Head Sets</p> <p>NEW</p> <p>VBH55</p>	<p>C84 Precision Finish Boring Head Sets</p> <p>NEW</p> <p>VBH68</p>	<p>C85 High Precision Boring Head Set</p> <p>NEW</p> <p>VBH620-</p>	<p>C86 High Precision Boring Head Set</p> <p>NEW</p> <p>VBH2084-</p>	<p>C87 Universal boring And Facing Master Hand</p> <p>VBHU-</p>
<p>C88 Interchangeable Shanks</p>	<p>C89 Boring Head Sets</p> <p>VBH-</p>	<p>C90 Boring Head Set C-Type</p> <p>VBHC-</p>	<p>C90 Boring Head Set C-Type</p> <p>VBHC-</p>	<p>C90 Boring Head Shank C-Type</p> <p>VBC-</p>
<p>C91 C-Type Boring Head</p> <p>VBC-2,3,4</p>	<p>C92 Touch Point Sensor</p> <p>VPS-20B,32B</p>	<p>C92 Touch Point Sensor</p> <p>VPS-20,32</p>	<p>C93 Touch Point Sensor</p> <p>VPS-201,201C</p>	<p>C93 Touch Point Sensor</p> <p>VPS-401,401C</p>
<p>C94 Touch Point Sensor</p> <p>VPS-301,302,301C</p>	<p>C94 Centering Indicator</p> <p>VCI-170</p>	<p>C95 Height Presetter</p> <p>HP-50Z,50ZM</p>	<p>C95 Height Presetter (For Machining Center)</p> <p>HP-100</p>	<p>C96 Z-Zero-Setter</p> <p>HP-50A,50B,50AM,50BM</p>
<p>C96 Electronic Tool Length Setter</p> <p>HP-50EM,100EM</p>	<p>C97 Reversible Tapping Attachment For Drilling & Milling Machine</p>	<p>C97 Tap Chuck Series</p> <p>VTA-13,16</p>	<p>C97 Drill Tapper</p> <p>VDT-33</p>	<p>C98 Reversible Tapping Attachments</p> <p>VTA7-</p>
<p>C99 Tap Chuck</p> <p>VTA-35000,35002</p>	<p>C99 Expansible Tapping Holder</p> <p>VET</p>	<p>C100 Expansible Tapping Holder</p> <p>VET</p>	<p>C101 Quick Change Tapping Chucks</p> <p>BT30-WF12</p>	<p>C104 Adjustable Wrenches</p> <p>VWR-40,60</p>
<p>C104 Quick Change Tapping Chucks</p> <p>VQT-</p>	<p>C106 Quick Change Tapping Chucks</p>	<p>C107 Quick Change Tapping Chucks</p> <p>TC-320,820,1433-</p>	<p>C108 Quick Change Tapping Chucks</p>	<p>C109</p> <p>Tap Shank Dimensions</p>



C110 Mini Type Arm Type Air Tapping Unit
 VAT-

C110 Small Arm Type Air Tapping Unit
 VAT-

C111 Arm Type Air Tapping Unit
 VAT-

C112 Air Tapping Unit
 VAT-

C112 Air Tapping Spindle
 VAT-SP

C112 Parallel Arm For Air Tapping Unit
 VAT-ARM

C113 Adjustable Angle Head For Air Tapping Unit

C113 Magnetic Base For Air Tapping Unit
 VLM-300A,600A

C113 Tapping Collet Adapter

C114 Mist Coolant System For Air Tapping Unit
 VAC-08

C114 Collet Rack For Air Tapping Unit
 VCR-08

C114 Working Table
 VAT-912T **NEW**

C115 Deluxe Type tool Setting Stand
 VTD-

C115 Simple type Tool Setting Stand
 VTS-

C116 Tool Holder Locking Device
 VTG-

C116 Tool Holder Locking Device
 VTL-

C116 Tool Holder Locking Fixtures
 VTL-

C117 End Mill Sheath Rack
 VMS-2

C117 End Mill Sheath Rack
 VMS-3 **NEW**

C117 Spindle Taper Wiper
 VTW-

C117 Spindle Taper Wiper
 VTW- **NEW**

C117 Spindle Taper Wiper
 VTW-

C117 Tooling Carts
 VTT **NEW**

C118 Tooling Trolleys
 VTT-2,5,6

C118 Tooling Sheath Rack
 VTTR-

C118 Tooling Sheath
 VTTS-

C119 Tool Presetter
 TP-3040E

C119 Tool Presetter
 TP-3040

C120 Tool Cabinet
 VTC-23,25

C120 Tooling Trolleys
 VTC-100

C121 Hydro Lift Table
 VLT-300 **NEW**

C121 Workbench
 VLT-300 **NEW**

C121 Hydro Pallet Trolleys
 HPT- **NEW**

C122 Parts Cabinet
 VA6-

C122 Tool Box
 VTB-102,901

C123 Standard

C123 Drill Chuck Taper



E01 Light Duty Live Center
VPC-

E01 Live Lathe Center
VLC-

E02 High-Speed NC Live Center
VLC-

E02 High-load NC Live Center
VCF-

E03 Inter-Changeable Points Live Center
VLC-

E03 High-Speed NC Interchangeable Points Live Center
VCS-

E03 High-Load Interchangeable Points Live Center
VCP-

E04 Bull Nose Center
VLC-

E05 Lathe Centers
VLC-

E05 Work-Driving Center
VDC-

E05 Work-Driving Center-Changeable Tips
VDC-30-MT4

E06 Dead Center
VLC-126~130

E06 Inter-Changeable Point Rolling Center
VLC-612

E06 Live Lathe Center
VLC-172~175

E07 3 Jaw Self Centering Chuck
VSC-

E07 3 Jaw Powerful Self Centering Chuck
VSK-

E08 4 Jaw Self Centering Chucks
VPS-

E08 4 Jaw Self Centering Chucks
VPS-

E08 3 Jaw Powerful Camlock Type Self-Centering Chuck
VSKC-

E09 DIN-Type 3-Jaw Self-Centering Chucks
VSC-

E09 4 Jaw Independent Chuck Plain Back
VKC-

E10 3 Jaw Scroll Chuck
VSC-

E10 3 Jaw Powerful Scroll Chuck
VSK-

E11 Machining Jaw Chuck
VMJ-

E11 Super Thin Chucks
VNBK-

E12 Soft Jaw For SK-Type Chuck
VJSJ-6~16

E13 Soft Jaw Hydraulic Power Chucks
VHC-5~15

E14 Soft Jaw Forming Ring
VFR-

E14 Soft Jaw Forming Unit
VFR-

E15 Soft Jaw Forming Disc
VFRD-

E15 T Nut For Hydraulic Chuck
B-205T

E15 Hard Jaw For Hydraulic Power Chucks
HJ-

E16 3-Jaw Wedge Type Through-Hole Power Chuck
N-205A4~

E17 2-Jaw Wedge Type Through-Hole Power Chuck
NT205~

E18 3-Jaw Wedge Type Non Through-Hole Power Chuck
V-206A5

E19 Super High Speed Through Hole Rotary Hydraulic Cylinder
M1036~

E20 Non Through Hole Rotary Hydraulic Cylinder
MS105~

E20 4-Jaw Wedge Type Through-Hole Power Chuck
VNIT-208~

E20 6-Jaw Awl Type Chucks
VAS-4,6

E21 Lathe collet
C-



E23 Tool Post Grinder ON Lathe
VGR-

E27 Axial Drilling And Milling Heads
VDI-

E27 Radial Drilling And Milling Heads

E30 Axial Drilling And Milling Heads
VDI-

E31 Radial Drilling And Milling Heads

E34 Axial Drilling And Milling Heads
VDI-

E35 Radial Drilling And Milling Heads

E36 Axial Drilling And Milling Heads-For"Baruffaldi" Type
VDI-

E37 Radial Drilling And Milling Heads-For"Baruffaldi" Type

E41 Axial Drilling And Milling Heads-For"Duplomatic" Type

E42 Radial Drilling And Milling Heads-For"Duplomatic" Type

E44 Radial Static Holders

E44 Radial Static Holders

E45 Radial Static Holders

E45 Radial Static Holders

E46 Axial Static Holders

E46 Axial Static Holders

E47 Combined Static Holders

E47 Combined Static Holders

E48 Combined Static Holders

E48 Static Holders

E49 Static Holders

E49 Static Holders

E50 Static Holders

E50 Static Holders

E51 Static Holders

E51 Axial Static Holders

E51 Axial Static Holders

E52 Reducing Sleeves

E52 Reducing Sleeves

E53 Test Mandrel

E54 H Type Milling Drilling Head

E55 H Type Milling & Drilling Head

E55 V Type Milling & Drilling Head

E58 Forward Turning Holder RH
MP SERIES SGT SERIES

E59 Reverse Turning Holder LH
SGT SERIES MP SERIES

E59 Double Turning Holder

E60 Boring Bar Holder

E61 Double Boring Bar Holder

E61 U Drill Holder



E62 Facing Holder RH

VTP-

E63 Quick Change Tool Post & Holders

NEW

VTP-

E64 Individually Piece Italian Style

NEW

VTP-

E65 Quick Change Tool Post & Holders

NEW

VTP-

E66 Quick Change Tool Post & Holders

NEW

VTP-

E67 Quick Change Tool Post American Type

NEW

VTP-

E68 Quick Change Tool Post American Type

NEW

VTP-

E69 Quick Change Tool Post American Type

NEW

VTP-



<p>G01 Shock Absorber</p> <p>TK-</p>	<p>G01 Shock Absorber</p> <p>SB-</p>	<p>G01 Shock Absorber</p> <p>SC-</p>	<p>G01 Shock Absorber</p> <p>SY-</p>	<p>G02 Shock Absorber</p> <p>NEW</p> <p>VSA-25K</p>
<p>G02 Shock Absorber</p> <p>NEW</p> <p>VSA-35K</p>	<p>G02 Hand Lubrication Pump</p> <p>NEW</p> <p>VSA-150K</p>	<p>G03 Arbor Press</p> <p>VAR-</p>	<p>G03 Arbor Press</p> <p>VARR-</p>	<p>G04 Precision Boring/Mining Spindle Head</p> <p>SH03</p>
<p>G04 Precision Boring/Mining Spindle Head</p> <p>SH30A</p>	<p>G05 One Way Acme Thread Slide Table</p> <p>ST-, STA-</p>	<p>G05 Vertical Dovetail Slide Table</p> <p>SE-</p>	<p>G06 Flat End Movable Handle</p> <p>VFE-</p>	<p>G06 Ellipse Movable Handle</p> <p>VEM-</p>
<p>G06 Ball Knobs</p> <p>VKB-</p>	<p>G06 Hand Knobs</p> <p>VKB-</p>	<p>G06 Adjustable Hand Levers</p> <p>VAH-</p>	<p>G06 Adjustable Hand Levers</p> <p>VAH-</p>	<p>G07 Revolving Handles</p> <p>VRL-</p>
<p>G07 Ball Crank Handle</p> <p>VBK-</p>	<p>G07 360° Swivelling Lock Handle</p> <p>VSA-, VSB-</p>	<p>G07 Lifting Eye Bolts</p> <p>VLE-</p>	<p>G07 Ball Plugger Screw-socket & Slotted</p> <p>VBP-</p>	<p>G08 PU-Hammer Series</p> <p>VHM-</p>
<p>G09 Hammer</p> <p>VHM-25PE</p>	<p>G09 Universal Drill & Cutter Grinder</p> <p>VDG-32N</p>	<p>G09 Horizontal Band Saws</p> <p>HBS-7</p>	<p>G09 Horizontal Band Saws</p> <p>HBS-7CE</p>	<p>G10 Multi-Purpose Milling & Drilling Machine</p> <p>MD-30N, 30B</p>
<p>G11 Vertical Band Sawing Machine</p> <p>Y-310~500</p>	<p>G12 Air Die Tool</p> <p>VAG-</p>	<p>G13 Air Die Tool</p> <p>VAG-</p>	<p>G13 Air Die Tool</p> <p>VAG-</p>	<p>G13 Air Die Tool</p> <p>VAG-</p>
<p>G13 Air Die Tool</p> <p>VAG-</p>	<p>G14 Air Die Tool</p> <p>VAG-</p>	<p>G14 Air Die Tool</p> <p>VAG-</p>	<p>G14 Air Die Tool</p> <p>VAG-</p>	<p>G14 Air Die Tool</p> <p>VAG-</p>



G15 Air Die Tool
NEW

 VAG-

G16 Abrasive Mounted Point & Wheel For Air Tool

 WA-,WF-,WR-,WE-

G16 Diamond Tools For Air Tool

 WG-30D

G17 Carbide Rotary Burrs
NEW

 VRB-C6,S6,A6

G18 Carbide Rotary Burrs
NEW

 VRB-P6,CR6,PC6

G19 Magnetic De-Burring & Polishing Machine

 VDB-

G20 Magnetic De-Burring & Polishing Machine

 VDB-

G21 Precision Drill Grinder

 VDG-13A, 30, 25A

G24 Left Hand Drill Grinder

 VDG-13L

G24 Sheet Metal Drill Grinder

 VDG-13S

G25 Precision End Mill Grinder
NEW

 VEG-13A, 25A

G29 Light Weight Table Scales
NEW

 VCU-

G29 Platform Scales

 VCU-

G30 Carbon Steel Punches

 VNP-, VLP-

G30 Hex - T Key
NEW

 HT-2.0

G30 Ball Hex. L Type Key Set
NEW

 HB-9L

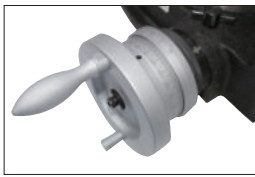
G30 Fold Type Hex. Key Sets
NEW

 HF-8



HV-6, 8, 10, 12, 14, 16

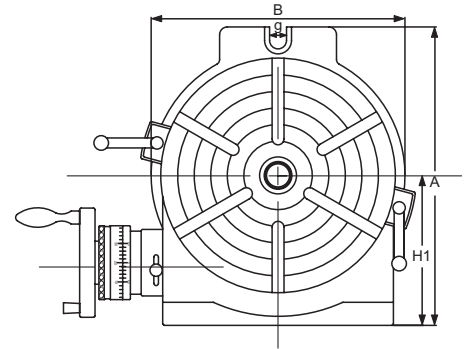
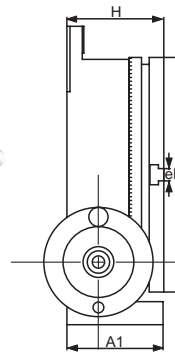
Optional Accessories (Details on page 2)



New Model



HV-4



Unit:mm/inches

Specifications

ORDER NO.	Table			Base dimension			Width of T-soft		Bolt slots g	The Load Capacity For Rotary Table		Center sleeve	Gross Weight(kg)		Meas. CFT	CODE NO.
	Outer diameter A1	Height D	H	H1	A	B	e	Type		Horizontal	Vertical		wooden case(W) Carton(C)			
													N.W.	G.W.		
HV-4	58	110	72	80	138	118	11	⊕	35 KGS	18 KGS	MT-2	7KGS	7.5KGS (C)	0.3	1001-000	
HV-6	78	150	80	102	205	163	11	⊕	17	40 KGS	20 KGS	MT-2	12.1KGS	12.7KGS (C)	0.4	1001-001
HV-8	100	205	102	135	265	219	14	⊕	17	80 KGS	40 KGS	MT-3	24.7KGS	26.2KGS (C)	0.8	1001-002
HV-10	106	254	109	163	321	276	14	⊗	17	90 KGS	50 KGS	MT-3	35.5KGS	37.3KGS (C)	2	1001-003
HV-12	123	305	125	194	388	330	16	⊗	18	120 KGS	60 KGS	MT-4	58.7KGS	69.8KGS (W)	2.6	1001-004
HV-14	123	353	125	225	445	389	16	⊗	18	130 KGS	70 KGS	MT-4	76.61KGS	90.3KGS (W)	3.2	1001-005
HV-16	128	406	130	258	503	435	16	⊗	18	140 KGS	70 KGS	MT-4	106.4KGS	123.1KGS (W)	4.2	1001-006

- Our Tables are made of high density Meehanite and use "HEIDENHAIN" electronic equipment to inspect angle to assure the excellent quality and durability.
- Use excellent machining center to process. Spindle end be applied accuracy bearing. Can be assured to keep very steady under load cutting.
- Worm is hardened and ground. The ratio is 90:1. The work table is graduated a full 360° so that one turn of the handle moves the table through 4°. Micro collar is graduated in steps of 1' min. And vernier scale makes settings down to 10 seconds possible.
- These Rotary Tables are popular for their excellent performance, practical design and reasonable cost. They are widely used for circular cutting work, angle setting, boring, spot-facing and similar work.
- Indexing accuracy of direct Indexing mechanism Maximum cumulative spacing error 1 minute.
- Please choose Front-Lock 3 Jaw chuck only.

3-Jaw Chuck For Rotary Table, Indexer

- Detail specification & Order NO. shown on page E7



ORDER NO.

- VSC-5A SUIT FOR BS-0 OR HV-6, VUT-6, VU-150
- VSC-6A SUIT FOR BS-1 OR HV-8, 10, VUT-6, VU-200
- VSC-7A, 8A SUIT FOR BS-2 OR HV-10, 12, 14, VUT-10, 12
- VSC-10A SUIT FOR HV-14, 16



Reversible type For indexer, The fixing hole is from front.

ORDER NO.

- VSK-6A SUIT FOR CS-6, CC-6
- VSK-8A SUIT FOR CS-8, CC-8
- VSK-12A SUIT FOR CC-12



Optional For Rotary Table



A. DIVIDING PLATES

DP-2, 3, 4, 5



*DP set include index plate, crank handle, 3 pcs screw, sector, & U Washer.

1 carton with 1 set. Gross weight: 3.5kgs.

Meas.: 0.13 CFT.

Number of the holes of Dividing Plates

ORDER NO.	SUIT FOR MODEL	WEIGHT kgs	CODE NO.
* DP-2	for HV-8, VU-200	4.5	1001-031
DP-3	for HV-10, 12, 14, 16, VUT-10, VUT-12	4.6	1001-032
DP-4	for CS-6, 8	4.6	1001-033
DP-5	for VU-300	4.6	1001-034

Holes Number

A-Plate	26, 30, 34, 38, 41, 44, 47, 51, 57, 28, 32, 37, 39, 43, 46, 49, 53, 59
B-Plate	61, 67, 71, 77, 81, 87, 91, 97, 63, 69, 73, 79, 83, 89, 93, 99

DP-1

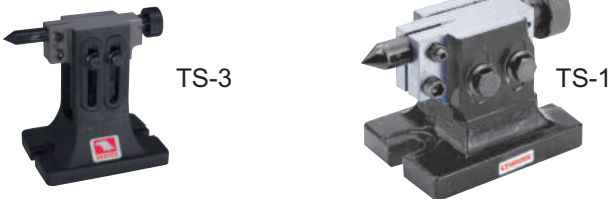


ORDER NO.	SUIT FOR MODEL	WEIGHT kgs	CODE NO.
*DP-1	for HV-4, HV-6, VUT-6, VU-100, 150	1.4	1001-030

Holes Number

A-Plate	15, 16, 17, 18, 19, 20
B-Plate	21, 23, 27, 29, 31, 33
C-Plate	37, 39, 41, 43, 47, 49

B. TAILSTOCK



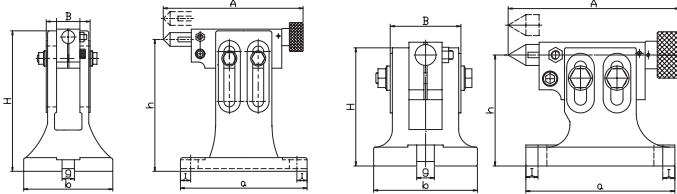
Tailstock

Unit:mm

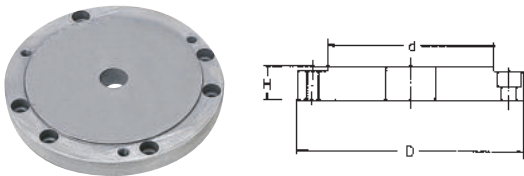
ORDER NO.	adjustable		SUIT FOR MODEL	G.W. kgs	Meas. CFT	CODE NO.
	highest	lowest				
TS-1	108	80	HV-4, HV-6, VSI-4, VSI-5, BS-0, VUT-6, VU-100, VU-150	3.9	0.4	1001-022
TS-2	145	115	BS-1, CC-6, CS-6, HV-8	5.5	0.4	1001-023
TS-3	205	130	CS-8, HV-10, HV-12, CC-8, VUT-10, VUT-12, VU-200	8.1	0.4	1001-024
TS-4	260	182	HV-14, CC-12, HV-16	11.9	0.7	1001-025

TS-2~TS-4

TS-1



C. FLANGE



Flange

Unit:mm

ORDER NO.	D	d	H	SUIT FOR MODEL	WEIGHT kgs	CODE NO.
FLT-103	90	60	20	HV-4, VU-100	0.71	1001-036
FLT-104	113	80	20	HV-4, 6, VU-100, 150, VUT-6	1.0	1001-037
FLT-0	138	100	20	HV-6, 8, VU-150, 200, VUT-6	1.9	1001-040
FLT-1	170	130	21	HV-8, 10, VU-200, VUT-10	3.3	1001-041
FLT-2	195	155	24	HV-10, 12, 14, VUT-10, 12	5.2	1001-042
FLT-3	210	160	24	HV-10, 12, 14, 16, VUT-12	4.9	1001-043

Unit:mm

ORDER NO.	D	d	H	SUIT FOR MODEL	T-NUT SIZE	BOLT	WEIGHT kgs	CODE NO.
FLT-103A	90	55	20	HV-4, VU-100	M8x10, 3412M	M8x20L	0.71	1001-044
FLT-104A	113	72	20	HV-4, 6, VU-100, 150, VUT-6	M8x10, 3412M	M8x20L	1.0	1001-045
FLT-0A	138	100	20	HV-6, 8, VU-150, 200, VUT-6	M8x10, 3412M	M8x20L	1.9	1001-046
FLT-1A	170	130	21	HV-8, 10, VU-200, VUT-10	M10x14, SPECIAL SIZE	M10x25L	3.3	1001-047
FLT-2A	195	155	24	HV-10, 12, 14, VUT-10, 12	M10x14, SPECIAL SIZE	M10x25L	5.2	1001-048
FLT-3A	210	165	24	HV-12, 14, 16, VUT-12	M10x16, SPECIAL SIZE	M10x30L	4.9	1001-049

FLT-103 For VSC-3F

FLT-104 For VSC-4F

FLT-0 For VSC-5F

FLT-1 For VSC-6F

FLT-2 For VSC-7F

FLT-3 For VSC-8F

Flange for VSC-A TYPE

FLT-103A For VSC-3A

FLT-104A For VSC-4A

FLT-0A For VSC-5A

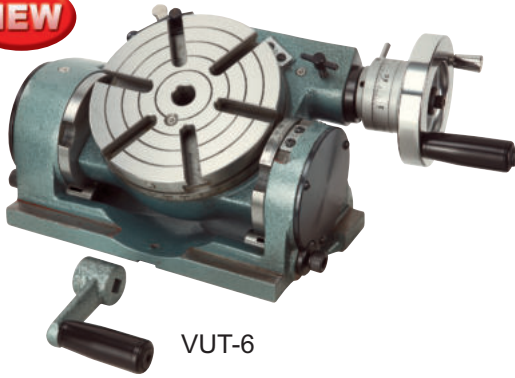
FLT-1A For VSC-6A

FLT-2A For VSC-7A

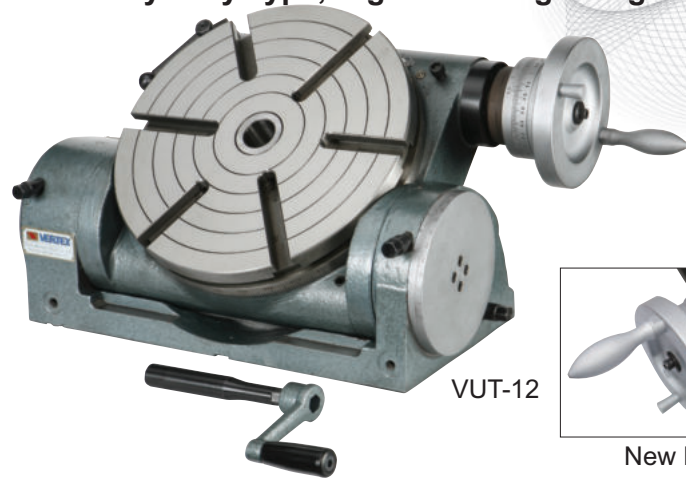
FLT-3A For VSC-8A

Heavy Duty Type, Rigid & Strong Design

NEW



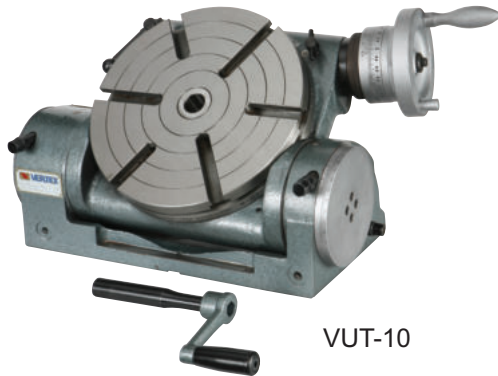
VUT-6



VUT-12



New Model



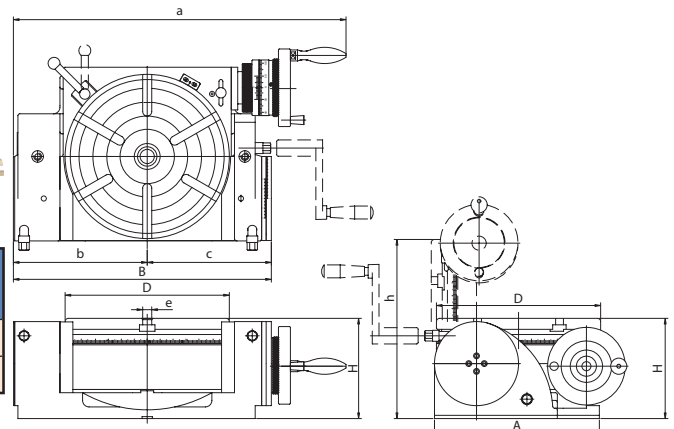
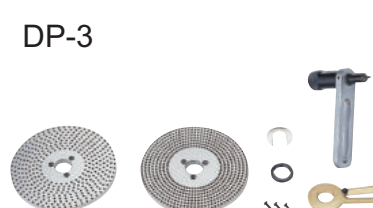
VUT-10

- Tilting by rigid & strong design, 2 supporter & rigid clamping system construction.
- Minimum set-up time.
- Tilting angle can adjusted by worm & worm gear system.
- Accurate and built for use in milling, boring and other machines.
- Indexing, facing and other operations can be done rapidly with extreme precision.
- Worm shafts are hardened and ground.
- Indexing can be done with optional dividing plates.

DP-1



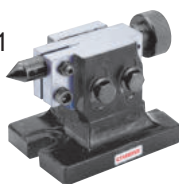
DP-3



DIVIDING PLATES

ORDER NO.	SUIT FOR MODEL	WEIGHT (kgs)	CODE NO.
DP-1	for VUT-6	1.4	1001-030
DP-3	for VUT-10, VUT-12	4.6	1001-032

TS-1



TS-3



TAILSTOCK

Unit:mm

ORDER NO.	Adjustable		SUIT FOR MODEL	G.W. (kgs)	MEAS CFT	CODE NO.
	highest	lowest				
TS-1	108	80	VUT-6	3.9	0.4	1001-022
TS-3	205	130	VUT-10, VUT-12	8.1	0.4	1001-024

MAIN SPECIFICATIONS		VUT-6	VUT-10 VUT-12
TILTING	Degree per one handle rotation	6°	1°
	vernier reading	1'	2'
	Scale of micro collar	5'	1'
TABLE	Degree per one handle rotation	4°	4°
	Scale of micro collar	2'	1'
	vernier reading	20"	10"
	Gear ratio	1:90	1:90

Specifications

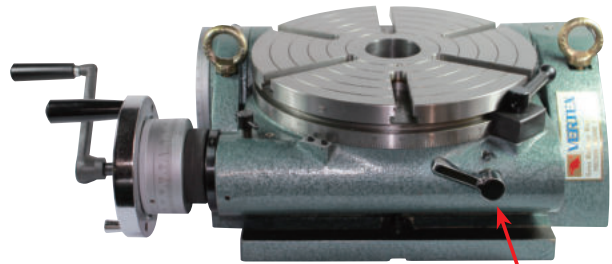
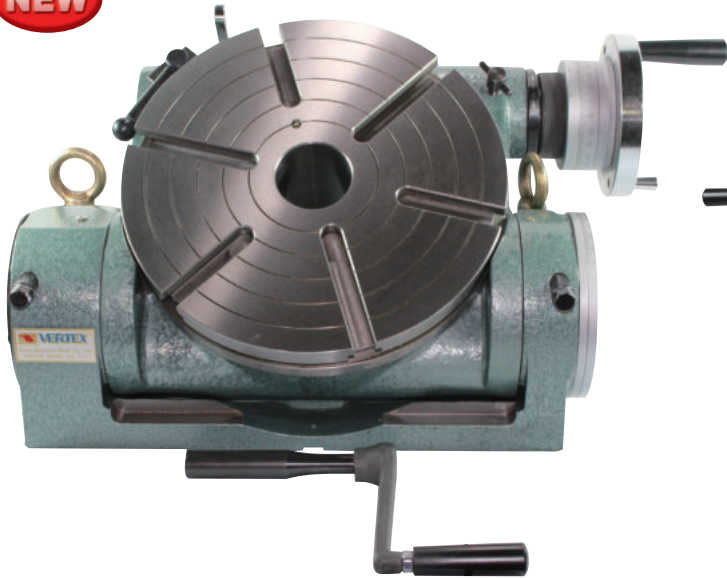
ORDER NO.	TABLE DIAMETER & TABLE HEIGHT			MOUNTING SURFACE		OVER ALL SIZE			T-SOLT WIDTH	CENTER HOLE	CENTER HEIGHT (Tilted at 90°)	WEIGHT (kgs)	CODE NO.
	D	H	h	A	B	a	b	c	e				
VUT-6	150	115	165	180	268	380	143	125	11	MT-2	90	23.5	1001-014
VUT-10	250	155	275	255	397	495	210	187	14	MT-3	150	75.5	1001-015
VUT-12	300	178	319	300	447	551	235	212	16	MT-4	169	108	1001-016

Multiple Tilting Rotary Table

BIG THROUGH HOLE DESIGN

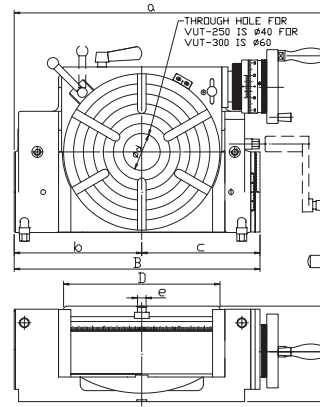


NEW



24-NOTCH
RAPID INDEX/EACH

- For the long bar & other work piece need BIGGER BORE size.
- Multiple purpose.
- Fast dividing function : 15° division by handle x 24/360°
- Improve efficiency, save cost.
- Upgrade your millig machine to speed up production.
- Tilting by rigid & strong design, 2 supporter & rigid clamping system construction.
- Minimum set-up time.
- Tilting angle can adjusted by worm & worm gear system.
- Accurate and built for use in milling, boring and other machines.
- Indexing, facing and other operations can be done rapidly with extreme precision.
- Worm shafts are hardened and ground.
- Indexing can be done with optional dividing plates.



New Model

DP-3



DIVIDING PLATES

ORDER NO.	SUIT FOR MODEL	WEIGHT (kgs)	CODE NO.
DP-3	for VUT-250,VUT-300	4.6	1001-032

TS-3



TAILSTOCK

Unit:mm

ORDER NO.	Adjustable		SUIT FOR MODEL	G.W. (kgs)	MEAS CFT	CODE NO.
	highest	lowest				
TS-3	205	130	VUT-250,VUT-300	8.1	0.4	1001-024

Specifications

ORDER NO.	TABLE DIAMETER & TABLE HEIGHT			MOUNTING SURFACE		OVER ALL SIZE			T-SOLT WIDTH	CENTER HOLE	CENTER HEIGHT (Tilted at 90°)	WEIGHT (kgs)	CODE NO.
	D	H	h	A	B	a	b	c	e				
VUT-250	250	155	275	255	397	495	210	187	14	Ø40	150	75.5	1001-015A
VUT-300	300	178	319	300	447	551	235	212	14	Ø60	169	108	1001-016A

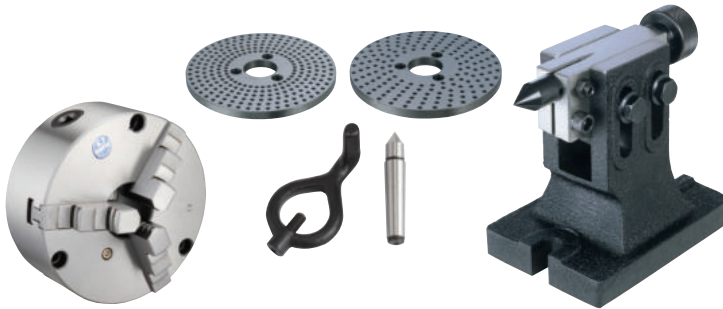


ORDER NO.	N.W. (kgs)	G.W. (kgs)	Meas. CFT	Applicable Chuck	CODE NO.
BS-0	19	(C)20	0.8	5"	1001-050
BS-1	32	(C)33	1.3	6"	1001-051
BS-0-J-5	24	(C)25	0.8	5"	1001-053
BS-1-J-6	42	(C)45	1.3	6"	1001-054



BS-0T 1 1/2 - 8TPI TYPE
 BS-0T 1 1/8 - 12TPI TYPE
 BS-1T 1 1/2 - 8TPI TYPE
 Call VERTEX to check old model's stock.

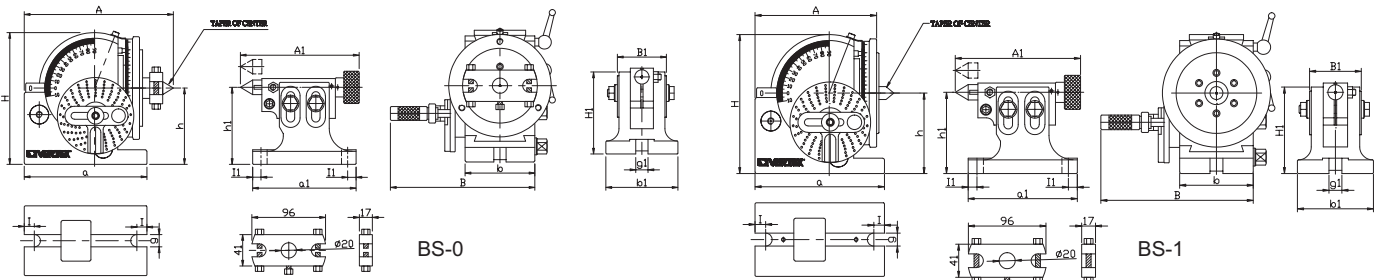
Standard Accessories



OPTIONAL
 The Chuck Fixing Hole Is From Front.

Dividing Plate A, B, C

Plate A	15	16	17	18	19	20
Plate B	21	23	27	29	31	33
Plate C	37	39	41	43	47	49



Semi-Universal Index No. 0 No. 1 (Head-stock):

Unit:mm/inches.

ORDER NO.	A	B	H	I	a	b	g	h	TAPER OF CENTER	SPINDLE THROUGH HOLE	CODE NO.
BS-0	177	188	173	13	160	91	16	100	MT-2	18	1001-050
BS-1	245	230	220	19	205	114	16	128	MT-3	20	1001-051

Semi-Universal Index B & S Type

No. 0 No. 1 (Tail-Stock):

Unit:mm/inches.

ORDER NO.	A1	B1	H1	I1	a1	b1	h1	g1	N.W. (KG)
BS-0	155-180	64	107	11	134	94	80-108	16	4
BS-1	170-195	64	150	11	155	110	150-115	16	5.3

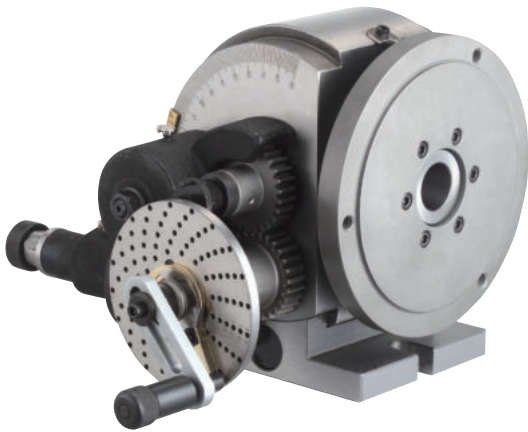
- Dividing Head can divide in any angle by the direct, indirect, or different methods. The ratio between the worm and the worm gear is 40:1.
- Hardened and ground spindle is rigidly held in a taper roller bearing. Worm is hardened and ground also.
- The swivel head can be locked of any angle from 10° below horizontal to 90° vertical-precision fitting to base assures smooth rotation.
- All models have threaded spindle nose and 24 hole dividing plate with easy conversion to fast direct indexing on numbers 2, 3, 4, 6, 8, 12, and 24.
- Easy indexing of all numbers from 2 to 50 and many numbers from 52 to 380. Model BS-2 is also equipped for different indexing of all numbers from 2 to 380, and for spiral cutting.
- Accurate precision, little backlash, fine appearance and strong structure so can assure smooth rotation.

THE CHUCK FIXING HOLE IS FROM FRONT.



BS-0-J is BS-0 fitted with 5" 3-Jaw Chuck & Standard Accessories

BS-2



BS-2-J-8
THE CHUCK FIXING HOLE IS FROM FRONT.

OPTIONAL
The Chuck
Fixing Hole Is
From Front.



BS-2T TYPE

Thread Spindle: 2 1/4" - 8tpi
Call To Check Old Model's Stock.

BS-2A

NEW



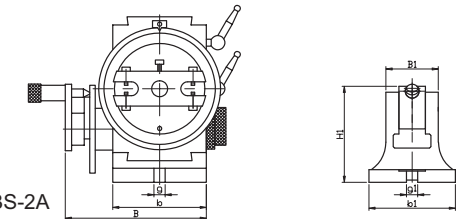
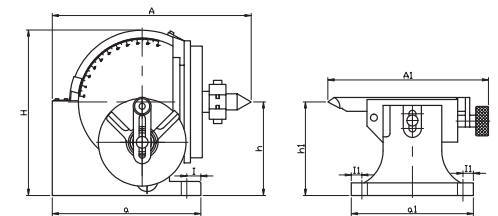
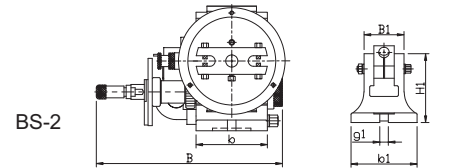
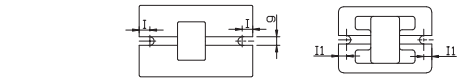
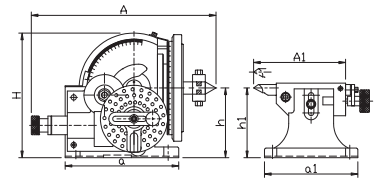
BS-2A COMES WITH A TAIL STOCK, A SET OF DIVIDING PLATE, A SET OF CARRIER CLAMP, A 3 JAW PLATE, A CENTER

BS-2A BODY STRUCTURE IS SAME AS BS-2 WITHOUT CHANGING GEAR ARBOR OR BRACKET. OTHER ACCESSORIES ARE SAME AS BS-2.

Standard Accessories



Standard Accessories



BS-2A

Universal Index No.2 (Head-stock):

ORDER NO.	A	B	H	I	a	b	g	h	Taper of center	SPINDLE THROUGH HOLE	CODE NO.
BS-2	359	340	235	20	212	135	16	134	MT-4	25	1001-052
BS-2A	285	202	237	20	213	134	16	134	MT-4	25	1001-057

Unit:mm/inches.

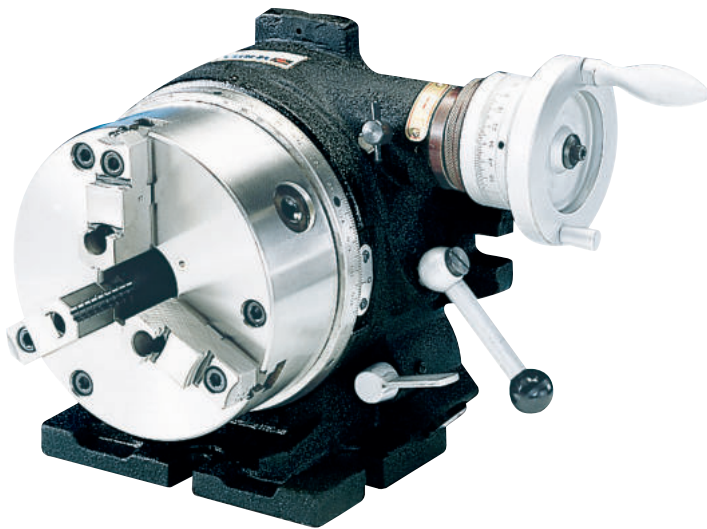
ORDER NO.	WEIGHT(kgs)	CODE NO.
BS-2	65	1001-052
BS-2-J-6	78.5	1001-055
BS-2-J-8	80	1001-056
BS-2A	47.5	1001-057
BS-2A-J-6	57	1001-058
BS-2A-J-8	63	1001-059

BS-2 (Tail-stock)

Unit:mm/inches.

ORDER NO.	A1	B1	H1	I1	a1	b1	h1	g1	N.W. (KG)
BS-2	135-175	75	130	15	175	125	120-145	16	10
BS-2A	218	74	139	15	175	124	134	16	10

ORDER NO.	Gross Weight kg	Meas. CFT	Applicable Chuck
BS-2	(C)65	3.4	6" OR 8"
BS-2A	(C)47.5	1.24	6" OR 8"



Standard Accessories



Optional Accessories

The same as Rotary table
Please see page A2

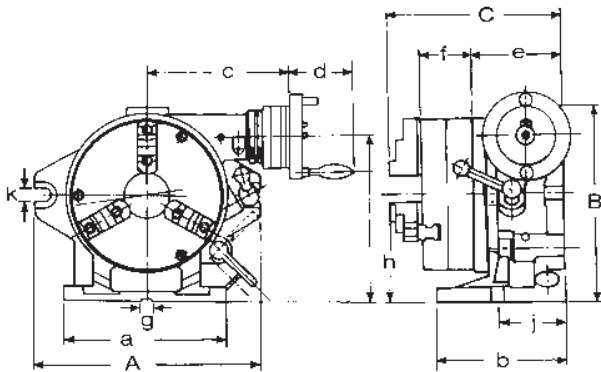
TS-2 for CS-6
TS-3 for CS-8



CS-8 with VSK-8 3-JAW MASKING PLATE & FACE PLATE

This product combines the advantages of the Super Index with those of a worm-gear index. When mounted on a milling, boring or other machine tool it can carry out single-purpose indexing and indirect indexing using the worm-drive mechanism. Disengaging the worm drive the 24-notch master plate permits 2, 3, 4, 6, 8, 12 and 24 dividing in the same manner as the Simple Index. When the chuck is removed, the unit can be used as a horizontal and vertical type rotary table. The operating handle to rotary table worm gear reduction ratio is 1:90. The operating handle collar is graduated in one minute, and readings down to ten seconds can be set on the vernier.

- Super spacer index include 3 jaw chuck, 10"/250mm face plate, masking plates 2, 3, 4, 6, 8, 12.



The state of CS-8 fitted with Face Plate & Dividing Plate

Specifications

Unit:mm

ORDER NO.	Numbers of dividing	Chuck				Face plate		A	B	C	a
		Outer diameter	Inner jaw	Outer jaw	Inner dia	Outer dia	Thickness				
CS-6	2, 3, 4, 6 8, 12, 24	167 VSK-6	4~42	10~156	44	203	50	250	235	221	220
CS-8		210 VSK-8	4~62	10~180	63	254	58	310	285	243	225

Unit:mm

ORDER NO.	b	c	d	e	f	g	h	i	j	k	Gross Weight kgs	Meas. CFT	CODE NO.
CS-6	150	184	82	112	66	16	123	186	80	18	(W)44.5	1.2	1001-060
CS-8	160	201	82	125	75	16	155	232	90	18	(W)71.5	3.1	1001-061

(W)Wooden Case (C)Carton Case



CC-12
BIG HOLE DESIGN

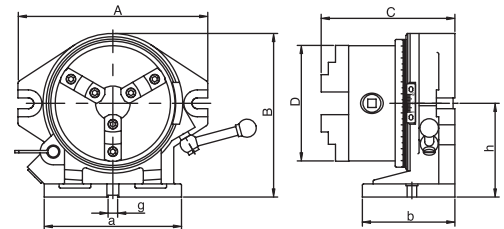


CC-8

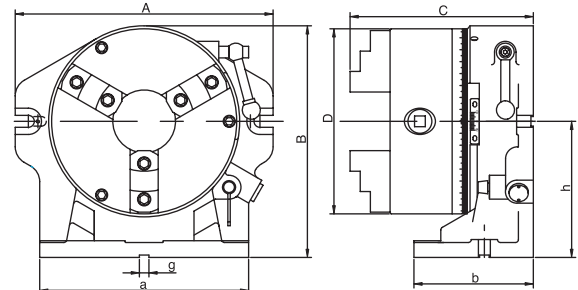


- The center through hole is big to be suitable for the large and long workpiece.
- Hardened and ground 24 position master plate, can index the special angle of 15 with excellent accuracy.
- CS-Type can be used with 2 pcs type 3-Jaw Chuck. Especially, it does similar work. as rotary table when it match with face plate.
- Rapid indexing and easy operation. It's a sharp equipment for mass-production.
- Simple index include 3-jaw chuck, Masking Plates 2, 3, 4, 6, 8, 12
- Used the key guide block, the center can be corrected quickly and accurately.
- CC-6 WITH VSK-6A CHUCK
CC-8 WITH VSK-8A CHUCK
CC-12 WITH VSK-12 CHUCK
CC-12A WITH VSK-12A CHUCK

DRAWING (I)



DRAWING (II)



Optional Accessories

TS-2 FOR CC-6
TS-3 FOR CC-8
TS-4 FOR CC-12



STANDARDS OF ACCURACY for Simple Index for Super-Dex.

NO.	Testing Objective	Tolerances Unit: mm Permitted Max.
1	Parallelism of table surface to base	0.02
2	True running of axial movement of table surface	0.03
3	True running of center boss	0.02
4	Squareness of base to angle face	0.02

Specifications

Unit:mm

ORDER NO.	Dividual number	A	B	C	D	a	b	h	Inner jaw	g	Outer jaw	Diameter of hole (turret)	Diameter of hole (chuck)	Gross weight kgs	Meas. CFT	CODE NO.
CC-6	I 2, 3, 4, 6	253	225	179	160	187	115	130	Ø55~Ø145	16	Ø3~Ø160	44	44	(C)29.5	0.9	1001-062
CC-8	II 8, 12, 24	318	274	209	200	230	155	157	Ø65~Ø200	16	Ø4~Ø200	63	58	(C)51.5	1.3	1001-063
CC-12	II 2, 3, 4, 6 8, 12, 16	432	388	293	315	350	200	228	Ø100~Ø315	16	Ø10~Ø315	106	105	(C)163	3.6	1001-066
CC-12A	II 24, 48															1001-066A



2 PCS HIRTH Coupling

VIT-450~1200 PICTURE

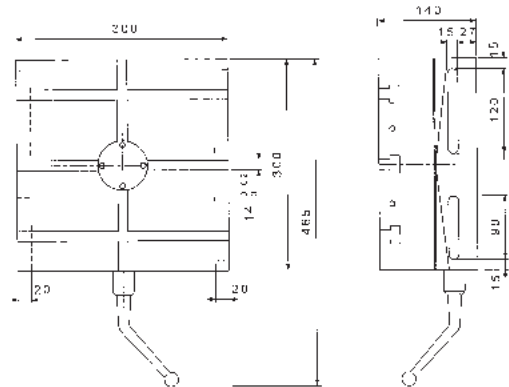
ORDER NO.	VIT-300-15	VIT-450-1	VIT-600-1	VIT-700-1			
		VIT-450-5	VIT-600-5	VIT-700-5	VIT-800-5	VIT-1000-5	VIT-1200-5
Table size LxW (mm)	300x300	450x450	600x600	700x700	800x800	1000x1000	1200x1200
Height (mm)	140	170	200	220	280	300	340
Spindle hole (mm)	-	ø30	ø40	ø40	ø60	ø60	ø80
T-slot (mm)	14	18	20	20	22	22	22
Table rotating	Clockwise and counterclockwise						
Table Lifting up & Clamp down stroke (mm)	5	5	5	5	5	8	8
Driving	Longitudinal	Manual					
	Revolving	Air Pressure 5~8kgs/cm ²					
Number of division (degree)	15°	1° or 5°					
Division (sec.) Accuracy	±3						
Max. load weight in theory (kgs)	1200	2400	3400	3400	4500	6000	7000
Allowable load weight (kgs)	500	1000	2000	2000	3000	5000	6000
Clamping capacity (kgs)	-	2200	3200	3200	5400	5400	8100
N.W. (kgs)	94	205	400	600	900	1200	2000
CODE NO. 1°	1001-070(15)	1001-071	1001-072	1001-073			
CODE NO. 5°		1001-081	1001-082	1001-083	1001-084	1001-085	1001-086

- The body is FC-35 cast iron, durable and will last longer without deformation.
- Clamping/Unclamping by pneumatic, easy operation.
- Powerful clamping design, allow heavy cutting and boring.

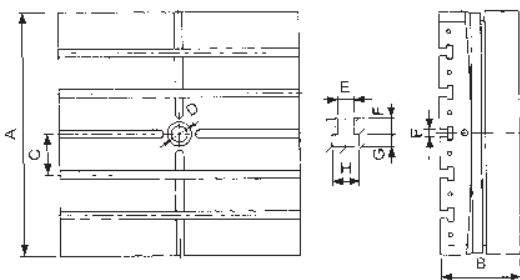
- Build-in 2 pieces hirth coupling for positioning, indexing accuracy +/-3 sec, ensure a long-term operation.
- Suitable for the high accuracy machining such as Boring-Milling, Grinding-Machine.

DIMENSION

VIT-300 (PICTURE)

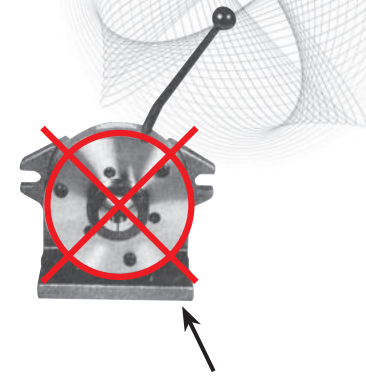
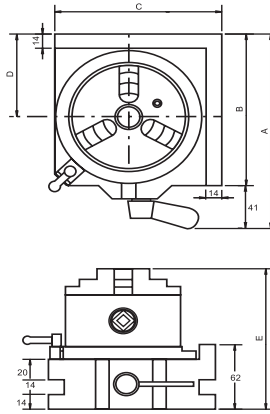


VIT-450~1200



	VIT-450	VIT-600	VIT-700	VIT-800	VIT-1000	VIT-1200
A	450	600	700	800	1000	1200
B	170	200	220	280	300	340
C	100	100	125	100	150	200
D	30	40	40	60	60	80
E	18	20	20	22	22	22
F	16	20	20	23	23	23
G	12	14	14	15	15	15
H	28	35	35	38	38	38

Economical Type Rapid Index



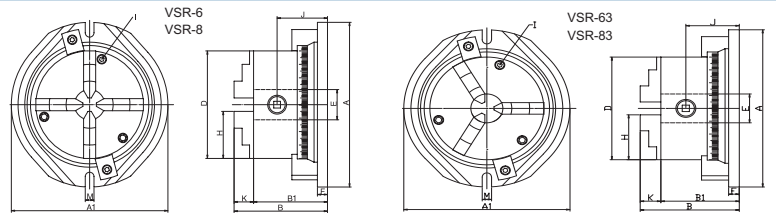
5C COLLET INDEXER
NON ECONOMICAL

- 3 JAW CHUCK VSC-4A, for VSI-4 / VSC-5A for VSI-5, the big range clamping capacity $\varnothing 3 - \varnothing 100$, it's better than collet fixing type.
- Simple & rapid operation.
- Dividual number 24-notch (15° each)
- Table scale 1° , for angular indexing.
- Table bore 30mm.
- Horizontal / vertical & 2 direction
- Suit for milling & drilling machine using.
- Optional: tailstock TS-1, Please see page A2

ORDER NO.	A	B	C	D	E	kgs	CODE NO.
VSI-4	187	146	146	80	135	10.5	1001-064
VSI-5	202	161	161	87	142	14.5	1001-065

Simple Rotary Chuck

NEW



VSR-6 + VPS-6A 4JAW CHUCK VSR-63 + VSC-6A 3JAW CHUCK
VSR-8 + VPS-8A 4JAW CHUCK VSR-83 + VSC-8A 3JAW CHUCK

- 4-jaw chuck (include reversible and removable jaw) is designed with swivel base for multifunctional purpose.
- VERTEX simple rotary chuck can be placed and fixed on your desired position.
- 360° vernier scale: smooth swival motion and easy locking by screws.
- Both horizontal and vertical position could be used on milling and machining center.

ORDER NO.	A	A1	B	B1	D	E	F	H	I	J	K	M	kgs	CODE NO.
VSR-6	245	233	139	110	160	45	15	70	3-M8	69	29	14	18	1001-068
VSR-8	305	270	159	125	200	65	20	86	3-M10	75	34	18	30.5	1001-067
VSR-63	245	233	139	110	160	45	15	70	3-M8	69	29	14	18	1001-068A
VSR-83	305	270	159	125	200	65	20	86	3-M10	75	34	18	30.5	1001-067A

Precision Universal Angle Chuck

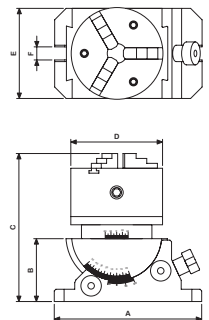
TW PAT.

With VSC-4 Chuck

NEW



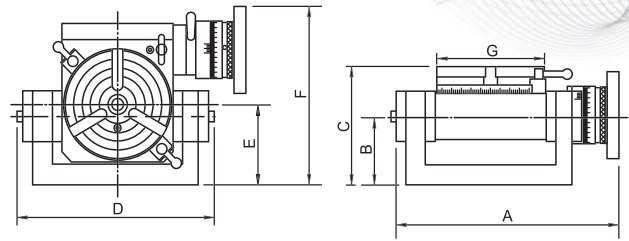
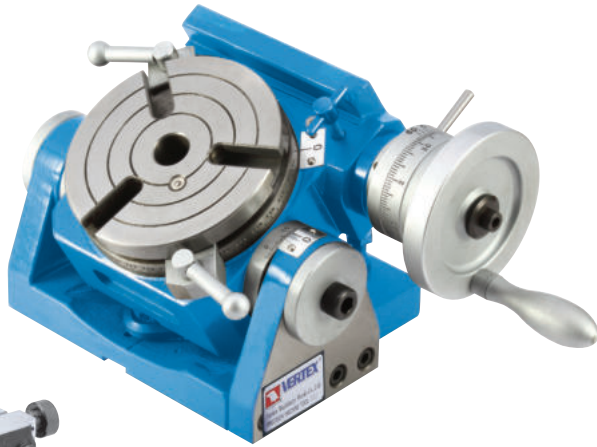
- Precision graduation for accurate reading.
- Its swivelling and tilting features with clamping make this unit well suited for straight or inclined surface, angular drilling machining on various machine tools.
- With VSC-4 3-Jaw chuck.
- O.D. clamping $\varnothing 3-90$ mm,
- I.D. clamping $\varnothing 32-84$ mm.
- Tolerance $\pm 0.01\text{mm}/100\text{mm}$.
- 2 axis with angle scale
- For angle setting
- Chuck indexing / Rotating setting
- Tilting Features same as VUA series, Page B6.



patent
PAT.

ORDER NO.	A	B	C	D	E	F	G.W (kgs)	CODE NO.
VUA-100J	180	77	181	112	110	16	14	2003-060

Universal Tilting Rotary Table



- Tilting range 0-90 degrees from horizontal to vertical position, It is high rigidity.
- Minimum Set-up time: It has two screws to lock setting. Low profile body for bigger capability.
- Worm is hardened and ground. The ratio is 90:1. The work table is graduated a full 360° so that of the handle moves the table through 4°. Micro collar is graduated in steps of 2' min.
- The tailstock & Dividing plates are optional. The sizes is same as the rotary table, please see page A2.
- For arc or index cutting at milling machine, Grinding machine or drill Machine.....

OPTIONAL: 1. TAILSTOCK

ORDER NO.	CODE NO.
TS-1	1001-022
TS-3	1001-024

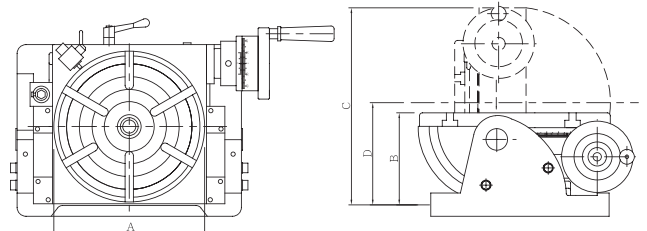
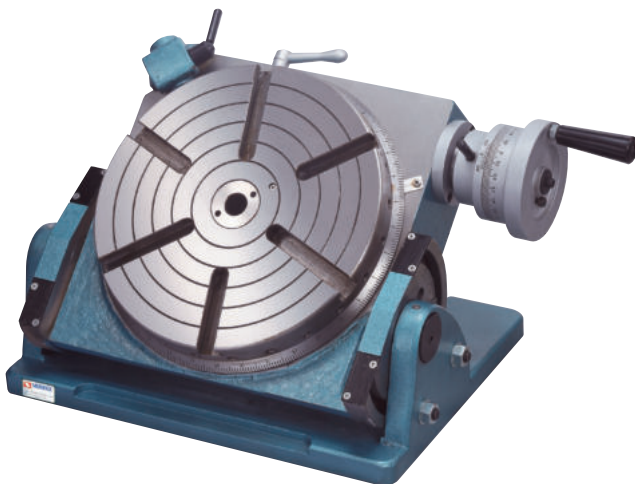
2. DIVIDING PLATE

ORDER NO.	CODE NO.
*DP-1 for VU-100, 150	1001-030
*DP-2 for VU-200	1001-031

ORDER NO.	A	B	C	D	E	F	G	SUITABLE TAILSTOCK	SUITABLE DIVIDING PLATE	WEIGHT kgs/cuft	CODE NO.
VU-100	228	68	117	202	80	177	110	TS-1	DP-1	13.5 / 1.5	1001-011
VU-150	266	75	140	246	90	216	150	TS-1	DP-1	21.5 / 2.0	1001-012
VU-200	429	111	177	432	141	283	205	TS-3	DP-2	46 / 2.5	1001-013

Universal Tilting Rotary Table

ORDER NO.VU-300 CODE NO.1001-010



Order No. & Dimensions

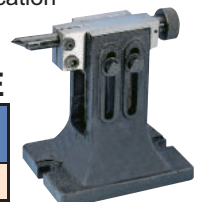
ORDER NO.	VU-300
TABLE DIAMETER A	300mm
TABLE HEIGHT (horizontal) B	185mm
TABLE O/A HEIGHT (VERTICAL) C	370mm
CENTER HOLE	MT3
CENTER HEIGHT (vertical) D	208mm
DIRECT INDEXING	24-div
GEAR RATIO	90:1
WEIGHT (G.W.)	102kgs
WEIGHT (N.W.)	99.5kgs

Special Accessories

1. DIVIDING PLATE DP-5, Detail specification & order NO.shown on page A2
2. TAILSTOCK

TSU-2 ECONOMICAL TYPE

ORDER NO.	WEIGHT kgs	CODE NO.
TSU-2	12	1001-021



This is an accurate designed table for milling, boring and other machine tools.

This table allows indexing, facing and other work to be carried out rapidly with extreme precision.

Tilting range 90 degrees from horizontal to vertical position, 1 rotation of handle equals 3 degrees, 5 minutes tilting reading. 10 Second Vernier Scale.

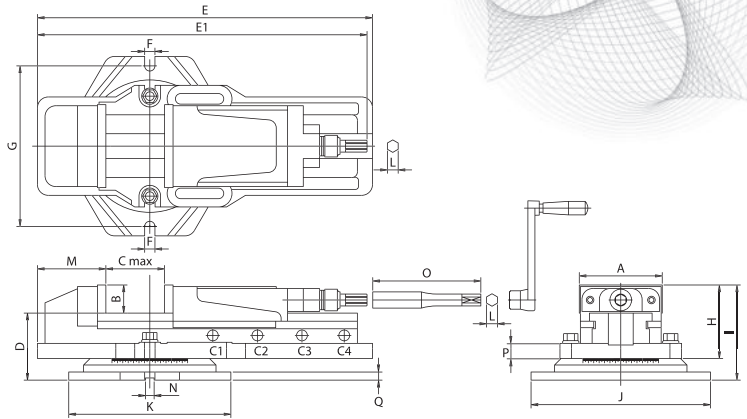
- Table Dial 1 Minute Graduations.
- Fast Degrees: Dividing Notch Pin & 24 Holes in 15 Degree
- Around that insures Rapid & Accurate Spacing.
- Minimum Set-Up time.
- Rugged Construction.

Hydraulic Machine Vise



- New design: Adjustable pressure device.
- Jam proof system.

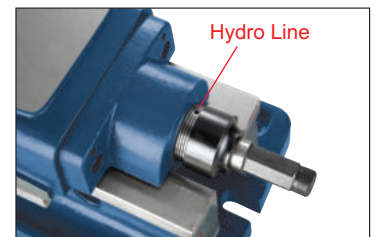
PATENT



VH-12

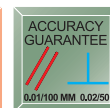
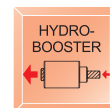


VH-6



Hydraulic controller: provide stable pressure, hydro indexer. Protect the hydro system.

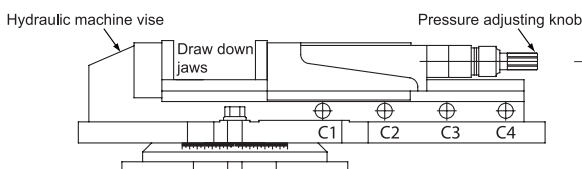
- New design: jam proof system: prevent wrong clamping force sticks the vise.
- Ruggedly constructed for milling, drilling, shaping, grinding and many other machine shop applications.
- Sliding bed ways flame hardened and ground.
- Concealed spindle for protection against chips and dirt.
- Hydraulic-booster system for maximum clamping pressure with minimum force.
- Quick of clamping & locking and easy of operation.
- Accuracy within 0.02mm.
- Furnished with or without swivel base.
- Hydraulic-booster system is guaranteed for using 1 years limited.
- The hydraulic oil number is #68.



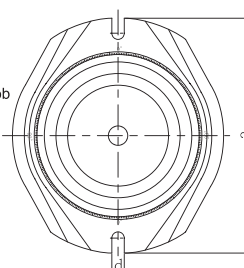
Order No. & Dimensions

ORDER NO.	A	B	C max	Opening Size For Capacity				D	E	E1	F	G	H	I	J	K	L	M	N	O	P	Max. Clamp Force (kgf)	G.W. (kgs)	CFT (cm)	CODE NO.
				C1	C2	C3	C4																		
VH-4	108	36	175	0-63	55-120	112-175		98	443	583	14	235	95	135	270	240	14	110	16	156	22	2500	28	45x25x16	1002-001
VH-5	132	48	210	0-75	72-150	146-210		113	550	703	17	253	118	161	290	263	19	124	16	165	22	4500	47	56x28x18	1002-002
VH-6	151	52	300	0-100	97-200	197-300		124	620	800	19	298	136	176	332	300	19	126	16	200	30	4500	63	65x34x22	1002-003
VH-8	204	62	300	0-100	94-200	194-300		144	680	857	17	342	162	206	375	350	19	155	16	200	30	7500	110	71x38x25	1002-004
NEW VH-8L	204	62	400	0-100	94-200	194-300	295-400	144	795	950	17	342	162	206	375	350	19	155	16	200	30	7500	108	84x42x30	1002-005
NEW VH-12	305	72	375	0-75	70-175	170-275	270-375	144	795	950	17	342	162	206	375	350	19	170	16	200	30	7500	138	84x35x27	1002-006

CLAMPING CAPACITY (3 STEPS CLAMPING POSITION FIG)



Swivel base



Swivel base

Unit:mm

ORDER NO.	a	b	c	d	Q	G.W. (kg)	CODE NO.
HS-4	280	210	30	16	15	4	1002-010
HS-5	297	267	43	16	20	7	1002-011
HS-6	335	310	40	19	20	10	1002-012
HS-8	373	355	45	19	22	16	1002-013



Tilting Hydraulic Machine Vise

PATENT



New Design

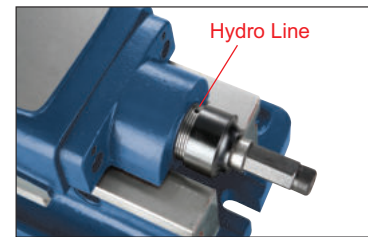
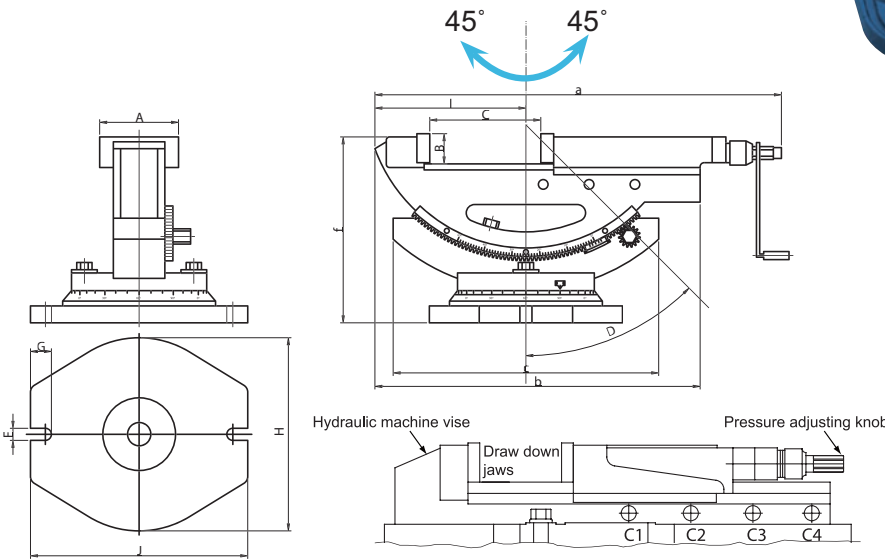
- Jam proof system
- Hydro overload device
- Great smooth operation



VHT-4

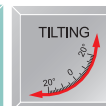
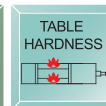
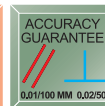
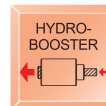


VHT-6



Hydraulic controller: provide stable pressure, hydro indexer. Protect the hydro system.

- The same as characters of VH type. Swivel base same as VH type.
- Tilting seat set by two locking screws, works in high stability.
- Angle setting ranges from 0°~50°. Tilting degrees graduated for easy reading. Swivel base graduated to 360° and fixable in any position.
- THE (3 STEPS CLAMPING POSITION) SAME AS VH TYPE.
- Accuracy within 0.02mm
- Hydraulic-booster system is guaranteed for using 2 years limited.



ORDER NO.	A	B	C OPEN	D	E	F	G	H	J	a	b	c	f	Max. Clamp Force (kgf)	G.W. (kgs)	Meas CFT	CODE NO.
VHT-4	110	36	170	50°	15	15	26	240	270	500	404	335	230	2500	(W)33.3	1.2	1002-020
VHT-6	154	54	300	50°	20	19	28	300	330	800	585	415	290	4500	(W)88	4.4	1002-021

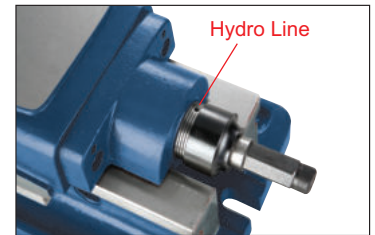


Universal Tilting Hydraulic Machine Vise



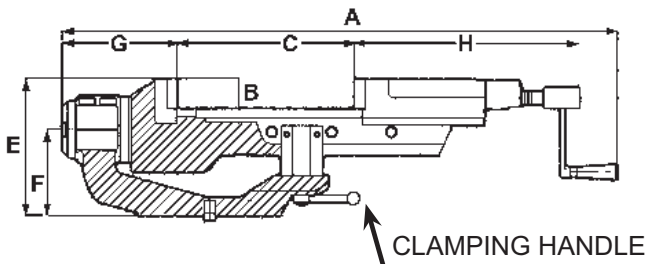
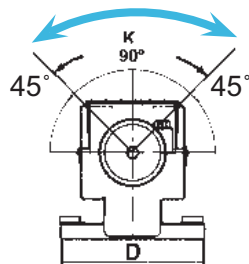
NEW

PATENT



Hydraulic controller: provide stable pressure, hydro indexer. Protect the hydro system.

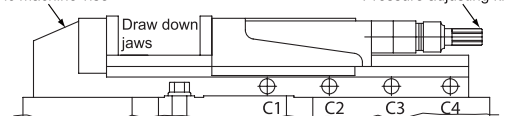
LEFT RIGHT



CLAMPING HANDLE

Hydraulic machine vise

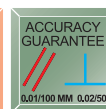
Pressure adjusting knob



- New design: adjustable pressure device.
- Suit for processing of brass, al, plastic, steel.
- New design: super open jaw size, smallest open jaw size.

Lock proof system: prevent wrong clamping force sticks the vise.

- 45 Degree tilting function, allow 90 degree processing!
- Tilting function has more work free allowance will not block or hit machine!
- Lower overall height provides more space for heavy cutting stability and bigger workpiece!
- Tilting structure has strong tightening design.
- All function same as vh series. Except the tilting Structure.



ORDER NO	A	B	C OPEN	D	E	F	G	H	i	j	Max. Clamp Force (kgf)	K Max. Degree	G.W. (kgs)	CODE NO.
VHT-4U	653	36	170	∅162	165	104	169	263	141	80	3750	90°	37.39	1002-025
VHT-6U	942	51	300	∅242	231	145	196	380	199	125	5250	90°	93.96	1002-026

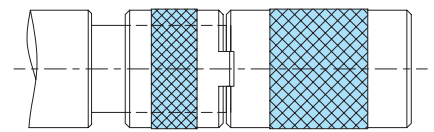
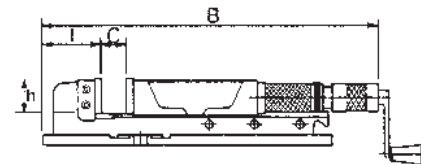
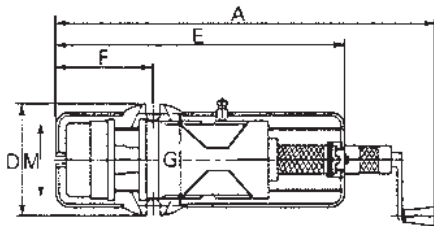
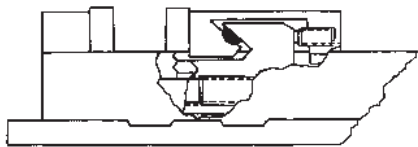
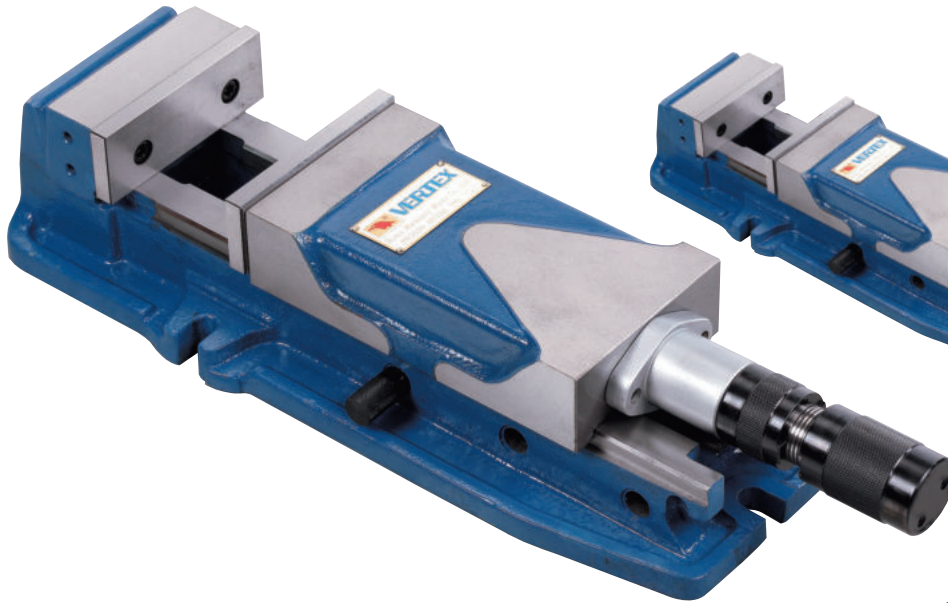


Hydraulic Machine Vise

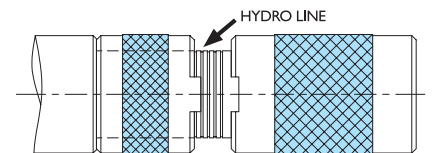
HYDRO + MECHANICAL

PATNET

Power Build Out Type



MECHANICAL
COLLAR COME TOGETHER



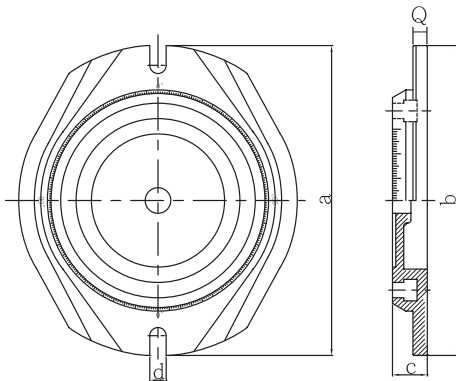
HYDRO
COLLAR SEPRATE

SUIT FOR PROCESSING OF
BRASS, AL, PLASTIC, STEEL,
CASTING

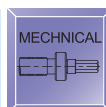
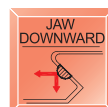
Features

- Hydro : move the spindle ring until see the hydro line to work vise.
- Mechanical : move the spindle ring toward the end until the bushing close the hydro line.
- Heavy duty cutting.
- Hardness > HRC 45° : vise sliding bed.
- High durebility & high precision.
- Tolerance : 0.01/100mm
- Lift proof : press down design.
- FCD 60 with 60 kgs/mm² or 80,000 psi high quality ductile cast iron - body material - reduce the cutting vibration.

Optional : Swivel Base



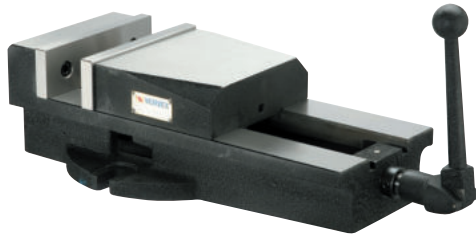
ORDER NO.	A	B	C	D	N.W. (kgs)	CODE NO.
HSO-5	285	263	35	16	12.5	1002-222
HSO-6	330	320	40	18	16.5	1002-223
HSO-8	415	413	50	21	35	1002-229



ORDER NO.	A	B	C OPEN	D	E	F	G	I	M	h	Jaw w	Max. Clamp Force (kgf)	N.W. (kgs)	CODE NO.
VHO-5	695 920	545 775	0-220	190	505	180	160	105	130	55	130	3500	36.5	1002-220
VHO-6	750 1060	600 915	0-300	240	625	208	196	125	160	58	160	4000	59.1	1002-221
VHO-8	830 1140	700 1015	0-310	280	700	265	240	165	200	63	200	5000	94.3	1002-228



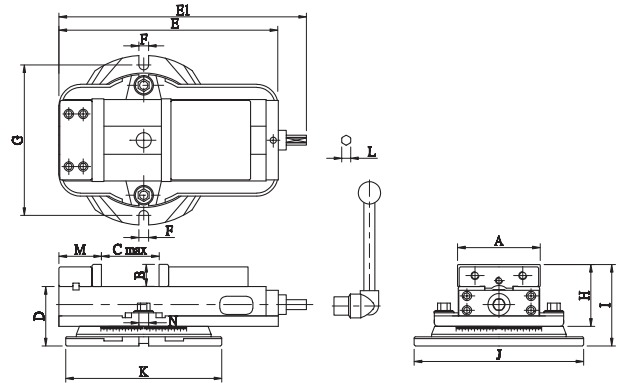
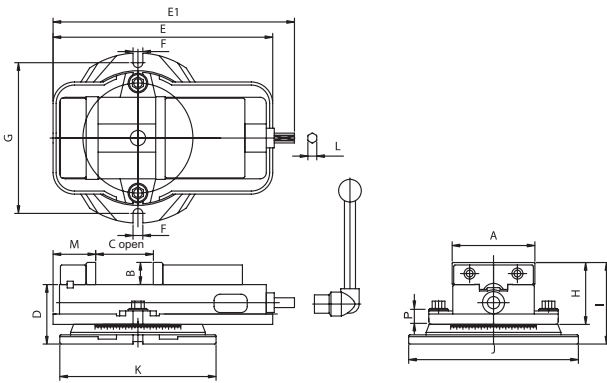
VA-8L 8" opened 10 1/4"
 VD-690 6" opened 9"
 VD-810 8" opened 10 3/4"



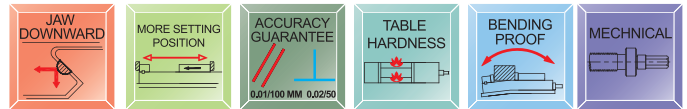
VA-8L



NEW
 VD-690
 VD-810

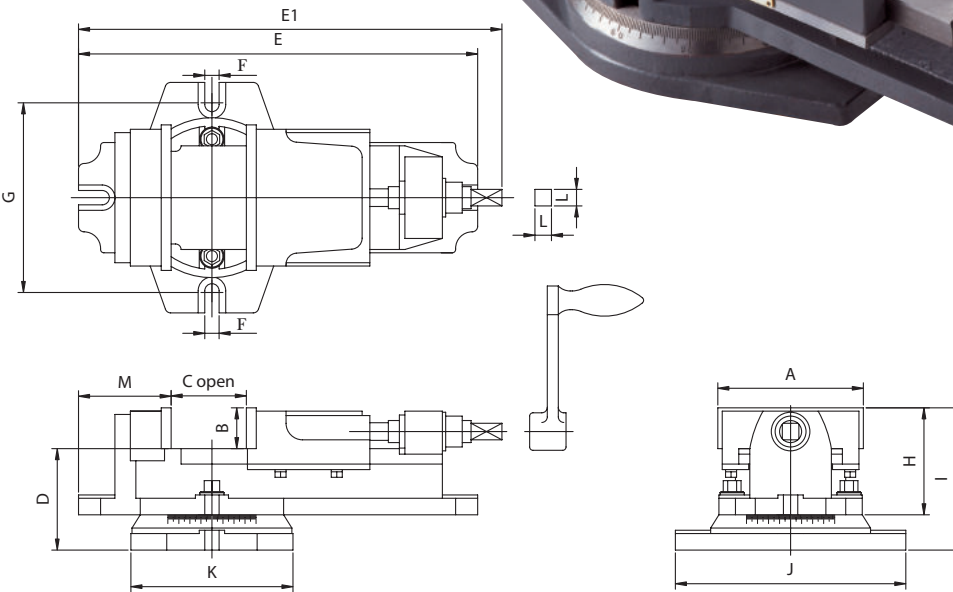
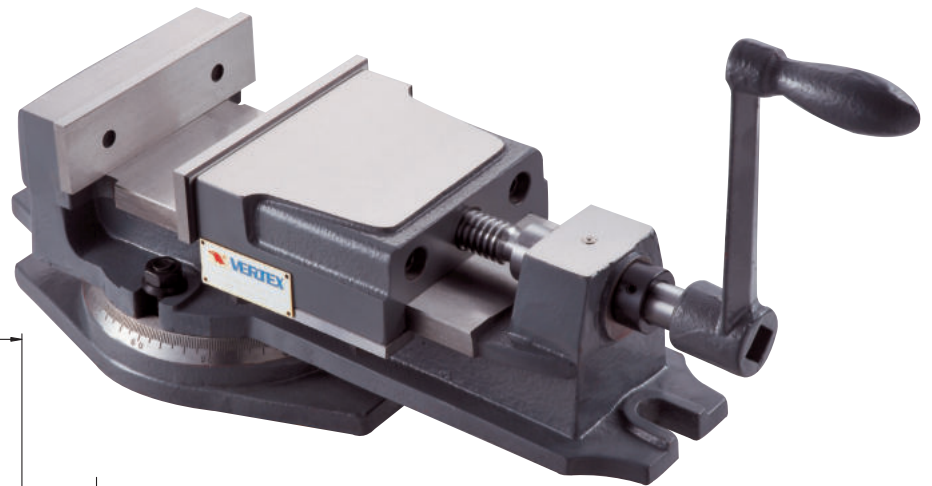
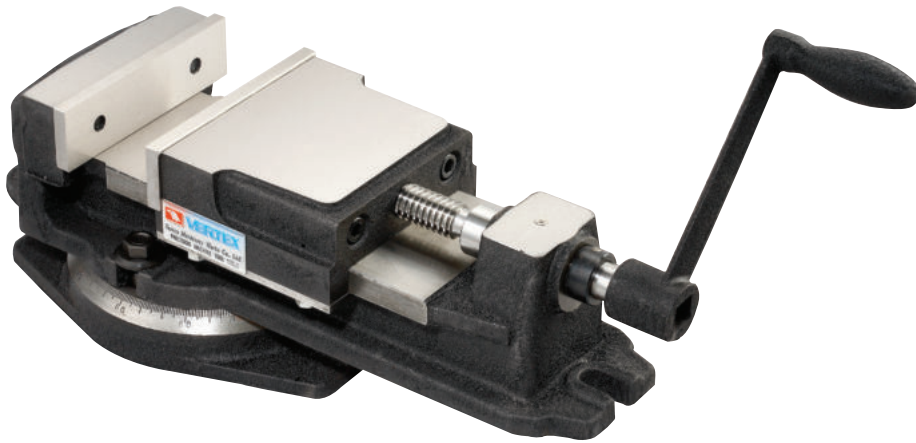


- The enclosed lead screw and sliding surface are harden and ground.
- Highest clamping power. It's very accurate and durable.
- This Vise is so designed that the horizontal Force generated by tightening the handle pushes the semisphere within the movable jaw and thus thrusts the movable jaw downward.
- There fore, the workpiece does not lift, even if it is held at the top of the jaw plates.
- Four setting positions of the jaw plates are available, widening the jaw plates opening.
- ACCURACY WITHIN 0.02mm
- Mini order quantity : 3 sets for same height request.

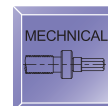


Order No. & Dimensions

ORDER NO.	A	B	C OPEN	D	E	E1	F	G	H	I	J	K	L	M	N	P	Clamp Force (kgf)	G.W. (KG)	C.F.T. (CM)	CODE NO.
VA-4	106	36	103	90	324	351	13	211	96	126	242	228	14.5	75	16	15	1500	20	35x24x15	1002-030
VA-5	135	36	110	97	359	394	17	246	101	133	277	255	14.5	85	16	15	2000	30	41x31x17	1002-031
VA-6	155	46	142	110	422	452	20	288	118	158	326	302	19	95	16	17	2500	42	49x35x20	1002-032
VA-8	210	60	197	129	553	583	19	355	145	190	395	366	19	105	16	19	3000	80	63x41x24	1002-033
VD-675	160	49	190	110	445	478	19	296	121	160	333	305	19	80	16	17	2500	42	52x35x21	1002-034
NEW VD-690	155	46	230	110	450	480	20	288	118	158	326	302	19	67	16	17	2300	43	49x35x20	1002-034B
VA-8L	208	64	260	138	510	561	17	310	157	202	375	282	19	71	16	17	3000	73	71x37x28	1002-035
NEW VD-810	205	62	275	129	555	615	19	378	147	191	420	377	19	79	16	17	3000	76	63x41x24	1002-035B



- It's a practical piece of equipment with excellent precision and a high quality finished.
- Body, movable jaw and swivel base made of closes-grained high tensile iron castings. Built for heavy duty machining and retained accuracy.
- Jaw plates were made of hardened and grounded tool steel.
- It's the most suitable for the Milling, Grinding and Drilling.
- ACCURACY WITHIN 0.02mm



Order No. & Dimensions

ORDER NO.	A	B	C OPEN	D	E	E1	F	G	H	I	J	K	L	M	Max. Clamp Force (kgf)	G.W. (kgs)	C.F.T. (cm)	CODE NO.
VK-4	104	36	62	76	293	310	13	145	83	113	176	122	15	65	900	10	33x13x13	1002-040
VK-5	130	37	80	92	362	384	13	172	97	129	209	147	15	84	900	16	40x16x15	1002.041
VK-6	152	43	112	105	442	473	15	209	108	148	260	181	16.5	90	1000	27	51x22x19	1002-042
VK-8	204	63	146	127	579	609	18	312	148	190	350	234	21	122	1400	58	65x27x25	1002-043

Super Open Vise



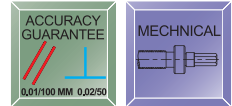
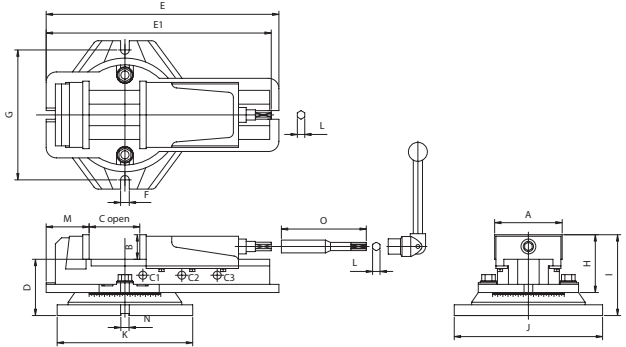
MECHANICAL TYPE

EXCEPT THE HYDRAULIC SYSTEM,
THE FEATURE IS SAME AS VH-TYPE
ACCURACE WITHIN 0.02mm

VJ-400 JAW OPENED 185mm
VJ-500 JAW OPENED 245mm
VJ-600 JAW OPENED 305mm



VJ-600



Order No. & Dimensions

ORDER NO.	A	B	C OPEN	Opening Size For Capacity			D	E	E1	F	G	H	I	J	K	L	M	N	O	Max. Clamp Force (kgf)	G.W. (kgs)	CFT (cm)	CODE NO.
				C1	C2	C3																	
VJ-400	110	38	185	0-65	52-129	116-185	97	386	516	15	240	96	135	270	238	14.5	90	16	156	1500	25	46x26x16	1002-050
VJ-500	132	48	245	0-78	70-158	150-245	110	455	580	17	255	113	158	290	265	14.5	85	16	166	1500	34	48x28x18	1002-051
VJ-600	154	56	305	0-111	97-211	197-305	118	546	722	17	255	131	175	290	265	19	111	16	200	1500	46	57x30x22	1002-052

2-Way Angle Milling Vise

TW PAT.

MECHANICAL TYPE



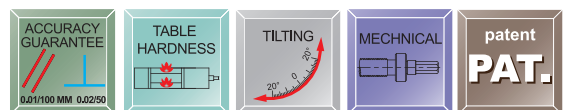
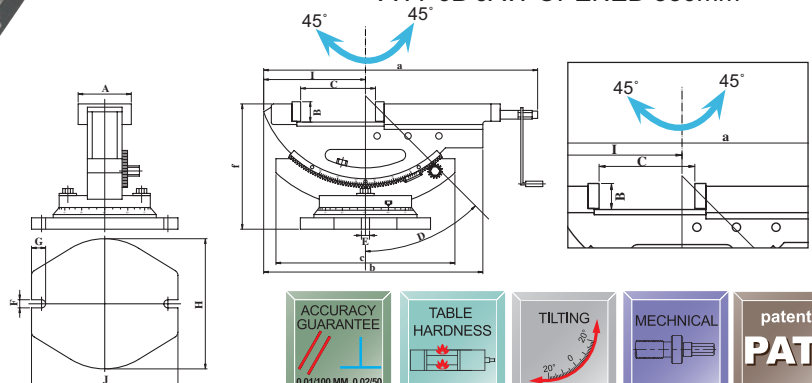
VWT-4B

VWT-6B

- Tilting seat set by two locking screws, works in high stability.
- Angle setting ranges from 0°~50°. Tilting degrees graduated for easy reading. Swivel base graduated to 360° and fixable in any position.



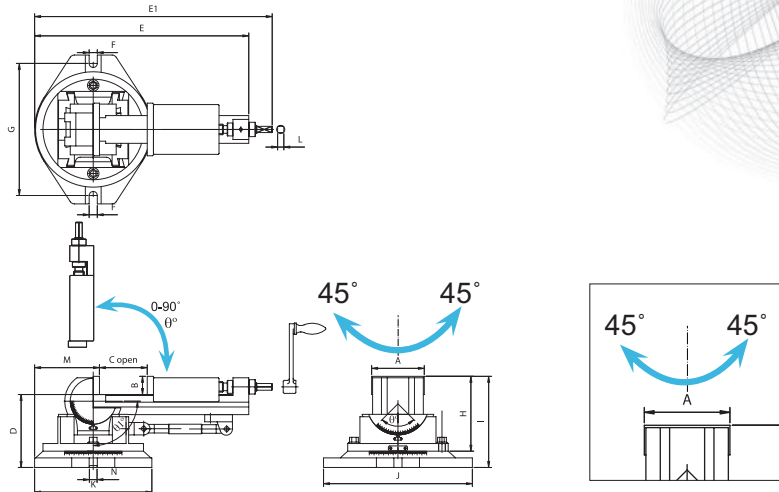
SUPER OPEN CAPACITY:
VWT-4B JAW OPENED 220mm
VWT-6B JAW OPENED 350mm



Order No. & Dimensions

ORDER NO.	A	B	C OPEN	D	E	F	G	H	I	J	a	b	c	f	Max. Clamp Force (kgf)	G.W. (kgs)	Meas CFT	CODE NO.
VWT-4B	110	36	220	50°	15	15	26	240	185	270	500	404	335	230	1200	(C) 33.3	1.2	1002-060B
VWT-6B	152	54	350	50°	20	19	28	300	246	330	800	585	415	290	1600	(W) 79.7	4.4	1002-061B

3-Way Angle Milling Vise



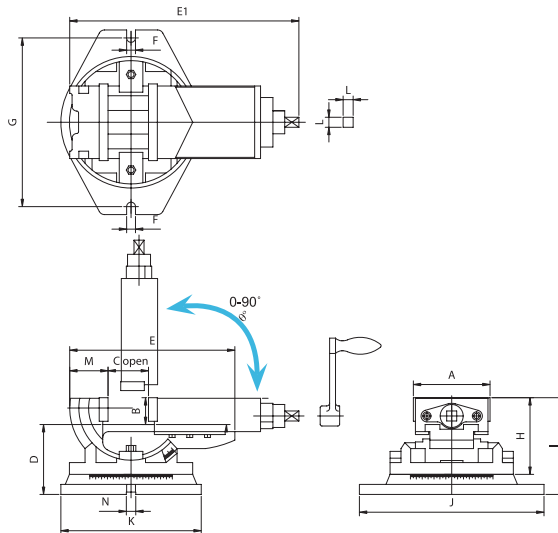
- Angles can be set in 3 dimensions. Swivels 360° around base. The vise can be elevated through 90° from the horizontal to vertical. And also can be tilted on its lower angle base up to 45° in both right and left.
- Tilting of any angle all keep the workpiece steady, smooth.
- Particularly the clamping part of screw is strengthened by a bush made of gunmetal.



Specifications

ORDER NO.	A	B	C OPEN	D	E	E1	F	G	H	I	J	K	L	M	N	θ	θ_1	Clamp Force (kgf)	G.W. (kgs)	Meas CFT	CODE NO.
VW-3	80	31	85	126	335	370	15	210	127	157	240	185	10	95	16	-45°~45°	-0°~90°	800	16.7	40x21x19	1002-080
VW-4	110	38	116	152	448	497	17	276	157	190	311	245	13	135	16	-45°~45°	-0°~90°	1000	32.7	56x27x23	1002-081
VW-5	135	40	145	170	530	580	17	310	173	210	358	271	13	140	16	-45°~45°	-0°~90°	1600	49.4	66x31x25	1002-082

2-Way Machine Vise



- Heavy cast iron structure
- Scales in both axis
- 360° swivel around Z-axis
- 90° vertical and horizontal swivel



Specifications

ORDER NO.	A	B	C OPEN	D	E	E1	F	G	H	I	J	K	L	M	N	θ	Clamp Force (kgf)	G.W. (kgs)	CODE NO.
VWT-5	130	46	100	118	280	415	15	286	130	164	313	238	17	65	16	0°~90°	900	31.7	1002-090
VWT-6A	160	51	120	140	360	510	17	293	150	191	328	252	17	83	16	0°~90°	1600	47	1002-091



Self Centering Vise 5 AXIS VISE

PATENT

SAME HEIGHT GUARANTEE



VERTEX®

NEW

VCV-1090

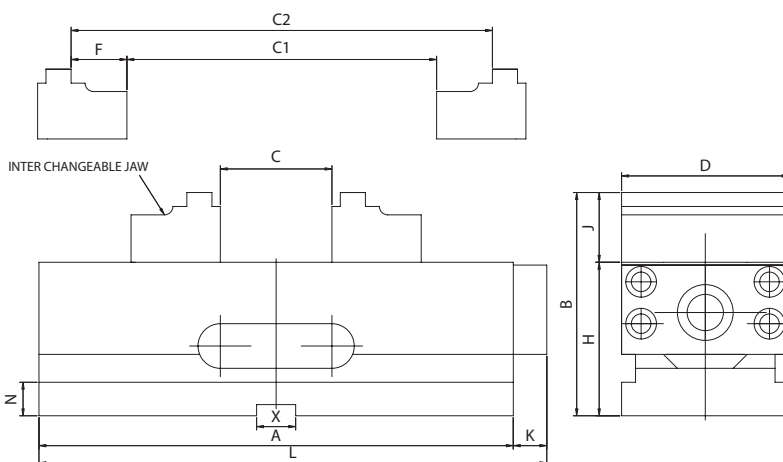


VCV-0611



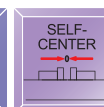
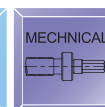
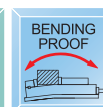
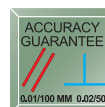
VCV-0611S

- Suit for 4/5 axis CNC machine
- Repeat clamping tolerance $\pm 0.01\text{mm}$
- Material: FCD60, high tension cast iron
- Slide way hardness: HRC 45°
- Inter changeable jaw: heat treatment HRC 55°
- Lock down-drawing force: keep work piece from lifting



Swivel Base Type

ORDER NO.	BASE SIZE	CODE NO.
VCV-0611S	Ø200 x 22 Thickness	1002-107S
VCV-1090S	Ø250 x 22 Thickness	1002-108S



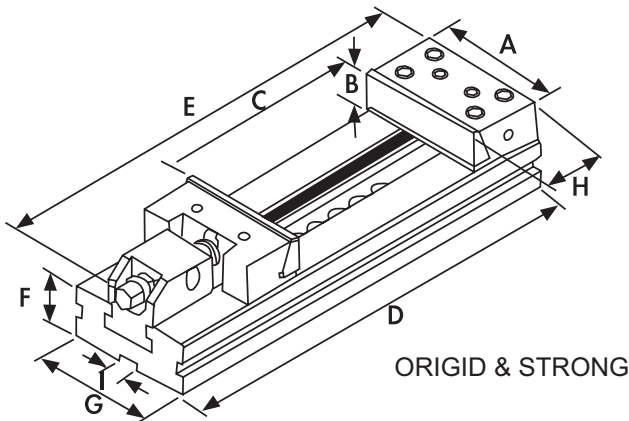
Specifications

ORDER NO.	A	B	C OPEN	CLAMPING CAPACITY			D	F	H	J	K	N	X	L	KN	CODE NO.
				C1	C2	C3										
VCV-0611	170	80	100	100	45-140		60	20	55	25	15	14	14	185	8	1002-107
VCV-1090	240	120	90	90	70-160	134-222	100	35	80	40	20	22	18	260	12	1002-108



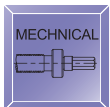
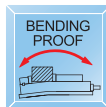
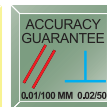
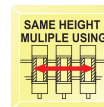
Modular Precision Machine Vise

SAME HEIGHT GUARANTEE



Features

- High Accuracy 0.01/100 m/m
- Unlimited Clamping Range
- High Quality Alloy Steel with HRC 59
- High Clamping Pressure
- EACH ONE IS SAME AS HEIGHT.
- CAN BE USED IN MULTIPLE STYLE.
- No Length of Height Limitation
- No Jaw Lift
- Low Profile
- All Vises are Matched parallelism $\pm 0.01/100$ m/m
- Optional=Swivel base



ORDER NO.	VMP -4	VMP -5	VMP -6	VMP -6B	VMP -6C	VMP -7A	VMP -7B	VMP -7C	VMP -8A	VMP -8B	VMP -8C	VMP -8D	VMP -12C	VMP -12E
A	100	125	150	150	150	175	175	175	200	200	200	200	300	300
B	30	40	50	50	50	60	60	60	65	65	65	65	80	80
C OPEN	100	150	200	300	400	200	300	400	200	300	400	500	400	600
D	270	345	420	520	620	455	555	655	573	595	695	795	735	935
E	325	146	530	600	700	620	620	620	718	718	718	880	830	1030
F	35	40	50	50	50	58	58	58	70	70	70	70	78	78
G	75	96	125	125	125	145	145	145	170	170	170	170	195	195
H	78	78	90	89.4	89.4	97	97	97	114	114	114	113.4	120.4	120.4
I	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Max. Clamp Force (kgf)	900	1300	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000		
KGS	9.2	16	28.5	34.8	38.1	43.7	48.3	53.5	66.3	73.2	81.3	87.2	125	143
CODE NO.	1002 -190	1002 -191	1002 -192	1002 -201	1002 -202	1002 -193	1002 -194	1002 -195	1002 -196	1002 -197	1002 -198	1002 -203	1002 -204	1002 -205



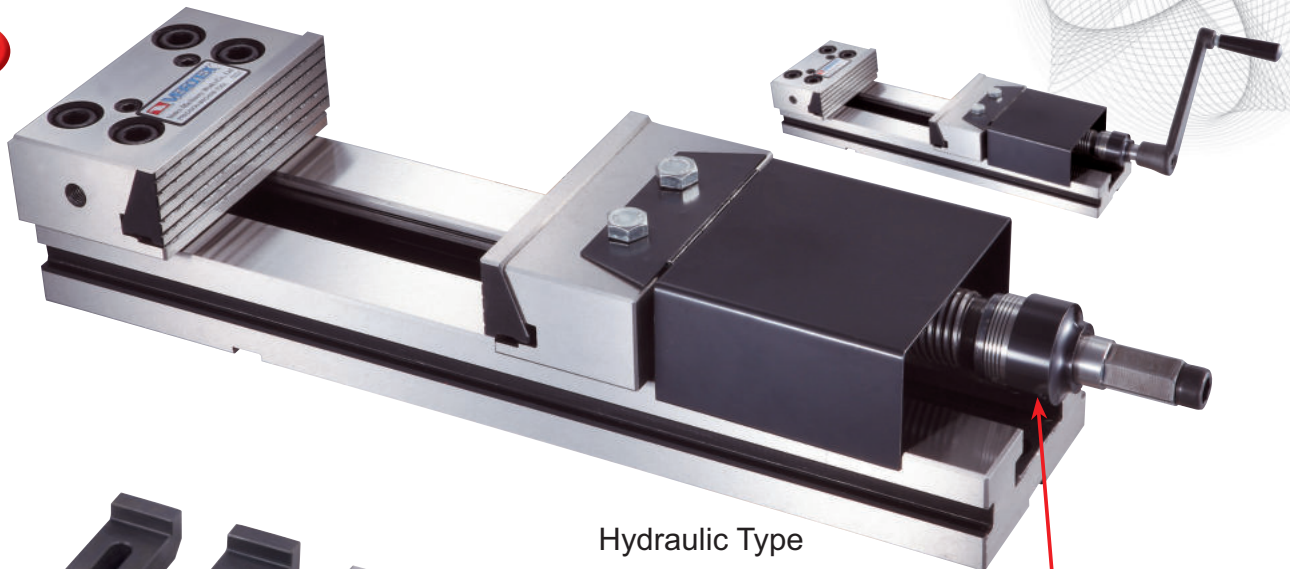
Modular Precision Hydraulic Machine Vise



PATENT

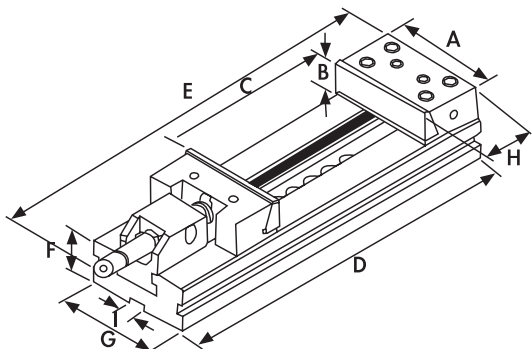
SAME HEIGHT GUARANTEE

NEW



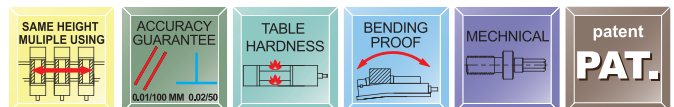
Hydraulic Type

Hydraulic Control Unit



Features

- New design: Adjustable pressure device.
- Suit for processing of brass, AL, plastic, steel.
- New design: super open jaw size, smallest open jaw size. lock proof system: prevent wrong clamping force sticks the vise.
- Hydraulic clamping force 4500kg for heavy duty cutting. The screw mechanism type clamping force is 2200 kgs
- Smooth & light operation for the handle.
- High accuracy 0.01/100 m/m
- Unlimited clamping range
- High quality alloy steel with HRC 59
- High clamping pressure
- Each one is same as height.
- Can be used in multiple style.
- No length of height limitation
- No jaw lift
- Low profile, strong & rigid.
- All vises are matched parallelism $\pm 0.01/100$ m/m



ORDER NO.	VMP -6BH	VMP -6CH	VMP -7AH	VMP -7BH	VMP -7CH	VMP -8AH	VMP -8BH	VMP -8CH	VMP -8DH	VMP-12CH	VMP -12EH
A	150	150	175	175	175	200	200	200	200	300	300
B	50	50	60	60	60	65	65	65	65	80	80
C OPEN	300	400	200	300	400	200	300	400	500	400	600
D	520	620	455	555	655	573	595	695	795	735	935
E	660	760	680	680	680	778	778	778	940	890	1090
F	50	50	58	58	58	70	70	70	70	78	78
G	125	125	145	145	145	170	170	170	170	195	195
H	89.4	89.4	97	97	97	114	114	114	113.4	120.4	120.4
I	16	16	16	16	16	16	16	16	16	16	16
Max. Clamp Force (kgf)	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500
KGS	29	33	38	43	48	65	69	74	90	115	135
CODE NO.	1002-201H	1002-202H	1002-193H	1002-194H	1002-195H	1002-196H	1002-197H	1002-198H	1002-203H	1002-204H	1002-205H

Modular Machine Free Vise

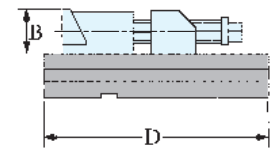
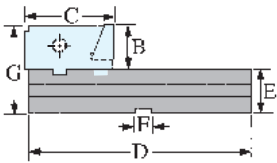
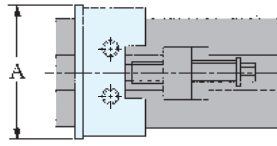
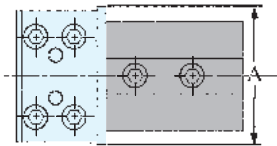
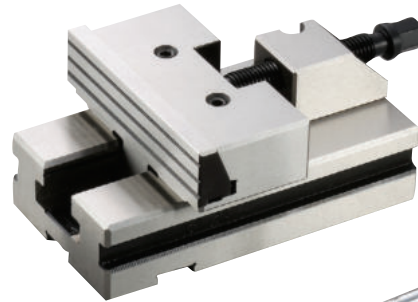


MODULAR VISES are manufactured under rigid quality control. Only the most suitable materials are used, and the accuracy of even the smallest components is assured. As a result of the high standard construction MODULAR VISES can be depended upon to maintain their accuracy under the most severe operating conditions.

L TYPE VISE



VMP-4L, 5L, 6L, 7L



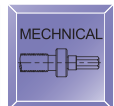
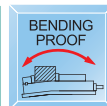
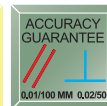
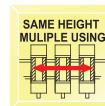
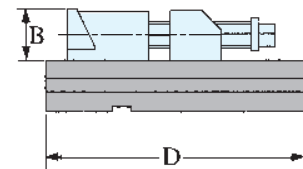
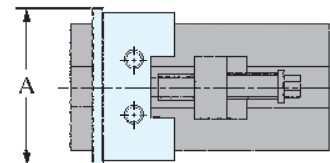
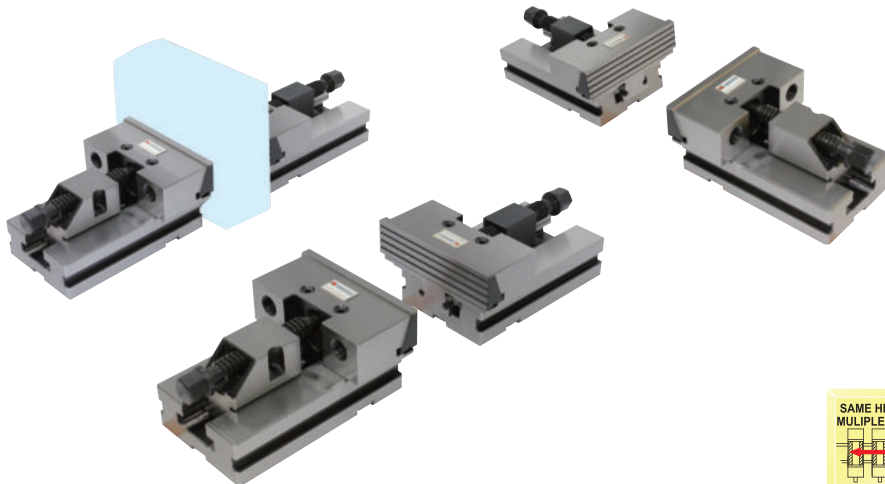
VMP-4L, 5L, 6L, 7L



Free head stock & fixed stock can for large wider workpiece use.

D TYPE VISE

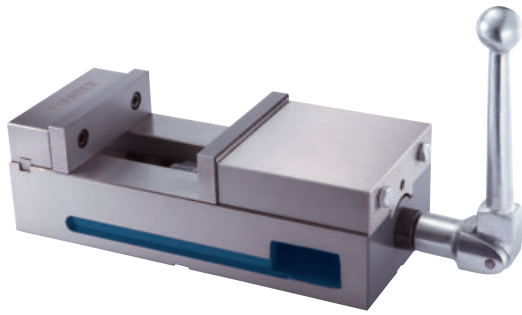
VMP-44D / 55D / 66D / 77D



ORDER NO.	VMP-4L	VMP-5L	VMP-6L	VMP-7L	VMP-44D	VMP-55D	VMP-66D	VMP-77D
A	100	125	150	175	100	125	150	175
B	30	40	50	60	30	40	50	60
C	78	78	90	97	78	78	90	97
D	140	160	230	240	140	160	230	240
E	35	40	50	58	35	40	50	58
F	16	16	16	16	16	16	16	16
G	65	80	100	118	65	80	100	118
KGS	8.5	14.5	30.1	42.4	8.5	14.5	30.1	42.4
CODE NO.	1002-206	1002-207	1002-208	1002-209	1002-206D	1002-207D	1002-208D	1002-209D



Lock-Fixed II Precision Machine Vise

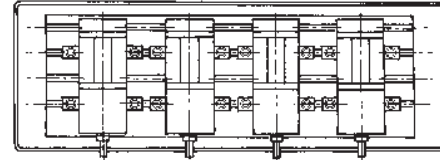
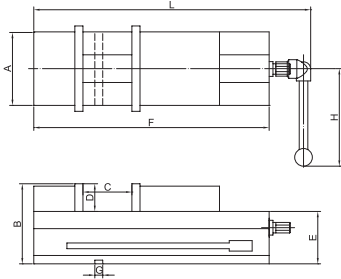


ORDER NO.
VMC-4
VMC-6

Performed
sided vertically.



- With the ability of lock-fixed III 2, 3, 4, 5.
- Use the semi-sphere segment principle.
- When operate several vises (in a row) put on one machine bed, the operating situation is showed as below:



Performed jointly.



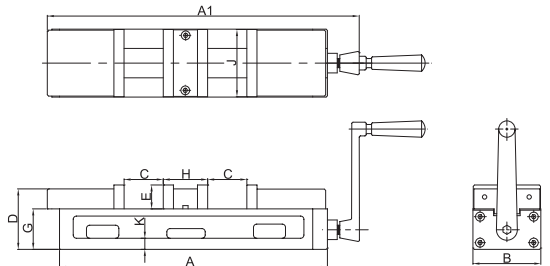
ORDER NO.	A	B	C OPEN	D	E	F	G	L	H	Max. Clamp Force (kgs)	Meas CUFT	Weight (kgs)	CODE NO.
VMC-4	108	100	110	36	63	283	16	374	202	1500	0.4	14.2	1002-185
VMC-6	156	120	142	46	74	370	16	472	221	2500	1.1	29.8	1002-186



Double Clamp Vise



- The slide ways are hardened.
- Precision made.
- One handle can operate two movable jaws and clamps 2 pieces of workpiece of similar size, for 3mm space.
- Lift Proof : Press down design.



Unit:mm

ORDER NO.	A	A1	B	C OPEN	D	E	G	H	J	K	KN	Weight kgs	CODE NO.	
VCV-4D	410	469	108	0~50	0~50	92	36	62	68	107	16	450	18.2	1002-236

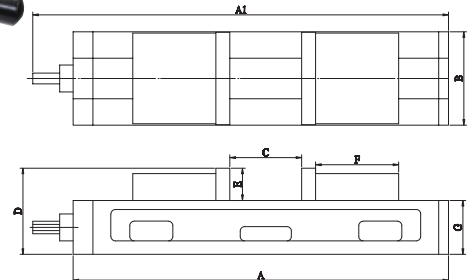


Compound Precision Vise



- Self centering. Suit for rough or irregular workpiece.
- Compact design, 185mm super opened.
- High Accuracy
- Super open capacity=190mm
- Rapid and convenient centralizing.
- Lift Proof : Press down design.

SELF-CENTERING

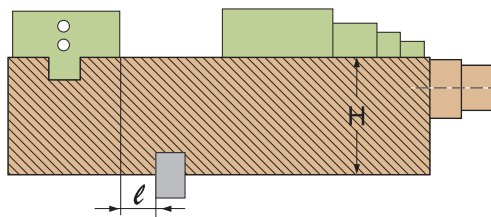


ORDER NO.	A	A1	B	C OPEN	D	E	F	G	KN	Weight (kgs)	CODE NO.
VCV-44	420	469	108	185	98	36	102	62	450	17.7	1002-240

NEW

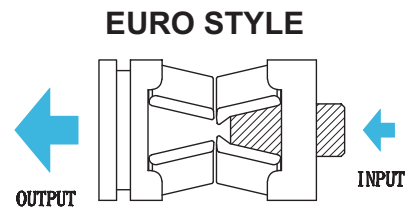
**● Great Capacity, Wide Clamping Range
Constant Full Length**

- Ultra clamping length more than other VMC-vise
- Big jaw opening.
- Easy operation, compact design.
- Even if the jaw is opened, it does not interfere with the cover of the mounting machine.
- Quick set up, time saving.
- When jaw is opened, it is not affect mounting machine's cover.



H-Accurance 0.01mm
l-Accurance 0.01mm

SAME HEIGHT GUARANTEE



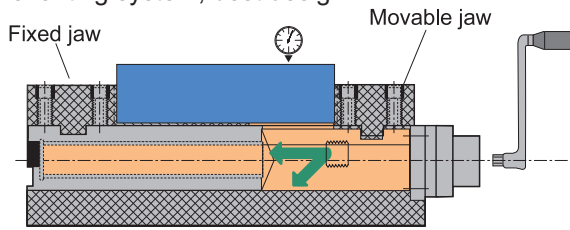
Driving device
Toggle joint device mechanism

● Flexible Clamp System

- High precision system keep the dimension tolerance within 0.01/100mm.
- Vise clamps long size workpieces securely & steady.
- High Accurate System: tolerance within 0.01/100mm.
- VQC Vise can hold long workpiece tight and fixed.

MC Power vises guarantee the lifting of workpiece is within of 0.02/100mm.

- Adapt a blinding beam system with workpiece lift Prevention mechanism. Pull-in effect.
- Adapt a lift preventing system, best design.



LOCK DOWN DESIGN



High power & fine balanced body structure stable clamping force

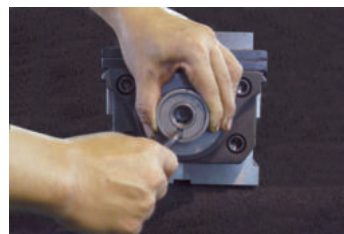
- The clamping force can be easily adjusted due to the preset mechanism.
- Mechanical type toggle enhancement mechanism.
- Clamping force can adjust to suit for different material, such as steel, brass and aluminum.
- Clamping force can be adjusted for customer's requirement.
- Adjustable clamping force device.



GREAT SMOOTH OPERATION
CLAMPING FORCE ADJUSTABLE DESIGN
 From 1800 kgf to 6000 Kgf

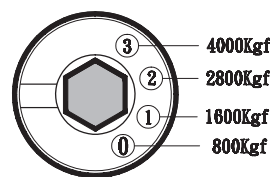
Toggle joint device mechanism.

- **One of the best vise mechanism design**
- After the moveble jaw touch,turning the handle, only the drive shaft is transmitted to the enhancement process of toggle joint device mechanism unit and the movable jaw clamps the work through the clamp spindle at the preset force.
- Clamp work piece, keep turning the handle, until the motion stop which means VQC mechanism has lock workpiece in the pre-set force.



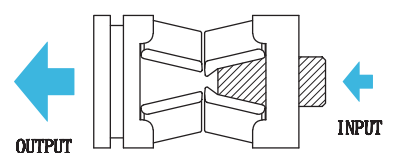
← Adjustable clamping force device

How to adjust the clamping force

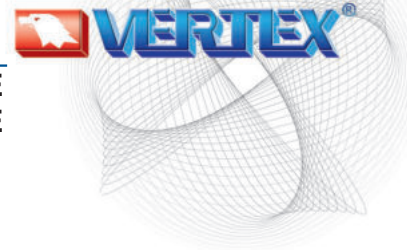


Clamping Collar

EURO STYLE



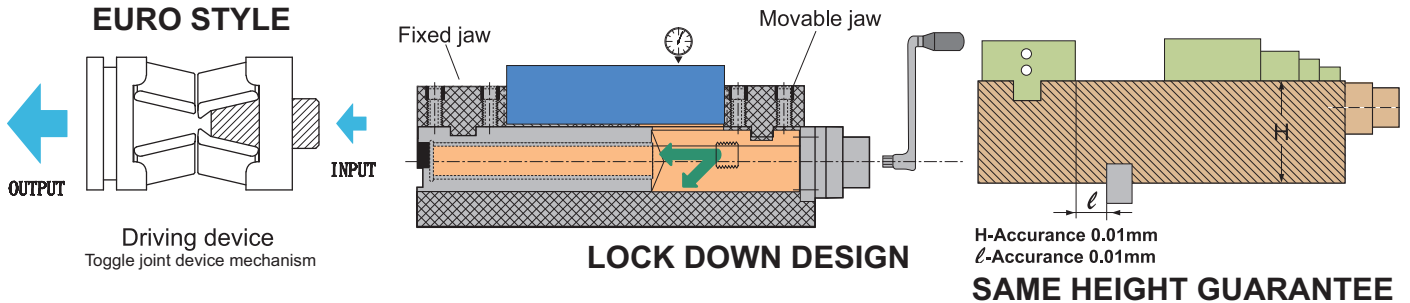
Driving device
Toggle joint device mechanism



GERMAN TYPE
JAPEN TYPE



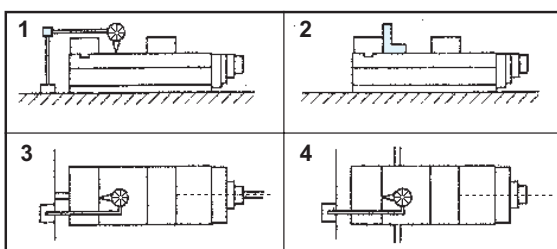
**TOGGLE JOINT MECHANISM
DESIGN FOR HEAVY DUTY
WORKING**



Features

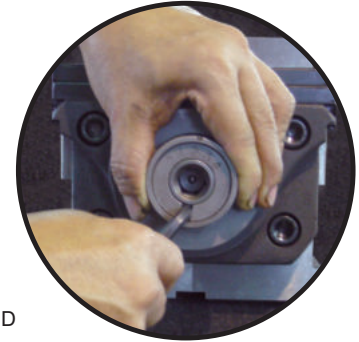
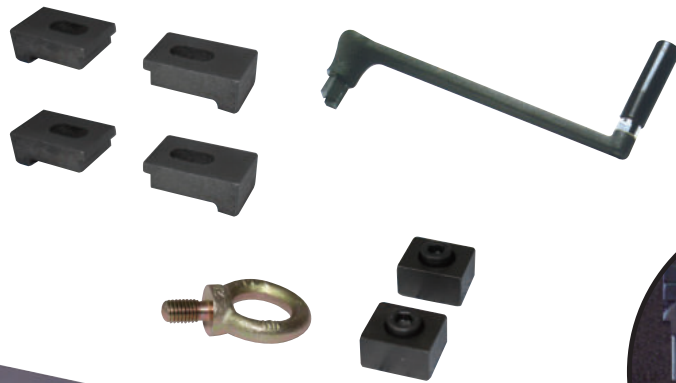
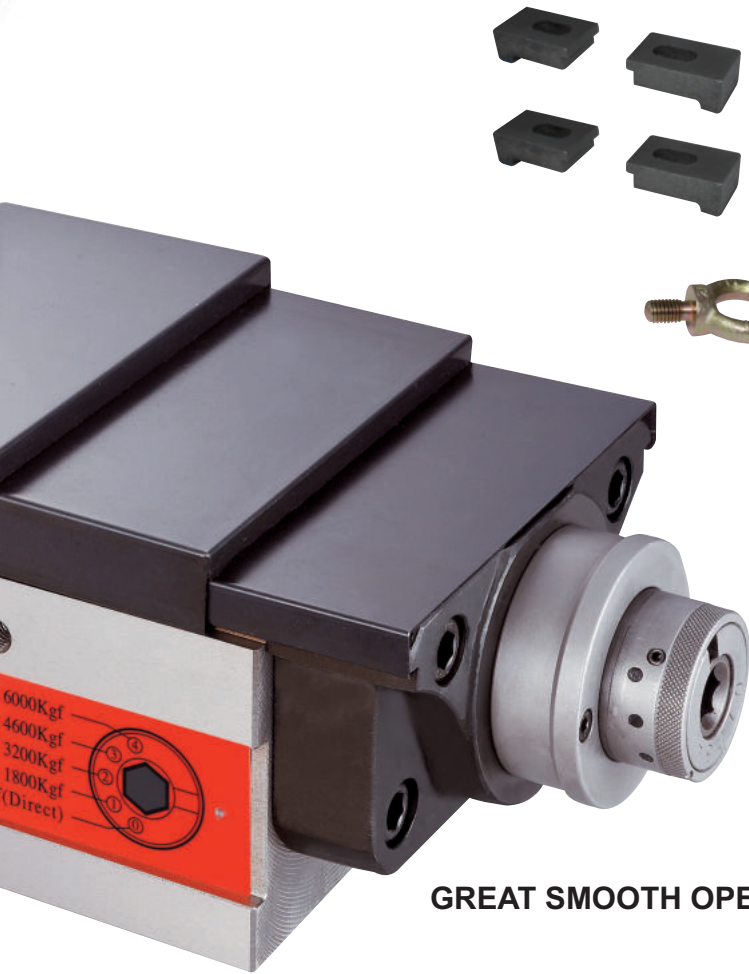
- Compact design. Great clamping capacity & rigid.
- “Toggle joint mechanism”. Provides a steady clamping force against shocks and vibrations during the operations, since it clamps the workpiece resiliently with an aid of the “disc-springs” mounted inside.
- Strong clamping force.
- Large jaw stroke range.
- Exclusive Power Vise provide same height same position for horizontal and vertical MC, NC, Machine.
- Body is made of FCD60 high quality ductile cast iron, resists deflection or bending.
- Sliding bed ways flame hardened and ground.
- Concealed spindle for protection against chips and dirt.
- Quick of clamping & locking and easy of operation.

INSPECTION SPECIFICATION



NO.	Inspection Item	Per (100mm)	Guaranteed
1	Parallelism: running face to bottom of bed.		0.01/100mm
2	Squareness :between running face and jaw plate.		0.02/100mm
3	Squareness: keways on bottom of bed to jaw plate.		0.02/100mm
4	Parallelism: running face of the test block to bottom of bed.		0.02/100mm

SAME HEIGHT GUARANTEE



- ADJUSTING METHOD**
1. FIXED COLLAR
 2. TURN BY WRENCH TO GET NO. 0, 1, 2, 3, 4. TO HAVE CLAMPING FORCE

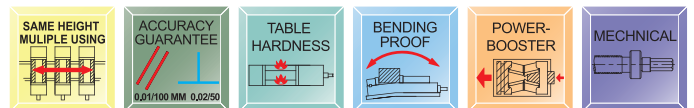
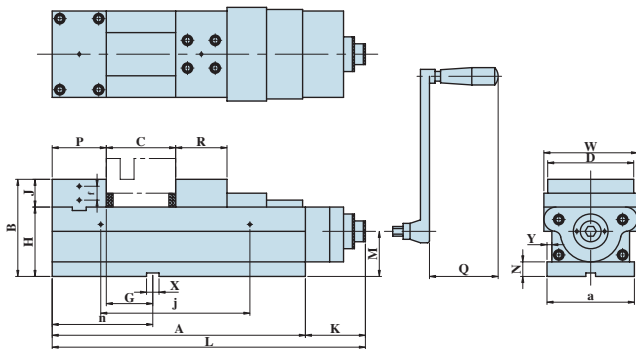
CLAMPING FORCE CHART

ORDER NO.	SCALE	4	3	2	1
	KN				
VQC-100	-	30KN	21KN	12KN	
VQC-125	-	40KN	28KN	16KN	
VQC-160	60KN	46KN	32KN	18KN	
VQC-160L	60KN	46KN	32KN	18KN	
VQC-200L	60KN	46KN	32KN	18KN	

GREAT SMOOTH OPERATION

CLAMPING CAPACITY

ORDER NO.	JAW J	JAW Open C	B	MAX. Clamping Force (KN)	G.W. kg
VQC-100	35	128	120	30	16.84
VQC-125	40	205	140	40	40.4
VQC-160	45	275	165	60	72.3
VQC-160L	45	355	165	60	78.6
VQC-200L	70	405	190	60	108



ORDER NO.	A	B	a	D	P	R	G	H	J	K	L
VQC-100	273	120	105	99	73	64	39	85	35	82.5	356.5
VQC-125	366	140	126	124.5	78	74	66	100	40	86	452
VQC-160	456	165	161	159.5	86	86	58	120	45	98	554
VQC-160L	536	165	162	160	86	86	58	120	45	98	634
VQC-200L	616	180	202	200	102	98	74	120	70	95	711

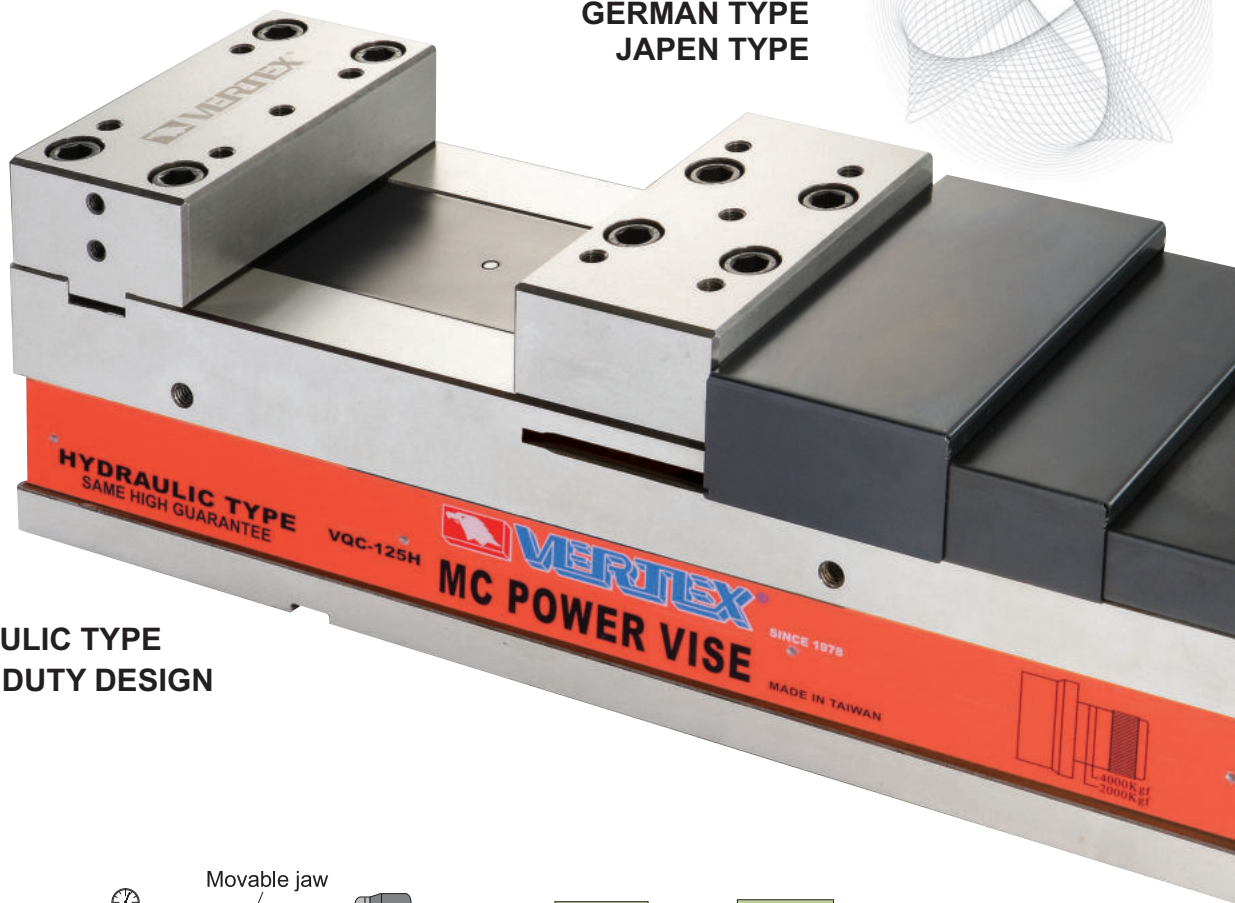
ORDER NO.	M	N	Q	W	X	Y	C OPEN	f	j	n	CODE NO.
VQC-100	50	15	74	110	14	6.5	128	20	105	112	4005-004
VQC-125	65	21	74	135	18	7	205	20	216	145	4005-005
VQC-160	78	21	94	170	18	7	275	20	286	145	4005-006
VQC-160L	78	21	94	174	18	7	355	20	286	145	4005-007
VQC-200L	75	21	96	217	18	7	405	20	386	177	4005-008

MC Power Vise Hydraulic Type

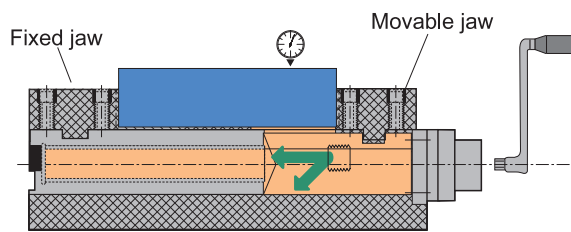


GERMAN TYPE
JAPEN TYPE

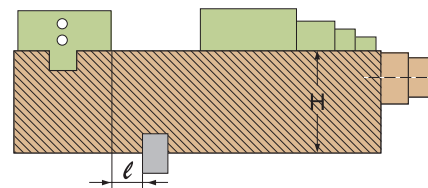
NEW



HYDRAULIC TYPE
HEAVY DUTY DESIGN



LOCK DOWN DESIGN



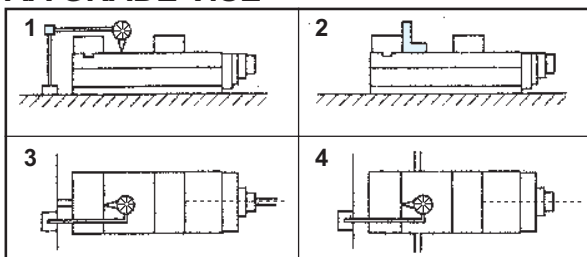
H-Accuracy 0.01mm
L-Accuracy 0.01mm

SAME HEIGHT GUARANTEE

Features

- Compact design. Great clamping capacity & rigid. Light & smooth operation.
- Constructed for milling, drilling, machining center, grinding and many other machine shop applications.
- Body is made of FCD60 ductile cast iron, HIGH deflection/bending resistant.
- Sliding bed ways flame hardened and ground.
- Concealed spindle for protection against chips and dirt.
- Hydra-booster system for maximum clamping pressure with minimum force.
- Quick of clamping & locking and easy of operation.
- Accuracy within 0.01/100mm.
- Hydra-booster system is guaranteed for using 2 years limited.
- The hydraulic oil number is 68#

AA GRADE VISE



INSPECTION SPECIFICATION

NO.	Inspection Item	Per (100mm)	Guaranteed
1	Parallelism: running face to bottom of bed.		0.01/100mm
2	Squareness :between running face and jaw plate.		0.02/100mm
3	Squareness: keways on bottom of bed to jaw plate.		0.02/100mm
4	Parallelism: running face of the test block to bottom of bed.		0.02/100mm



MC Power Vise Hydraulic Type

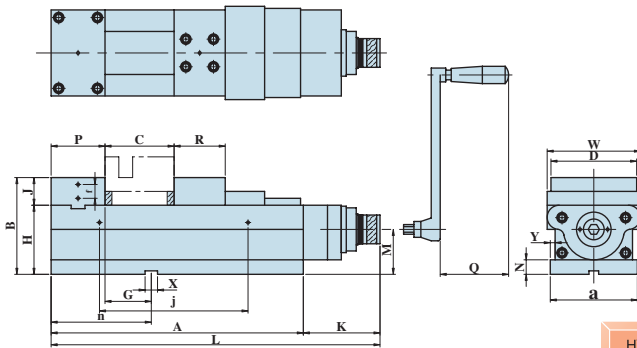
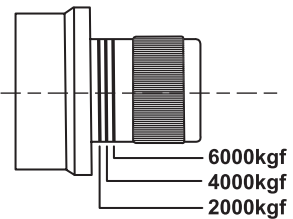
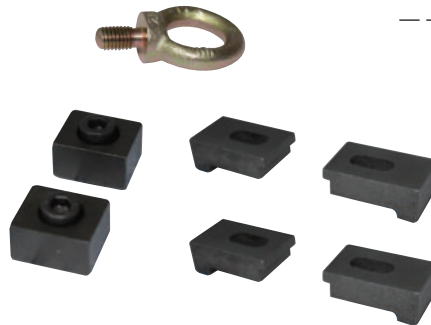
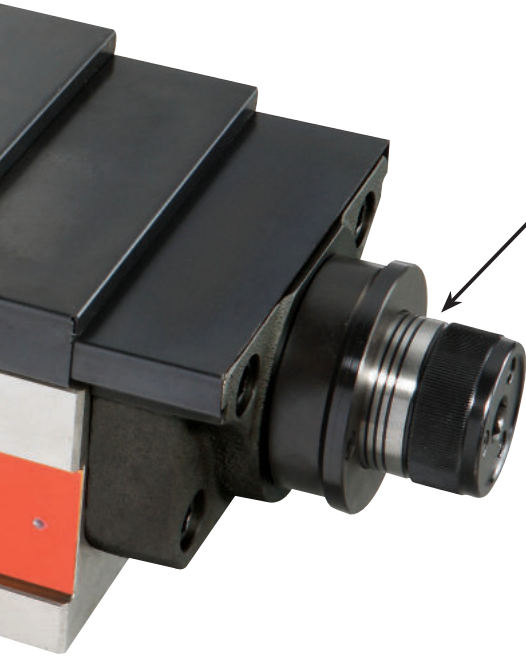
PATENT

SAME HEIGHT GUARANTEE

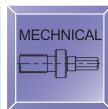
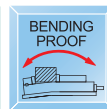
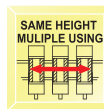
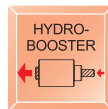


HYDRAULIC UNIT-
GREAT SMOOTH OPERATION

COMPACT DESIGN-
SMALL LENGTH BODY BUT
SUPER OPEN CAPACITY



ORDER NO.	JAW J	JAW Open C	B	MAX. Clamping Force (KN)	G.W. kg
VQC-100H	35	128	120	30	18.84
VQC-125H	40	205	140	40	42.5
VQC-160H	45	275	165	60	66
VQC-160LH	45	355	165	60	78.79
VQC-200LH	70	405	190	60	108



ORDER NO.	A	B	a	D	P	R	G	H	J	K	L
VQC-100H	273	120	105	99	73	64	39	85	35	110	383
VQC-125H	365	140	126	124.5	78	74	66	100	40	113.5	478.5
VQC-160H	455	165	161	159.5	86	86	58	120	45	125.5	580.5
VQC-160LH	535	165	162	160	86	86	58	120	45	125.5	660.5
VQC-200LH	615	180	202	200	102	98	74	120	70	122	737

ORDER NO.	M	N	Q	W	X	Y	C OPEN	f	j	n	CODE NO.
VQC-100H	50	15	74	110	14	6.5	128	20	105	112	4005-004H
VQC-125H	65	21	73	135	18	7	205	20	215	145	4005-005H
VQC-160H	78	21	93	170	18	7	275	20	285	145	4005-006H
VQC-160LH	78	21	93	174	18	7	355	20	285	145	4005-007H
VQC-200LH	75	21	95	217	18	7	405	20	385	177	4005-007AH



MC Power Vise

SAME HEIGHT GUARANTEE



VERTEX®

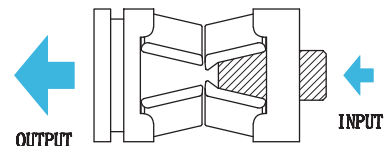
NEW

GERMAN TYPE
JAPEN TYPE

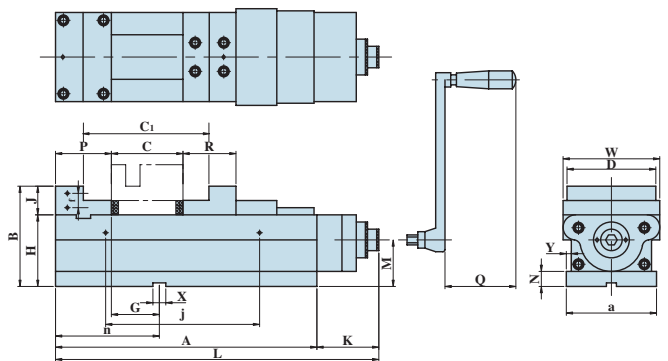


DRIVING
TOGGLE JOINT MECHANISM
DESIGN FOR HEAVY DUTY
WORKING

EURO STYLE



Driving device
Toggle joint device mechanism



Features

- Compact design. Great clamping capacity & rigid.
- "Toggle joint mechanism". Provides a steady clamping force against shocks and vibrations during the operations, since it clamps the workpiece resiliently with an aid of the "disc-springs" mounted inside.
- Strong clamping force.
- Large jaw stroke range.
- Exclusive Power Vise provide same height same position for horizontal and vertical MC, NC, Machine.
- Body is made of FCD60 high quality ductile cast iron, resists deflection or bending.
- Sliding bed ways flame hardened and ground.
- Concealed spindle for protection against chips and dirt.
- Quick of clamping & locking and easy of operation.

L TYPE IS ULTRA OPEN TYPE

ORDER NO.	JAW J	JAW Open		B	MAX. Clamping Force (KN)	G.W. kg
		C	C1			
VQC-100LC	35	128	196	120	30	16.34
VQC-125LC	40	205	283	140	40	40.4
VQC-160LC	50	275	361	165	60	72.3
VQC-1602LC	50	355	455	165	60	78.58
VQC-2002LC	70	405	505	190	60	108



ORDER NO.	A	B	a	D	P	R	G	H	J	K	L	M	N	Q	W	X	Y	C OPEN	C1 OPEN	f	j	n	CODE NO.
VQC-100LC	273	120	105	99	73	64	38.5	85	35	82.5	356.5	50	15	74	110	14	6.5	128	196	20	105	112	4005-004LC
VQC-125LC	365	140	126	124.5	78	74	66	100	40	86.5	451.5	65	21	73	135	18	7	205	283	20	215	145	4005-005LC
VQC-160LC	455	165	161	159.5	86	86	58	120	50	98.5	553.5	78	21	93	170	18	7	275	361	20	285	145	4005-006LC
VQC-1602LC	535	165	162	160	86	86	58	120	50	98.5	633.5	78	21	93	174	18	7	355	455	20	285	145	4005-007LC
VQC-2002LC	615	180	202	200	102	98	74	120	70	95	710	75	21	95	217	18	7	405	505	20	385	177	4005-008LC



MC Power Vise Hydraulic Type

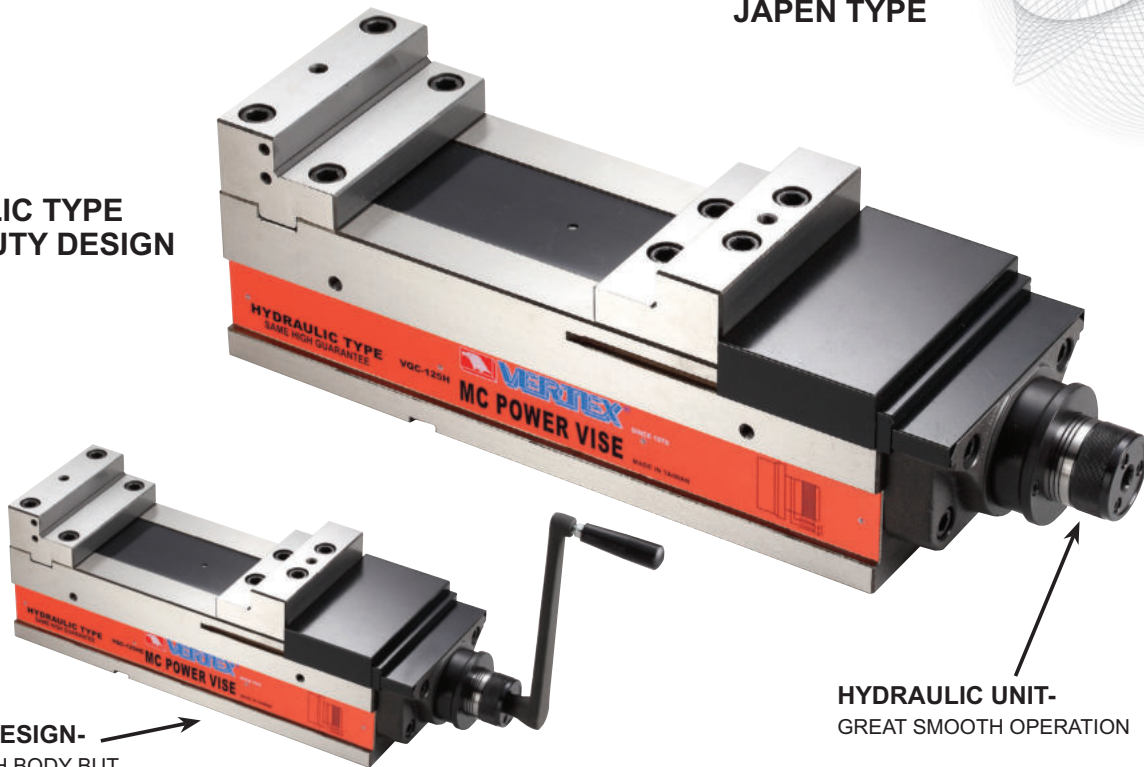


NEW

SAME HEIGHT GUARANTEE

**GERMAN TYPE
JAPEN TYPE**

**HYDRAULIC TYPE
HEAVY DUTY DESIGN**



COMPACT DESIGN-

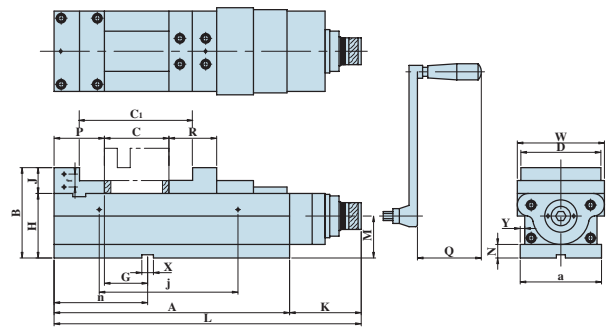
SMALL LENGTH BODY BUT
SUPER OPEN CAPACITY

HYDRAULIC UNIT-

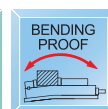
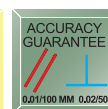
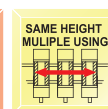
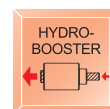
GREAT SMOOTH OPERATION

Features

- Compact design. Great clamping capacity & rigid. Light & smooth operation.
- Constructed for milling, drilling, machining center, grinding and many other machine shop applications.
- Body is made of FCD60 ductile cast iron, HIGH deflection/bending resistant.
- Sliding bed ways flame hardened and ground.
- Concealed spindle for protection against chips and dirt.
- Hydra-booster system for maximum clamping pressure with minimum force.
- Quick of clamping & locking and easy of operation.
- Accuracy within 0.01/100mm.
- Hydra-booster system is guaranteed for using 2 years limited.
- The hydraulic oil number is 68#

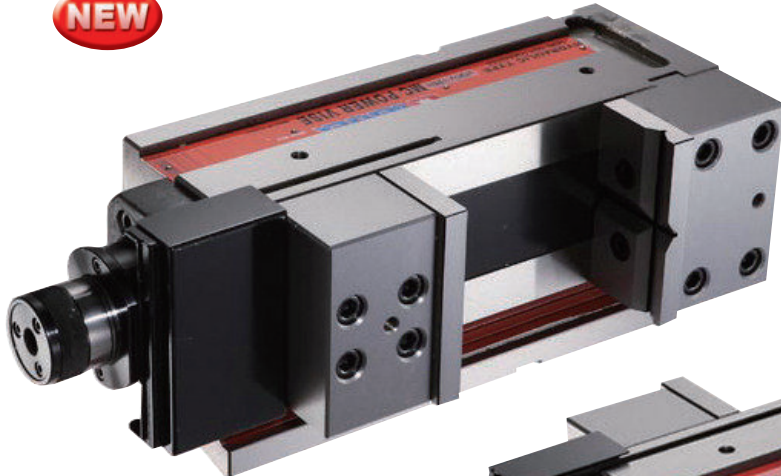


ORDER NO.	JAW J	JAW Open		B	MAX. Clamping Force (KN)	G.W. kg
		C	C1			
VQC-100HC	35	128	196	120	30	18.34
VQC-125HC	40	205	283	140	40	42.5
VQC-160HC	50	275	361	165	60	66
VQC-160LHC	50	355	455	165	60	78.79
VQC-200LHC	70	405	505	190	60	108



ORDER NO.	A	B	a	D	P	R	G	H	J	K	L	M	N	Q	W	X	Y	C OPEN	C1 OPEN	f	j	n	CODE NO.
VQC-100HC	273	120	105	99	73	64	38.5	85	35	110	383	50	15	74	110	14	6.5	128	196	20	105	112	4005-004HC
VQC-125HC	365	140	126	124.5	78	74	66	100	40	113.5	478.5	65	21	73	135	18	7	205	283	20	215	145	4005-005HC
VQC-160HC	455	165	161	159.5	86	86	58	120	50	125.5	580.5	78	21	93	170	18	7	275	361	20	285	145	4005-006HC
VQC-160LHC	535	165	162	160	86	86	58	120	50	125.5	660.5	78	21	93	174	18	7	355	455	20	285	145	4005-007HC
VQC-200LHC	615	180	202	200	102	98	74	120	70	122	737	75	21	95	217	18	7	405	505	20	385	177	4005-008HC

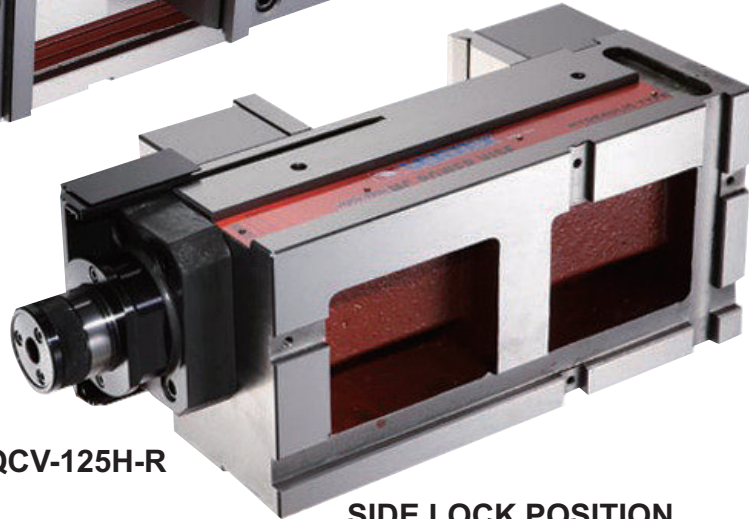
NEW



VQCV-125H-L

NEW

A GOOD POWERFUL CLAMPING WAY FOR SIDELOCK & STANDING POSITION & HEAVY CUTTING.



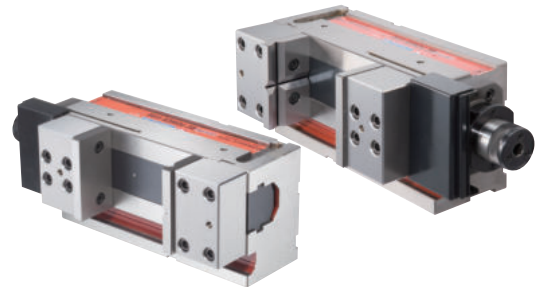
VQCV-125H-R

SIDE LOCK POSITION

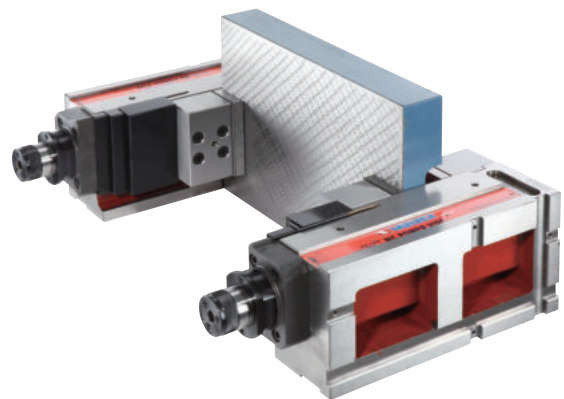
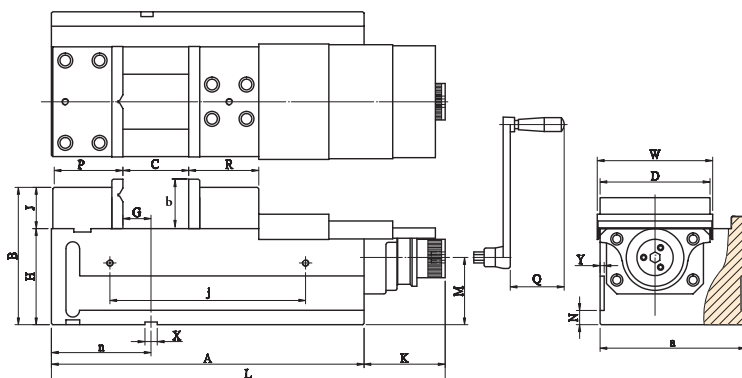


Features

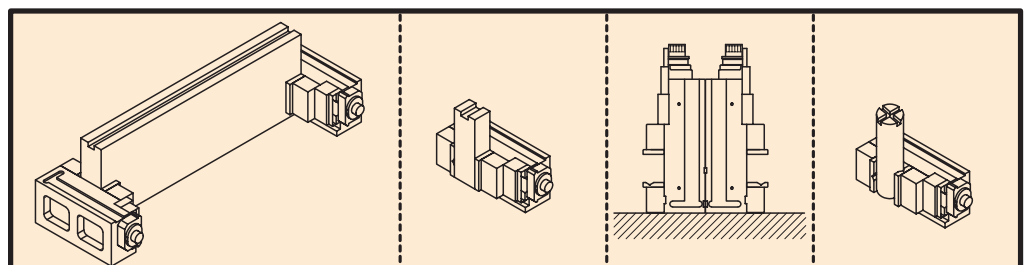
- Multiple purpose.
- Fast & Horizontal & Side setting. Heavy Duty.
- Firm & Rigid & Accurate.
- Unique design allows processing being easier.
- Fast : 2 location setting slots for locating key.
- Dust-proof : concealed spindle.
- Engraved cross shaped jaw for flat & round workpiece.
- All Parts are inter - changeable with VQC-series.



DIMENSION DIAGRAM



NEW DESIGN FOR BETTER CLAMPING WAY



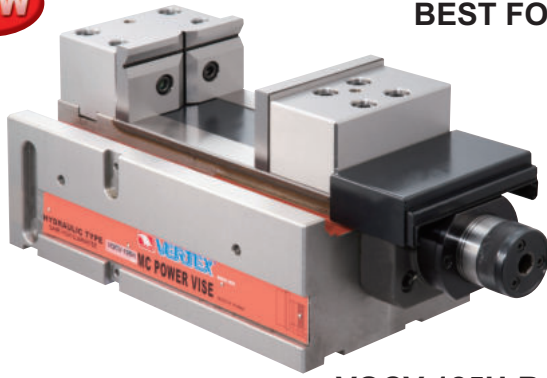
Universal MC Power Vise

PATENT



NEW

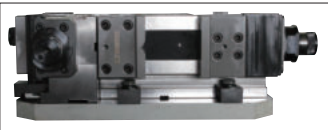
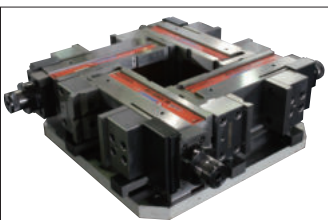
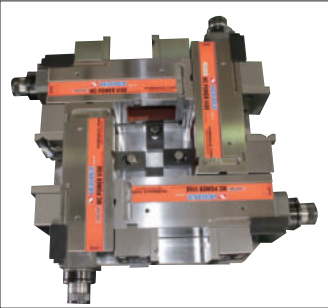
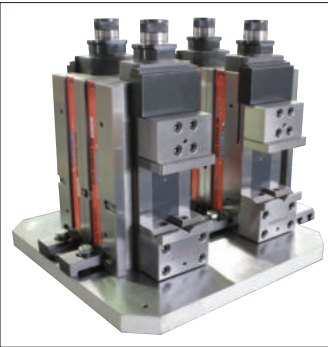
BEST FOR VERTICAL SETTING



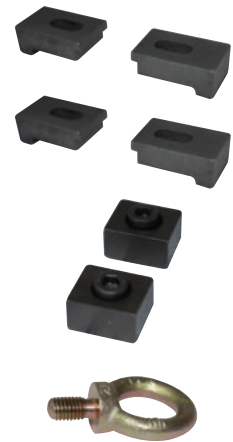
VQCV-125H-R



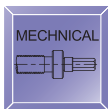
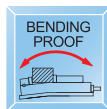
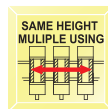
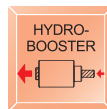
VQCV-125H-L



HORIZONTAL VERTICAL POSITION



- Strong Vertical Clamping



L LEFT HAND , R IS RIGHT HAND

BACK TO BACK ALIGNMENT

- Strong & Stable
- Fast Setting

ORDER NO.	CODE NO.
VQCV-125H - L	4005-091
VQCV-125H - R	4005-092
VQCV-160H - L	4005-093
VQCV-160H - R	4005-094

ORDER NO.	JAW b	JAW Open C	B	MAX. Clamping Force(8#KN)	G.W. kg
VQCV-125H- L R	72	165	180	40	53
VQCV-160H- L R	72	235	200	60	85

ORDER NO.	A	B	a	D	P	R	G	H	J	K	L
VQCV-125H- L R	364	180	177	125	94	90	43	120	60	113.5	477.5
VQCV-160H- L R	455	200	212	160	102	102	42	140	60	125.5	580.5

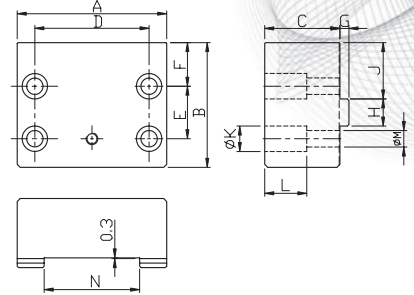
ORDER NO.	M	N	Q	W	X	Y	C OPEN	j	n
VQCV-125H- L R	85	21	73	135	18	7	162	215	139
VQCV-160H- L R	98	21	93	170	18	7	235	285	145

OPTIONAL: Soft jaw for different shape workpiece FJ & MJ can for cutting

FJ



Fixed side



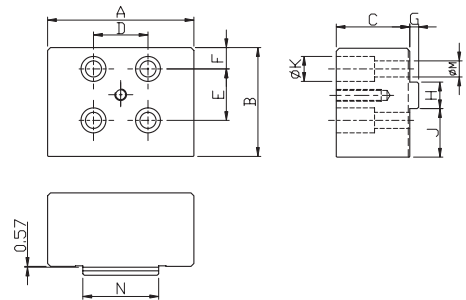
SOFT FIXED JAW

ORDER NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	WEIGHT	CODE NO.
VQC-100FJ	99.5	73	50	76	35	19	6	18	27.5	17	26	11	55	2.97	4005-013C
VQC-125FJ	124.5	91	60	88	45	29.5	8	24	40	19	33.5	13	63	4.96	4005-014
VQC-160FJ	159.5	102	60	124	50	34	9	28	45	22	30	15	84	7.2	4005-015
VQC-160L-FJ	159.5	102	60	124	50	34	9	28	45	22	30	15	84	7.2	4005-016
VQC-200L-FJ	200	122	75	140	62	40	9	28	57	25	37	17	100	3.61	4005-016A

MJ



Movable side



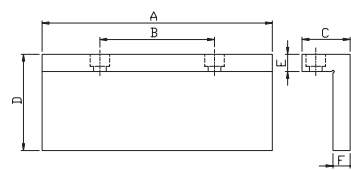
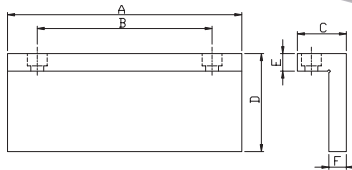
SOFT MOVEABLE JAW

ORDER NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	WEIGHT	CODE NO.
VQC-100MJ	99.5	64	50	37	35	14.5	6	18	23	17	26	11	51.5	2.65	4005-017A
VQC-125MJ	124.5	87	60	35	42	29	8	24	38	19	33.5	13	59.5	4.73	4005-017
VQC-160MJ	159.5	102	60	56	50	34	9	28	45	22	30	15	80.5	7.25	4005-018
VQC-160L-MJ	159.5	102	60	56	50	34	9	28	45	22	30	15	80.5	7.25	4005-019
VQC-200L-MJ	200	117	75	62	59	39	9	28	54.5	25	37	17	95	13.08	4005-019A

Sub Hard Jaws



Suit for VQC & VQC-H type



L TYPE FOR FIXED JAW

ORDER NO.	A	B	C	D	E	F	WEIGHT	CODE NO.
VQC-100FPF	100	70	37	49	15	15	0.81	4005-040
VQC-125FPF	125	80	37	54	15	15	1.06	4005-041
VQC-160FPF	160	100	42	59	15	15	1.55	4005-042
VQC-200FPF	201	150	42	84	15	15	2.56	4005-043

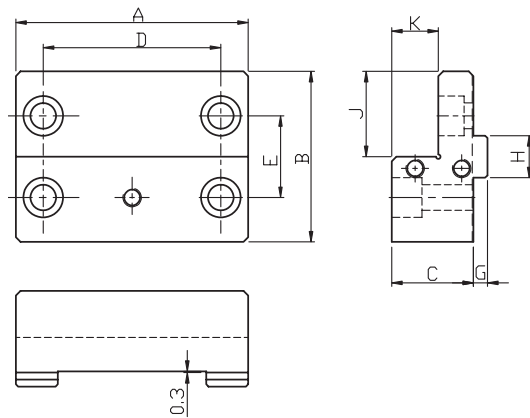
L TYPE FOR MOVEABLE JAW

ORDER NO.	A	B	C	D	E	F	WEIGHT	CODE NO.
VQC-100FPM	100	40	37	49	15	15	0.81	4005-046
VQC-125FPM	125	50	37	54	15	15	1.06	4005-047
VQC-160FPM	160	80	42	59	15	15	1.55	4005-048
VQC-200FPM	201	100	42	84	15	15	2.56	4005-049



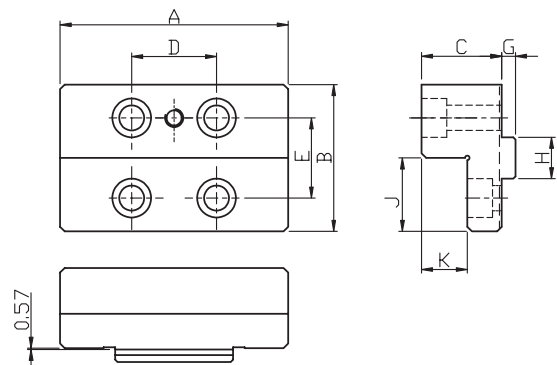
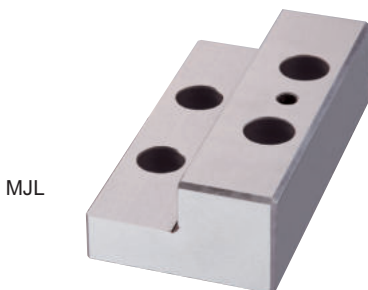
OPTIONAL: Hard jaw for thin type workpiece

WISE JAWS CAN TURN 180° FOR YOUR REQUIREMENT.



L TYPE FIXED JAW

ORDER NO.	A	B	C	D	E	G	H	J	K	WEIGHT	CODE NO.
VQC-100FJL	99.5	73	35	76	35	6	18	36.5	20	1.27	4005-010B
VQC-125FJL	124.5	78	40	88	45	8	24	39	20	2.09	4005-008A
VQC-160FJL	159.5	86	50	124	50	9	28	43	25	3.78	4005-009
VQC-160L-FJL	159.5	86	50	124	50	9	28	43	25	3.78	4005-010
VQC-200L-FJL	200	102	70	140	62	9	28	51	35	7.92	4005-010A



L TYPE MOVEABLE JAW

ORDER NO.	A	B	C	D	E	G	H	J	K	WEIGHT	CODE NO.
VQC-100MJL	99.5	64	35	37	35	6	18	32	20	1.15	4005-013B
VQC-125MJL	124.5	74	40	35	42	8	24	37	20	2.02	4005-011
VQC-160MJL	159.5	86	50	56	50	9	28	43	25	3.86	4005-012
VQC-160L-MJL	159.5	86	50	56	50	9	28	43	25	3.86	4005-013
VQC-200L-MJL	200	98	70	62	59	9	28	49	35	7.69	4005-013A



Precision Compact MC Vise

PATENT

for machining center



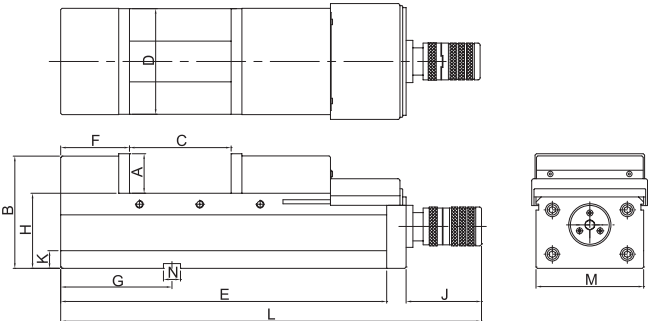
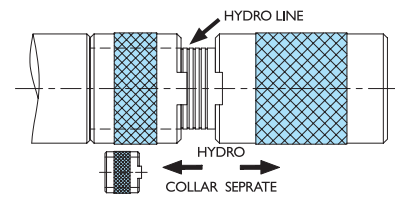
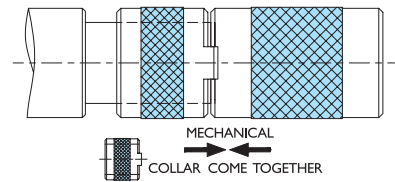
New Design For Hydro Booster 1 Year Guarantee



Hydro & Mechanical Type GREAT SMOOTH OPERATION SAME HEIGHT GUARANTEE

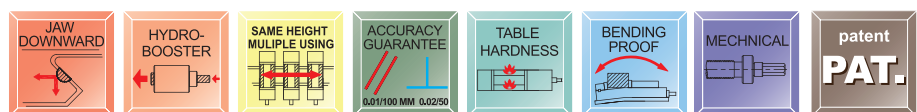
Features

- FCD 60 with 60kgs/mm² or 80,000 psi high quality ductile cast iron - body material - reduce the cutting vibration.
 - Angle-fixed design : for vertical & horizontal cutting & processing machine.
 - Everlasting clamping power : choices of 2 - Hydro & MC.
 - Hydro : move the handle ring to word vise.
 - Mechanical : move the handle ring toward the hex. hole.
 - Heavy cutting.
 - Hardness > HRC 45° : vise sliding bed.
 - High durebility & high precision.
 - Tolerance : 0.01/100mm
 - Lift proof : press down design.
 - Bending resistance : rigid & strong.
 - Dust proof : concealed spindle.
- Fast & easy operation.



INSPECTION SPECIFICATION

NO.	Inspection Item	Per (100mm)	Guaranteed
1	Parallelism: running face to bottom of bed.		0.01/100mm
2	Squareness :between running face and jaw plate.		0.02/100mm
3	Squareness: keway on bottom of bed to jaw plate.		0.02/100mm
4	Parallelism: running face of the test block to bottom of bed.		0.02/100mm



Hydraulic Type

ORDER NO.	A	B	C OPEN	D	E	F	G	H	J	K	L	M	N	Clamping Force (kgf)	Weight Body	CODE NO.
VMC-100HV	48	130	125	100	340	80	125	85	110	15	470	101	16	3000	27 kgs	4005-060
VMC-130HV	55	147	180	130	405	85	150	95	110	21	535	131	18	4000	40 kgs	4005-061
VMC-160HV	58	168	240	160	495	100	165	105	110	21	625	161	18	5000	58 kgs	4005-062
VMC-200HV	61	170	280	200	570	108	190	110	110	21	700	201	18	6000	87 kgs	4005-063



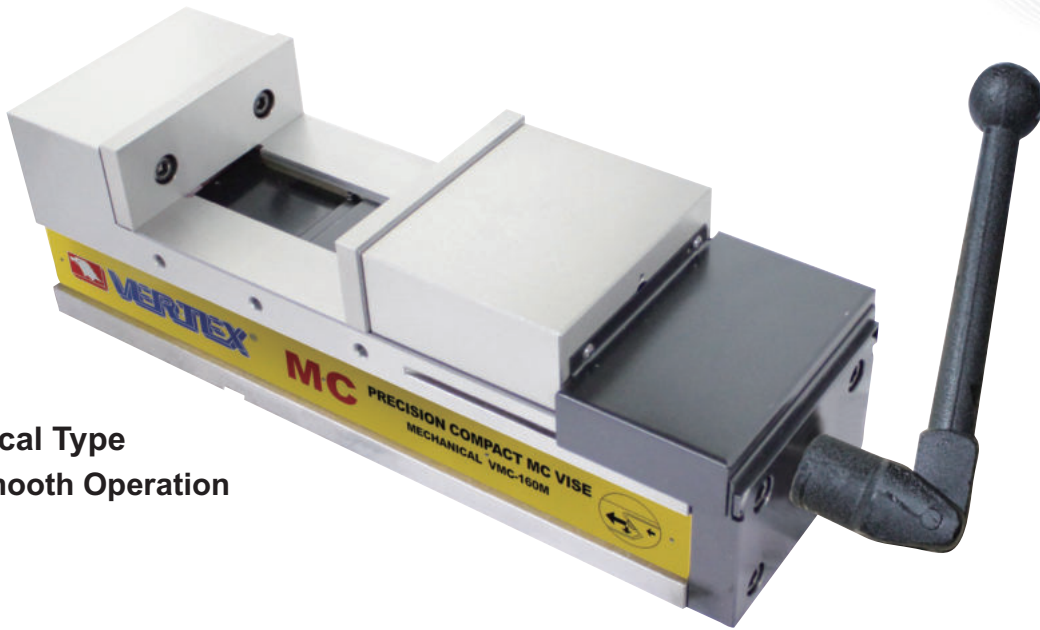
Precision MC Power Vise

SAME HEIGHT GUARANTEE

for machining center



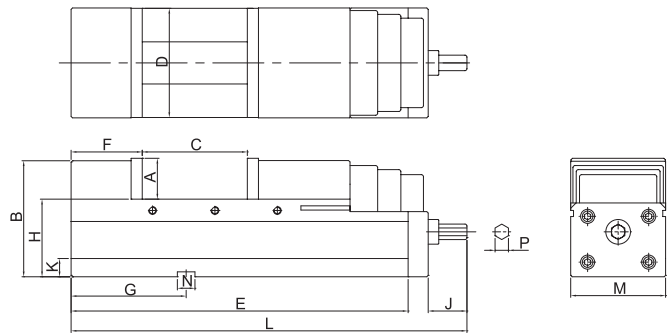
VERTEX®



Mechanical Type
Great Smooth Operation

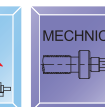
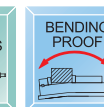
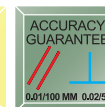
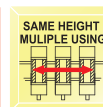
Features

- FCD 60 high quality ductile cast iron - body material - reduce the cutting vibration.
- Angle-fixed design : for vertical & horizontal cutting & processing machine.
- Everlasting clamping power.
- Heavy cutting.
- Hardness > HRC 45° : vise sliding bed.
- High durebility & high precision.
- Tolerance : 0.01/100mm
- Lift proof : press down design.
- Bending resistance : rigid & strong.
- Dust proof : concealed spindle.
- Fast & easy operation.



INSPECTION SPECIFICATION

NO.	Inspection Item	Per (100mm)	Guaranteed
1	Parallelism: running face to bottom of bed.		0.01/100mm
2	Squareness :between running face and jaw plate.		0.02/100mm
3	Squareness: keway on bottom of bed to jaw plate.		0.02/100mm
4	Parallelism: running face of the test block to bottom of bed.		0.02/100mm



Mechanical Type

ORDER NO.	A	B	C OPEN	D	E	F	G	H	J	K	L	M	N	P	Weight Body	CODE NO.
VMC-100M	48	130	125	100	340	80	125	85	55	15	425	101	16	19	26 kgs	4005-064
VMC-130M	55	147	180	130	405	85	150	96	55	21	490	131	18	19	39 kgs	4005-065
VMC-160M	58	168	240	160	495	100	165	105	55	21	580	161	18	19	57 kgs	4005-066
VMC-200M	61	170	280	200	570	108	190	110	55	21	655	201	18	19	86 kgs	4005-067

NC Hydro Machine Vices

PATNET

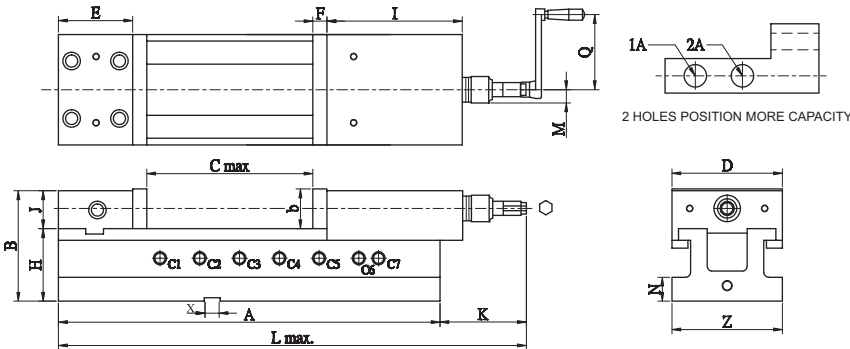
SAME HEIGHT GUARANTEE



NEW



COMPARE WITH SAME WIDTH VISE JAW, VNC TYPE HAS THE BIGGEST OPENING CAPACITY.

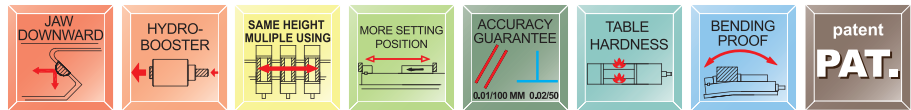


2 HOLES POSITION MORE CAPACITY



Features

- Hydro-booster system for maximum clamping pressure with minimum force.
- Sliding bed ways flame hardened and ground.
- Compact design. Great clamping capacity. Light & smooth operation.
- Body is made of FCD60 ductile cast iron, High deflection/bending resistant.
- Constructed for machining center, milling, drilling, grinding and many other machine shop applications.



ORDER NO.	C MAX. Open	MAX. Clamping Force KN	L MAX. mm	Opening Size For Capacity							
				-	C1	C2	C3	C4	C5	C6	C7
VNC-100H	205	25	464	1A	2-30	57-90	115-146	173-205	-	-	-
				2A	0-3	28-60	86-116	145-175	-	-	-
VNC-125H	225	40	556	1A	10-46	70-106	130-166	190-226	-	-	-
				2A	0-12	38-72	98-132	158-192	-	-	-
VNC-160H	310	50	684	1A	13-70	93-150	173-230	253-310	-	-	-
				2A	0-30	53-110	133-190	213-270	-	-	-
VNC-160LH	509	50	884	1A	13-70	93-150	173-230	253-310	333-390	410-470	450-510
				2A	0-30	53-110	133-190	213-270	293-350	370-430	410-470

ORDER NO.	A	B	D	E	F	b	H	J	N	I	Z	X	Weight (kgs)	CODE NO.
VNC-100H	380	107	100	67	13	38	70	37	24	133	100	14	19	4005-100
VNC-125H	432	126	124	85	15	45	82	44	27	147	125	18	37	4005-101
VNC-160H	550	148	159	102	18	54	95	53	27	189	160	18	63	4005-102
VNC-160LH	750	148	159	102	18	54	95	53	27	189	160	18	77	4005-103

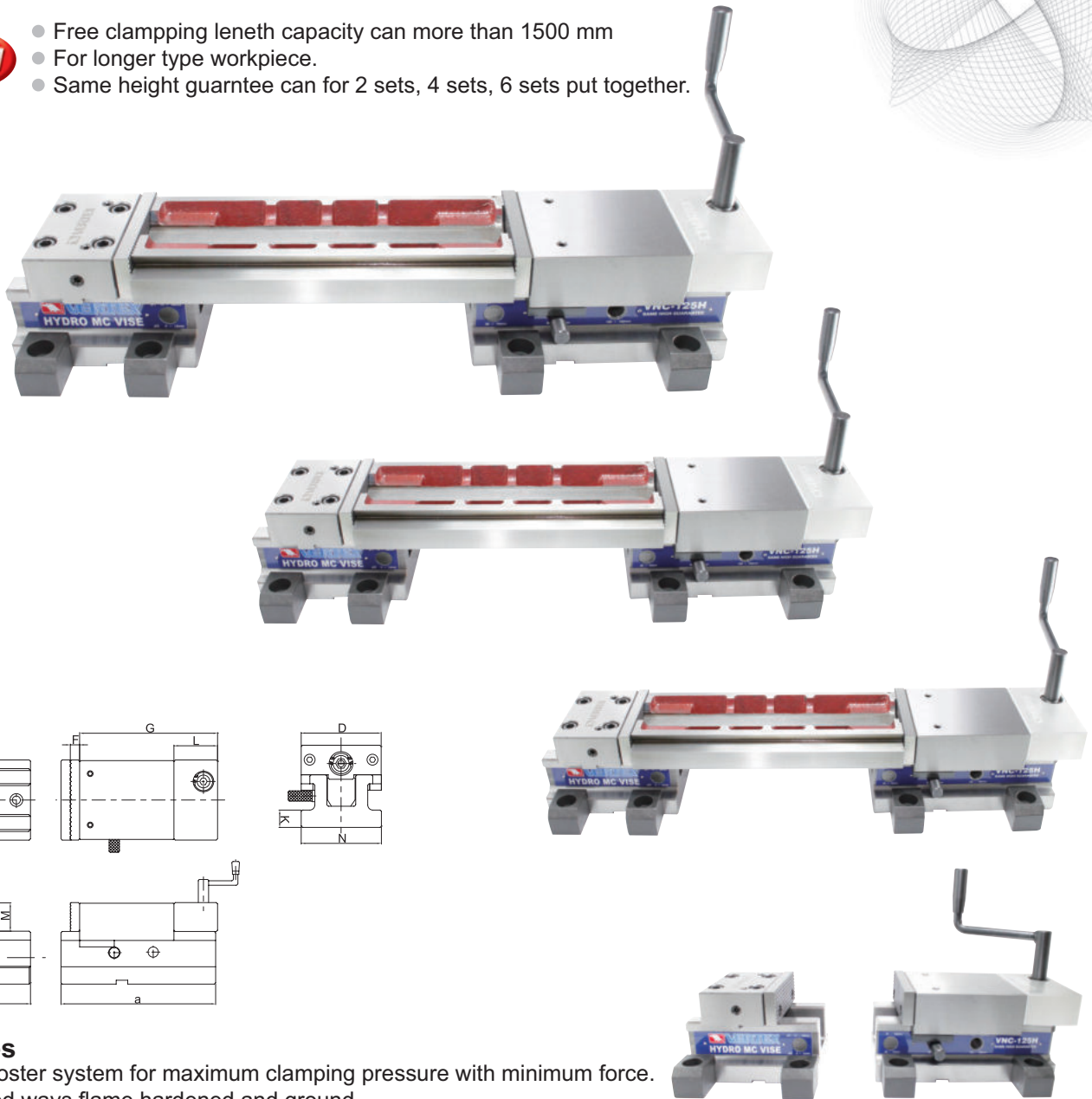


Combination M/C Power Free Vise



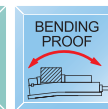
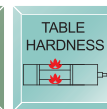
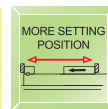
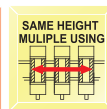
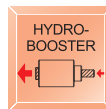
NEW

- Free clamping length capacity can more than 1500 mm
- For longer type workpiece.
- Same height guarantee can for 2 sets, 4 sets, 6 sets put together.



Features

- Hydro-booster system for maximum clamping pressure with minimum force.
- Sliding bed ways flame hardened and ground.
- Compact design. Great clamping capacity. Light & smooth operation.
- Body is made of FCD60 ductile cast iron, High deflection/bending resistant.
- Constructed for machining center, milling, drilling, grinding and many other machine shop applications.
- Free setting style.
- Handle : horizontal & vertical.
- Allow to clamp longer workpiece.



ORDER NO.	A	a	B	C	D	E	F	G	H	J	K	L	M	N	Weight kgs
VNC-100FV	150	228	103	14	99	67	13	133	70	33	24	76	34	100	19
VNC-125FV	180	250	126	18	124	85	15	147	82	44	27	78	45	125	37
VNC-160FV	200	280	148	18	159	102	18	189	95	53	27	90	54	160	63

ORDER NO.	JAW WIDTH	JAW HEIGHT	BASE HEIGHT	GUIDE BLOCK	JAW STROKE	MAX CLAMPING FORCE(KN)	CODE NO.
VNC-100FV	100	38	70	14	90	20	4005-106
VNC-125FV	125	45	82	18	106	30	4005-107
VNC-160FV	160	54	95	18	150	40	4005-108



VNC Axial Drive & Plain Jaw

HYDRO PATENT

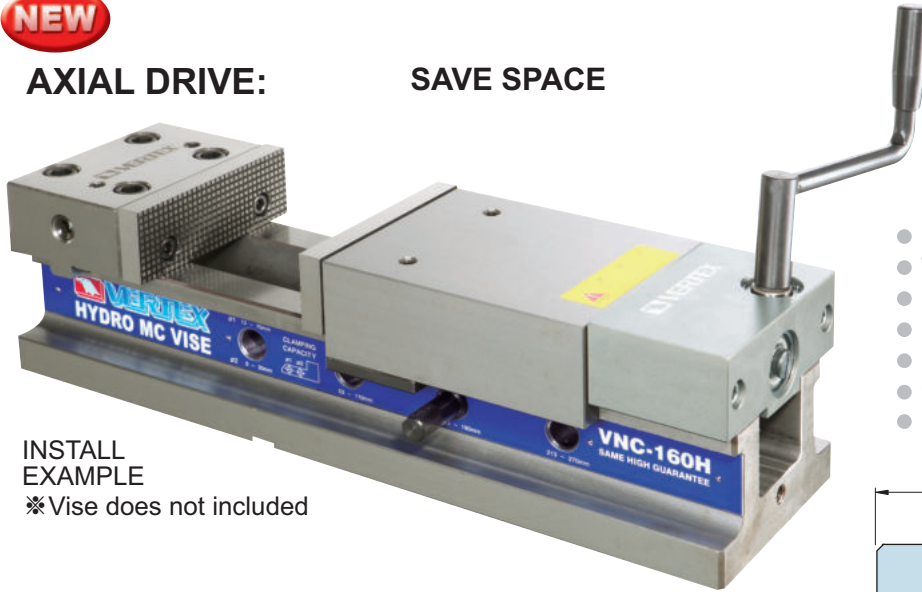
Accessories For VNC Only



NEW

AXIAL DRIVE:

SAVE SPACE



- Better flexibility.
- Transfer to vertical drive.
- Extend functions.
- Compact design.
- Provide better escape while clamping.
- 90° horizontal to vertical drive.
- Light Weight & easy to install & take off.

INSTALL EXAMPLE

*Vise does not included



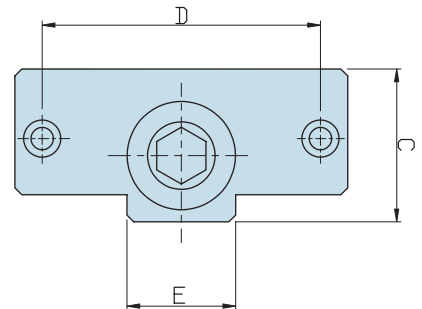
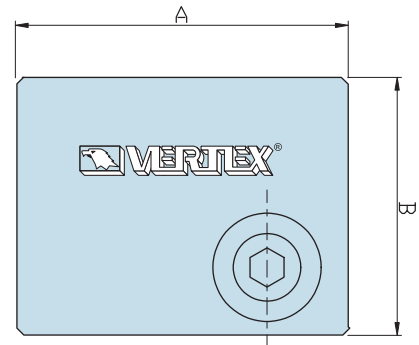
VNC-4AD



VNC-5AD



VNC-6AD

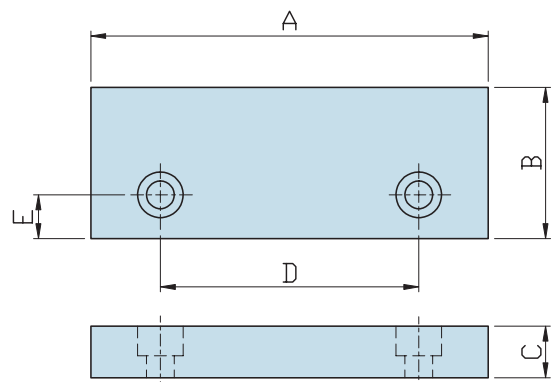
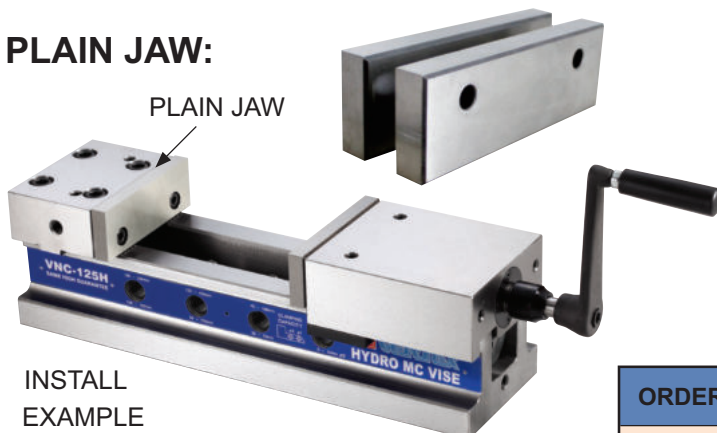


AXIAL DRIVE

ORDER NO.	A	B	C	D	E	G.W. (KG)	CODE NO.
VNC-4AD	98	76	45	82	32	1.57	4005-111
VNC-5AD	124	78	52	96	40	2.08	4005-112
VNC-6AD	158	90	61.5	126	46	2.97	4005-113

PLAIN JAW:

PLAIN JAW



INSTALL EXAMPLE

- Spare jaw (2 piece per set)
- Accurate Harded, Ground

ORDER NO.	A	B	C	D	E	G.W. (KG)	CODE NO.
VNC-4PJ	100	38	13	65	11	1.3	4005-121
VNC-5PJ	125	45	15	80	14	1.5	4005-122
VNC-6PJ	160	54	18	100	17	2.6	4005-123



Precision Pneumatic Ang-Fixed Power Vise



VERTEX®

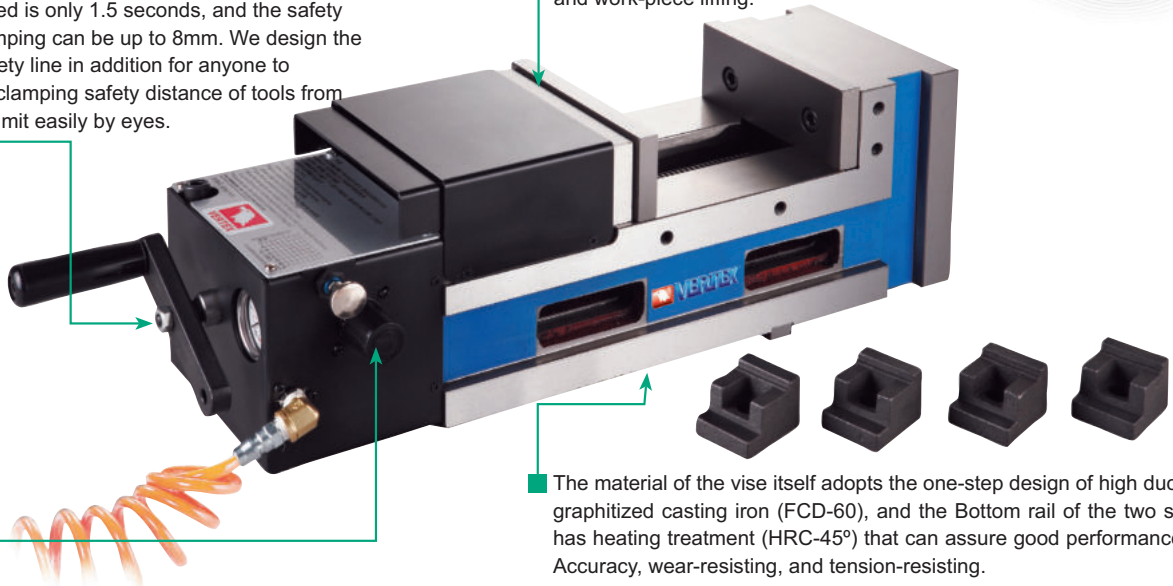
SAME HEIGHT GUARANTEE

Suitable for Mass production and to be used on machine centers, milling machines, drilling machines and special purpose machines.

The greatest safety distance of clamping:

The switch speed is only 1.5 seconds, and the safety distance of clamping can be up to 8mm. We design the hand wheel safety line in addition for anyone to distinguish the clamping safety distance of tools from exceeding the limit easily by eyes.

Down trust "semi-spherical segment" mechanism eliminates jaw lifting and work-piece lifting.



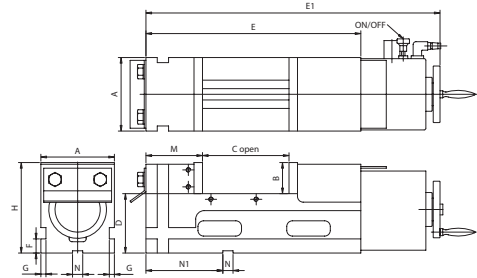
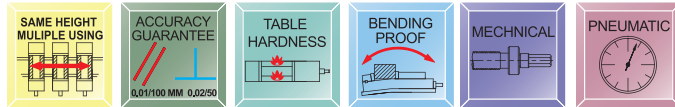
The material of the vise itself adopts the one-step design of high ductility graphitized casting iron (FCD-60), and the Bottom rail of the two sides has heating treatment (HRC-45°) that can assure good performance on Accuracy, wear-resisting, and tension-resisting.

Regulator: If the air pressure is low, 8 kgf/cm², it can still achieve the super strong clamping capacity of 9000 kg/cm².

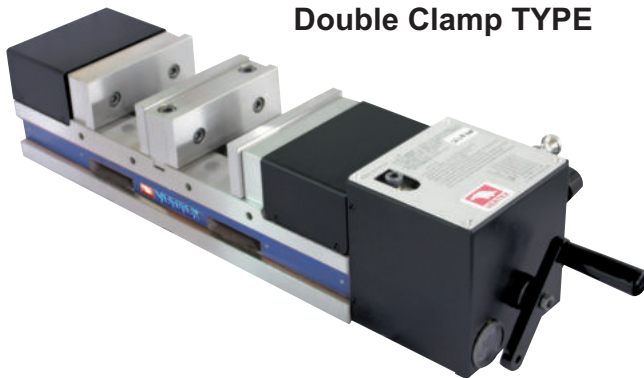
The clamping capacity from 0~9000 kg/cm² can be set freely and adjust via pressure regulator.

Automatically seeking the highest source of air pressure:

When the required pressure was set, it will not loose under low air pressure.



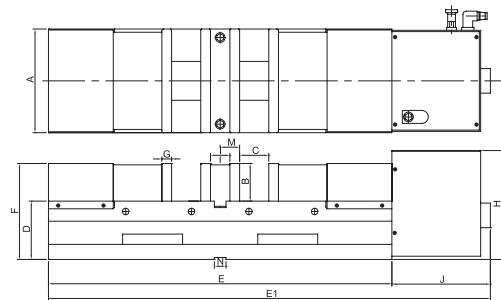
ORDER NO.	A	B	C OPEN	D	E	E1	F	G	H	M	N	N1	Max. Clamp Force (kgf)	N.W. (kgs)	CODE NO.
VMC-5P	130	55	150	105	380	520	25	9	160	100	18	136	6000	38	4005-070
VMC-6P	160	58	160	105	400	540	25	9	163	100	18	136	6000	48	4005-071
VMC-6PL	160	58	250	105	490	630	25	9	163	100	18	136	6000	51	4005-072
VMC-7P	180	63	200	110	460	600	25	12	173	108	18	171	9000	65	4005-073
VMC-8P	200	63	200	110	470	610	25	12	173	108	18	171	9000	70	4005-074
VMC-8PL	200	63	300	110	570	710	25	12	173	108	18	171	9000	79	4005-075



Double Clamp TYPE

Feature:

Double clamp function for massive production.



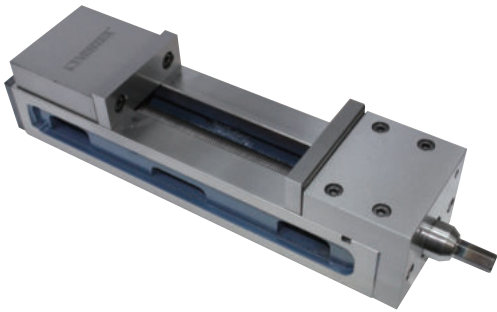
Unit:mm

ORDER NO.	A	B	C OPEN	D	E	E1	F	G	H	I	J	N	Max. Clamp Force (kgf)	N.W. (KG)	G.W. (KG)	CODE NO.
VMC-6PD	160	58	0-100	90	530	682	148	15	168	30	152	18	4000	63	66	4005-085

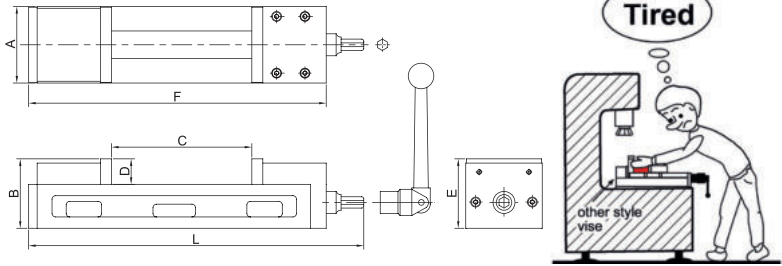
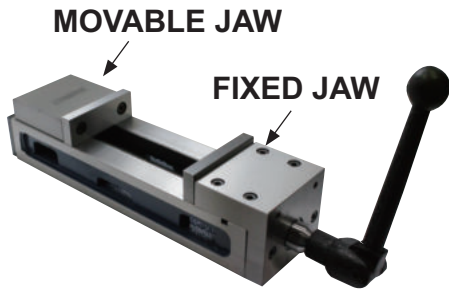
Convenience Type Machine Vise



NEW



- Moveable jaw located at outer end and align surface for workpiece is in front of operator. It is convenient for loading or unloading workpiece on such design of vise.
- The overall length of this vise is shorter than other similar vises, but keep the more jaw opening. Save space on work table.
- Extra opened
- Semi-spherical segment eliminates jaw lifting and workpiece tilting.
- Time & energy saving



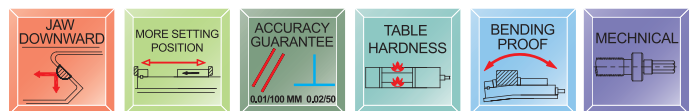
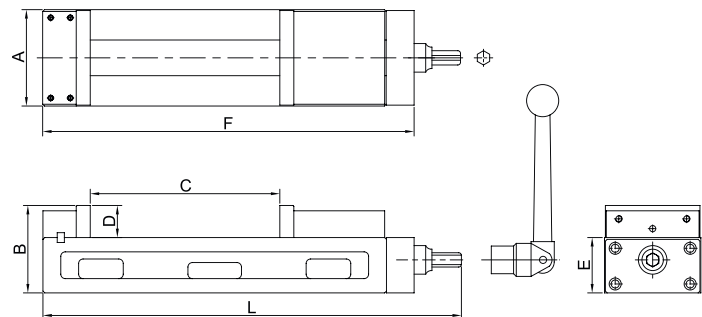
ORDER NO.	A	B	C OPEN	D	E	F	L	Max. Clamp Force (kgs)	Weas (kgs)	CODE NO.
VCM-47	108	98	180	36	62	420	470	450KN	17.7	4005-080

Super Opened Ang-Fixed Machine Vise

NEW

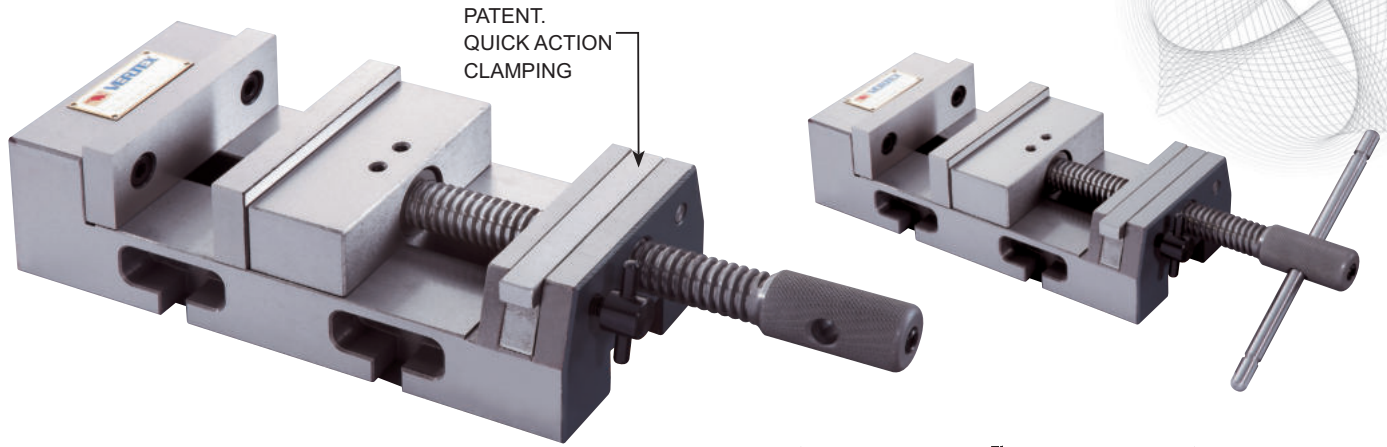


- The overall length of this vise is shorter than other similar vises, but keep the more jaw opening. Save space on work table.
- Semi-spherical segment eliminates jaw lifting and workpiece tilting.
- Vise bed flame hardend to HRC up is capable to obtain low weariness and last the high accuracy for long.
- Chip covers is applied on this vise to prevent from chips falling to leadscrew and inside of vise.



ORDER NO.	A	B	C OPEN	D	E	F	L	Max. Clamp Force (kgs)	Weas (kgs)	CODE NO.
VMC-4L	108	98	210	36	62	420	470	450KN	17.3	4005-095

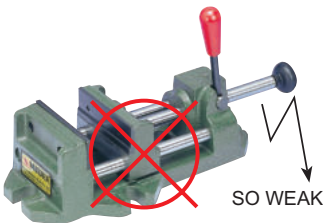
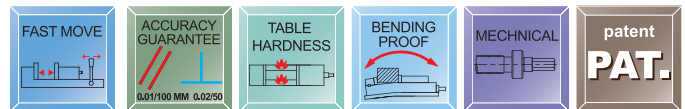
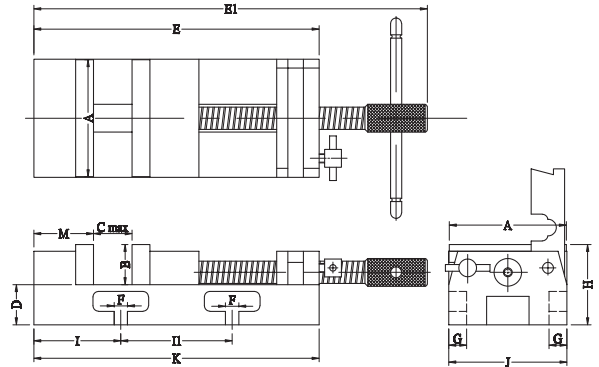
Quick Setting Vice



PATENT.
QUICK ACTION
CLAMPING

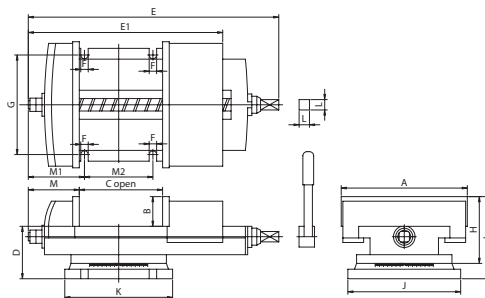
Features

- Special design for quick clamping. (From the acme thread shaft stationly)
- Quick setting by sliding movement. Big clamping capability.
- Operating very quick and easy, can increase so much working efficiency than you can image.
- Good for short term and massive production or proto type work.
- Suit for milling machine, grinder machine, precision drilling machine using.
- Accurate grounded and assembled.
- Precision cut acme thread, it can get 800kgs high clamping force.
- Horizontal & vertical



ORDER NO.	A	B	C max.	D	E	E1	F	G	H	I	I1	J	K	M	MAX.Clamp Force kgf	G.W.	CODE NO.
VQS-3	81	34	85	36	230	374	10	14	70	75	80	82	230	50	700	7	1002-262
VQS-4	105	36	104	36	256	422	12	16	72	78	100	106	256	54	800	9.5	1002-263
VQS-5	131	36	125	38	297	490	12	20	74	98	100	132	297	67	800	14.5	1002-264

Machine Vise For Shaping & Milling Use



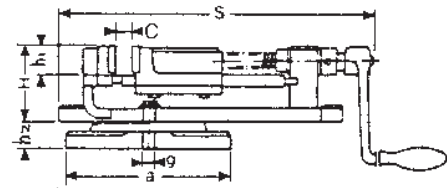
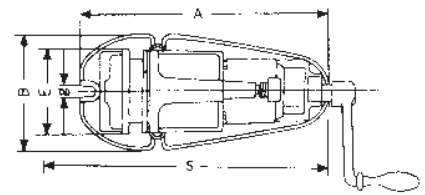
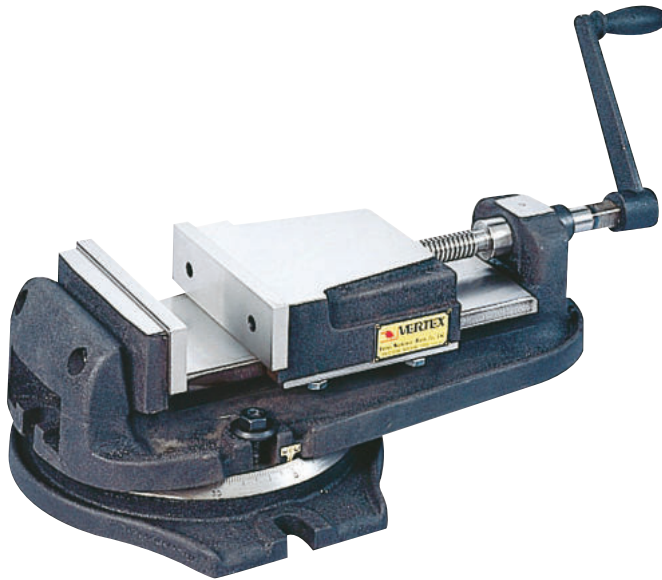
The vise is made of the high tension cast iron, rigidity, large range of clamping spans and more bigger clamping force at press down jaws, especially suitable for the heavy duty cutting and the heavy duty planner milling machine to clamp large workpiece.



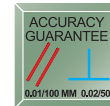
Unit:mm

ORDER NO.	A	B	C OPEN	D	E	E1	F	G	H	I	J	K	L	M	M1	M2	Max. Clamp Force (kgf)	G.W. (kgs)	CUFT (cm)	CODE NO.
VSM-12	304	72	290	126	604	560	18	240	161	198	272	260	25	123	135	165	800	84	67x35x23	1002-270
VSM-16	405	96	415	145	763	738	20	292	200	241	336	336	25	135	143	248	1000	142	84x45x27	1002-271
VSM-20	508	95	505	150	902	871	21	288	204	245	336	336	25	169	211	246	1200	200	97x56x28	1002-272

B-Type Milling Vise



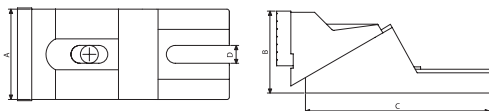
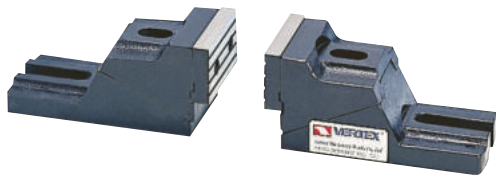
- A wider bottom to increase clamping force.
- Groove device to collect cutting oil.
- Full 360° swivel base with line, accurate graduation.



Please refer to page 11 Fig.2

ORDER NO.	A	B	C OPEN	E	S	H	a	h1	h2	g1	g2	G.W. kgs	CODE NO.
VBV-4	270	140	65	100	305	79	212	33	28	12	12	13	1002-280
VBV-5	350	180	100	125	410	96	280	37	35	15	15	21.5	1002-281
VBV-6	452	218	132	160	483	103	317	48	40	16	16	41	1002-282

Free Vise

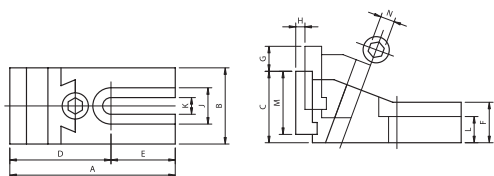
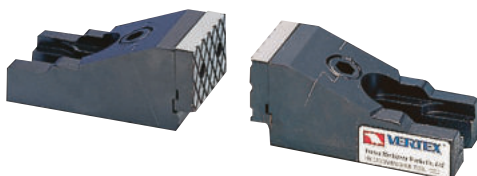


Unit:mm

ORDER NO.	DIMENSION (WxHxL)	CLAMPING CAPACITY (HxL)	WEIGHT (kgs/2PCS)	CODE NO.
FV-350	75x67x150mm	140x350mm	7.5	1002-290
FV-450	100x90x200mm	180x450mm	14	1002-291
FV-550	125x120x250mm	250x550mm	23	1002-292

ORDER NO.	BOLT SIZE
FV-350	M12 x 75L x 2PCS. M12 x 100L x 2PCS
FV-450	M12 x 75L x 2PCS. M12 x 125L x 2PCS
FV-550	M16 x 75L x 2PCS. M16 x 150L x 2PCS

- FV type is light duty.
- Free style clamping.
- Adjustable distance 15mm.



Unit:mm

ORDER NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	N.W. (kgs)	CODE NO.
SV-62	139	64	59.5	85	54	33.5	21	9	30.5	18	22	52.5	12	5.8	1002-293
SV-85	192	86.5	86	115	77	53	24	10	36	18	25.5	59.5	12	11	1002-294
SV-125	218	127	84	124	94	51.5	33	18	45.5	20	23.5	73	12	21	1002-295

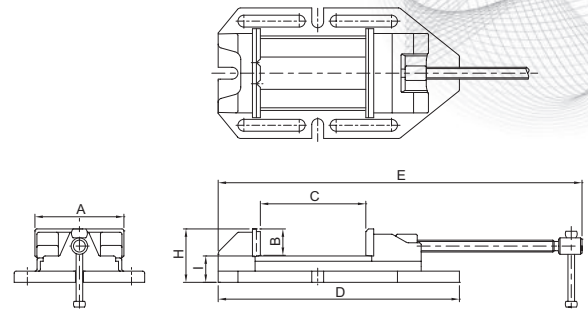
ORDER NO.	BOLT SIZE
SV-62	M12 x 75L x 4PCS
SV-85	M16 x 75L x 4PCS
SV-125	M16 x 75L x 4PCS

- Free style clamping.
- Heavier duty.
- Adjustable distance 10mm.

Super Open Drill Vise



NEW

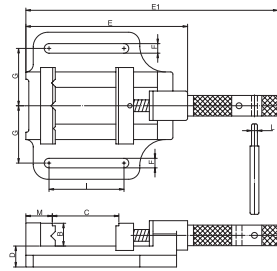


Unit:mm

ORDER NO.	A	B	C OPEN	D	E	H	I	V	G.W. (kgs)	CFT	CODE NO.
VRV-4	110	32	130	316	471	73	40	5-32	9.8		1002-320
VRV-5	135	40	160	366	552	81	40	6-40	14.0		1002-321
VRV-6	160	50	220	447	693	96	45	7-48	25.7		1002-322

Drill Vise

NEW

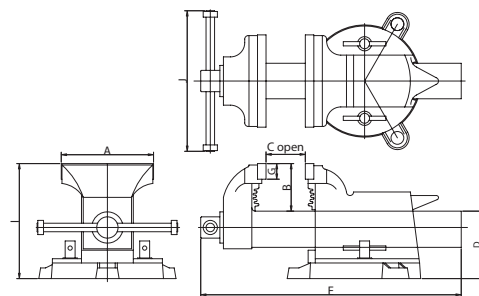


- Designed with solid structure, main body is made of FC15, assemble a pair of heat treated steel jaws with hardness HRC 45°~50°
- Suitable for clamping work piece on drill press machine & milling machine
- Jaw pair and handle are surface treated by black oxide finish
- Front fixed prismatic jaw with cross V-grooves is designed for clamping work piece firmly in both vertical & horizontal directions

ORDER NO.	A	B	C OPEN	D	E	E1	F	G	H	I	J	L	M	WEIGHT	CODE NO.
DV-85	84	25	85	27	182	287	12	64	56	80	167	8	32	3.5	1015-041
DV-100	104	31	100	28.5	220	343	13	78	63	102	200	8	36	5.7	1015-042
DV-120	132	38	120	32	250	395	14	91	71	127	226	9.5	45	8.2	1015-043

Steel Bench Vise With Base

NEW



mm

ORDER NO.	A	B	C OPEN	D	E	G	I	J	WEIGHT (kgs)	CODE NO.
BVV-3	79	51	75	87	280	18	138	178	6	1002-330
BVV-4	104	61	100	87	310	18	148	178	7	1002-331
BVV-5	127	68	125	93	370	22	165	198	10.5	1002-332
BVV-6	154	78	150	108	420	22	183	228	14	1002-333
BVV-8	205	87	200	115	500	22	202	238	18	1002-334
BVV-10	253	100	250	114	570	22	220	263	24	1002-335



Quick Bench Vice

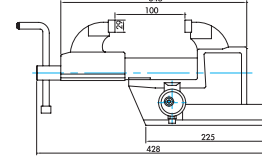
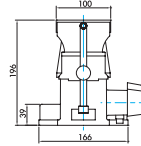
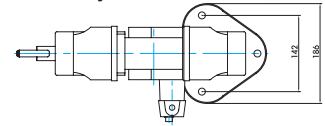
ORDER NO. VQS-40 CODE NO. 1002-096



NEW



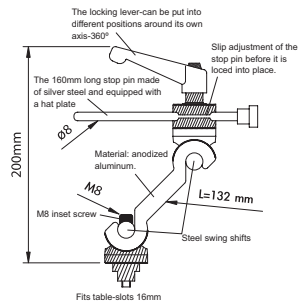
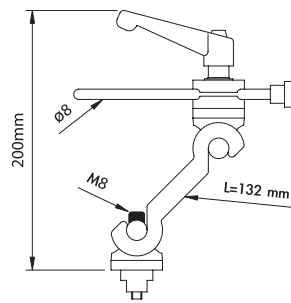
- Hardened & Ground Jaw
- Jaw Width 100 m/m
- Jaw Height 29 m/m
- Opened Capacity 100 m/m
- 8 m/m Distance of Quick Clamping System
- Can Be Move By Handle & By Quick Action Arm
- Weight: 13.3 kgs



Universal Work Stopper



TEETH TYPE



NON TEETH TYPE
ORDER NO. VWS-123
CODE NO. 1002-105
WEIGHT: 0.9kg
T-SLOT: 16mm

TEETH TYPE
ORDER NO. VWS-125
CODE NO. 1002-106
WEIGHT: 1.1kg
T-SLOT: 16mm

ORDER NO.	CODE NO.
VWS-123	1002-105
VWS-125	1002-106

- It is fixed and secured by its rigid serration without skid. (300kg bump is permanent)

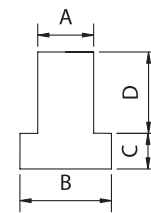
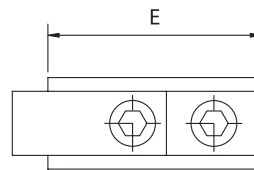


T Slot Clamps

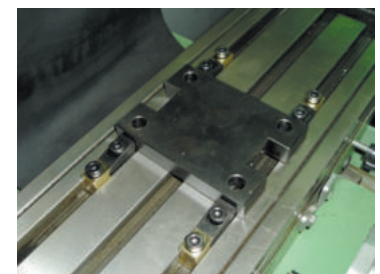
PATENT

For Thin Work Piece

NEW



- 1 Set consist of 4 vices.
- For thin or small workpiece.
- Good clamping force.
- Quick setting
- Suit for light duty cutting on the milling drilling / EDM machine.



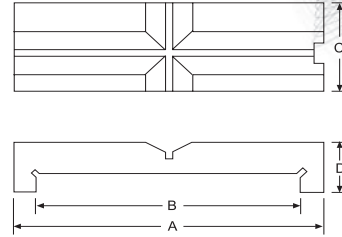
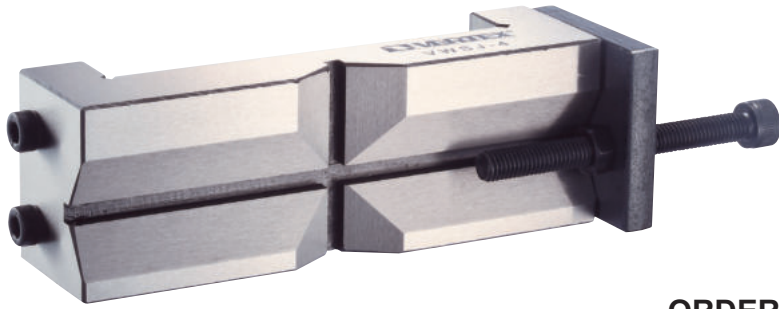
ORDER NO.	A	B	C	D	E	N.W.	CODE NO.
CK-3712	11.5	18	7	16	42	0.6	1002-311
CK-3714	13.5	22	8	18	42	0.7	1002-312
CK-3716	15.5	25	10	20	45	0.9	1002-313
CK-3718	17.5	28	11	24	45	1.1	1002-314
CK-3720	19.5	32	12	26	53	1.5	1002-315



Universal Vise Jaws With Work Stopper

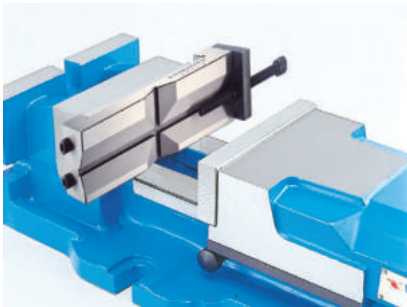


VERTEX



ORDER NO. VWSJ-4, 5, 6, 8

- Can be fixed on any vise jaw by the two screws on the side.
- One jaw in multiple- function features.
- V-type jaw can fix workpiece at horizontal and vertical position.
- Can be performed as work stopper.
- Quick, save your time.



4 FOR THE JAW WIDTH 100-110m/m
 5 FOR THE JAW WIDTH 125-140m/m
 6 FOR THE JAW WIDTH 150-160m/m
 8 FOR THE JAW WIDTH 200-210m/m

ORDER NO.

VWSJ-□ — VISE JAW SIZE
 (Unit:inch)

Unit:mm

ORDER NO.	A	B	C	D	WEIGHT kgs	CODE NO.
VWSJ-4	145	110	49	38	1.6	1002-170
VWSJ-5	175	140	49	39	1.7	1002-171
VWSJ-6	190	160	53	40	2	1002-172
VWSJ-8	245	210	76	42	4.2	1002-173



Prisma Jaw



ORDER NO.

VWS-VK-4.5.6.8
 VWS-VA-4.5.6.8
 VWS-VH-4.5.6.8
 VWS-VJ-400.500.600
 VWS-VW-3.4.5
 VWS-VMC-4.6
 VWS-VQS-3.4.5

ORDER NO.	kgs	CODE NO.
VWS-VK-4	0.26kg	1002-110
VWS-VK-5	0.36kg	1002-111
VWS-VK-6	0.46kg	1002-112
VWS-VK-8	1.16kg	1002-113

ORDER NO.	kgs	CODE NO.
VWS-VA-4	0.4kg	1002-130
VWS-VA-5	0.51kg	1002-131
VWS-VA-6	0.96kg	1002-132
VWS-VA-8	1.76kg	1002-133

ORDER NO.	kgs	CODE NO.
VWS-VH-4	0.44kg	1002-150
VWS-VH-5	0.70kg	1002-151
VWS-VH-6	0.88kg	1002-152
VWS-VH-8	1.78kg	1002-153

ORDER NO.	kgs	CODE NO.
VWS-VW-3	0.21kg	1002-120
VWS-VW-4	0.36kg	1002-121
VWS-VW-5	0.44kg	1002-122

ORDER NO.	kgs	CODE NO.
VWS-VMC-4	0.35kg	1002-140
VWS-VMC-6	0.4kg	1002-141

ORDER NO.	kgs	CODE NO.
VWS-VQS-3	0.3kg	1002-160
VWS-VQS-4	0.42kg	1002-161
VWS-VQS-5	0.51kg	1002-162

ORDER NO.	kgs	CODE NO.
VWS-VJ-400	0.36kg	1002-163
VWS-VJ-500	0.58kg	1002-164
VWS-VJ-600	0.9kg	1002-165



Specifications

Inch Size

ORDER NO.	Table Slot	Stud Size	G.W. kg	Meas. CFT	CODE NO.
CK-103A	7/16"	3/8"-16w	6.5	(C) 0.8	1003-009
CK-103B	1/2"		6.5		1003-010
CK-104A	9/16"	1/2"-12w 1/2"-13UNC	9.7	(C) 1.0	1003-011
CK-104B	5/8"		10.4		1003-012
CK-105A	11/16"	5/8"-11w	12.5	(C) 1.5	1003-013
CK-105B	3/4"		11.8		1003-014
CK-206	7/8"	3/4"-10w	26.5	2.0	1003-015

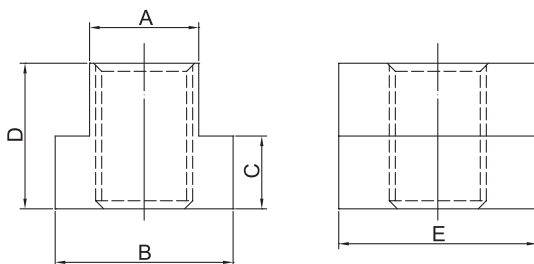
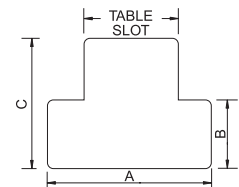
Metric Size

ORDER NO.	Table Slot	Stud Size	G.W. kg	Meas. CFT	CODE NO.
CK-08	10	M8-1.25P	7.4	(C) 0.8	1003-001
CK-10	12	M10-1.5P	7.6		1003-002
CK-12A	14	M12-1.75P	9.4	(C) 1.0	1003-003
CK-12B	15.7		9.5		1003-004
CK-14	16	M14-2.0P	11.1	(C) 1.5	1003-005
CK-16	18	M16-2.0P	12.6		1003-006
CK-18	20	M18-2.5P	25.3	(C) 1.6	1003-007
CK-20	22	M20-2.5P	27	(C) 2.0	1003-008

- Heat treated steel black oxide finish.
- Block size 1" (25mm). Set in plastic rack consists of:
 - 24 pcs Studs (4 ea, 3/4/5/6/7/8 inches or 75/100/125/150/175/200mm.)
 - 6 pcs T-Nuts
 - 4 pcs Coupling Nuts
 - 6 pcs Flange Nuts
 - 6 pcs Step Clamps
 - 6 pcs Step Blocks
- CK-18, CK-20, CK-206, Pack in wooden or Plastic Tray.
- The parts of every specification all can be purchased individually.

INDIVIDUALLY PARTS T-SLOT NUT

HRC 34°



Inch Size

ORDER NO.	Table Slot	Thread Size	A	B	C	Length	WEIGHT (kg)	CODE NO.
3413I	7/16	3/8-16	11/16	7/32	1/2	7/8	0.023	1003-180
3423I	1/2		7/8	9/32	1/2	7/8	0.032	1003-181
3433I	9/16		7/8	11/32	5/8	1-1/8	0.048	1003-182
3414I	9/16	1/2-12 1/2-13	7/8	11/32	5/8	1-1/8	0.048	1003-183
3424I	5/8		1	11/32	5/8	1-1/8	0.06	1003-184
3434I	11/16	3/4-10	1-1/8	7/16	3/4	1-1/4	0.087	1003-185
3415I	11/16		1-1/8	7/16	3/4	1-1/4	0.087	1003-186
3425I	3/4		1-1/4	15/32	3/4	1-1/4	0.102	1003-187
3435I	13/16		1-1/4	9/16	1	1-1/2	0.142	1003-188
3416I	13/16		1-1/4	9/16	1	1-1/2	0.142	1003-189
3426I	7/8		1-1/2	9/16	1	1-1/2	0.175	1003-190
3436I	1		1-5/8	5/8	1	1-3/4	0.2	1003-191
3446I	1-1/16		1-5/8	11/16	1-1/2	2	0.23	1003-192
3417I	1	7/8-9	1-5/8	5/8	1	1-1/2	0.21	1003-193
3418I	1-1/16	1-8	1-5/8	11/16	1-1/2	2	0.25	1003-194

Metric Size

ORDER NO.	Table Slot	Thread Size	A±0.3	B	C	D	E	CODE NO.
3412M	10	M8	9	16	6	12	22	1003-020
3423M	12	M10	11.5	18	7	14	22	1003-021
3414M	14	M12	13.5	22	8	16	28	1003-022
A3424M	16	M12	15.3	25	8	16	28	1003-023
B3424M	16	M14	15.3	25	8	16	28	1003-024
3415M	18	M16	17	28	11	20	32	1003-025
3416M	20	M18	19.5	32	12	24	38	1003-026
3417M	22	M20	21.5	35	14	28	38	1003-027
3418M	28	M24	26.5	44	18	36	38	1003-028



Coupling Nut

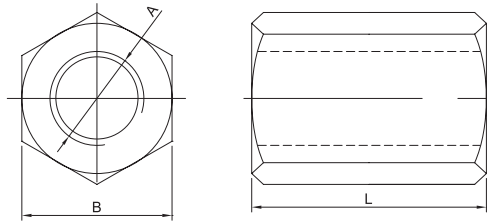
HRC 34°



Metric Size

mm

ORDER NO.	A Thread	B Parallel	L Length	Weight (kg)	CODE NO.
2612M	M8x1.25	13	22	0.033	1003-060
2613M	M10x1.5	17	25	0.035	1003-061
2614M	M12x1.75	21	32	0.065	1003-062
2614M-1	M14x2.0	21	32	0.06	1003-063
2615M	M16x2.0	26	41	0.128	1003-064
2616M	M18x2.5	32	48	0.228	1003-065
2617M	M20x2.5	32	48	0.208	1003-066
2618M	M24x3.0	41	64		1003-067



Inch Size

ORDER NO.	A Thread	B Parallel	L Length	Weight	CODE NO.
2612I	5/16-18	9/16	7/8	0.033	1003-060I
2613I	3/8-16	11/16	1	0.035	1003-061I
2614I	1/2-12 1/2-13	7/8	1-1/4		1003-062I
2615I	5/8-11	1-1/16	1-5/8	0.128	1003-064I
2616I	3/4-10	1-1/4	1-7/8	0.22	1003-065I
2617I	7/8-9	1-7/16	1-7/8		1003-066I
2618I	1-8	1-5/8	2-1/2		1003-067I



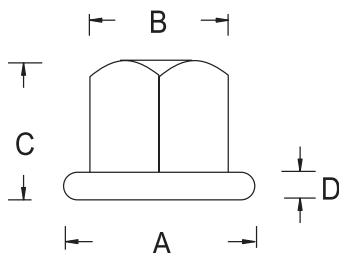
Flange Nut

HRC 34°

Metric Size

mm

ORDER NO.	Thread	A	B (M/M)	C	D	Weight (kg)	CODE NO.
4512	M8x1.25	19	13	8	2	0.013	1003-050
4513	M10x1.5	22	17	12	3	0.023	1003-051
4514	M12x1.75	28	19	16	4	0.043	1003-052
4514M	M14x2.0	28	21	16	4	0.047	1003-053
4515	M16x2.0	35	26	17	5	0.087	1003-054
4516	M18x2.5	41	32	25	6	0.10	1003-055
4517	M20x2.5	44	32	35	6	0.092	1003-056
4518	M24x3.0	50	41	32	6	0.12	1003-057



Inch Size

ORDER NO.	Thread	A	B (M/M)	C	D	Weight (kg)	CODE NO.
4512I	5/16-18	3/4	9/16	3/8	3/32	0.013	1003-050I
4513I	3/8-16	7/8	11/16	1/2	1/8	0.023	1003-051I
4514I	1/2-12NC 1/2-13NC	1-1/8	7/8	5/8	5/32	0.043	1003-052I
4515I	5/8-11	1-3/8	1-1/16	11/16	3/16	0.087	1003-054I
4516I	3/4-10	1-5/8	1-1/4	1	1/4	0.092	1003-055I
4517I	7/8-9	1-3/4	1-7/16	1-1/8	1/4	0.12	1003-056I
4518I	1-8	2	1-5/8	1-1/4	1/4	0.12	1003-057I



Clamping Studs

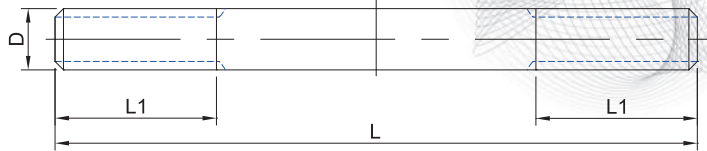
HRC 27°

Heat Treated Steel

Studs



Black Oxide Finished



Metric Size

ORDER NO.	D	L	L1	WEIGHT (kgs)	CODE NO.
1323M	M8x1.25P	75	30	0.023	1003-071
1324M		100	40	0.03	1003-072
1325M		125	40	0.04	1003-073
1326M		150	40	0.05	1003-074
1327M		175	40	0.06	1003-075
1328M		200	40	0.07	1003-076
1333M	M10x1.5P	75	30	0.04	1003-081
1334M		100	40	0.05	1003-082
1335M		125	40	0.06	1003-083
1336M		150	40	0.07	1003-084
1337M		175	40	0.09	1003-085
1338M		200	40	0.10	1003-086
1343M	M12x1.75P	75	30	0.06	1003-091
1344M		100	40	0.07	1003-092
1345M		125	40	0.09	1003-093
1346M		150	40	0.11	1003-094
1347M		175	40	0.13	1003-095
1348M		200	40	0.15	1003-096
1343MA	M14x2.0P	75	30	0.07	1003-101
1344MA		100	40	0.10	1003-102
1345MA		125	40	0.13	1003-103
1346MA		150	40	0.15	1003-104
1347MA		175	40	0.18	1003-105
1348MA		200	40	0.20	1003-106
1353M	M16x2.0P	75	30	0.09	1003-111
1354M		100	45	0.13	1003-112
1355M		125	45	0.16	1003-113
1356M		150	45	0.19	1003-114
1357M		175	45	0.23	1003-115
1358M		200	45	0.25	1003-116
13510M		250	45	0.31	1003-117
13512M		300	45	0.38	1003-118
1363M	M18x2.5P	75	30	0.12	1003-120
1364M		100	40	0.16	1003-121
1365M		125	45	0.20	1003-122
1366M		150	45	0.25	1003-123
1367M		175	45	0.30	1003-124
1368M		200	45	0.32	1003-125
13610M		250	50	0.40	1003-126
13612M		300	50	0.50	1003-127
1373M	M20x2.5P	75	30	0.15	1003-140
1374M		100	40	0.20	1003-141
1375M		125	45	0.25	1003-142
1376M		150	45	0.30	1003-143
1377M		175	45	0.35	1003-144
1378M		200	45	0.40	1003-145
13710M		250	50	0.50	1003-146
13712M		300	50	0.65	1003-147
1384M	M24x3.0P	100	40	0.25	1003-150
1385M		125	45	0.35	1003-151
1386M		150	45	0.45	1003-152
1387M		175	45	0.53	1003-153
1388M		200	45	0.60	1003-154

OPERATING TORQUE FOR

TUNT. FLANGE NUT. SCREW	
SCREW SIZE	TORQUE(NM)
M3	1.1
M4	2.4
M5	4.8
M6	8.4
M8	21
M10	42
M12	72
M16	180
M20	352
M24	564

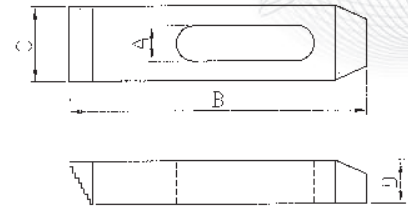
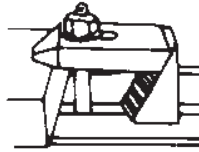
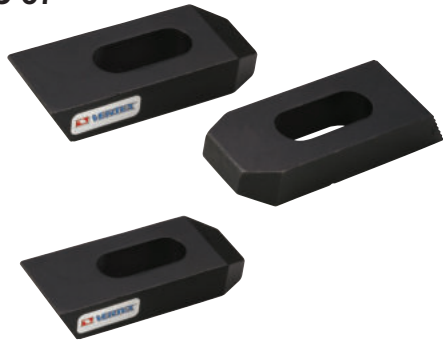
Inch Size

ORDER NO.	D	L	L1	WEIGHT (kgs)	CODE NO.	
1333I	3/18-16	3"	30	0.04	1003-081I	
1334I		4"	40	0.05	1003-082I	
1335I		5"	40	0.06	1003-083I	
1336I		6"	40	0.07	1003-084I	
1337I		7"	40	0.09	1003-085I	
1338I		8"	40	0.10	1003-086I	
1343I	1/2-12	3"	30	0.06	1003-091I	
1344I		4"	40	0.07	1003-092I	
1345I		5"	40	0.09	1003-093I	
1346I		6"	40	0.11	1003-094I	
1347I		7"	40	0.13	1003-095I	
1348I	5/8-11	8"	40	0.15	1003-096I	
1353I		3"	30	0.09	1003-111I	
1354I		4"	40	0.13	1003-112I	
1355I		5"	40	0.16	1003-113I	
1356I		6"	40	0.19	1003-114I	
1357I		7"	40	0.23	1003-115I	
1358I		8"	40	0.25	1003-116I	
13510I		10"	45	0.31	1003-117I	
13512I		12"	45	0.38	1003-118I	
1363I		3/4-10	3"	30	0.12	1003-120I
1364I			4"	40	0.16	1003-121I
1365I			5"	45	0.20	1003-122I
1366I	6"		45	0.25	1003-123I	
1367I	7"		45	0.30	1003-124I	
1368I	8"		45	0.32	1003-125I	
13610I	10"		50	0.40	1003-126I	
13612I	12"		50	0.50	1003-127I	
13614I	14"		50	0.62	1003-128I	
13616I	16"		50	0.75	1003-129I	
13618I	18"	50	0.87	1003-130I		
13620I	20"	50	1.00	1003-131I		
1373I	7/8-9	3"	30	0.183	1003-140I	
1374I		4"	45	0.25	1003-141I	
1375I		5"	45	0.30	1003-142I	
1376I		6"	45	0.40	1003-143I	
1377I		7"	45	0.45	1003-144I	
1378I		8"	45	0.50	1003-145I	
1384I	1"-8	4"	45	0.25	1003-150I	
1385I		5"	45	0.35	1003-151I	
1386I		6"	45	0.45	1003-152I	
1387I		7"	45	0.53	1003-153I	
1388I		8"	45	0.60	1003-154I	



Step Clamp

HRC 37°



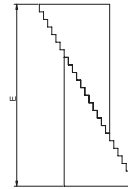
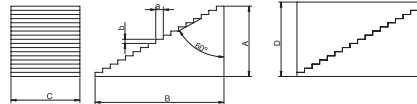
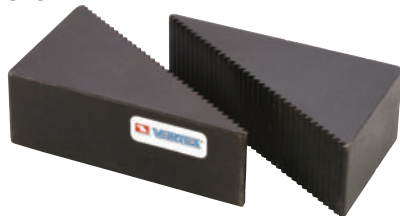
Metric Size

ORDER NO.	Bolt Size	A slot	B Length	C Width	D Thickness	Weight (kg)	CODE NO.
6113	M8 or M10	11	64	25	12	0.25	1003-030
6123	M8 or M10		100	25	16	0.49	1003-031
6133	M8 or M10		150	28	19	0.99	1003-032
6214	M12	14	64	28	12	0.25	1003-033
6224	M12		100	32	19	0.35	1003-034
6234	M12		150	32	22	0.60	1003-035
6215	M16	18	64	32	22	0.31	1003-036
6225	M16		100	38	19	0.85	1003-037
6235	M16		150	38	22	1.47	1003-038
6316	M20 or M18	20	100	38	19	0.75	1003-039
6326	M20 or M18		150	38	25	1.43	1003-040
6336	M20 or M18		200	44	28	2.82	1003-041
6417	M24	26	150	50	32	1.9	1003-042
6427	M24		200	50	35	2.75	1003-043
6437	M24		250	50	38	3.8	1003-044



Step Block

HRC 37°



ORDER NO.	A	B	C	D	E	a	b	CODE NO.
5114	19	30	25	21	45	3.1	1.8	1003-170
5124	30	47	25	32	70	3.1	1.8	1003-171
5134	59	97	25	61	147	3.1	1.8	1003-172
5114B	19	30	32	21	45	3.1	1.8	1003-170B
5124B	30	47	32	32	70	3.1	1.8	1003-171B
5134B	59	97	32	61	147	3.1	1.8	1003-172B
5215	39	59	38	41	87	3.1	1.8	1003-173
5225	61	97	38	63	147	3.1	1.8	1003-174
5235	86	140	38	88	210	3.1	1.8	1003-175



C-Clamp Cast Steel

NEW



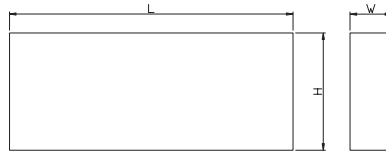
ORDER NO.	MAX. OPEN	THROAT DEPTH	LxW	WEIGHT (kgs)	CODE NO.
VCL-2C	1-7/8"	1-7/8"	120x84mm	0.22	1003-210
VCL-3C	2-3/4"	2"	163x91mm	0.38	1003-211
VCL-4C	3-7/8"	2-1/2"	195x102mm	0.59	1003-212
VCL-6C	6"	3-1/2"	270x127mm	1.18	1003-213
VCL-8C	7-3/8"	4-1/2"	345x161mm	1.75	1003-214



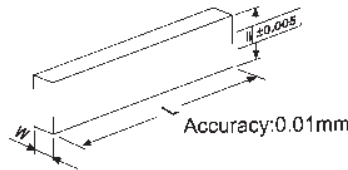
Ground Parallels

ORDER NO.VP-100 CODE NO.1004-001

To provide more convenient processing for milling vise.



- Hardness: HRC 48°-53°
- Accuracy: 0.01mm
- Process: Four-side ground
- 1 set includes 18 pcs
- Packed by plastic case, G.W.: 11.5 kgs, Meas: 0.3 CFT.



Unit:mm

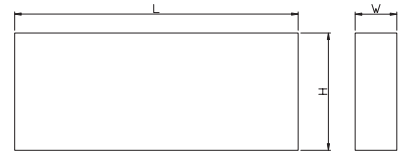
BODY SIZE	CLAMP SIZE
WxHxLxPcs	AxBxCxLxPcs
5x16x100x2	15x31x2.5x200x2
6x18x100x2	
8x24x100x2	
10x30x100x2	
12x36x150x2	
14x48x150x2	
18x60x150x2	
22x62x150x2	



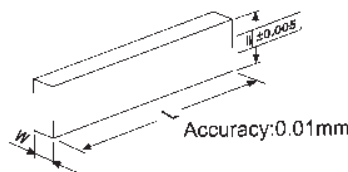
Ground Parallels

ORDER NO.VP-118A CODE NO.1004-010

8.5mm WIDTH, 5.8kgs



- Hardness: HRC 48°-53°
- MADE OF HIGH GRADE ALLOY STEEL HARDENED AND GROUND.



Unit:mm

WxHxLxPcs	
8.5x14x150x2	8.5x32x150x2
8.5x16x150x2	8.5x36x150x2
8.5x20x150x2	8.5x40x150x2
8.5x24x150x2	8.5x44x150x2
8.5x30x150x2	

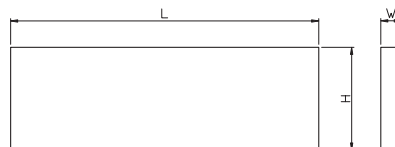


Ground Parallels

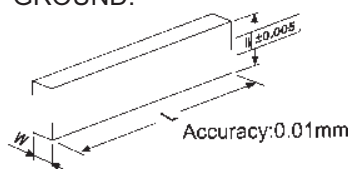
ORDER NO.VP-128A CODE NO.1004-020

28 PCS/SET 10.7kgs

VP-128A 10mm WIDTH



- Hardness: HRC 48°-53°
- MADE OF HIGH GRADE ALLOY STEEL HARDENED AND GROUND.



Unit:mm

WxHxLxPcs	
10x14x150x2	10x28x150x2
10x16x150x2	10x30x150x2
10x18x150x2	10x32x150x2
10x20x150x2	10x35x150x2
10x22x150x2	10x40x150x2
10x24x150x2	10x45x150x2
10x26x150x2	10x50x150x2



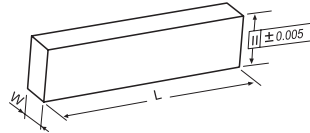
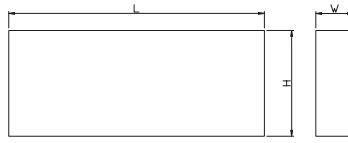
Precision Parallels



ORDER NO.VP-136 CODE NO.1004-030

To provide more convenient processing for milling vise

- Hardness: HRC 48°-53°



ACCURACY:0.01mm

WIDTH 8.0mm

36 PCS/SET 12.3kgs

Unit:mm

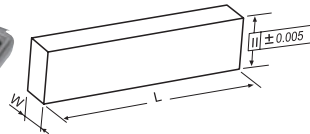
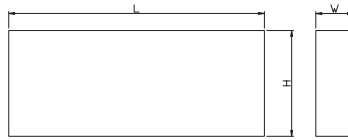
WxHxLxPcs	
8x16x150x2	8x34x150x2
8x18x150x2	8x36x150x2
8x20x150x2	8x38x150x2
8x22x150x2	8x40x150x2
8x24x150x2	8x42x150x2
8x26x150x2	8x44x150x2
8x28x150x2	8x46x150x2
8x30x150x2	8x48x150x2
8x32x150x2	8x50x150x2



VP-018 Thin Type Parallels Set

ORDER NO.VP-018 CODE NO.1004-040

- Hardness: HRC 48°-53°



3Wx150Lx20 PCS/SET

G.W. 2.2kgs.

PACKING: 175x65x200 mm

ACCURACY: 0.01mm

THICKNESS 1/8" ≈ 3mm

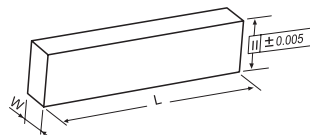
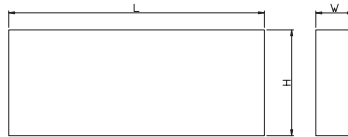
WxHxLxPcs	WxHxLxPcs
3x13x150x2	3x28x150x2
3x16x150x2	3x31x150x2
3x19x150x2	3x35x150x2
3x22x150x2	3x38x150x2
3x25x150x2	3x41x150x2



VP-163 Precision Parallels

ORDER NO.VP-163 CODE NO.1004-050

- Hardness: HRC 48°-53°



5Wx150Lx8 PCS/SET

G.W. 1.7kgs.

PACKING: 100x65x175 mm

ACCURACY: 0.01mm

THICKNESS 3/16" ≈ 5mm

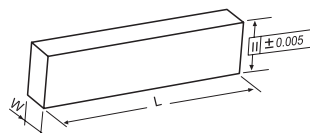
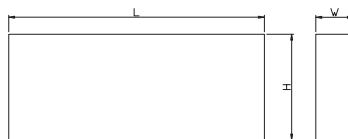
WxHxLxPcs	
5x25x150x2	
5x31x150x2	
5x38x150x2	
5x44x150x2	



VP-064 Precision Parallels

ORDER NO.VP-064 CODE NO.1004-060

- Hardness: HRC 48°-53°



6Wx150Lx18 PCS/SET

G.W. 4.5kgs.

PACKING: 210x178x68 mm

ACCURACY: 0.01mm

THICKNESS 1/4" ≈ 6mm

WxHxLxPcs	WxHxLxPcs
6x19x150x2	6x35x150x2
6x22x150x2	6x38x150x2
6x25x150x2	6x41x150x2
6x28x150x2	6x44x150x2
6x31x150x2	



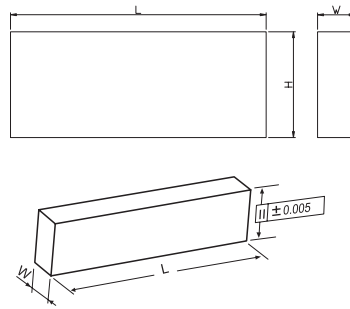
VP-050 Precision Parallels



ORDER NO.VP-050 CODE NO.1004-070 13Wx150Lx8 PCS/SET

● Hardness: HRC 48°-53°

G.W. 4.5kgs.
PACKING: 180x70x310 mm
ACCURACY: 0.01mm
THICKNESS 1/2" ≈ 13mm



WxHxLxPcs
13x25x150x2
13x31x150x2
13x38x150x2
13x44x150x2



VP-033 Precision Parallels

ORDER NO.VP-033 CODE NO:1004-080

200Lx8 PCS/SET

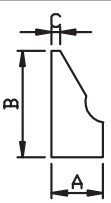
Accuracy: 0.01 mm

● Hardness: HRC 48°-53°

G.W. 6.2kgs.
PACKING: 180x65x230 mm
LONGER TYPE,
SUIT FOR BIGGER VISE.



WxHxLxPCS
8x24x200x2
12x36x200x2
22x40x200x2
31x15x200x2x2.5 For Clamping
15x31x2.5x200x2




VP-146 Ground Parallels

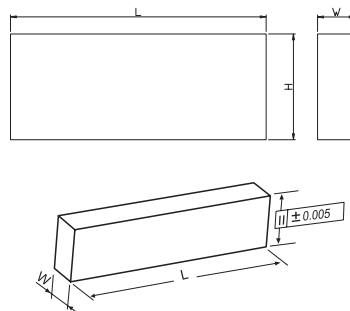
ORDER NO.VP-146 CODE NO:1004-082

4.6Wx150Lx12 PCS/SET

Accuracy: 0.01 mm

G.W. 3kgs.
Material: S45C
Hardness: HRC48°-53°

NEW



WxHxLxPCS
4.6x32x150x2
4.6x34x150x2
4.6x36x150x2
4.6x38x150x2
4.6x40x150x2
4.6x44x150x2



VP-168 Ground Parallels

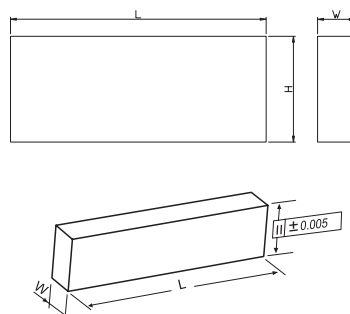
ORDER NO.VP-168 CODE NO:1004-083

6.8Wx150Lx14 PCS/SET

Accuracy: 0.01 mm

G.W. 3.5kgs.
Material: S45C
Hardness: HRC48°-53°

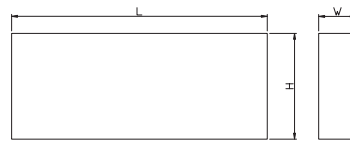
NEW



WxHxLxPCS
6.8x15x150x2
6.8x18x150x2
6.8x21x150x2
6.8x25x150x2
6.8x27x150x2
6.8x31x150x2
6.8x35x150x2

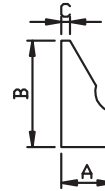
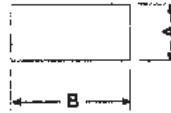
VP-200 Ground Parallels

ORDER NO.VP-200 CODE NO.1004-085



MADE OF HIGH GRADE ALLOY STEEL HARDENED AND GROUND.
ACCURACY: 0.01/100 MM

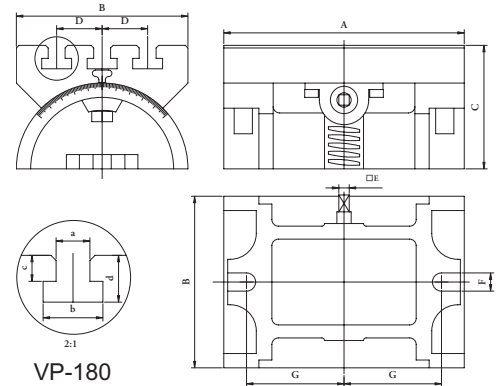
- Hardness: HRC 48°-53°



FOR OVER 150 m/m, 200m/m JAW PLATE VISE USING

BODY SIZE	CLAMP SIZE
AxBxLxPcs	AxBxCxLxPcs
5x16x150x2	31x15x200x2x2.5
6x18x150x2	
8x24x150x2	
10x30x150x2	
12x36x200x2	
14x48x200x2	
18x60x200x2	
22x62x200x2	

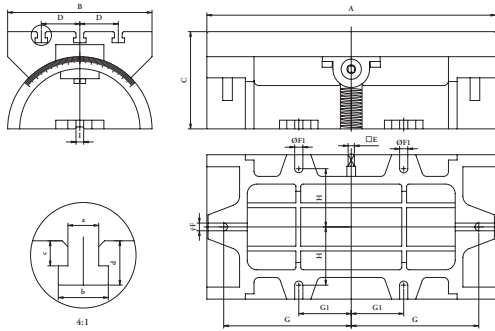
Adjustable Angle Plate



1. For angle setting on various machine tools.
2. Adjustable 45°
3. Material: FC25
4. Lower plate and bigger working space.

VP-180
VP-250
VP-380

Unit:mm



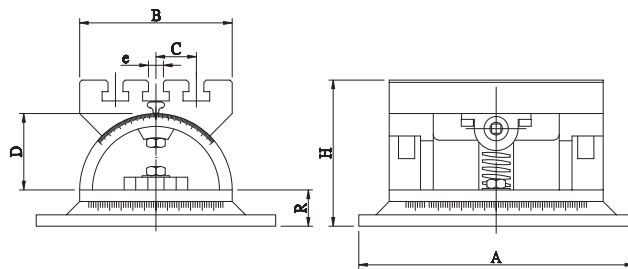
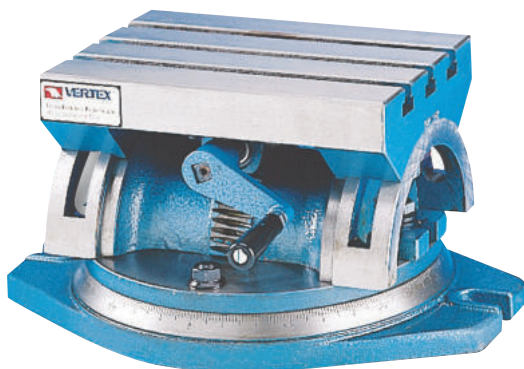
VP-600

ORDER NO.	A	B	C	D	E	F	G	a	b	c	d	kg	CODE NO.
VP-180	185	132	95	35	8	14	75	13	23	10	18	7.38	1004-089
VP-250	255	180	136	50	10	16	95	16	26	13.5	25	28.7	1004-090
VP-380	380	255	181	69	13	18	150	16	26	14	25	56	1004-091

Unit:mm

ORDER NO.	A	B	C	D	E	F	F1	G	G1	H	I	a	b	c	d	kg	CODE NO.
VP-600	600	300	202	80	13	16	17	265	109	121	16	16	26	13	23	85	1004-092

Angle Plate With Swivel Base



Unit:mm

ORDER NO.	Table LxW			T-SLOT			R	WEIGHT (kg)	CODE NO.
	A	B	H	e	C	D			
VP-250S	290	180	206	16	50	105	52	36	1004-100
VP-380S	390	360	255	16	68	127	60	86	1004-101

360° SWIVEL BASE.

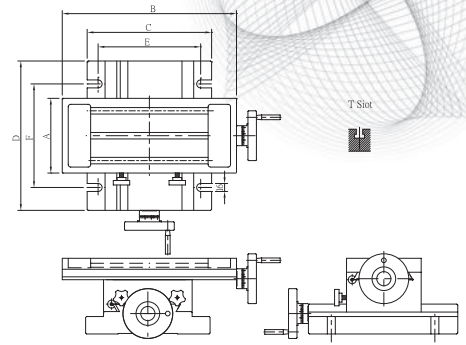
Precision Cross Table



VCT-407



VCT-514



DRAWING OF VCT-514

Unit:mm

- Material: over FC-30
- Precision: 0.02/100mm
- Feature: The sliding surfaces are treated by heat-treatment & precision ground
- Can be used as measurement table

Specifications

ORDER NO.	A	B	C	D	E	F	Stroke	T Slot	Total height	Dial graduation	PACKING LxWxH m/m	WEIGHT kgs	MAX.LOAD kgs	CODE NO.
VCT-407	100	180	130	100	115	50	50x80	3/8"	100	2.5mm/0.02	290x240x140	12	35	1007-001
VCT-514	150	350	250	300	206	208	156x170	3/8"	134	4mm/0.02	510x450x240	33.5	105	1007-002
VCT-820	200	500	300	400	250	290	200x250	3/8"	155	4mm/0.02	640x520x200	72	140	1007-003
VCT-1024	250	600	400	500	340	430	250x300	1/2"	210	4mm/0.02	790x680x310	141	175	1007-004

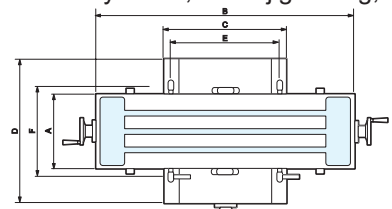
Precision Cross Table

ORDER NO.VCT-830 CODE NO.1007-010

A heavy, rugged slide in all kinds of positioning, milling, drilling micro-scope viewing and staging, adjustable bases for heavy loads, small jig boring, precision cut-off.



VCT-830



Unit:mm

Specifications

ORDER NO.	A	B	C	D	E	F	Stroke	T Slot	Total height	Dial graduation	PACKING LxWxH m/m	WEIGHT kgs	MAX.LOAD kgs	CODE NO.
VCT-830	210	730	345	405	305	230	190x350	16	185	2.5mm/0.05	991x584x292	100	35	1007-010

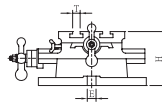
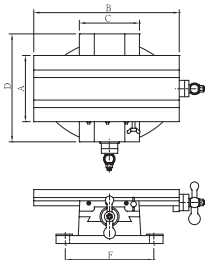
Cross Table

ORDER NO.VCT-512 CODE NO.1007-020

Table: 300x140mm
 Height: 115mm
 Travel: 200mm longitudinal.
 125mm transverse.
 Base: 225mm x 200mm oval with U slots for up to 16 bolts on 190 to 210 bolts circle.
 Dial Graduated: 0.03mm
 Net weight: 16.5kgs
 Max.Load:20kgs
 Packing Volume of each unit: 430x265x155mm
 LIGHT DUTY ONLY



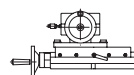
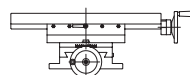
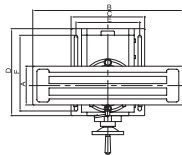
VCT-512



Precision Cross Table

ORDER NO.VCT-520RT CODE NO.1007-030

A heavy, slide in all kinds of positioning, milling, drilling micro-scope viewing and staging, adjustable bases for heavy loads, small jig boring, precision cut-off.
 LIGHT DUTY ONLY



ORDER NO.	A	B	C	D	E	F	Stroke	T Slot	Total height	PACKING LxWxH m/m	WEIGHT kgs	CODE NO
VCT-520RT	130	540	180	290	205	191	90x240	15	200	605x410x235	43	1007-030

Right Angle Head

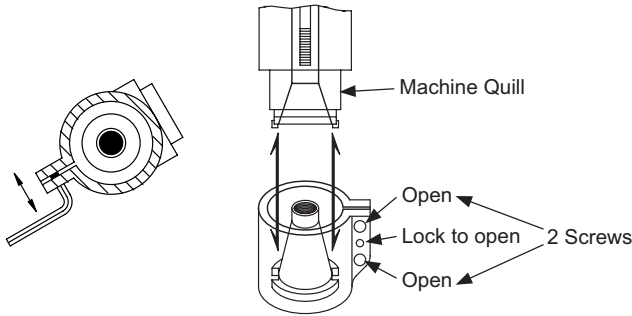


VRA-TYPE

- Used on Vertical Milling Machine to make horizontal work.
- Rigidity constructed suitable for horizontal cutting.
- The clamping bushing to suit milling machine.
- Maximum spindle speed allowed right angle. 2000 R.P.M.

※Please notify the quill dia. when ordering

ORDER NO.	SUITABLE MILLING HEAD QUILL DIAMETER	WEIGHT (kgs)	CODE NO.
VRA-R8	85.725mm~86mm	12.5	1008-001
VRA-NT 30	85.725mm~86mm	13	1008-002
VRA-NT 40	85.725, 100, 105, 110, 115mm	18	1008-003

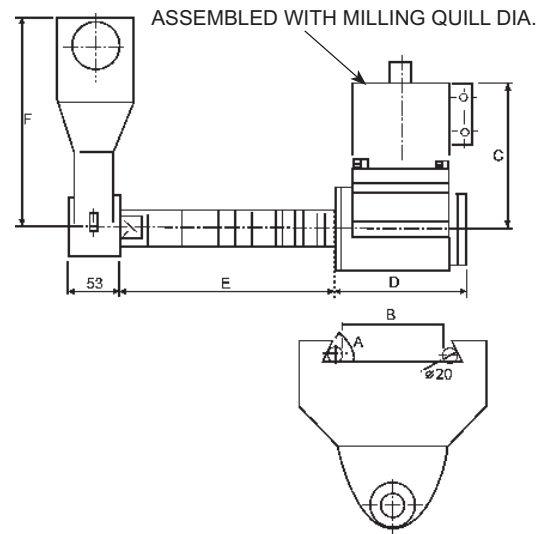


- Loose 2 screws to match with machine.
- Tighten 2 screws to fix on quill D.
- Assemble with milling quill dia.

ARBOR FOR CUTTER INCH OR MERTIC SIZE

VRA-R8	R8-SCA1"	R8-SCB22
VRA-NT 30	NT30-SCA1"	NT30-SCB27
VRA-NT 40	NT40-SCA1"	NT40-SCB27

Horizontal Milling Attachment



- Special dovetail degree, also can supply.....please notify.
- VHA-TYPE including right angle head, long horizontal arbor and breaker. VHA-R-8-27mm VHA-NT-30/NT-40-27mm for The mm size, for inch size are same 25.4mm (1")
- The quill diameter is same as VRA-Type
- Maximum spindle speed allowed right angle. 2000 R.P.M.

- Benefit: convert your vertical mill to a horizontal mill. Designed to simplify right angle work by reducing the need for special tooling and complex fixtures, gains your efficiency, save your time and money.

Horizontal Milling Arbor Support

TYPE	SPEC.	SUITABLE M/C RAM DOVETAIL WIDTH	WEIGHT(kgs)
A 50°	B	140mm~170mm	25.7
A 55°	B	140mm~170mm	26.5
A 60°	B	140mm~170mm	30.8

Unit:mm

ORDER NO.	C	D	E	F	CODE NO.
VHA-R-8	175	138	255	233	1008-010
VHA-NT-30	175	160	270	233	1008-011
VHA-NT-40	183	190	270	233	1008-012



Power Table Feed - Super Power Type 500X, 500Y, 500Z Series



NEW



500S Type series
VPF-500X
VPF-500Y
VPF-500Z



For Longitudinal X Axis



For Cross Y Axis



For Vertical Z Axis

The VERTEX vertical milling machines-model: VTM-2S/2V/3V/4V/5V and all milling machine without gearbox table feed device. All type milling/drilling machines high torque. Easy installation. Automatic shutoff. Superior thermal characteristic. Smooth operations. Safety option. Trouble-free performance. super power.

The max. torque is 650 in/lb

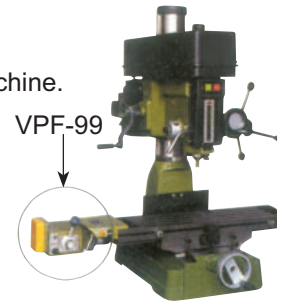
- New super power design and construction materials.
- Top quality. Long life span designed.



VPF-99

Features

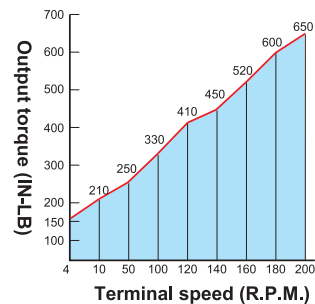
- Application: the VERTEX power table feed for Drill/Milling machine.
- Easy to install, no modification needed.
- Highest quality design and construction.
- Circuit panel is designed for easy replacement with insert type connectors.
- Assy-gear clutch has limit for twisting: When power feed is working and accepting tremendous obstacle, the assy-gear clutch will automatically become natural turning in order to reduce damage.



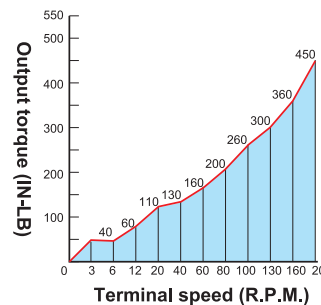
OPTIONAL
Transformer 110V 220V
ORDER NO. VPF-TF
CODE NO. 1009-006

TR1: Output TR2:2 Output
Output: 110V 50/60Hz,
power supply: 50/60Hz, 1-phase
220, 240, 380, 415, 440V

**THIS TRANSFORMER IS
FOR VPF-TYPE USE ONLY.**

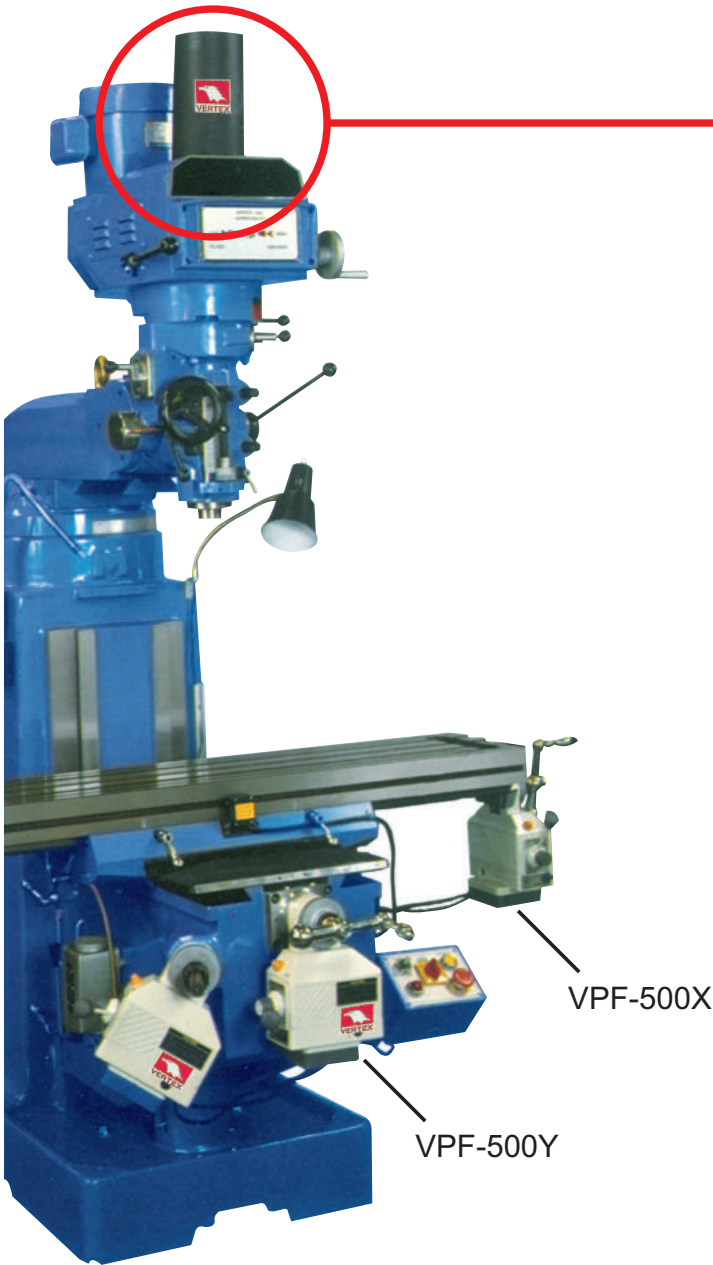


VPF-500



VPF-99

ORDER NO.	VOLTAGE	Speed Range	Rapid Speed	Max. Torque	LxWxH	G.W.(kgs)	CODE NO.
VPF-500 X	110V	4-160rpm	200rpm	650 in/lb	290x200x320mm	6.3	1009-001A
VPF-500 Y						6.7	1009-002A
VPF-500 Z						6.9	1009-003A
VPF-99 X	110V	0-165rpm	240rpm	450 in/lb	290x200x315mm	6.2	1009-005



- It will increase your productivity with more profits as cutter replacement needs only 3 sec and the speed of replacement is more than 10 times to compare with traditional cutter replacement.

Air power drawbar PD-150, PD-200

- It can be installed in any kind of machine, of which the main spindle are R-8, NT #30, #40 or #50.
- It is convenient for the machinist who wants increased production and performance from his machine.
- It is suitable for NC and general milling machines.
- This device is easily installed needs only 5 seconds to change the cutting tool.
- Main power is air compression.
- This device is designed with safety device controlled with solenoid valve. The power drawbar cannot be operated while machine is running.

Standard equipment

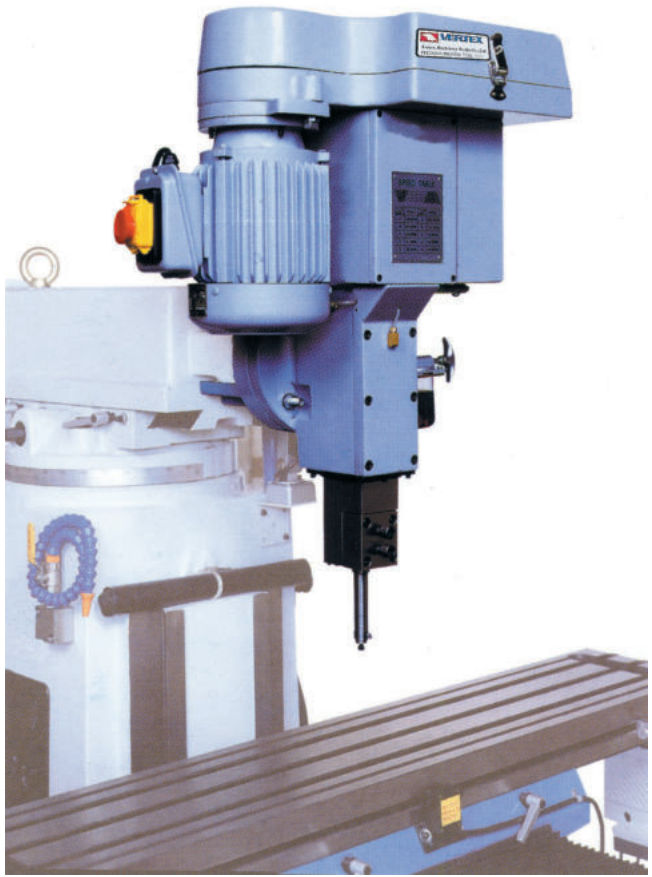
- Power motor
- Control box
- Air filter and lubricant
- Drawbar
- Mounting hardware

ORDER NO.	SPEED	TORQUE	AIR PRESSURE	VOLTAGE FOR MAGNETIC VALVE	G.W. kgs	PACKING LxWxH	CODE NO.	
PD-150 FOR	R-8	3000 R.P.M.	150 ft-lb	90 psi 6.3 kg/cm ²	AC 110V OR 220V DC 24V	9.8	650x300x200	1010-001
	NT-30							1010-002
	NT-40							1010-003
PD-200 FOR	NT-50	3000 R.P.M.	200 ft-lb	90 psi 6.3 kg/cm ²	AC 110V OR 220V DC 24V	11	650x300x200	1010-004



Precision Slotting Head

ORDER NO.VSH-125 CODE NO.1012-010



Features

- Special design worm and worm gear with linkage transmission mechanism, well construction and highly power output.
- The ram-sliding surface are hardened and precision ground
- Built in lubricating system for smoothly running and prolong the life of head
- Available mounting on any type milling m/c back side of the ram.

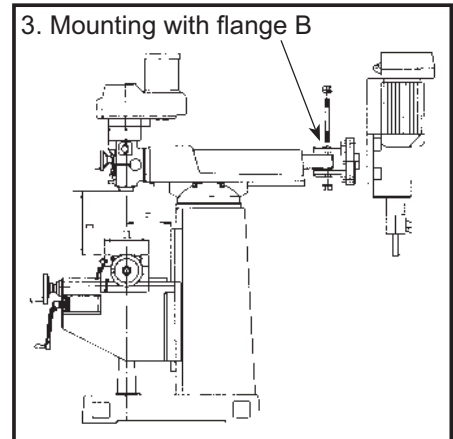
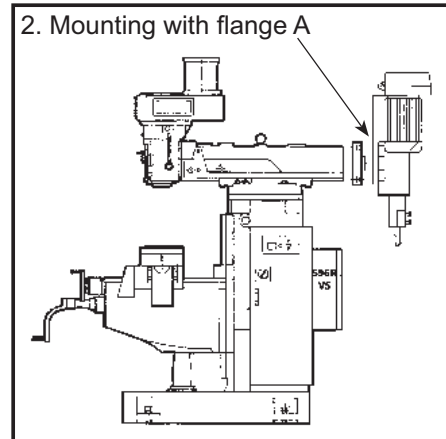
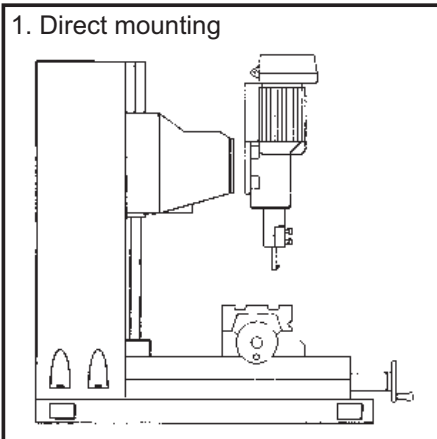
Specification

Stroke: 125mm (5")
 No. of stroke speed change: 5 steps
 Stroke speed (stroke/min): 30, 47, 69, 98, 140 spm (50HZ)
 Stroke speed (stroke/min): 35, 54, 79, 112, 160 spm (60HZ)
 Driving Motor: 3/4HP-6P
 WEIGHT: 150kgs

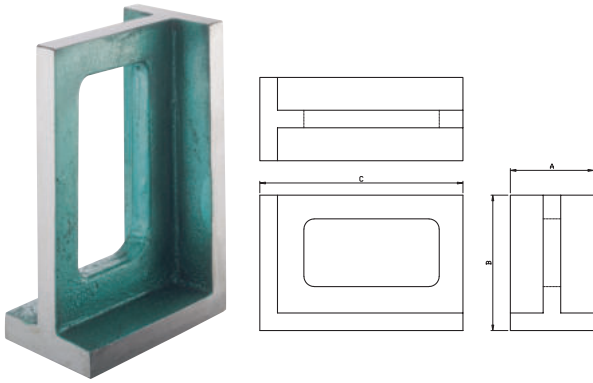
Optional Accessories

- Flange A
- Flange B
- Slotting bar & cutter 4, 5, 6, 7, 8, 10mm

ORDER NO.	CUTTER & DESCRIPTION	WEIGHT (kg)	CODE NO.
VSH-4C	Slotting bar 4mm	0.32	1012-011
VSH-5C	Slotting bar 5mm	0.32	1012-012
VSH-6C	Slotting bar 6mm	0.56	1012-013
VSH-7C	Slotting bar 7mm	0.62	1012-014
VSH-8C	Slotting bar 8mm	0.80	1012-015
VSH-10C	Slotting bar 10mm	0.81	1012-016
VSH-FGA	FLANGE A	11	1012-017
VSH-FGB	FLANGE B	23	1012-018



Precision Right Angle Plate

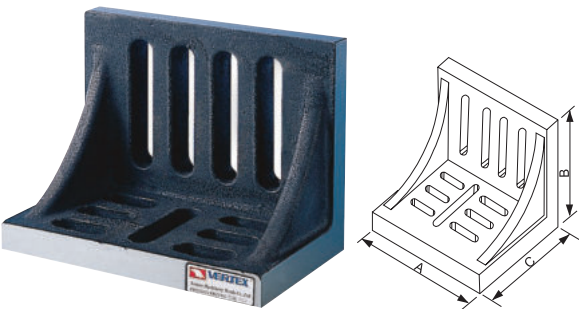


- Made of finest quality castings, stress relieved.
- All outside surfaces closely finished for square and parallel references:
Precision ground: Square within 0.01mm per 100mm
Parallel within 0.01mm per 100mm

Unit:mm

ORDER NO.	Approx Dimensions			WEIGHT (kgs)	CODE NO.
	A	B	C		
VRH-4	102	126	150	6.3	1013-001
VRH-5	126	202	300	16.9	1013-002
VRH-6	150	150	202	14.5	1013-003
VRH-8	202	250	300	32.5	1013-004

Right Angle Plate

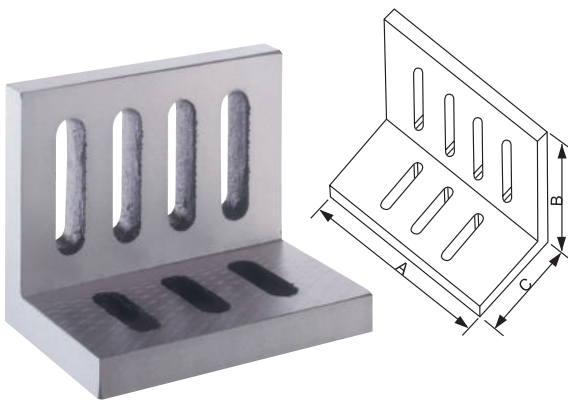


- Made of high tensile cast iron
- Webbed style accurately grounded, square and parallel on outside faces and ends within 0.01mm per 100mm

Unit:mm

ORDER NO.	Approx Dimensions			WEIGHT (kgs)	CODE NO.
	A	B	C		
VR-6	150	126	115	3.8	1013-010
VR-8	202	150	126	7.4	1013-011
VR-10	250	202	126	12.1	1013-012
VR-12	300	228	202	23.7	1013-013

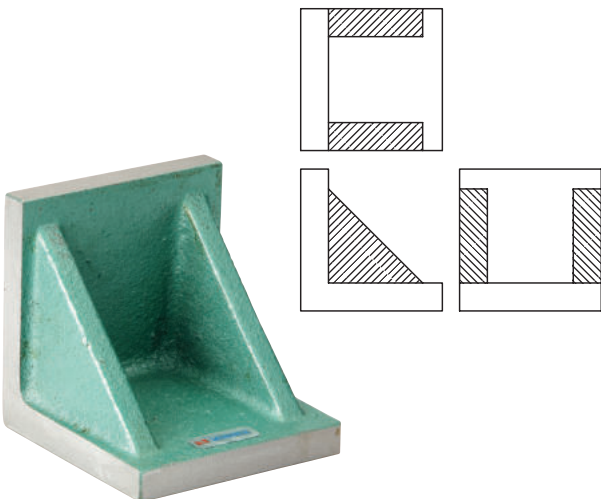
Slotted Angle Plate



- Many size also stocked with precision ground finish, prices on request.
- Made of high tensile cast iron properly seasoned against distortion. Open end style accurately machined square and parallel on all faces.

ORDER NO.	Approx Dimensions			APPROX WEIGHT (kgs)	CODE NO.
	A	B	C		
VR-45	4-1/2"	3-1/2"	3"	1.3	1013-020
VR-60	6"	5"	4-1/2"	3.2	1013-021
VR-80	8"	6"	5"	7.4	1013-022
VR-100	10"	8"	6"	12	1013-023
VR-120	12"	9"	8"	19.4	1013-024

Plain Angle Plate



Machined or precision ground

- Made from high tensile cast iron - normalized and stress relieved.
- Precision ground: Flat and square within 0.01 per 100m/m

ORDER NO.	Size in inches	APPROX WEIGHT (kgs)	CODE NO.
VR-22	2x2x2	0.4	1013-030
VR-33	3x3x3	1.2	1013-031
VR-44	4x4x4	2.5	1013-032
VR-55	5x5x5	4.3	1013-033
VR-66	6x6x6	7	1013-034
VR-88	8x8x8	15.2	1013-035
VR-1010	10x10x10	27.7	1013-036
VR-1212	12x12x12	42.9	1013-037

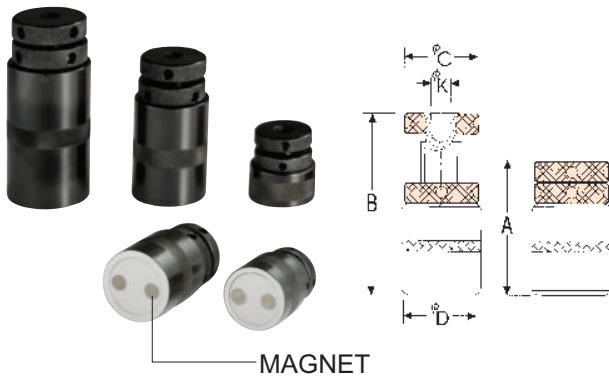
Screw Jack



- Material: S45C
Support heavy weight

ORDER NO.	ADJUSTABLE CAPACITY	ØD	K.G.	CODE NO.
VSJ-40	40-55mm	38	0.3	1014-000
VSJ-70	70-95mm	38	0.4	1014-001
VSJ-150	100-150mm	50	1.1	1014-002
VSJ-250	140-230mm	53	2.3	1014-003
VSJ-500	280-375mm	73	4.6	1014-004

Screw Jack With Magnet



- Cross type fixture gives best positioning.
- Built-in magnets designed, easy to clean chips.

ORDER NO.	A	B	C	D	K	K.G.	CODE NO.
VSJM-50	40	50	35	40	11.5	0.4	1014-010
VSJM-70	50	65	35	40	11.5	0.5	1014-011
VSJM-85	65	85	40	45	11.5	0.7	1014-012
VSJM-110	85	110	40	45	11.5	0.8	1014-013
VSJM-165	110	165	45	50	11.5	1.4	1014-014

Screw Jack Set



SUITABLE FOR IRREGULAR WORKPIECE.
RAPID SETTING & FIXED.

PADS:



6 PADS For different work piece shape

ORDER NO.	SIZE	CODE NO.
VSJ-1A	Ø25xØ11x10mm	1014-030
VSJ-2A		1014-031
VSJ-3A		1014-032
VSJ-4A		1014-033
VSJ-5A		1014-034
VSJ-6A		1014-035

ORDER NO.	SET INCLUDING		WEIGHT K.G.	CODE NO.
	JACKS	PARTS EACH ONE		
VSJ-A	VSJ-70x2 VSJ-150x2	VSJ-1A, VSJ-2A, VSJ-3A VSJ-4A, VSJ-5A, VSJ-6A	4.0	1014-020
VSJ-B	VSJ-150x2 VSJ-250x2	VSJ-1A, VSJ-2A, VSJ-3A VSJ-4A, VSJ-5A, VSJ-6A	7.5	1014-021

U-Clamp



- Material: S45C
- Easy adjustment

ORDER NO.	STUD	LxWxH	K.G.	CODE NO.
VCA-404	M12x5"	105x45x35mm	1.5	1015-001
VCA-405	M16x6"	126x54x40mm	2.6	1015-002
VCA-406	M20x7"	155x58x55mm	4.2	1015-003
VCA-408	M24x8"	190x70x65mm	8.2	1015-004

Pivot Clamp



- The clamping height is adjustable
- With brass plate under the clamp arm for protecting the working material from damage
- By using spherical Flange nut, it will be assured to clamp the material tightly
- The clamping arm is forged
- Material: S45C

ORDER NO.	Table T-Slot Size	Stud X L Size	Body	Clamping height	G.W.	CODE NO.
VCB-404	16	M12x5"	115x42x39	0 or 3 1/2"	1.6	1015-005
VCB-405	18	M16x6"	133x50x49	0 or 4"	2.7	1015-006
VCB-406	22	M20x7"	157x60x54	0 or 4 3/4"	4.6	1015-007
VCB-408	28	M24x8"	7x2 7/8	0 or 6"	8.6	1015-008

Hand Drift

ORDER NO.VHD-1 CODE NO.1016-001



An essential tool for machinery processing

Specially applied for: Vertical drill, radial drill, compounding miller, boring miller, and any drill drifting, etc.

- Easy and fast operation.
- Enhance the working efficiency.
- Protect toolings to be safe.
- Economical, practical & durable.
- Medium Carbon Steel.
- Hardness:HRC 44°-48°

Suit For Spindle Notes	Length	30pcs/Box Size	30pcs/ Carton Size	N.W.(kg)
M.T.#2 #3 #4 #5	375mm	385x45x37mm	390x270x240mm	1.3



Eye Shield

ORDER NO.VH-56 CODE NO.1017-001

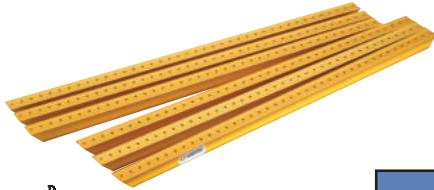


- The clamping height is adjustable
- With brass plate under the clamp arm for protecting the working material from damage

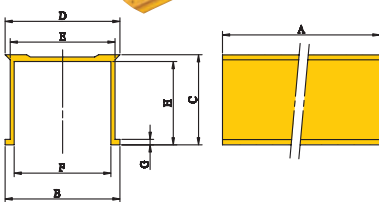
GUIDER SIZE	K.G.
300x180x2	1



Milling Table Slot Cover



- Save time cleaning chips from machine
- Protects table slots
- Prevents chips from interfering with coolant flow
- Made of hand anodized aluminum, Light weight.



ORDER NO.	Table Slot	A	B	C	D	E	F	G	H	L	Set	KG	CODE NO.
VST-10	10	300	10	8	10.2	7.4	5.5	2.2	6.2	300	6PCS	0.1	1018-011
VST-12	12	400	12	8	12.2	9.9	7.2	2.2	6.2	400	6PCS	0.4	1018-012
VST-14	14	400	13	9.9	14.2	11.3	7.2	2.2	8	400	6PCS	0.5	1018-013
VST-16	16	400	16	13.3	16.5	9.5	9	2.2	10	400	6PCS	0.5	1018-001
VST-18	18	450	17.8	13.3	18.5	16.4	11	2.2	10	450	6PCS	0.6	1018-002
VST-20	20	1000	20	13.7	20.5	18.4	13.2	2.2	10	500	10PCS	1	1018-003
VST-22	22	1000	22	13.7	22.6	20.5	15.2	2.2	10.5	1000	5PCS	1.1	1018-004
VST-24	24	1000	24	14	24.8	22.5	17.2	2.2	11.7	1000	5PCS	1.2	1018-005
VST-28	28	1000	27.8	14.1	28.8	28	21.1	2.2	11.7	1000	5PCS	1	1018-006
VST-36	36	1000	36.6	13	36.7	35	28.2	2.2	12	1000	5PCS	1.1	1018-007

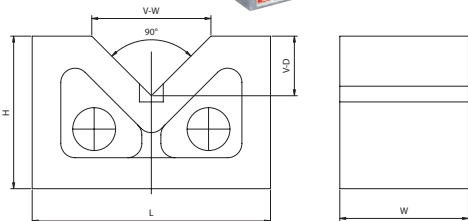


Vee Blocks



MACHINED ONLY

Material: High quality close-grained cast iron, stress-relieved.
Accuracy: Machining to 0.05mm / 100mm



ORDER NO.	Length	Width	Height	V-Width	V-Depth	Weight (kgs)/Set	CODE NO.
V-2V	50mm	27mm	32mm	25mm	12.5mm	0.5	1019-001
V-3V	76mm	35mm	61mm	44mm	22mm	1.5	1019-002
V-4V	100mm	45mm	67mm	53mm	26.5mm	2.5	1019-003
V-5V	130mm	51.5mm	79.5mm	64mm	32mm	4.3	1019-004
V-6V	156mm	66mm	90.5mm	81mm	40.5mm	6.4	1019-005
V-7V	181mm	77mm	110mm	85.4mm	42.7mm	12	1019-006
V-8V	206mm	103mm	143mm	116mm	58mm	16.7	1019-007

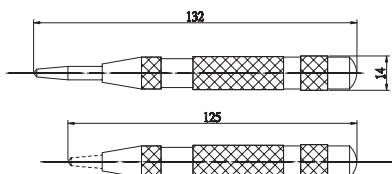


Auto Center Punch

ORDER NO.VACP-1 CODE NO.1019-020



L: 120MM



Automatic point marker is the best tool final the central point before punching. It's operated to aim at the central line and be pressed downward; the central point will appear. The size of the point can be adjusted by the pressure lid, no need to use hammers.

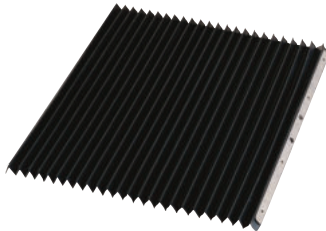
- N.W. : 0.07kg

Draw Bar



ORDER NO.	DRAW BAR THREAD	LENGTH mm		WEIGHT (kg)	CODE NO.
		STEPS (S) TYPE	VARIABLE (A) SPEED		
VDR-R8-S	7/16-20UNF	518	598	0.5	1020-001
VDR-R8-A				0.8	1020-002
VDR-NT302-S	1/2-12UNF	555	635	0.6	1020-003
VDR-NT302-A				0.9	1020-004
VDR-NT303-S	1/2-13UNF	555	635	0.6	1020-005
VDR-NT303-A				0.9	1020-006
VDR-NT30M-S	M12x1.75P	555	635	0.6	1020-007
VDR-NT30M-A				0.9	1020-008
VDR-NT40I-S	5/8-11UNF	545	630	1	1020-009
VDR-NT40I-A				1.3	1020-010
VDR-NT40M-S	M16x2.0P	545	630	1	1020-011
VDR-NT40M-A				1.3	1020-012

Expandable Machine Guard Cover



F IS FOR FRONT (X)
B IS FOR BACK (Y)
(MILLING MACHINE)
B SERIES RUBBER IS PLANE TYPE.

ORDER NO.	WxL	SUITFUL MILLING SINE	WEIGHT (kg)	CODE NO.
VGC-3833F	380x330	1.5#	0.3	1021-001
VGC-3860F	380x600	1.6# 1.7#	0.6	1021-002
VGC-4550F	450x500	1.6#	0.7	1021-003
VGC-3775B	370x750	1.5#	0.7	1021-004
VGC-4585B	450x850	1.6# 1.7#	1.1	1021-005
VGC-6085B	600x850	2.0#	2	1021-006

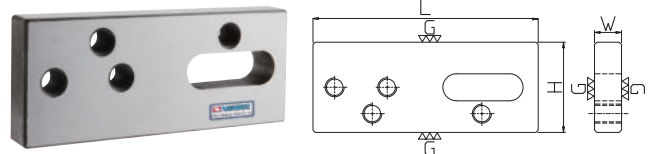
5C. C32. OZ25 Collet Rack

ORDER NO.VMS-5 CODE NO.1021-050



SIZE: 220x110x6 mm
MATERIAL:PLASTIC
G.W.: 0.2 kgs

Table Slot Plate



Material:SS41C Carburized
Hardness: HRC 50°~55°

ORDER NO.	WxHxL (mm)	WEIGHT (kgs)	CODE NO.
TP-90-18	18x60x90	0.76	1021-070
TP-90-20	20x60x90	0.85	1021-071
TP-90-22	22x60x90	0.9	1021-072
TP-90-24	24x60x90	1	1021-073
TP-150-18	18x60x150	1.3	1021-074
TP-150-20	20x60x150	1.4	1021-075
TP-150-22	22x60x150	1.6	1021-076
TP-150-24	24x60x150	1.8	1021-077

Parts Storage

COLOR: RED, BLUE, YELLOW



ORDER NO.	SIZE	PACKED	EACH WEIGHT (kg)	CODE NO.
VHB-1218	120Wx180Dx80H mm	60 PCS/CASE	8.6	1021-100
VHB-1525	150Wx250Dx120H mm	36 PCS/CASE	9.6	1021-101
VHB-2035	200Wx350Dx150H mm	18 PCS/CASE	0.585	1021-102
VHB-2045	200Wx450Dx177H mm	12 PCS/CASE	0.8	1021-103
VHB-3045	300Wx450Dx177H mm	8 PCS/CASE	1.8825	1021-104



Universal Cutter Grinder

ORDER NO.U2 CODE NO.1022-001



For grinding HSS and carbide engraving cutter as well as single lip or multiple lip cutters of various shapes such as radiused cutters or negative taper angle of cutters. The universal index head is provided at 24 positions so that any particular angle or shape can be obtained, free 3600 or 100 rotation is allowed for grinding End Mills. Twist Drill. Lathe Tools, only replace the attachment to the index head without any complex setup.

Technical Data

Max. Collet capacity Ø18mm
Max. Grinding dia. Ø25mm
Taper angle 0°-180°
Relief angle 0°-45°
Negative angle 0°-26°
Grinding spindle 3600 r.p.m.
Cup grinding wheel 100x50x20mm
Motor 1/3Hp 220V50/60Hz, please notify volt & phase
Net weight 45kgs
G.W.: 58kgs
Machine dimensions (LxWxH) 45x40x35cm
Packing Dimensions (LxWxH) 55x45x47cm

Standard Accessory Included

- Wheel dresser with diamond..... 1pc
- Wheel flange (mounted)..... 1pc
- Grinding wheel (stone).....1pc (U2-G)
- Collet Ø4, 6, 8, 10 12mm..... 5pc
- Aligning finger.....1pc
- Drive belt (U2-B).....1pc (U2-B)
- Lock pin.....1pc
- Tools.....1set

Optional Accessory

- Twist drill grinding attachment U2-T
- END mill grinding attachment U2-E
- Lathe tool grinding attachment U2-L
- Grinding wheel balancing stand LBS-100 CODE NO. 2014-010
- Diamond grinding wheel U2-D
- Resinoid Diamond & CBN Wheels U2-R
- Collect (extra 1, 2, 2.5, 3, 5, 7, 9, 16, 18, 20, 25mm and 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8").
Detail specification & ORDER No. shown on page U2 collet.

ORDER NO.	CODE NO.
U2-E	1022-010
U2-T	1022-011
U2-L	1022-012
U2-D #100	1022-013
U2-B BELT	1022-014
U2-C CABINET	1022-015
U2-G WHEEL	1022-016
U2-R #200	1022-017
U2-R-1 #400	1022-017-1

WEIGHT: 2kg



CODE NO. 1022-010 U2-E
END mill grinding attachment



WEIGHT: 0.9kg

CODE NO. 1022-011 U2-T
Twist drill grinding attachment



● Tool cabinet stand U2-C,
900x500x400mm G.W.:40kgs
CODE NO. 1022-015



WEIGHT: 0.9kg

CODE NO. 1022-012 U2-L
Lathe tool grinding attachment



U2-D
WEIGHT: 0.7kg
1022-013

U2-R
WEIGHT: 0.5kg
1022-017

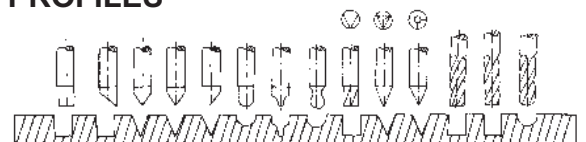
CODE NO. 1022-013
diamond grinding wheel
CODE NO. 1022-017
Resinoid Diamond & CBN Wheels



DIAMOND GRINDING WHEEL

ORDER NO.	SIZE	GRAIN
U2-D	100Dx10Wx5Ux20Hx22T	#100
U2-R	100Dx8Wx2Xx20H	#200
U2-R-1	100Dx8Wx2Xx20H	#400

ENGRAVING AND MILLING CUTTER PROFILES





VCF-500

Accessory: Side Mill Cutter Insert SPUN 422

SPMN 1203



ORDER NO.	CODE NO.
VCF-500	1023-001
VCF-500W	1023-002
VCF-500F	1023-003

PRACTICAL

- A. UNIVERSAL APPLICATION.
- B. SIMPLIFIED OPERATION.
- C. FAST-ACCURATE-RATIONAL.
- D. TIME SAVED.



VCF-500W

Accessory: Grinding Wheel
100Øx50x17Ø



FEATURES FOR VCF-

1. Simplified operation, suitable for unskilled personnel.
2. Easily to be bevelled for any length made of steel, cast iron, nonferrous metals, plastics, acrylic etc.
3. 500 : With exchangeable carbide inserts, knife can be changed easily to decrease cost and increase working ability.
4. 500W: With taper wheel or flange hot-processed parts also can be bevelled or chamfered.
5. 500F : Working base on surface milling principles, the deburring processing surface is same as the milling machine surface.



VCF-500F

Accessory: Face Milling Cutter
Insert SEKN 1203



TECHNICAL DATA

	500	500W	500F
Space requirement	500x320m/m	500x440m/m	500x220m/m
Weight(kgs)	28.5	29.1	29
Voltage	3Ø 220V or 1Ø 110V/220V 50HZ/60HZ 3Ø 380V/415V		
Motor output	0.7KW		
Speed	3500 r.p.m		
Length of guide rails	500m/m	500m/m	500m/m
Height of bevel	0-3m/m		
Bevel angle	15°~45° (Changable)	45°	45°

PLEASE NOTIFY VOLTAGE & PHASE, WHEN YOU ORDERING.
C.E MARK REQUESTED



VCF-500S

Accessory: Sanding Disc
165Øx22Ø

ORDER NO.	CODE NO.
VCF-500S	1023-004
VCF-600	1023-005
VCF-700	1023-006

PRACTICAL

- A. USING SAND-CLOTH ROLLER FOR CUTTING.
- B. GOOD FOR STEEL. CAST IRON HARDEN PARTS.
- C. NOT FOR SOFT IRON OR ALUMINUM.
- D. IF USED BENT WORKPIECE, THE CHAMFERING SURFACE WOULD NOT SMOOTHLY STRAIGHT.



VCF-600

Insert SPMW 321
ZSPMW 090308

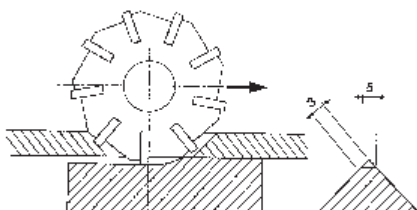
FEATURES FOR VCF-

1. 500S: Uses sanding disc, can debur soft and rigid materials.
2. 600 : Easy to carry and time-saving. suitable for heavy workpiece which can't be easily moved. The tools can be chamfered 0-3mm bevel angle, radius, arc angle, irregular shape. straight line, outer curve and etc.
3. 700 : The machine is used to carry out chamfering operations on any kind of ferrous material in particular steel and cast iron. Equipped with square-shaped tungsten carbide inserts-12.7x12.7x3.18 ISO 1203 SPUN. Simplified operation suitable for unskilled personnel. 3Ø220V/3Ø380V



VCF-700

Side mill cutter



TECHNICAL DATA

	VCF-500S	VCF-600	VCF-700
Space requirement	330x410	380x130	360x200x260
Weight(kgs)	26	3.7	14
Voltage	3Ø220V or 1Ø110V/220V 3Ø380V/415V		50HZ/60HZ
Motor output	0.7KW		0.37KW
Speed	3500 r.p.m	12000 r.p.m	3500 r.p.m
Length of guide rails	320m/m	100m/m	200m/m
Height of bevel	0-3m/m	0-3m/m	0-7m/m
Bevel angle	45°	45°	15°~45° Adjustable

PLEASE NOTIFY VOLTAGE & PHASE, WHEN YOU ORDERING.



Chamfering & Deburring Unit

ORDER NO.VCF-300A CODE NO.1023-007



NEW



- Process by carbide end mill.
- The range of chamfer: inner dia. 6mm, inner gap width 6mm and 3R arc.
- The chamfer a bility by: 2C/2R.
- The adjustable speed (0-6000rpm) can use for all kinds of materials cutting. (except harden parts)
- This machine was designed for regular and irregular parts such as curved surface, inner gap, and complex of inner and outer parts.
- All bevel angle comes to 45° by 45° carbide end mill.

SPECIFICATION

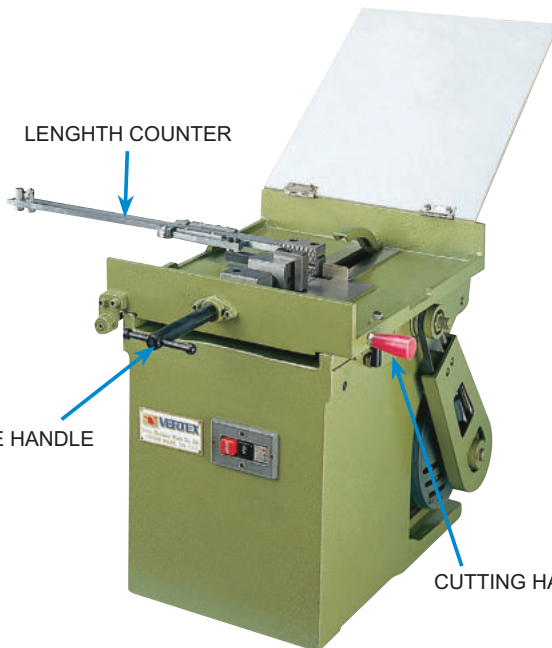
Accessory	Carbide end mills
Machine size	L330mm x W330mm x H300mm
Voltage	1ø, 220V; 50Hz/60Hz
Speed	0~12000 r.p.m.
Distance of Bevel	0~3mm
Bevel angle	45°
N.W. / G.W.	40kgs / 42kgs
Box size	550mm x 440mm x 380mm
Measurement	3.4 Square feet
Motor	1HP
Track Size	300mm x 250mm x 10mm



Ejector Pin Cutting-off Unit

ORDER NO.VEC-100 CODE NO.1024-001

A PRECISE & SHARP CUTTING TOOL FOR MOULD MAKING LINE



Features

- Moveable shaft bearing easy operation, safety.
- For cutting ejector pin of mould. or machine key. round rod.
- Heat-Treatment materials. Good-Looking cutting surface of stainless steel.
- Handle device according law of lever, it's easy to move on.
- Cause no vibration, no dust and noiseless.
- Easy to exchange the emery wheel.

ABLE TO CUT ALL THE MATERIAL WITH PLANE SURFACE ALMOST

SPECIFICATION

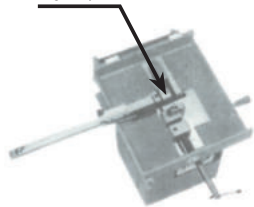
Unit:mm

Max. Cutting capacity	Ø25x300L
Cutting tolerance	20 ± 0.10MM
Emery wheel	150MM (O.D.)
	1MM (THICK)
	19.05MM (HOLE)
R.P.M.	3600
Motor	1/2HP
Measure rule	300MM
Weight (approx.)	94.5KGS
Machine size	620x420x450MM
Packing size	720x520x600MM

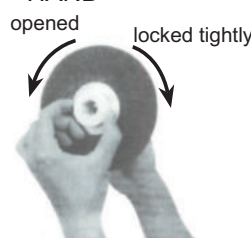
STANDARD ACCESSORIES
Emery wheel (Ø150x1x19.05mm) 5 PCS



LARGE & SMALL V SLOT
(For clamping round object)



EMERY WHEEL ASSEMBLY BY HAND



PLEASE NOTIFY THE VOLTAGE & PHASE, WHEN YOU ORDERING.



ORDER NO.	CODE NO.
VEC-300G	1024-010
VEC-500G	1024-011
VEC-600G	1024-012

Features

- During operation, the grinding sander may be micro adjusted and repaired without changing its dimensions.
- The tightness of belt may be automatically adjusted and controlled (the larger the resistance, the tighter the belt.)
- The dimensions precision of cutting off the length of working piece are not subject to the effect of the difference of thickness of cutting-off sander piece.
- The rapid chuck is used to hold the working piece in place, opening or closing it is very quick, and Ø1-25mm is the same.
- When operation, a shaft with two tapered ends is used for transmission and characterized by high stability low wearing rate and long life.
- The rapid positioning rule is in the unit of 20mm and provided with a micro rule (0mm to 25mm) of which the zeroing point is the dimensions at the rapid positioning point.
- The minimum of cutting length is 60mm



For Clamping



For Cutting & Grinding

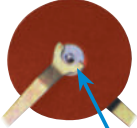
1.



2.



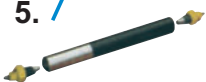
3.



4.



5.



6.



The measure rule

SPECIFICATION

Cut-off precision	25m/mø x 300m/m ± 0.01
Right-angle precision	25m/mø x 90° ±0.01
Cut-off sander lamina	1m/m t x 180m/mø (Hole) 31.8m/mø
Grinding sander	WA46K x100 x 50 x 20
R.P.M.	3600
Motor	1HP 110/220V 1 or 3 phase
Capacity	VEC-300G 300mm VEC-500G 500mm VEC-600G 600MM
Weight (Approx.)	105.5kgs (107kgs) (110kgs)
Machine Size	L430m/m x W360m/m x H500m/m

- The length of measure: 300mm is for VEC-300G
500mm is for VEC-500G
600mm is for VEC-600G
Except the measure rule length is different, all items of body are same.
- Please notify the voltage & phase, when you ordering



Dustproof Halogen Lamp Beam



UNIVERSAL TYPE

- Fitted with coil transformer resisting unstable voltage.
- Long service life.



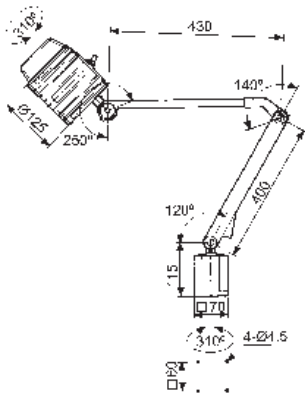
VHL-300L



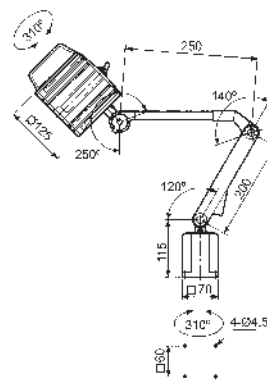
VHL-300M



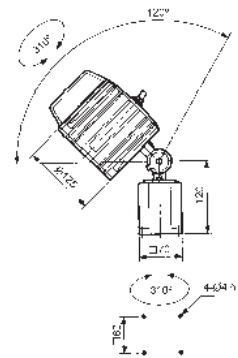
VHL-300S



VHL-300L
LONG ARM

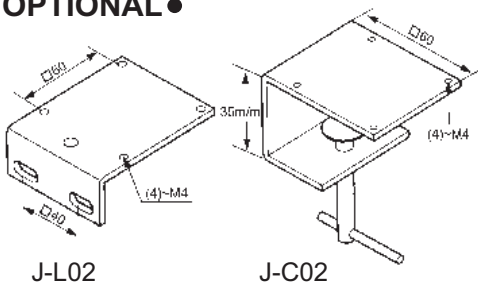


VHL-300M
MEDIUM ARM



VHL-300S
SHORT ARM

●OPTIONAL●



J-L02

J-C02

- MOUNTING ANGLE PLATE J-L02
- MOUNTING CLAMP J-C02

Totally enclosed lighting head provides well prevention for explosion, dust, coolant, and lubricants.
Uses efficient quartz halogen bulb, great light output, soft illuminating without irritating to the eyes.

Features

- Coil transformer built in base for directly connect to voltage of Ac power. (110V, 220V, 380V.....)
- Specify voltage as desired when ordering.
- It accepts bulb 50W
- Furnished with 1.8 meter cord with plug.

Unit:mm

ORDER NO.	ARM LENGTH L x l	WEIGHT (kg)	CODE NO.
VHL-300L	430x400	2.4	1025-001
VHL-300M	250x200	2.1	1025-002
VHL-300S	1 JOINT	2.3	1025-003
J-L02		0.3	1025-004
J-C02		0.5	1025-005



Dustproof Halogen Lamp Beam



VERTEX

UNIVERSAL TYPE

- Fitted with coil transformer resisting unstable voltage.
- Long service life.
- With Water proof articulated arm.
- Round tube arm provides great lighting angles.



VHL-300LR



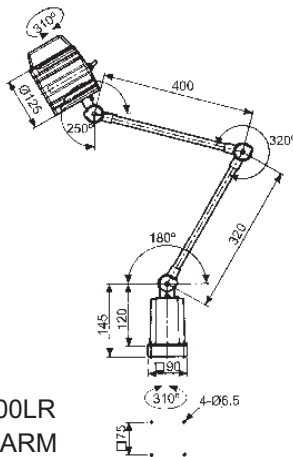
VHL-300MR



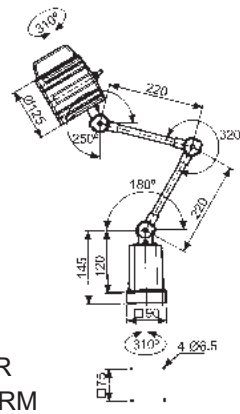
VHL-300SR



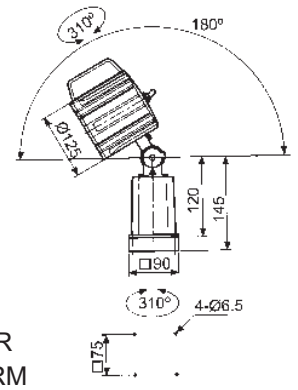
VHL-300 1/2MR



VHL-300LR
LONG ARM

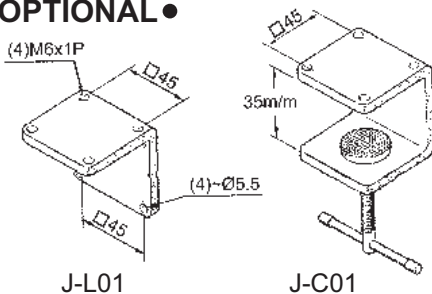


VHL-300MR
MEDIUM ARM



VHL-300SR
SHORT ARM

● OPTIONAL ●



J-L01

J-C01

- MOUNTING ANGLE PLATE J-L01
- MOUNTING CLAMP J-C01

Totally enclosed lighting head provides well prevention for explosion, dust, coolant, and lubricants.

Uses efficient quartz halogen bulb, great light output, soft illuminating without irritating to the eyes.

Features

- Coil transformer built in base for directly connect to voltage of Ac power. (110V, 220V, 380V.....)
- Specify voltage as desired when ordering.
- It accepts bulb 50W, 55W, 70W.
- Furnished with 1.8 meter cord with plug.

Unit:mm

ORDER NO.	ARM LENGTH L x l	WEIGHT (kg)	CODE NO.
VHL-300LR	400x400 (With Water proof)	4.4	1025-010
VHL-300MR	200x200 (With Water proof)	3.6	1025-011
VHL-300SR	1 JOINT (With Water proof)	2.9	1025-012
VHL-300 1/2MR	200 (With Water proof)	3.4	1025-013
J-L01		0.6	1025-014
J-C01		0.4	1025-015

Quartz Halogen Lamp Beam

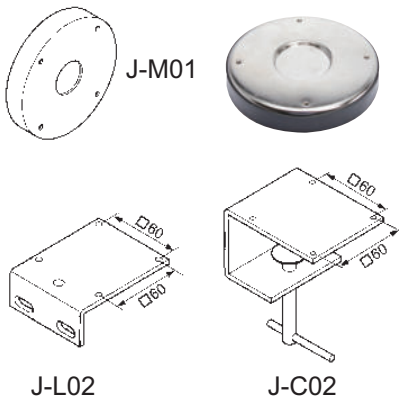


- Gooseneck arm for smooth lighting angle adjustment.
- Lighting reaches any direction.

VHL-20FT SERIES

- Engineering plastic shade and base provides complete insulation for maximum operator safety.
- Power source available: Any voltage on customer's request. Such as 110V, 220V, 240V, 380V, 415V.
- Transformer built in base.
- Accept 20, 35 and 50 watt bulb. Included with 20 watt bulb, 35 and 50 watt bulb on request.
- Furnished with 1.8 meter (70") cord.
- Available with magnetic base. (optional)
- Engineering mounting angle plate. (optional)
- Double shades designed permits fast heat dissipation.

● OPTIONAL ●



- MAGNETIC SEAT
- MOUNTING CLAMP J-C02
- MOUNTING ANGLE PLATE J-L02

VHL-20F SERIES

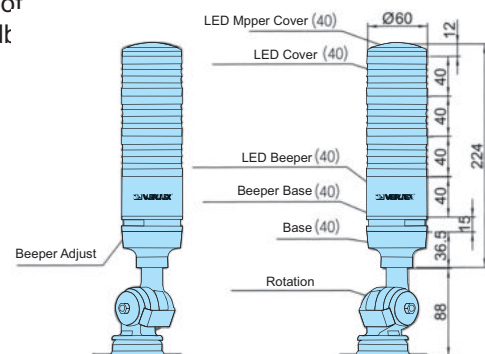
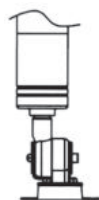
- The quartz halogen lamp has great light output, soft illuminating without irritating to the eyes.
- Low voltage 12 or 24 volt operation without danger of electric shock.
- The articulated arm provides vibration resistance performance.
- Use top quality electric components.
- Accept 20, 35, 50 watt bulb. Included with 20 watt bulb, 35 and 50 watt bulb on request.
- Complete with 1.8 meters (70") cord.
- Economical model, jet quality constructed.
- Ideally suited to machine tools and machinery without big working area.
- Engineering plastic shade and base provides complete insulation.

ORDER NO.	WEIGHT(kg)	CODE NO.
VHL-20FT	1.6	1025-020
VHL-20F	1.1	1025-021
J-M01	0.6	1025-006
J-L02	0.3	1025-004
J-C02	0.5	1025-005

Water - Proof Bright LED Signal Light



- Signal light with feature of multi-function, water proof
- Lamp of signal light, adopted high efficient LED bulb



- Suit for machine tools & etc, show singal of machine process
- Good for automatic process line multi angle
- Double layer lamp shade high illumination LED water & dust proof-steam 360° lighting without shade

ORDER NO.	Voltage	Bulb	Enclosure IP	weight (kgs)	CODE NO.
VLED-SL	110V / 220V Wiring with electric transformeris required	24V	IP54	0.77	1025-026

Cool Light Beam



WATER RESIST



D SERIES



DB SERIES



- Outstanding Water-resist Performance

Separate ballast series

ORDER NO.	LAMP LENGTH	BULB LENGTH	WATT	DIA	WEIGHT (kg)	CODE NO.
VHL-W18D/PL	425m/m	195m/m	18	70mm	2	1025-032
VHL-W20D	765m/m	580m/m	20	70mm	3.6	1025-033
VHL-W36D/PL	621m/m	385m/m	36	70mm	2.9	1025-034
VHL-W40D	1385m/m	1200m/m	40	70mm	5.1	1025-035

FOUR MODELS TO CHOOSE FORM 10, 15, 20, AND 40 WATT. OUTSTANDING FEATURES

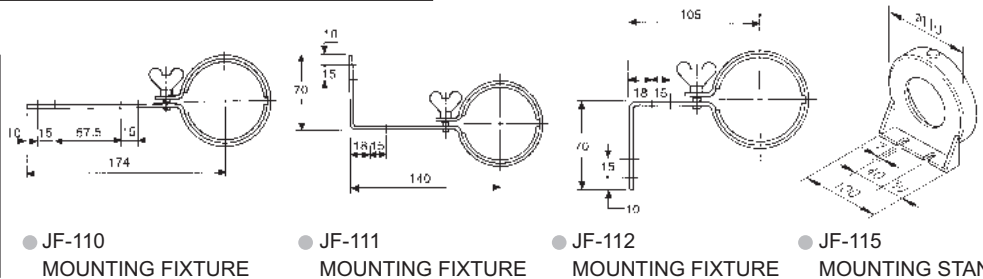
- Suited for machine lighting. indoor and outdoor lighting.
- Cool lighting performance.
- Anti-crack lamp.
- Swivelling mounting bracket (opional).
- Accommodates power source 110V or 220V. single voltage only.
- Specify HZ and voltage when ordering.
- The outer tube is manufactured from acrylic. When requested. the glass outer tube is available.
- Furnished with 1.8 meter (70") cord.

Built-in ballast series

ORDER NO.	LAMP LENGTH	BULB LENGTH	WATT	DIA	WEIGHT (kg)	CODE NO.
VHL-W18DB/PL	525m/m	195m/m	18	70mm	2	1025-042
VHL-W20DB	861m/m	580m/m	20	70mm	3.6	1025-043
VHL-W36DB/PL	715m/m	385m/m	36	70mm	2.9	1025-044
VHL-W40DB	1529m/m	1200m/m	40	70mm	5.1	1025-045

OPTIONAL

ORDER NO.	WEIGHT (kg)	CODE NO.
JF-110	0.6	1025-050
JF-111	0.6	1025-051
JF-112	0.6	1025-052
JF-115	0.1	1025-053



Waterproof Reflector LED Lamp

NEW



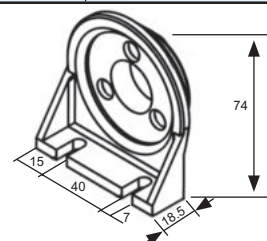
- Wide illuminating range suit for various machine tools. Water proof & dust proof good for under ground environment.
- The products wide illumination range and brightness makes it suitable for areas requiring wide-range illumination. it is suitable for various machine tools when installed on different mounts, particularly machine tools within closed operating environments. The protective cover is waterproof and dustproof, the lamp is conducive for subways, mines, and tunnel environments.

ORDER NO.	VOLTAGE	LAMP LENGTH	BULB	UMINATION DISTANCE	WEIGHT (KGS)	CODE NO.
VLED-W13	110V / 220V	414 m / m	9W	0.5 m / 500 lux	2.2	1025-058
VLED-W36	110V / 220V	700 m / m	22W	0.8 m / 500 lux	3.5	1025-059

※Color Temperature: 5500 K-6000 K

OPTIONAL

ORDER NO	WEIGHT	CODE NO.
VLED-102	0.41	1025-116





Magnifying Fluorescent Work Light Beam



WITH 5X LENSE



VHL-30TEB
BENCH TYPE

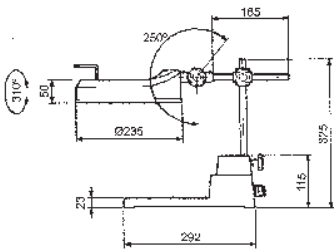


VHL-30MEB

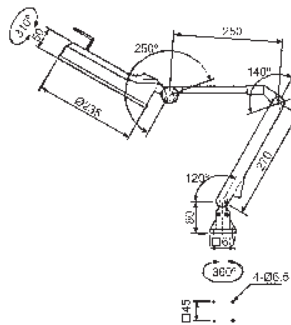


3 Diopter auxiliary lens
(optional)

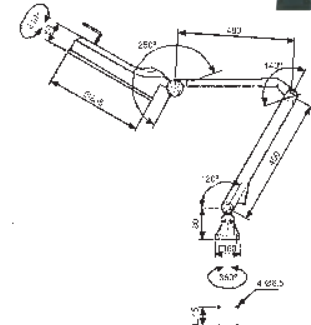
VHL-30LEB



VHL-30TEB BENCH TYPE



VHL-30MEB MEDIUM ARM



VHL-30LEB LONG ARM

VHL-30TEB

- Bench type model.
- Constructed with a wide base for placing object, allowing it especially suited for inspection lighting.
- Electronic ballast is built in arm.
- Accepts 22 watt fluorescent tube.
- 110V, or 220V operation. Supplied single voltage only. Specify desired voltage when ordering.
- Furnished with 1.8 meter cord with plug. Extended cord length is available when required.

Designed with a magnifier lense on luminaire head giving 5 Diopter of magnification 2.25x than acrual object. The fluorescent lighting provides day light effect without flash.

VHL-30 MEB

- Medium arm model.
- Electronic ballast is built in arm.
- Accepts 22 watt fluorescent tube.
- 110V, or 220V operation. Supplied single voltage only. specify desired voltage when ordering.
- Furnished with 1.8 meter cord with plug. Extended cord length is available when required.

VHL-30 LEB

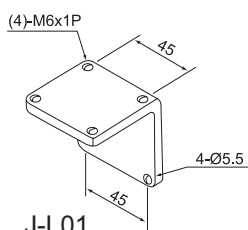
- Long arm model.
- Electronic ballast is built in arm.
- Accepts 22 watt fluorescent tube.
- 110V, or 220V operation. Supplied single voltage only. Specify desired voltage when ordering.
- Furnished with 1.8 meter cord with plug. Extended cord length is available when required.

●OPTIONAL●

ORDER NO. VHL-3X
3 Diopter magnifier lense=1.75X



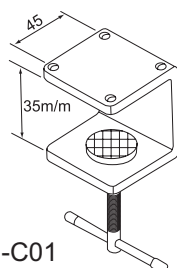
●OPTION



J-L01

MOUNTING ANGLE
PLATE

●STANDARD ACC.



J-C01

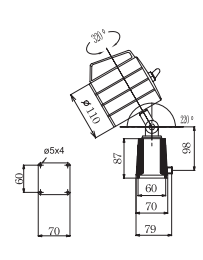
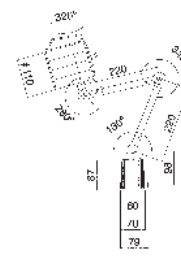
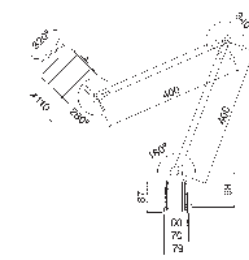
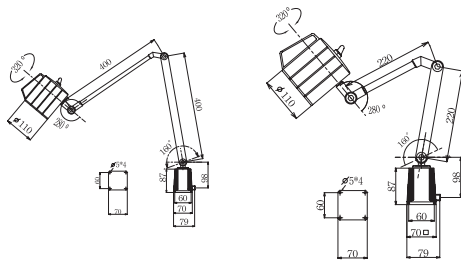
MOUNTING CLAMP

ORDER NO.	WEIGHT (kg)	CODE NO.
VHL-30TEB	3.5	1025-060
VHL-30MEB	2.9	1025-062
VHL-30LEB	2.9	1025-063
J-L01	0.6	1025-014
VHL-3X	0.3	1025-065

- All VHL-XXXEB work lights are with 5 Diopter magnifier lense, The MAX.=5+3=8 Diopter



Water-Proof Halogen Lighting Beam



VHL-400L

- Water-proof lighting head with reinforced glass resists big temperature fluctuations of cutting oil.
- 12V/24V Voltage.
- Flexible Arm (round arm), 400x400mm
- With universal Lighting Base.
- Specifications of Bulb: 12V/50W.
- Different conditions demand different lighting bases. Selected rectangular L-type (#V-20) base or C-type (#V-21) base.

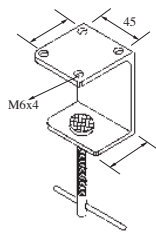
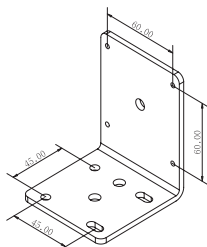
VHL-400M

- Performance & features: same as, but with shorter flexible arm at 220x185mm.

VHL-400S

- Specially designed to fit particular locations and spaces, The flexible arm is very short.

● OPTIONAL ●



VHL-500L

- Performance & features of these series: same as. The main difference is that VHL-500L can be installed with a shorter arm, and connected with AC current below 240V. Please indicate the required voltage when placing the orders to us.
- Specifications of the bulb: 12V/50W

VHL-500M

- Same specifications as VHL-500L, but with shorter flexible arm at 220x220mm.

VHL-500S

- Specially designed to fit particular locations and spaces. The flexible arm is very short.

WATER-PROOF HALOGEN LIGHTING LAMP (VHL-400L SERIES)

LIGHTING HEADS OF THESE SERIES WITH SPECIFIC FEATURES OF WATER-PROOF, DUST-FREE, ANTI-LUBRICAT, ANIT-CUTTING OIL, ETC. THE LIGHTING UNITS ADPOTED WITH A BULB (12V/50W). CUSTOMERS' SPECIFICATIONS ALSO ACCEPTED.

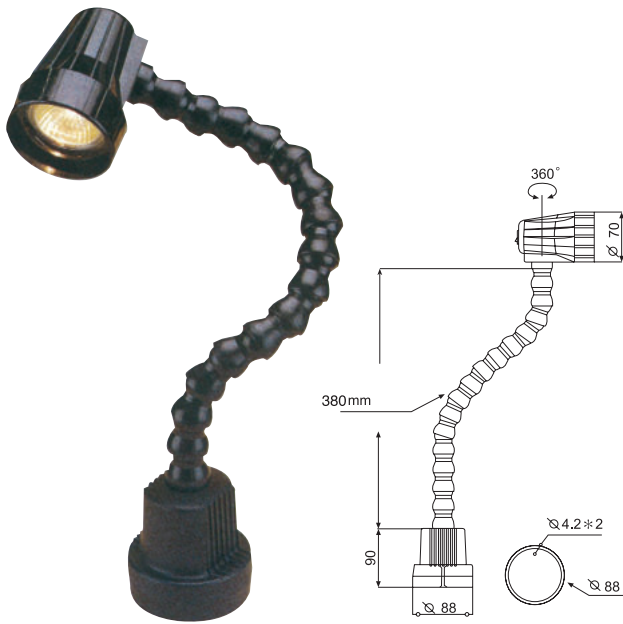
ORDER NO.	WEIGHT (kg)	CODE NO.
V-21	0.48	1025-107
V-26	0.19	1025-108

ORDER NO.	VOLTAGE	BULB	ARM LENGTH L x l	OPTIONAL ACCESSORIES	WEIGHT (N.W.)	CODE NO.
VHL-400L	110V - 220V	12V 50W	400x400	V-26	3.8	1025-100
VHL-400M	110V - 220V	12V 50W	220x220	V-26	3.5	1025-101
VHL-400S		12V 50W		V-20 / V-21	2.8	1025-102
VHL-500L	110V - 220V	12V 50W - 24V 50W	400x400	V-26	4	1025-103
VHL-500M	110V - 220V	12V 50W - 24V 50W	200x220	V-26	3.8	1025-104
VHL-500S	110V - 220V	12V 50W - 24V 50W		V-26	2.7	1025-105

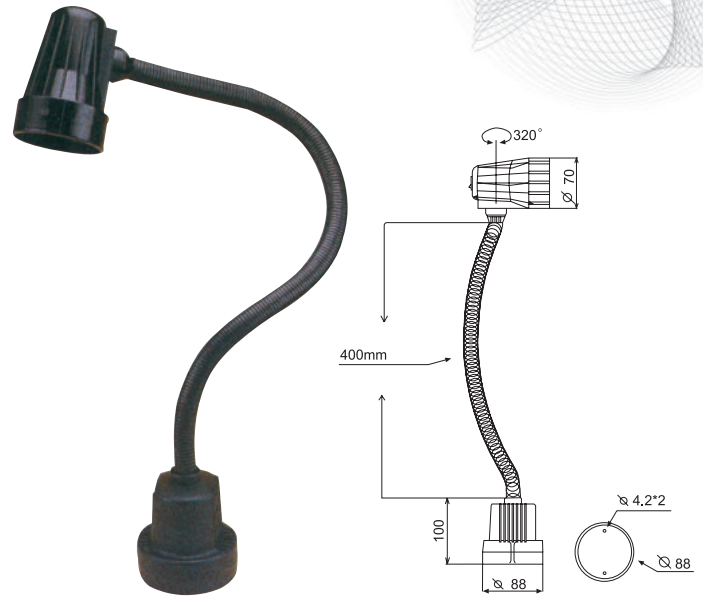
Dustproof Halogen Lamp Beam



WITH TRANSFORMER
& MAGNETIC BASE



VHL-600FT



VHL-700FT

Features

- VHL-600FT, VHL-700FT type ideal for work-place lighting if bright concentrated light is required in performance not too large area illumination. Built in transformer.
- Suitable for use at small machine such as CNC engraving machine, sewing machine, lathe machine, working benches and working table.....etc.
- VHL-700FT with flexible arm.

ORDER NO.	VOLTAGE	BULB	ARM LENGTH L x l	OPTIONAL ACCESSORIES	WEIGHT N.W.(KGS)	CODE NO.
VHL-600FT	110V - 220V	12V 20W	380	M-23	1.7	1025-109
VHL-700FT	110V - 220V	12V 20W	400	M-23	1.7	1025-110

V-B15		12V 50W / 24V 50W			0.009	1025-111
V-B16		12V 55W / 24V 70W			0.009	1025-112
V-T17	415V - 12 / 415V - 24 380V - 12 / 380V - 24 230V - 12 / 230V - 24				1.47	1025-113
V-T18	415V - 12 / 415V - 24 380V - 12 / 380V - 24 230V - 12 / 230V - 24				1.4	1025-114

V-T17



TRADITIONAL
TRANSFORMER V-T17
SUITABLE FOR
VHL-400 SERTES
VHL-500 SERTES

V-T18



EXTERIOR DUST-FREE
TRANSFORMER V-T18
Voltage below 415V. Can
be installed anywhere.
Dust-Free, leakage-proof
and oil-proof.

V-B15



V-B15
12V/50W, 24V/50W
Those bulb for VHL-400,
VHL-500 series

V-B16



V-B16
24V/70W, 12V/55W
Those bulb for VHL-400,
VHL-500 series

Water Proof LED Lamp



ENERGY SAVING

UNIVERSAL TYPE

NEW



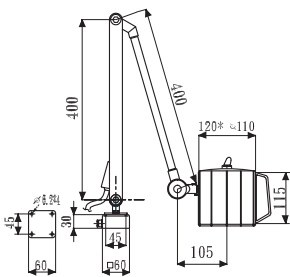
VLED-400L

VLED-400M

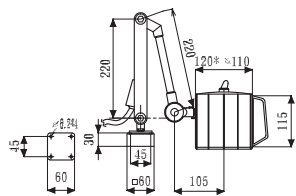
VLED-500L

VLED-500M

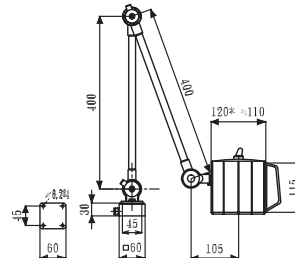
VLED-500S



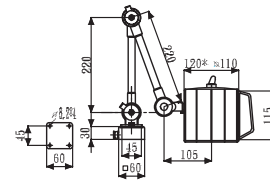
VLED-400L



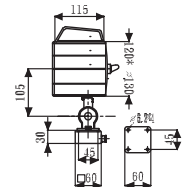
VLED-400M



VLED-500L



VLED-500M



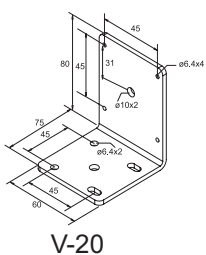
VLED-500S

Features

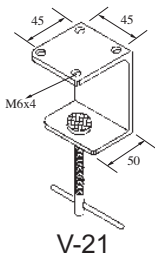
- Energy saving
- Luminous flux: 780~800 lumen
- LED light long service life
- 1 year guarantee
- 1.8 meter coil
- White light
- No high heat produce
- Dust/water proof
- Specify voltage when ordering
- For any working place, stable quality
- Suit for CNC, engraving, drill press machine, lathe, wood and mold industry

ORDER NO.	VOLTAGE	BULB	ARM		WEIGHT N.W.(KGS)	CODE NO.
			L x l	TUBE STYLE		
VLED-400L	110V / 220V	9W	400 X 400	SQUARE	2.12	1025-130
VLED-400M	110V / 220V	9W	220 X 220	SQUARE	1.96	1025-131
VLED-500S	110V / 220V	9W	JOINT	ROUND	1.6	1025-132
VLED-500L	110V / 220V	9W	400 X 400	ROUND	2.42	1025-136
VLED-500M	110V / 220V	9W	220 X 220	ROUND	2.3	1025-137

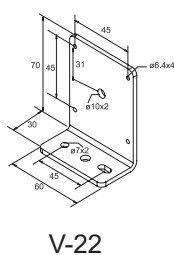
OPTIONAL



V-20



V-21



V-22



- LED9W High lumen 780~800 Led light bulb

Totally enclosed lighting head provides well prevention for explosion, dust, coolant, and lubricants.

OPTIONAL ACCESSORIES

ORDER NO.	WEIGHT (kg)	CODE NO.
V-20	0.28	1025-106
V-21	0.48	1025-107
V-22	0.16	1025-119
LED9W	0.19	1025-141

Concentrate LED Lamp

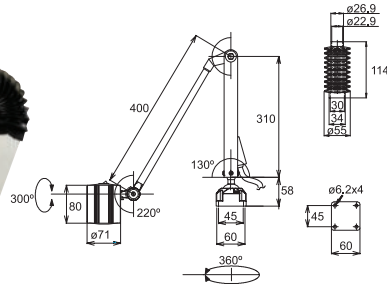


NEW

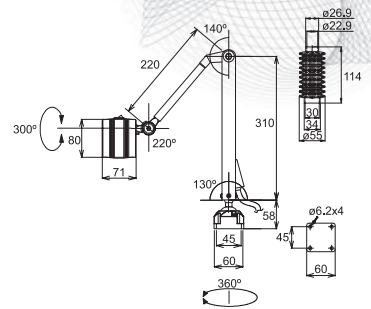
UNIVERSAL TYPE



VLED-30L



VLED-30M

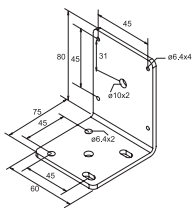


Features

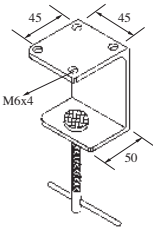
- Energy saving
- LED light long service life
- 1 year guarantee
- Luminous flux: 250~330 lumen
- No high heat produce
- Dust proof
- Flexible & folding arm
- Built-in transformer
- Suit for small CNC, engraving, sewing machine, drill press, lathe, and working table

ORDER NO.	VOLTAGE	BULB	ARM L x ℓ	WEIGHT N.W.(KGS)	CODE NO.
VLED-30L	INPUT: 220V OUTPUT: AC / DC 12V	12V 6W	400 X 310 mm	2	1025-125
VLED-30L	INPUT: 110V OUTPUT: AC / DC 12V	12V 6W	400 X 310 mm	2	1025-126
VLED-30M	INPUT: 220V OUTPUT: AC / DC 12V	12V 6W	220 X 310 mm	1.8	1025-127
VLED-30M	INPUT: 110V OUTPUT: AC / DC 12V	12V 6W	220 X 310 mm	1.8	1025-128

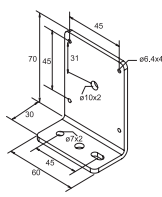
●OPTIONAL●



V-20



V-21



V-22



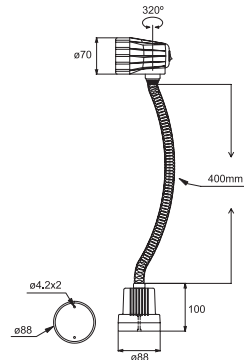
- LED6W
Led light bulb
250~330 lumen

OPTIONAL ACCESSORIES

ORDER NO.	WEIGHT (kg)	CODE NO.
V-20	0.28	1025-106
V-21	0.48	1025-107
V-22	0.16	1025-119
LED6W	0.14	1025-140

Concentrate LED Lamp

NEW



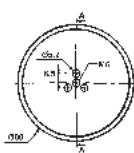
Features

WITH TRANSFORMER & MAGNETIC BASE

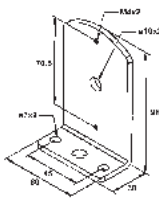
- Energy saving
- LED light long service life
- 1 year guarantee
- Luminous flux: 250~330 lumen
- No high heat produce
- Dust proof
- Flexible & folding arm
- Built-in transformer
- Suit for small CNC, engraving, sewing machine, drill press, lathe, and working table

ORDER NO.	VOLTAGE	BULB	ARM L x ℓ	WEIGHT N.W.(KGS)	CODE NO.
VLED-20L	INPUT: 220V OUTPUT: AC / DC 12V	12V 6W	400 mm	1.2	1025-120
VLED-20L	INPUT: 110V OUTPUT: AC / DC 12V	12V 6W	400 mm	1.2	1025-121

●OPTIONAL●



V-23



V-27



- LED6W
Led light bulb
250~330 lumen

OPTIONAL ACCESSORIES

ORDER NO.	WEIGHT (kg)	CODE NO.
V-23	0.27	1025-117
V-27	0.21	1025-118
LED6W	0.14	1025-140

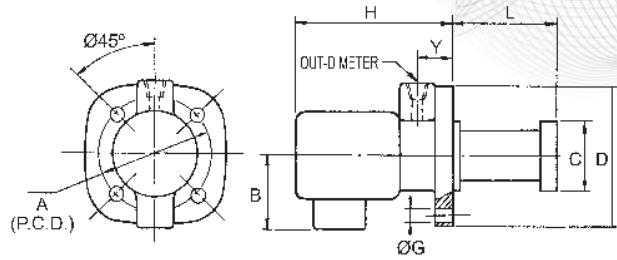
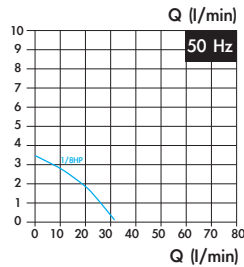


1/8 HP. Under Water Coolant Pump



Features

This is the pump in best quality with anti-rust treatment, use high grade material for the complete set and has been duly inspected in five steps by precision electron device.



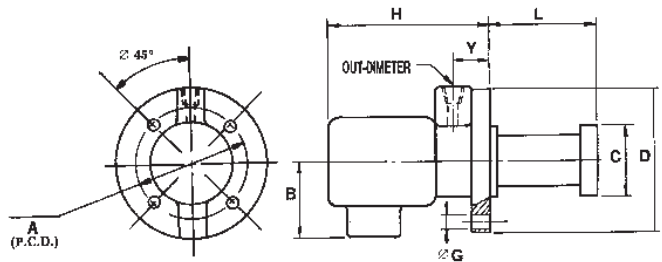
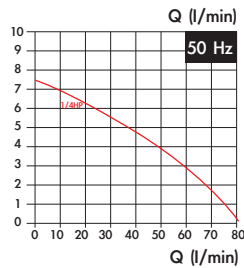
Unit:mm

POWER	A	B	C	D	G	H	Y	OUT-DIMETER
1/8 HP	128±0.2	105	Ø90	Ø150	Ø8	160	19	PT 3/8

ORDER NO.	TYPE	POWER	L m/m	PUMPING WATER		WEIGHT (kg)	CODE NO.
				1 m/min	2 m/min		
VWP-0810	UNDER WATER	1/8 HP	100	27ℓ-28ℓ	25ℓ-26ℓ	5.5	1026-001
VWP-0813			130				
VWP-0815			150				
VWP-0818			180				



1/4 HP. Under Water Coolant Pump



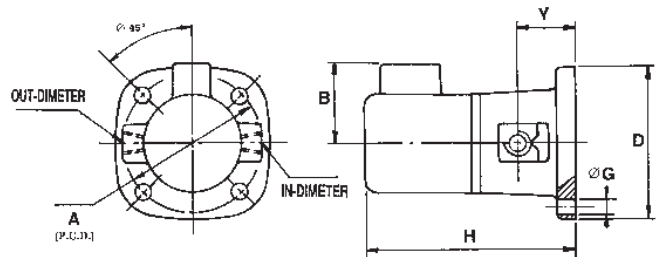
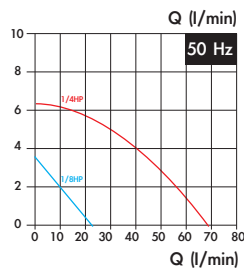
Unit:mm

POWER	A	B	C	D	G	H	Y	OUT-DIMETER
1/4 HP	158±0.2	125	Ø122	Ø180	Ø8	180	26	PT 1/2

ORDER NO.	TYPE	POWER	L m/m	PUMPING WATER		WEIGHT (kg)	CODE NO.
				1 m/min	2 m/min		
VWP-0415	UNDER WATER	1/4 HP	160	74ℓ-76ℓ	71ℓ-72ℓ	11.1	1026-010
VWP-0418			180				
VWP-0420			200				
VWP-0424			240				
VWP-0427			270				



Self Priming Coolant Pump 1/8 HP. 1/4 HP



Unit:mm

POWER	A	B	D	G	H	Y	IN-DIMETER	OUT-DIMETER
1/8 HP	140±0.2	105	165	Ø8	195	50±0.5	PT 3/8	PT 3/8
1/4 HP	185±0.2	125	225	Ø8	240	65±0.5	PT 1/2	PT 1/2

ORDER NO.	TYPE	POWER	PUMPING WATER		WEIGHT (kg)	CODE NO.
			1 m/min	2 m/min		
VWP-089	SELF PRIMING	1/8 HP	26ℓ-27ℓ	24ℓ-25ℓ	5.9	1026-020
VWP-049		1/4 HP	73ℓ-75ℓ	70ℓ-71ℓ		

Coolant Pump Kit



1/8 HP & 1/4 HP

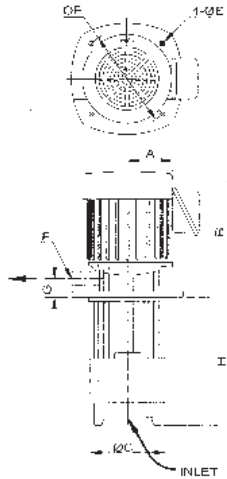


SET INCLUDING

- Coolant pump
- Coolant tank
- Connecting cable (w/plug for 1 ph)
- Coolant hose kit w/magnetic base
- Flexible conveying hose
- Drain hose
- Tool kits
- ON/OFF switch (for 1ph)

ITEM	ORDER NO.	VWP-81-150K	VWP-41-180K
Coolant pump (HPxH)		1/8 HP x 150mm	1/4 HP x 180mm
Tank size (LxWxH)		350x250x185mm	500x350x200mm
Volume of coolant tank		16ℓ	35ℓ
Connecting cable		2000mm	2000mm
Coolant hose kits w/magnetic base (ØxL)		1/4" x 330mm	3/8" x 360mm
Flexible conveying hose (ØxL)		3/8" x 1500mm	3/8" x 1500mm
Drain hose (ØxL)		1" x 300mm	1-1/4" x 400mm
Weight(kgs)		10.8	33
CODE NO.		1026-030	1026-031

Under Water Type Multi-stage High Pressure Coolant Pump



Special Features

- Discharge available in either N.P.T / P.T.
- Heavy duty bearings greased for long life and easy maintenance.
- Multi-stages., up to 6 stages for pressure over 9kg/cm² staggered discharge ports equalize radial loads for increasing pump life.
- Stainless steel made enclosed impeller., increasing pump efficiency and flow volumn.
- Rigid and strong one-piece shaft.

SPECIFICATION

ORDER NO.	STAGE	HP	A	B	C	D	E	F	G	H	PRESSURE kg/cm ² (PSI)	VOLUMETRIC DELIVERY (ℓ/min)		DELIVERY HEAD (m)	WEIGHT (kg)	CODE NO.
												EMULSION	COOLING OIL			
VWP-MS2-180	2	3/4	135	255	135	9	170	3/4" or 1" (option)	28	180	3 (42)	140	116	30	15	1026-040
VWP-MS2-250										250						15.5
VWP-MS3-200	3	1	135	275	135	9	170	3/4" or 1" (option)	28	200	4.5 (64)	140	116	45	16	1026-042
VWP-MS3-250										250						17
VWP-MS4-230	4	1 1/4	135	275	135	9	170	3/4" or 1" (option)	28	230	6 (85)	140	116	60	18	1026-044
VWP-MS4-180										180						19
VWP-MS5-210	5	1 1/2	135	275	135	9	170	3/4" or 1" (option)	28	210	7.5 (106)	140	116	75	20	1026-046

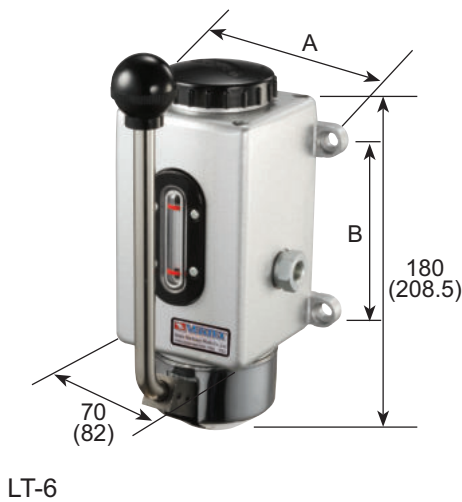


LT-4

● Rattling hand pump LT model

Rattle the lever of the pump reiteratively and the oil will be pressured into the main pipe. When the lever is released, it will return to the original position automatically.

ORDER NO.	Discharged amount (c.c/st)	Max. discharged pressure (kg/cm ²)	capacity (c.c)	Efficient capacity (c.c)	WEIGHT (kg)	CODE NO.
LT-4	4	15	230	200	0.7	1026-050



LT-6

● Rattling hand pump LT model

The discharged amount and pressure are higher than those of LT-4 and the operation method is just the same.

ORDER NO.	LT-6	LT-18	LT-18A
Size (AxB)	85x85	100x110	98x107
Weight	1.2kg	1.6kg	1.6kg

ORDER NO.	Discharged amount (c.c/st)	Max. discharged pressure (kg/cm ²)	capacity (c.c)	Efficient capacity (c.c)	CODE NO.
LT-6	6	15	350	250	1026-061
LT-18	8	15	600	400	1026-062
LT-18A	8	15	650	450	1026-063



EA-8R

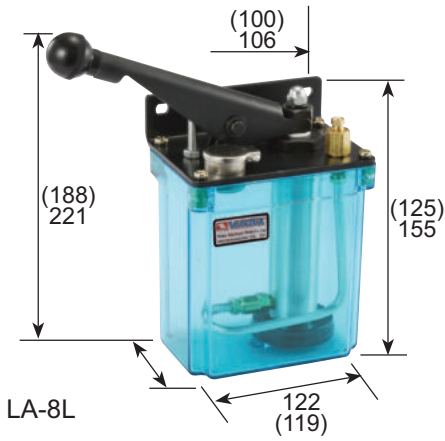
● Pulling type hand pump EA model

Pull the lever of the pump reiteratively and the oil will be discharged at the up or down port.

ORDER NO.	Discharged amount (c.c/st)	Max. discharged pressure (kg/cm ²)	capacity (c.c)	Efficient capacity (c.c)	WEIGHT (kg)	CODE NO.
EA-8 R	8	3.5	600	500	1	1026-070
EA-8 L						1026-071

The installation machine could be selected either the right side marked "R" or the left side marked "L"

Hand Lubrication Pump



● Depressing type hand-pump model LA

Depress the lever repeatedly, first. The oil will be pressured out when it's depressed. Only after the lever is released, the pressured oil will be discharged.

ORDER NO.	Discharged amount (c.c/st)	Max. discharged pressure (kg/cm ²)	capacity (c.c)	Efficient capacity (c.c)	WEIGHT (kg)	CODE NO.
LA-8 R	1~8	5	1000	800	1.4	1026-082
LA-8 L						1026-083

The installation position of a machine could be selected either the right side marked "R" or the left side marked "L"



● Electrical automatic pump SMA model

The outstanding performances of SMA models belong to intermittent oil supply pumps whose specification are classed into four kinds by the intermittent time and the discharged amount is adjustable within the range of 1~3c.c.

ORDER NO.	Intermittent time (min)	Discharged amount (c.c/st)	Max. discharged pressure (kg/cm ²)	Capacity (ℓ)	WEIGHT (kg)	CODE NO.
SMA-3	5, 10, 15, 30, 60	1~3	3	2	1.8	1026-090
SMA-6		3~	3	2	1.8	1026-091
SMA-8.5		4~8.5	3	2	1.9	1026-092

Motor's voltage is AC 110V or 220V



● Operation Instructions:

When move the operating rod, the plunger (iron core) will be moved simultaneously so as to make cylinder become under negative pressure. Then, due to closed air pressure of the tank, the grease will get into the cylinder from the suction port. Now, operate the rod to extrude out the grease through pipe in the cylinder by principle of the plunger pushing open the check valve. When inside pressure reaches to the specific pressure of 100kg/cm², down pressure valve will start to return the grease to the oil tank. The operating rod is to use of a spring to link on the injector, while the oil tank is tightly fixed on the injector as a round storage tank to prevent from oil leaking.

Advantages:

- Has smooth stickness to the lubricating surface with proper oiling capacity, so no surplus oil will be leaked out to stain with the surface of bench.
- No need to worry about the dirt & impurities entered into the oiling port, so it is more clean than other ways of lubrication.
- Manual type pump. Use of single pipe, so no need of pipe return device. With simple piping for best effect.

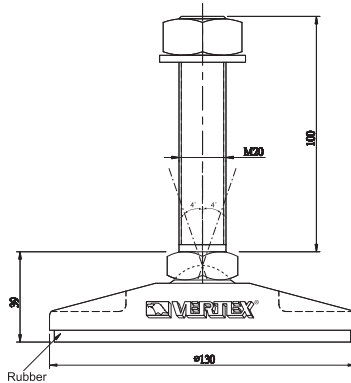
ORDER NO.	A	B	C	OIL	c.c./stork	VOLUME c.c.	PRESSURE kg/cm ²	VALVE	SPRAY MOUTH	CODE NO.
LA-1403	290	150	70	MACHINE OIL	2	300	60	SD	60 □	1026-100
LA-1408	310	205	90			800				1026-101
LA-2403	290	150	70	GREASE	2	300	100	SD	60 □	1026-102
LA-2408	310	205	90			800				1026-103

Shock Absorber

PATENT

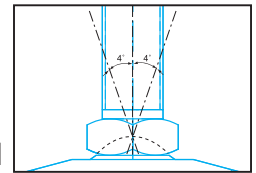
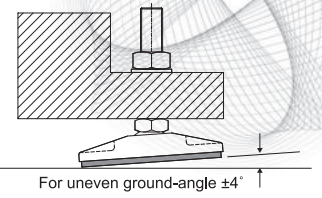


NEW



Machine Stand

- Leveling
- Reduce Vibration
- Increase Stability
- Frictionless
- Precision & Accurate
- Rubber : 80°

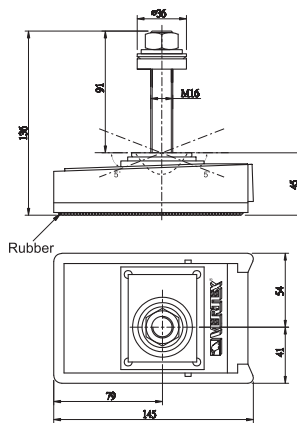
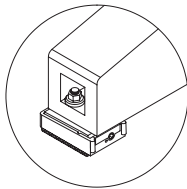


STEP Machine Stand

- Place shock absorbers under machine.
- When shock absorbers have full contact with machine base, you can start to adjust the leveling.

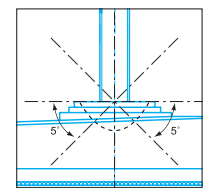
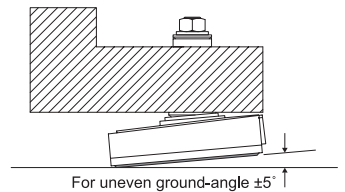
ORDER NO.	L x W x H	THREAD	LOAD ABOUT	WEIGHT KGS	CODE NO.
VSA-25K	130 x 39 x 139	M20 x 100L	22KN	1.76	7001-140

NEW



Adjustable screw

- Leveling
- Reduce Vibration
- Increase Stability
- Frictionless
- Precision & Accurate
- Rubber : 80° Shore

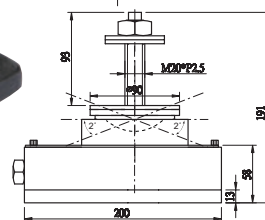
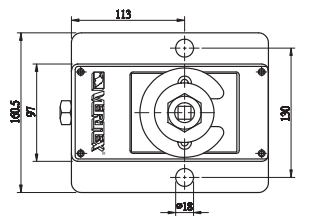
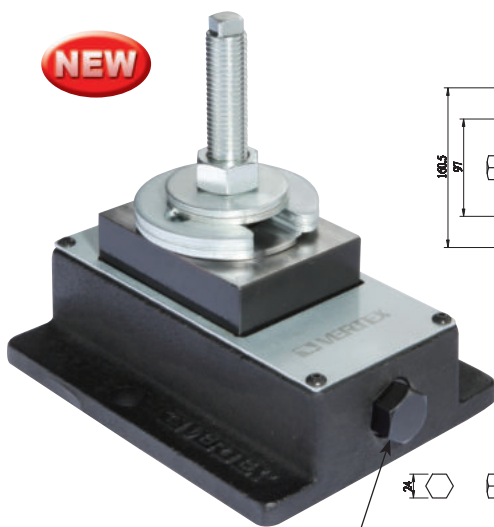


STEP

- Place shock absorbers under machine.
- When shock absorbers have full contact with machine base, you can start to adjust the leveling.

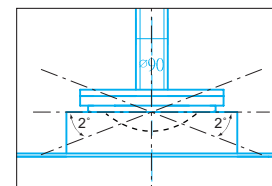
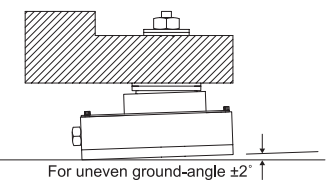
ORDER NO.	L x W x H	THREAD	LOAD ABOUT	ADJUSTMENT HEIGHT / FROM ADJUSTABLE SCREW	WEIGHT KGS	CODE NO.
VSA-35K	145 x 95 x 136	M16 x 91L	63KN	7 mm	1.61	7001-160

NEW



Adjustable screw

- Leveling
- Reduce Vibration
- Increase Stability
- Frictionless
- Precision & Accurate



STEP

- Place shock absorbers under machine.
- When shock absorbers have full contact with machine base, you can start to adjust the leveling.

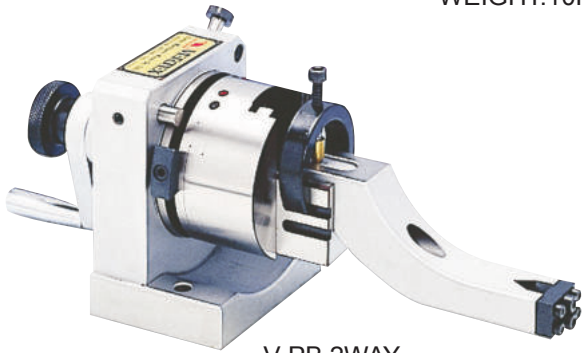
ORDER NO.	L x W x H	THREAD	LOAD ABOUT	ADJUSTMENT HEIGHT / FROM ADJUSTABLE SCREW	WEIGHT KGS	CODE NO.
VSA-150K	200 x 160.5 x 91	M20 x 93L	225KN	7 mm	9.32	7001-180



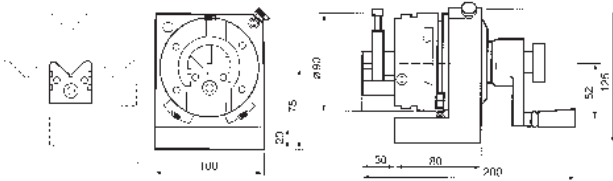
Punch Former

ORDER NO.V-PB CODE NO.2001-001

WEIGHT:10KGS

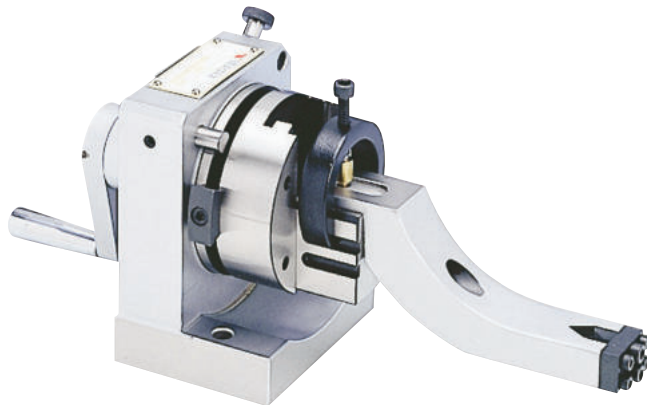


V-PB 2WAY
V-PS 1WAY, THROUGH HOLE



- Punch former is the fixture to grind the point of standard punches and E.D.M. electrodes for precise and fast operation.
 - Besides the round, radius and multiangle punches, any special forms can be ground precisely .
 - By using this attachment, it can be ground either concave or convex radius shape.
 - The capacity is from 4mm to 30mm.
- Punch Former is the great dressing instrument. Precision forming of grinding wheel can be done by assembling an ARM with the main body. Any combination of tangents or radial form of the grinding wheel may be dressed accurately by easy operation.
- Max. diameter of grinding wheel within 200m/m can be dressed accurately and safely. The height from base to roller's center is 80m/m. Movement of each side can reach 12.5m/m while aiming at the center of V block. The main body is made of one piece steel construction.

ORDER NO.V-PS CODE NO.2001-010



Specification

D(diameter)of the pressed part of the punch...4-30mm
 L(length)of the pressed part of the punch...above22mm
 Upper and lower movement span of V block.....25mm
 Horizontal movement span of V block(one side)..12.5mm
 (tow side)...25mm

Length of V block30mm
 Height of the rotary central axis.....15mm
 Cutting and dividing.....24 equal pieces(15")
 Sand forming of the forming lever
 (concave R).....100mmR
 (convex R).....48mmR

Diamond sharpening knife
 (small diameter)60x50(1/10carat)
 (large diameter)100x50(1/4carat)

*Except for the handle and graduation scale all metal is special hard tool steel (SKS-2) heat treated at HRC 63

*V block can be disassembled for use separately.

V-PS the center through hole is $\varnothing 30$ m/m

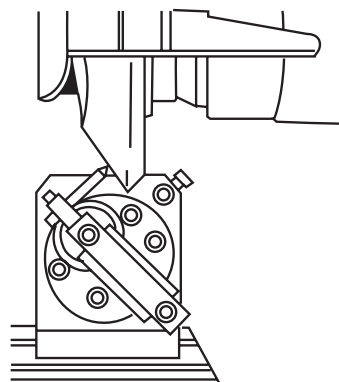
V-PS can pass through from itself to the center of grip, in case of facing a more longer punch ejector pin, it can go deep into of the grip position directly. To assemble an ARM with the main body, any combination of radial form of the grinding wheel may be dressed accurately by easy operation.

SPECIAL PART ACCESSOR FOR ANGULAR DRESSING

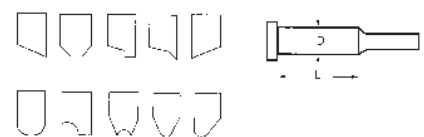
ORDER NO.V-PF

CODE NO.2001-020

WEIGHT:0.7KG



Application style:

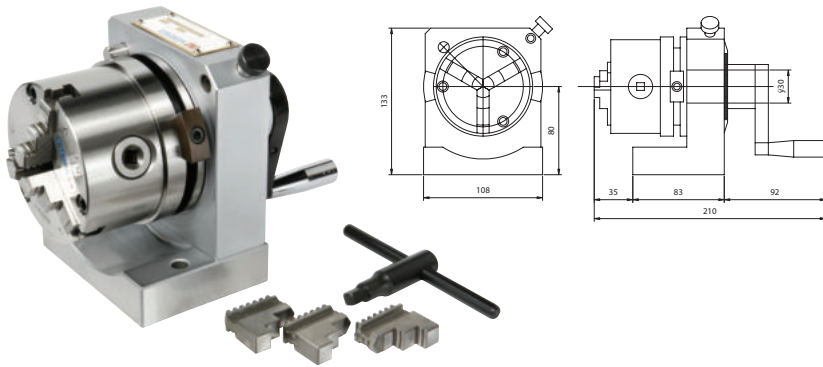


The Wheel angular dressing



3-Jaws Punch Former

ORDER NO.V-PS-80J CODE NO:2001-030

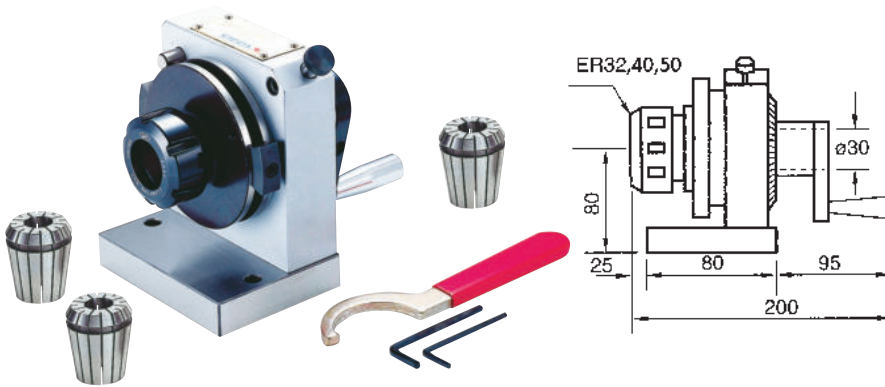


- The center of 3 jaws punch grinder can move gently to fix and to help the concentricity more precision.
- This punch grinder can divide into 24 angles, each angle is 15 degrees at 10 seconds accuracy, the weight is 8.7kgs.
- This style base can be selected to set up with sine plate to make sine angles. The sine plate also can be used with other Machines.
- The base can be adjusted for sine angle. (ORDER NO.V-PS-80JS)



ER Collet Dividing Punch Former

ORDER NO.V-PS-ER32 CODE NO.2001-040
 ORDER NO.V-PS-ER40 CODE NO.2001-041
 ORDER NO.V-PS-ER50 CODE NO.2001-042



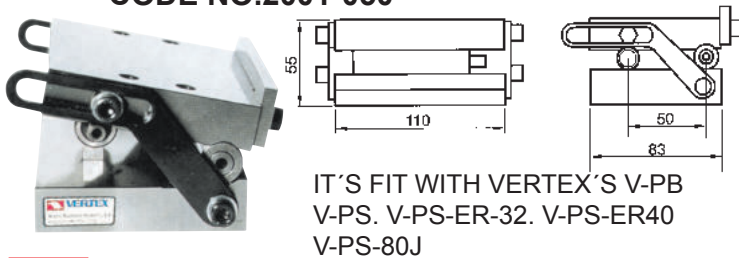
- ER Collet Dividing Punch Grinder put ER32 main body and with collet inner size 6, 8, 10, 12, 16, 20mm, total 6pcs. the weight is 11kgs. ER40 with 7pcs, ER50 with 6pcs collet. (ER50 collet size 12, 16, 20, 26, 30, 32mm)
- The center of collet can move gently to help the concentricity more precision.
- This punch grinder can divide into 24° angles, each angle is 15 degrees at ±10 seconds accuracy.
- ER16 connection, special accessory(v-601 20-ER16-50L WITH 10PCS COLLET) can use ER 16 base can select sine vise base which is good for sine angle use (ORDER NO.V-PS-ER32S) .



Sine Plate For All Type

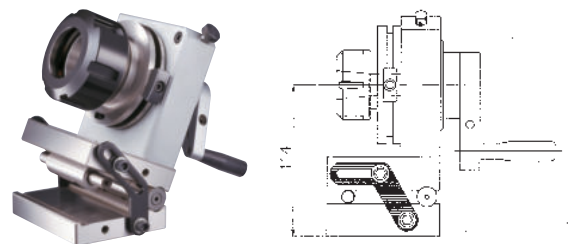
Punch Former

ORDER NO.V-PS-SP WEIGHT:3.6kgs
 CODE NO.2001-050



ER Collet Dividing Punch Grinder With Sine Plate

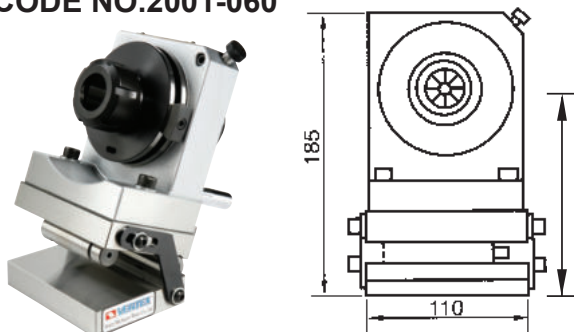
ORDER NO.V-PS-ER50S WEIGHT:10kgs
 CODE NO.2001-061



ER Collet Dividing Punch

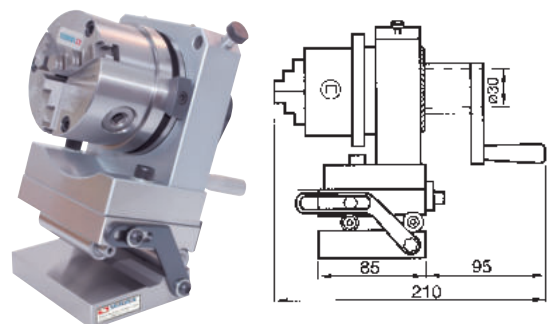
Grinder With Sine Plate

ORDER NO.V-PS-ER32S WEIGHT:11kgs
 CODE NO.2001-060



3-Jaws Punch Former With Sine Plate

ORDER NO.V-PS-80JS WEIGHT:11.7kgs
 CODE NO.2001-070



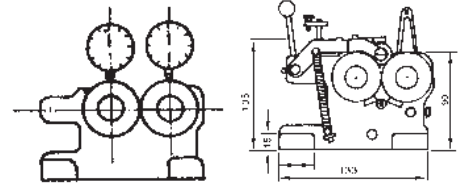
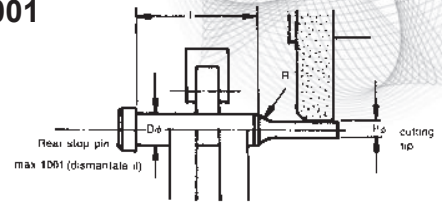
Punch Grinder



ORDER NO.V-PGS CODE NO.2002-001
MINI-TYPE
PUNCH GRINDER Ø1.5-3mm

This is a mini type punch grinder which can grind fine punch of outside diameter from 1.5mm to 3mm.N.W.4.5kgs

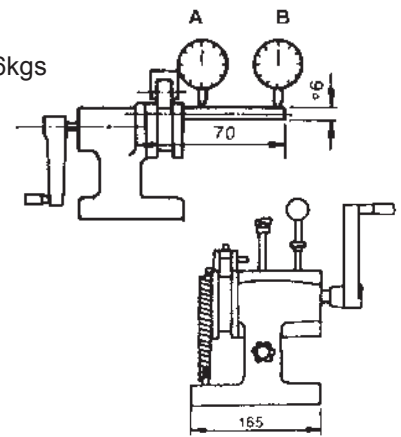
Accuracy of point A within 0.005m/m and point B Within 0.008m/m while turning.



ORDER NO.V-PG CODE NO.2002-010
STANDARD- TYPE Ø1.5-Ø25 WEIGHT: 6.6kgs

Punch grinder is a tool which can be put on the surface grinding machine for round punches(1.5mm-25mm).It can be ground by putting among three rollers of punch grinder. without checking the center. Accuracy of roller within 0.005mm while turning right or left. It can allow lenght 5-35m/m

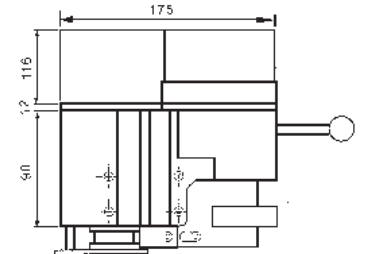
Accuracy of point A within 0.005m/m and point B Within 0.008m/m while turning.



ORDER NO.V-PGM CODE NO.2002-020
WITH MOTOR TYPE Ø1.5-Ø25
WEIGHT: 11.8kgs

Features

- 1.High accuracy cylindrical grinding work possible just by putting this economical unit on surface grinder.
- 2.No center alignment necessary. just put work on rollers.
- 3.Portable with single hand, thus easily set on grinding.
- 4.With rollers motor -driven attention can be concentrated on table/wheel feeds.
- 5.Work can be formed in radius taper as well
- 6.Double roller unit available for long pin or punch grinding.



V- PGM

FEATURES

- Mounting surface(RLxFB).....175X218X90mm
- 50Hz/220v.....108rpm
- Roller speed 60Hz/110v.....129rpm
- Accuracy(Roundness and concentricity).....25.4mm
- Roller driving motor 110v, Single phase, 25W
- (Specifications are subject to change without notice.)

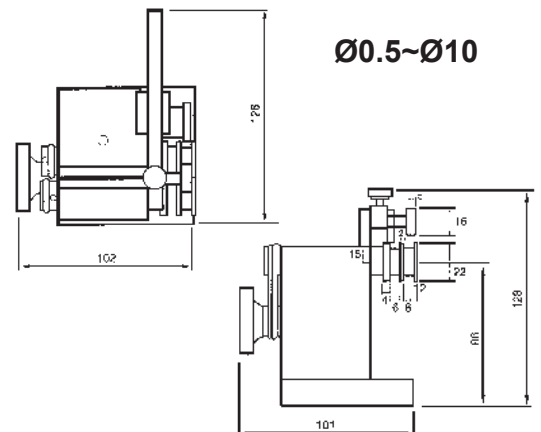
Punch Grinder

ORDER NO:V-PGA CODE NO.2002-030

WEIGHT:3.1kgs



1. The small punch grinder can process from dia 0.5mm to 6mm. If the length of workpiece is about 10mm which can be grind.
This punch grinder can work with surface grinding machine and to grinding any sizes.
2. Easy operation and high precision make it to be the best grindig tool for small workpiece.



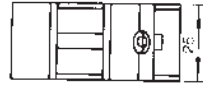
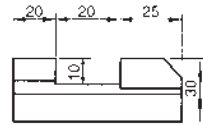
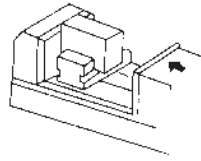
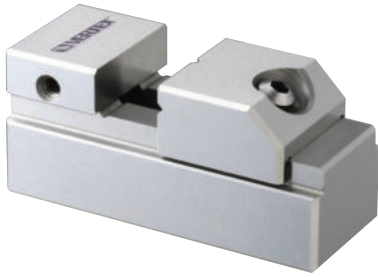
Ø0.5~Ø10



Mine Tool Maker Vise

ORDER NO.VMV-10 CODE NO.2003-001

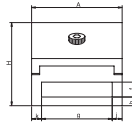
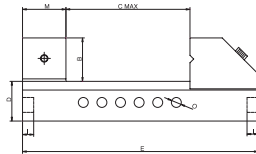
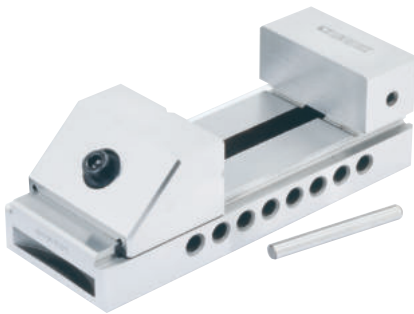
WEIGHT:0.3kg



Tool makers vise of mini type which can be put in a bigger vise to process the small and precise workpiece. Also it can be used in an E.D.M. machine and grinding machine. Squareness and parallelism: within $\pm 0.005\text{mm}$.



Tool Maker Vise

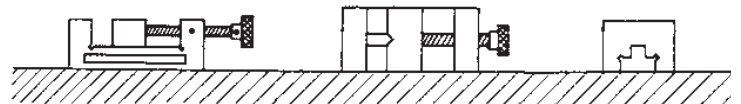
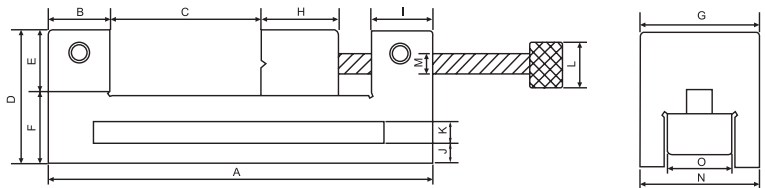
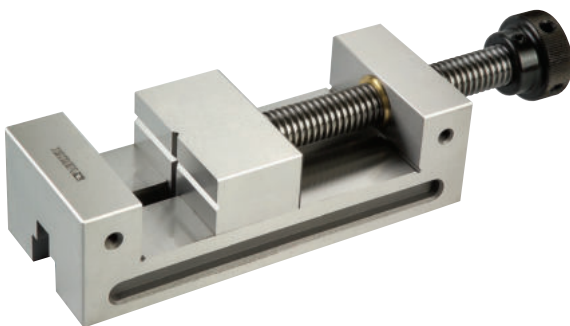


- Made of SK material of J.I.S. specification.
- Hardened by heat treatment and precision ground.
- Squareness and parallelism are ensured to be within $\pm 0.005\text{mm}$.
- It can be used and kept its high precision while standing on its base, sides or extremity, for inspection use in stead of squares due to its extremely accuracy.
- Hardness: $\text{HRC}54^{\circ} \pm 2^{\circ}$

ORDER NO.	MATERIAL	A	B	C max	D	E	I	f	g	h	j	k	H	M	O	N.W (KGS)	CODE NO
VMV-15	SK2	36	20	40	20	100	5	8	24	5	6	6	40	20	6	0.9	2003-010
VMV-20	SK2	47	29	70	28	150	5	10	37	6	5	5	57	30	8	2	2003-011
VMV-25	SK2	62	34	84	28	170	7	10	52	6	5	5	62	30	8	3.3	2003-012
VMV-30	SK2	72	34	98	32	190	9	12	56	7	8	8	66	35	8	4.5	2003-013
VMV-35	SK2	88	45	125	40	230	12	12	64	11	12	12	85	40	10	7	2003-014
VMV-40	SK2	98	45	130	40	235	12	12	64	11	17	17	85	40	10	8.9	2003-015
VMV-50	SK2	125	50	150	50	287	12	13	73	14	26	26	100	50	14	15.5	2003-016
VMV-60	S50C	150	50	200	50	330	12	14	76	14	37	37	100	50	14	21.4	2003-017



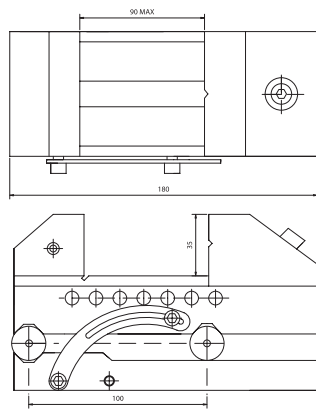
Tool Maker Vise



TOLERANCE $\pm 0.004\text{mm}$, $\pm 0.005\text{mm}$

ORDER NO.	MATERIAL	A LENGTH	B	JAW C OPENING	D	E	F	G	H	I	J	K	L	M	N	O	HEIGHT (mm)	HARDEN	WEIGHT (KGS)	CODE NO.
VDV-20	SK2	155	25	55	54	25	29	48	45	25	9.50	10.15	34.70	15.80	48	18.7	54	$\text{HRC}54^{\circ} \pm 2^{\circ}$	2.5	2003-020
VDV-25	SK2	176	25	75	60	30	30	63	44.80	25	10	10.90	39.60	15.75	63.10	28.15	60	$\text{HRC}54^{\circ} \pm 2^{\circ}$	3.9	2003-021
VDV-30	SK2	181	30	71	70	30	40	73	51.85	25	14	12.35	50.35	18.95	73	26	70	$\text{HRC}54^{\circ} \pm 2^{\circ}$	5.7	2003-022
VDV-35	SK2	250	35	121	73	38	35	88	55.40	35.55	10.80	11.60	54.85	25.35	88.45	30.20	73	$\text{HRC}54^{\circ} \pm 2^{\circ}$	9.2	2003-023
VDV-40	SK2	250	35	121	73	38	35	98	55	34.75	11.80	11.55	54.65	25.35	98.60	29.60	73	$\text{HRC}54^{\circ} \pm 2^{\circ}$	10.1	2003-024

Unit:mm



- Compound angles easily and quickly set.
- Adjustments up to 46 degrees.

Accuracy

Material Hardened:SKS HRC60°Sub-zero processing.

Parallelism:Within 0.003/100mm

Squareness:Within 0.005/100mm

Model:V.VC.L CSV

Angle tol:Within 15sec Within 20sec

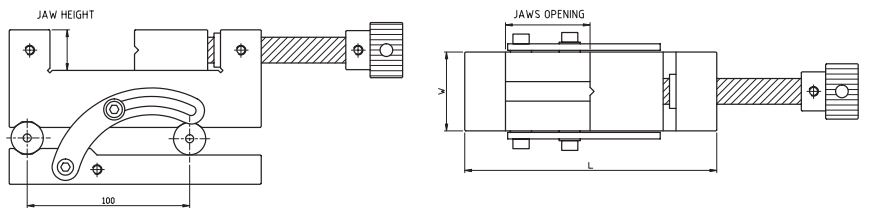
*Since conversion table attached

SPECIFICATION

Unit:mm

ORDER NO.	MATERIAL	LENGTH	WIDTH	JAW OPENING	JAW HEIGHT	HEIGHT (mm)	ANGLE	HARDEN	N.W (KGS)	CODE. NO.
SVD-20	SK2	155	48	80	30	93.5	0°-46°	HRC56°-58°	4.4	2003-030
SVD-25	SK2	175	63	90	35	102.5	0°-46°	HRC56°-58°	6	2003-031
SVD-30	SK2	180	73	90	35	103.8	0°-46°	HRC56°-58°	6.9	2003-032

Sine Vise



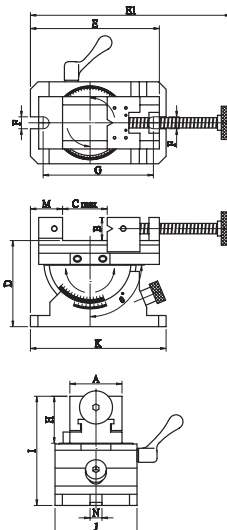
SPECIFICATION

Unit:mm

ORDER NO.	MATERIAL	LENGTH	WIDTH	JAW OPENING	JAW HEIGHT	HEIGHT (mm)	ANGLE	HARDEN	N.W (KGS)	CODE. NO.
SVD-200	SK2	155	48	60	25	94	0°-46°	HRC54°±2	4.6	2003-040
SVD-250	SK2	176	63	68	30	97.5	0°-46°	HRC54°±2	6.4	2003-041
SVD-300	SK2	180	73	72	30	103	0°-46°	HRC54°±2	8.4	2003-042

Precision Universal Angle Vise

NEW



PAT.

- Precision graduation for accurate reading.
- Its swivelling and tilting features make this unit well suited for straight or inclined surface, angular drilling machining on various machine tools as precision grinding machine, boring and milling machine, electrical discharge machine etc.
- Tolerance $\pm 0.01\text{mm}/100\text{mm}$.
- Vise bottom to base parallelism $\pm 0.02\text{mm}$
- Squareness ± 0.02
- 360° Horizontal swivel
- 45° Vertical tilting
- Precision ground
- Material: SK-2
- Hardness: HRC52°±2°

Unit:mm

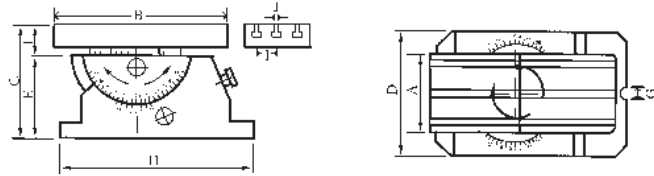
ORDER NO.	A	B	C MAX	D	E	E1	F	G	H	I	J	K	M	N	θ	G.W(KGS)	CODE.NO.
VUA-3	70	31	80	115	173	291	16	156	63	146	110	182	43	16	-20°~50°	12	2003-050
VUA-4	88	35	110	132	193	346	16	156	83	167	110	182	29	16	-20°~50°	15	2003-051



Precision Universal Angle Plate



- Precision grounded.
- Rigid design.
- The table can swivel 360°, and tilts 45°
- It can put tool maker vise VMV-type VDV-type or 3 jaw chuck for clamping
- The graduation for accurate reading



ORDER NO.	A	B	C	D	E	F	G	H	I	J	G.W (kgs)	CODE NO.
VUA-408	100	200	133	110	83	50	16	182	30	12	15	2003-055
VUA-510	126	250	133	110	83	50	16	182	40	12	18.1	2003-056



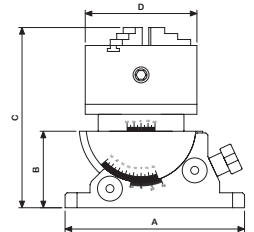
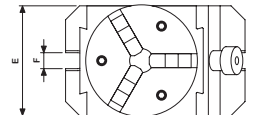
Precision Universal Angle Chuck

PATENT

With VSC-4 Chuck



- Precision graduation for accurate reading.
- Its swivelling and tilting features with clamping make this unit well suited for straight or inclined surface, angular drilling machining on various machine tools.
- With VSC-4 3-Jaw chuck.
- O.D. clamping Ø3-90 mm,
- I.D. clamping Ø32-84 mm.
- Tolerance ±0.01mm/100mm.
- 2 axis with angle scale
- For angle setting
- Chuck indexing / Rotating setting
- Tilting Features same as VUA series, Page B5.



ORDER NO.	A	B	C	D	E	F	G.W (kgs)	CODE NO.
VUA-100J	180	77	181	112	110	16	14	2003-060

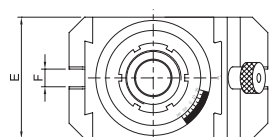
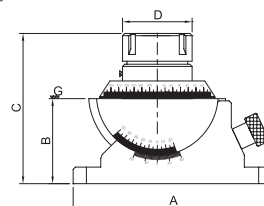


Precision Universal Angle Collet Chuck

Capacity Ø3-Ø30



- Precision graduation for accurate reading.
- Its swivelling and tilting features with clamping make this unit for straight or inclined surface, angular drilling machining on various machine tools.
- Tolerance ±0.01mm/100mm.
- 360° horizontal swivel, 45° vertical tilting.
- Suit for multi - angle cutting.
- Simple way for mass production.
- Hardness : HRC52±2°

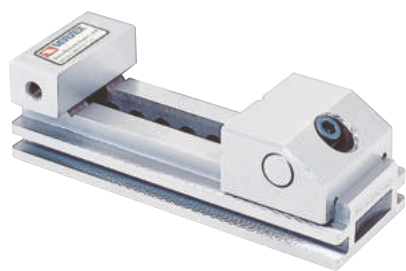


Standard Accessories: With 15pcs ER-40 Collet (4, 5, 6, 8, 10, 12, 13, 15, 16, 18, 20, 21, 22, 25, 26)

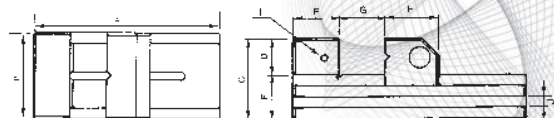
ORDER NO.	A	B	C	D	E	F	G.W (kgs)	CODE NO.
VUA-ER40	180	77	136	63	110	16	12	2003-065

Optional collet ER-40-Ø 27, 28, 29, 30 mm

Tool Makers Vice

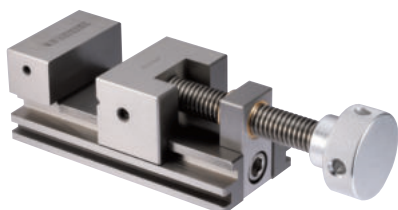


- Material:SKS2
- Hardness:HRC 58°-60°
- Squareness:Within 0.005m/m

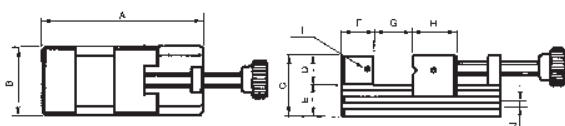


ORDER NO.	A	B	C	D	E	F	G	H	I	J	N.W (kgs)	CODE NO.
VC20	135	48	42	20	22	23	62	40	M6	5x7	1.3	2003-070
VC25	160	70	62	30	32	33	80	45	M6	8x7	3.6	2003-071
VC30	175	73	65	32	33	35	95	45	M6	8X7	4	2003-072

Tool Makers Vice



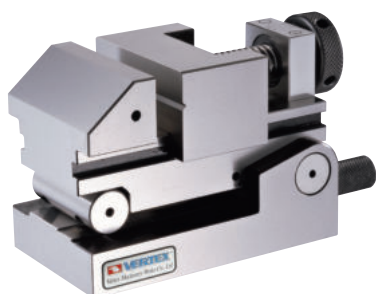
- Material:SKS2
- Hardness:HRC 54°±2°
- Squareness:Within 0.005m/m



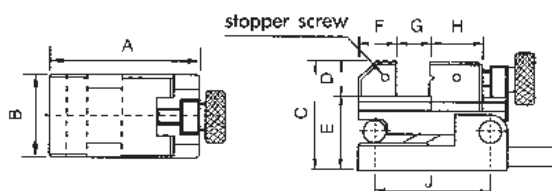
ORDER NO.	A	B	C	D	E	F	G	H	I	J	N.W (kgs)	CODE NO.
V-VE20	90	60	50	23	27	25	32	30	M5	6x6	1.62	2003-080
V-VE25	160	70	62	28	34	33	80	45	M6	7.5x7	4.02	2003-081
V-VE30	175	73	65	30	35	35	93	45	M6	7.5x7	4.7	2003-082

Precision Sine Vice

ORDER NO.SVC-100 CODE NO.2003-090



HARDNESS HRC 60°, SKS3
PARALLELISM 0.003/100mm
SQUARENESS 0.005/100mm



THE CLAMP HANDLE IS PLACED UNDER WORK PIECE.

Unit:mm

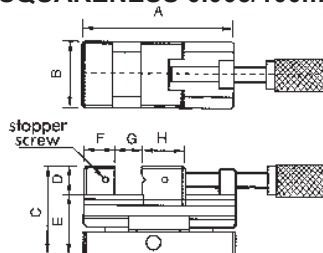
A	130
B	70
C	93
D	30
E	63
F	33
G	45
H	45
I	M5
J	100
Max.angle	46°
Weight(kgs)	5.5

Precision Sine Vice

ORDER NO.SVL-50 CODE NO.2003-100



HARDNESS HRC 60°, SKS3
PARALLELISM 0.003/100mm
SQUARENESS 0.005/100mm



HORIZONTAL WAY

Unit:mm

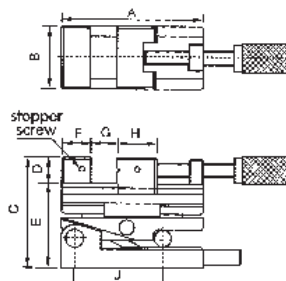
A	160
B	73
C	93
D	30
E	63
F	33
G	80
H	45
I	M5
Max.angle	46°
Weight(kgs)	6.6

Two Way Vice

ORDER NO.SVS-100 CODE NO.2003-110



HARDNESS HRC 60°, SKS3
PARALLELISM 0.003/100mm
SQUARENESS 0.005/100mm



2 WAYS

Unit:mm

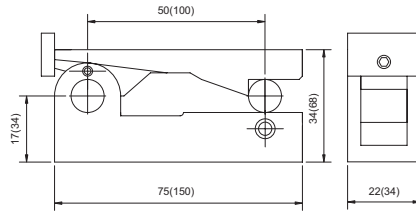
A	160
B	73
C	124
D	30
E	94
F	33
G	80
H	45
I	M5
J	100
Max.angle	46°
Weight(kgs)	8.3

Sine Bar With Magnetic



The thread can for stopper screw

There is magnet in the bottom which can be run on any kind of machine for testing angle use.



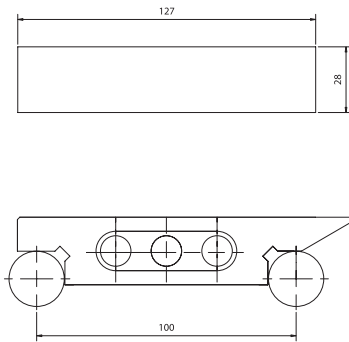
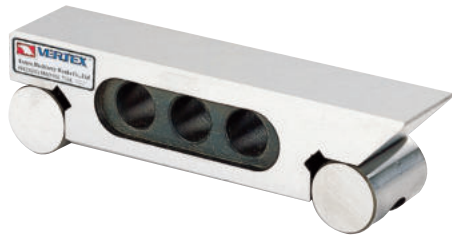
Unit:mm

ORDER NO.	SQUARNESS /100mm	ACCURACY	PARALLELISM	HARDNESS	MATERIAL	N.W. (kgs)	CODE NO.
V-S50M	0.005mm	±0.002	0.002mm/100mm	HRC50°	SK-3	0.34	2004-001
V-S100M	0.005mm	±0.002	0.002mm/100mm	HRC50°	SK-3	2.06	2004-002

HOW TO CHOOSE THE BLOCK FOR SINE BAR

DISTANCE GAUGE BLOCK CAN GET DEGREE	SIN BAR CENTER		SIN BAR CENTER	
	HEIGHT	←50→	HEIGHT	←100→
2°	1.7405	3.4899		
3°	2.6168	5.2336		
4°	3.4878	6.9756		
5°	4.3578	8.7155		
6°	5.2264	10.4528		
7°	6.0935	12.1869		
8°	6.9587	13.9173		
9°	7.8217	15.6434		
10°	8.6824	17.3648		
11°	9.5404	19.0809		
12°	10.3956	20.7911		
13°	11.2476	22.4951		
14°	12.0961	24.1921		
15°	12.9401	25.8819		
16°	13.7819	27.5637		
17°	14.6186	29.2371		
18°	15.4058	30.9017		
19°	16.2784	32.5586		
20°	17.1010	34.2020		
21°	17.9184	35.8367		
22°	18.7303	37.4606		
23°	19.5366	39.0713		
24°	20.3368	40.6736		
25°	21.1309	42.2618		
26°	21.9186	43.8371		
27°	22.6995	45.3990		
28°	23.4736	46.9471		
29°	24.2405	48.4809		
30°	25.0000	50.0000		
31°	25.7519	51.5038		
32°	26.4960	52.9919		
33°	27.2320	54.4639		
34°	27.9596	55.9192		
35°	28.6788	57.3576		
36°	29.3893	58.7785		
37°	30.0908	60.1815		
38°	30.7831	61.5661		
39°	31.4660	62.9320		
40°	32.1394	64.2787		
41°	32.8030	65.6059		
42°	33.4565	66.9130		
43°	34.0999	68.1998		
44°	34.7329	69.4658		
45°	35.3553	70.7106		

Sine Bar



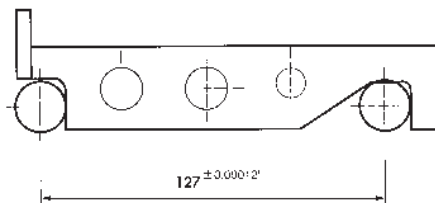
Unit:mm

ORDER NO.	LENGTH	WIDTH	HEIGHT	CENTER DISTANCE	PARALLEL	HARDEN	BLOCKS DIA.	MATERIAL	N.W (kgs)	CODE NO.
VS-100	127	28	35	0.005	0.005/100mm	HRC50°	20Øm/m	SK-3	0.76	2004-010

Sine Bar-Inch



Change of the sine angle must be count on sine bar inspection, the bar's tolerance within 0.005mm



Unit:inch

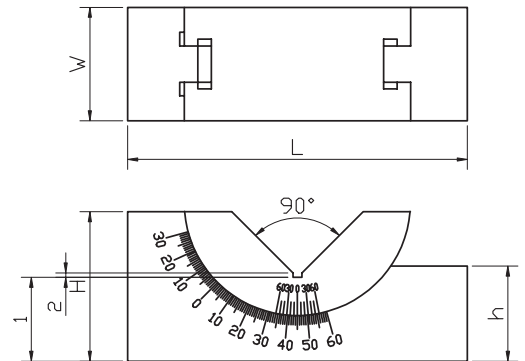
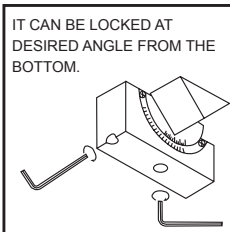
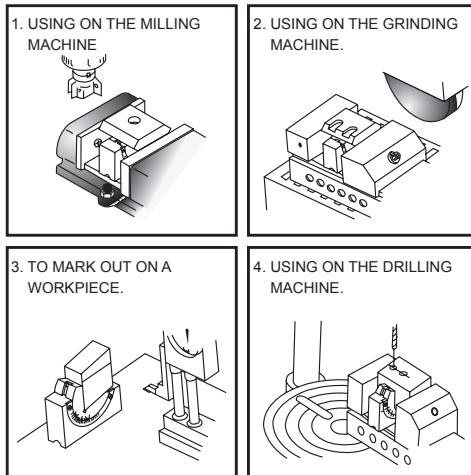
ORDER NO.	LENGTH	WIDTH	HEIGHT	CENTER DISTANCE	PARALLEL	HARDEN	BLOCKS DIA.	MATERIAL	N.W (kgs)	CODE NO.
V-S25	6-3/8"	1"	1-1/4"	127	0.00012"	HRC52°	3/4"	SK2	1	2004-020
V-S50	6-3/8"	2"	1-1/4"	127	0.00012"	HRC52°	3/4"	SK2	1.8	2004-021

Angle Plate



90° V-way. High carbon steel hardened to 50°-54° HRC, precision ground to within 0.005mm accuracy in squareness. Angle tolerance 30 seconds. Sets any angle 0-60°, vernier reading 10 minutes. 2 set screws provided for firmlocking at fixed angle.

Material: SK2
 Hardness: HRC50°-54°
 Squareness: ±0.01mm
 Angular measures from 0°-60°

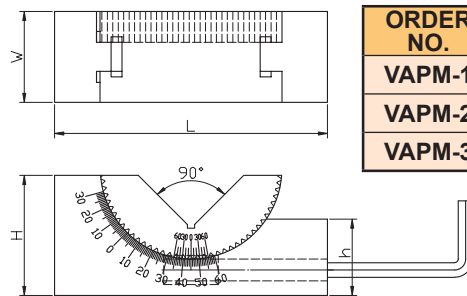


Unit:mm

ORDER NO.	H	W	L	h	N.W. (KGS)	CODE NO.
VAP-1	48	45	102	28	1.4	2005-001
VAP-2	49	30	102	28	0.9	2005-002
VAP-3	32.5	25	75	21	0.5	2005-003

Micro-Adjustable Angle Plate

ANGULAR CAN BE ADJUSTED FROM 0°~60° BY SCREW

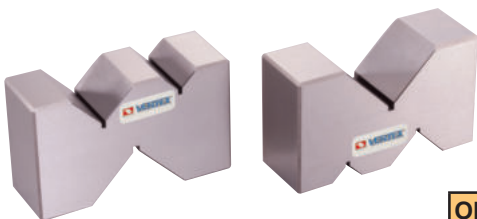


Unit:mm

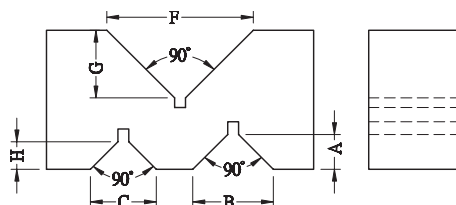
ORDER NO.	H	W	L	h	N.W. (KGS)	CODE NO.
VAPM-1	47	46	102	28	1.4	2005-010
VAPM-2	47	30	102	28	1	2005-011
VAPM-3	32	25	75	22	0.5	2005-012

Precision V Block

PAIRS GROUNDED



MATERIAC : STEEL



Unit:mm

ORDER NO.	A	B	C	F	G	H	L X W X H	WEIGHT(KGS)	CODE NO.
V-5VA	14	35	40	63	29	19	124X35X61	2.8	2005-017
V-3VA-S	10	22	18	40	18	8	72.8X25X36.7	0.88	2005-018
V-4VA-S	15	32	18	50	24	8	100X36X60	2.9	2005-019
V-5VA-S	16	35	22	65	31.5	9.5	124.6X49.8X79.8	6.8	2005-020



Precision Angle Blocks

ORDER NO.AB-130 CODE NO.2006-001

WEIGHT:1kg



Furnished in 1° increments to 5 degrees and in 5° increments to 30 degrees. With the addition of the optional 1/4° and 1/2° blocks virtually and conceivable angle to these increments can be established.

- Simple, quick angle set-ups.
- Eliminates calculations, avoids errors.
- Lightly magnetized for better holding.
- Manufactured of steel, hardened, stabilized and ground.
- Sizes: 3" long x 1/4" thick. (75mm x 6mm)
- Accuracy: .0001" per inch.
- Oil-hardened steel, precision ground. 12pcs angle blocks (1/4°, 1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°)



Universal Angle Block Set



No sine plate, sine vise, angle chart or gauge block needed!

- A slope at any angle can be provided by installing a block or blocks on a machine vise up to 5%
- 8 pieces in a deluxe wooden box include: 10°, 15° & 30° vee blocks and 5 angle plates-1° to 5° for AB-164
- Heat treated 50° HRC & ground to 10 sec.
- 9pcs angle blocks (1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 30°) for AB-163

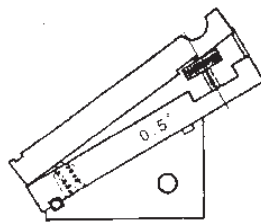
ORDER NO.	L X W X H	WEIGHT (KGS)	CODE NO.
AB-163	Vee blocks: 3" L x 1 3/16" W x 1 3/16" H Angle Plates: 2 3/4" L x 1 3/16" W x 3/64" H	2	2006-010
AB-164	Vee blocks: 4" L x 1 1/2" W x 1 1/2" H Angle Plates: 4" L x 1 1/2" W x 5/32" H	3.8	2006-011



Micrometric Tangent Bar & Angle Gauge Block Set

ORDER NO.AB-166 CODE NO.2006-020

WEIGHT:1kg



Micrometric Tangent Bar & Angle Gauge Block Set

- Made of Hardened Steel, Precision Ground.
- Accuracy ±.001" Per Inch.
- Interlocking Slots.
- Size of Angle Blocks: .35"x3"
- A Complete set for Angular set-ups. No Other Gages Required. Consists of set.
- Simplicity in application.

Angular set-ups with this are a zip. Just dial your angle direct in degrees and minutes. Add one or two angle block gauges for angles over 5° and Secure assembly by dropping 1/8" dowel or square key into slot provided.

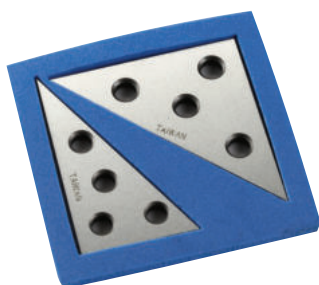
- Complete with fitted case.
- Hardness : HRC50°



Solid Angle Plates

ORDER NO.AB-167 CODE NO.2006-030

WEIGHT:0.3kg



Solid Angle Plates

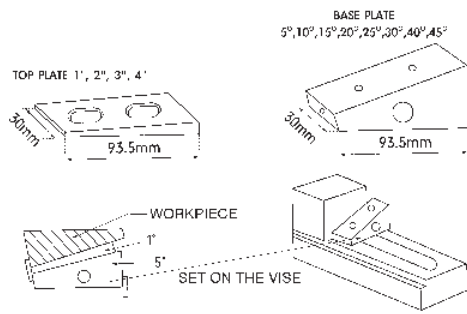
- Precision ground angles for convenient set-ups in tooling, production and inspection.
- Four holes on top of it for easy mounting.
- 1/4" Thick, packed in cardboard box.
- Set of 3"x3"x4-3/8", 45°x45°x90°x1pc
2"x3-15/32"x4", 30°x60°x90°x1pc
- Hardness : HRC50°



Precision Angle Blocks

ORDER NO:AB-113(13PCS/SET) CODE NO:2006-040

WEIGHT:7.1kgs



FEATURES

- ANGLE TOLERANCE:0.02MM
- CAN BE ASSEMBLED TOP PLATE WITH BASE PLATE FOR 6°-9°,16°-19°,26°-29°, 36°-39°,46°- 49°
- HARDEN TREATMENT UP TO HRC55°
- MADE BY THE MATERIAL OF SK2
- CAN BE COOPERATE TWO SET FOR USE.

EXAMPLE FOR USE

PLATE	ANGLE DEGREE
TOP PLATE	1°,2°,3°,4°
BASE PLATE	5°,10°,15°,20°,25°,30°,35°,40°,45°



Hardened Steel Square



Hardness : HRC50°

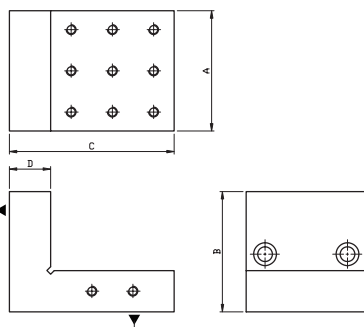
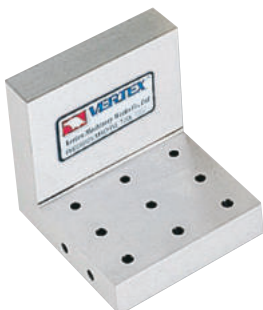
Squares have accurate right angles both inside and outside. Made from a single piece of fully tool steel. Beams and blades are ground and accurately lapped for straightness and parallelism. Blades are beveled on both edges of each side. Beam is grooved at inner corner for clearance of burr and dirt. All squares are fully hardened . Packed in individual cartons. Accuracy 0.02mm.

ORDER NO.	L x H x thick	NEW WEIGHT (KGS)	CODE NO.
SS-304	100X75X8MM	0.3	2006-050
SS-306	100X150X8MM	0.6	2006-051
SS-308	130X200X8MM	0.8	2006-052
SS-310	250X160X10MM	1.4	2006-053
SS-312	300X200X12MM	2.2	2006-054



Precision Steel Angle Plate

HIGH PRECISION TYPE



MATERIAL : YK30 ALLOY STEEL
 ACCURACY : 0.005/100MM
 HARDEN TREATMENT UP TO HRC 58°

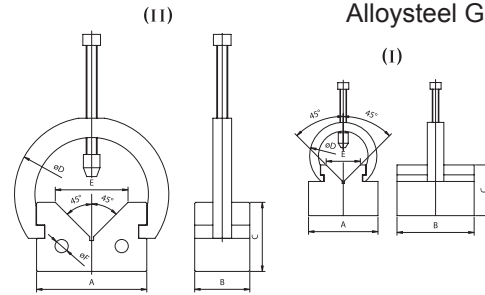
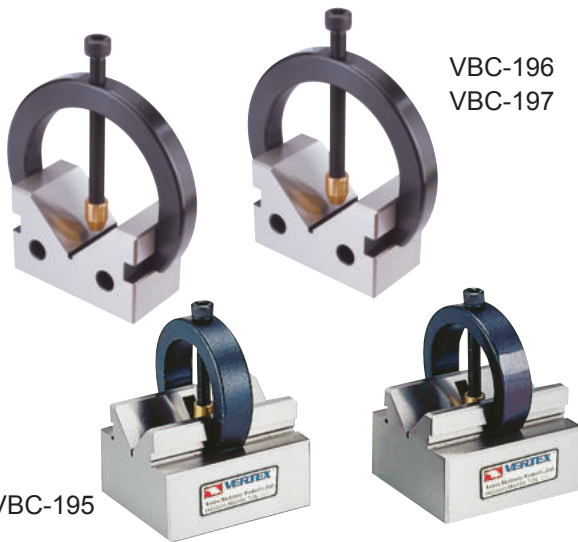
ORDER NO.	A	B	C	D	N.W (KGS)	CODE NO.
VRS-33	3"	3"	4"	1"	2.2	2006-060
VRS-44	4"	4"	4"	1"	3.7	2006-061
VRS-46	4"	4"	6"	1"	4.5	2006-062
VRS-85	8"	8"	8"	40	14.3	2006-063
VRS-1206	12"	6"	12"	2"	32.3	2006-064



ORDER NO.	LxHxthick	ACCURACY	WEIGHT(kg)	CODE.NO.
FS-204	100x75x6mm	0.02mm	0.2	2006-055
FS-206	150x100x6mm		0.3	2006-056
FS-208	200x130x6mm		0.5	2006-057

 **V-Block With Clamp**

Alloysteel Grounded HRC50

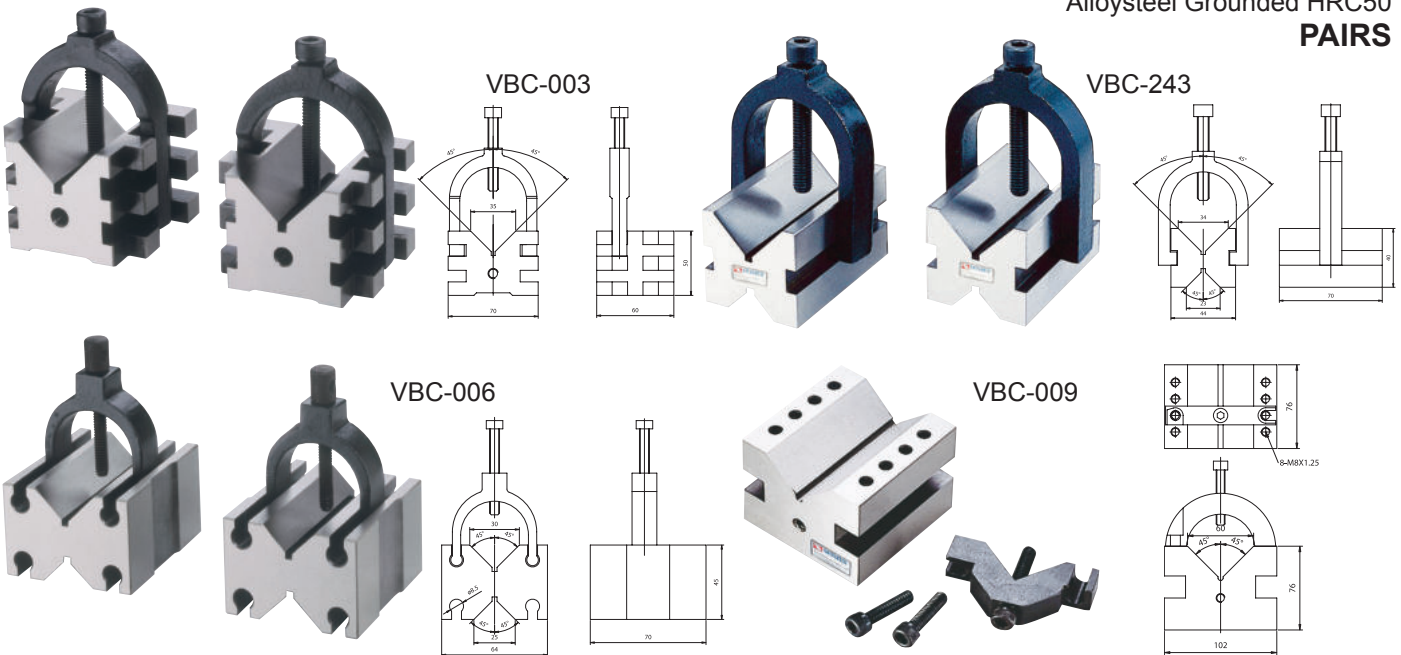


- Two V blocks and two clamps are include in the set.
- Made of hardened tool steel machined & ground in pairs close tolerances.
- A precision set for toolmakers & machinists.

ORDER NO.		A	B	C	D	E	F	N.W. (kgs)	CODE.NO.
VBC-195	I	63	70	46	61	31	X	3.1	2007-001
VBC-196	II	100	50	63	140	66	12	5.9	2007-002
VBC-197	III	150	64	100	193	110	12	14.7	2007-003

 **V-Block With Clamp**

Alloysteel Grounded HRC50
PAIRS



ORDER NO.	W	H	L	W.OF SMALL VEE	W.OF LARGER VEE	PACKING	G.W. (kgs)	CODE NO.
VBC-003	2.36 60mm	1.86 50mm	2.75 70mm	-	50mm	110x80x110mm	2.4	2007-010
VBC-243	2 3/4 70mm	1 3/4 45mm	1 5/8 42mm	-	1"	75x80x100mm	1.9	2007-020
VBC-006	2 1/2 64mm	1 3/4 45mm	2 3/4 70mm	1	1 ³ / ₁₆ "	110x80x110mm	2.6	2007-030
VBC-009	4 102mm	3 76mm	3 76mm	-	2 ¹ / ₄ "	70x50x110mm	3.9	2007-040



Electrode Vise

ORDER NO.VEH-20 CODE NO.2008-001 (ALLOY STEEL) FOR EDM

WEIGHT:0.8kg



ELECTRODE HOLDERS FOR ELECTRO DISCHARGE MACHINE

Mini vise can be used in fixed electrode holders.

The opening with a cross V groove on the vise can do electric discharging both by vertical way and horizontal way for various-shape workieces.

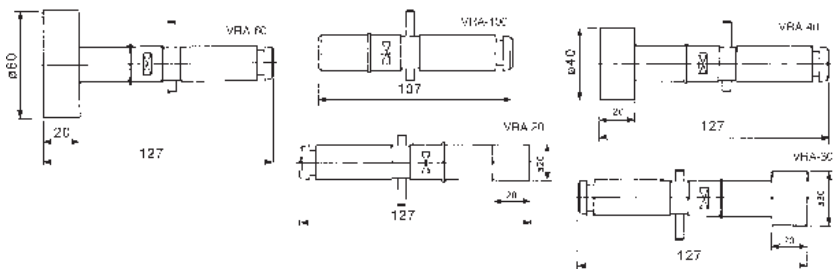
The max. opening on the vise is 20mm.

MATERIAL	LENGHT	WIDTH	JAW OPENING	JAW HEIGHT	HARDEN
SKS	65	25	20	0.8	HRC58°-60°



Electrode Holder

FOR EDM



ORDER NO.	VRA-20	VRA-30	VRA-40	VRA-60	VRA-100
WEIGHT(KG)	0.2	0.4	0.5	0.9	0.3
CODE NO.	2008-010	2008-011	2008-012	2008-013	2008-014

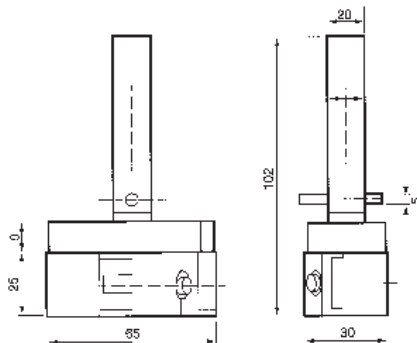


Electrode Holder

ORDER NO.VEH-20MS CODE NO.2008-020

(STAINLESS)FOR EDM

WEIGHT:0.7kg



Material	SUS440
Parallelism	within 0.003mm/100mm
Squareness	within 0.005mm/100mm
Harden treatment up to	HRC58°

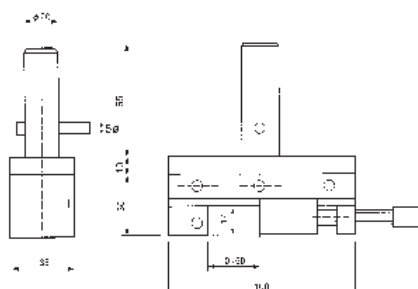


Electrode Holder

ORDER NO.VEH-20DS CODE NO.2008-030

(STAINLESS)FOR EDM

WEIGHT:1.3kgs



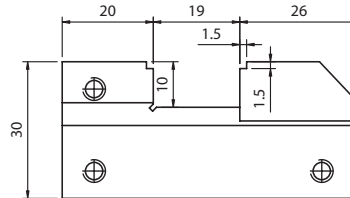
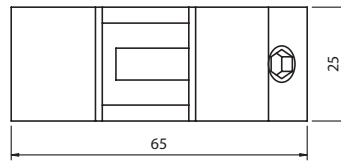
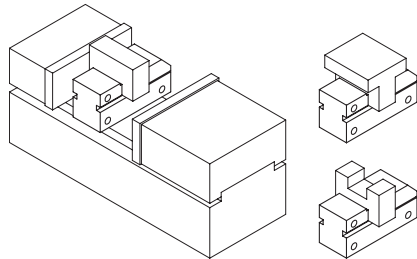
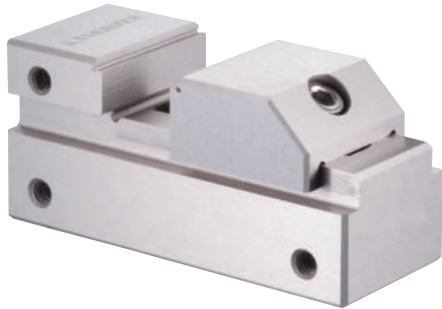
Material	SUS440
Parallelism	within 0.003mm/100mm
Squareness	within 0.005mm/100mm
Harden treatment up to	HRC58°



Tool Maker Vice (STAINLESS)

ORDER NO.VSTV-10V CODE NO.2008-070 MINI TYPE FOR EDM

WEIGHT:0.3kg



Tool makers vise of mini type which can be put in a bigger vise to process the small and precise workpiece. Also it can be used in an E.D.M. machine and grinding machine.
Squareness and parallelism: within ± 0.003 m/m

MATERIAL	LENGHT	WIDTH	JAW OPENING	JAW HEIGHT	HARDEN
SUS440	65	25	19	10	HRC56°-58°



Tool Maker Vice (STAINLESS)

ORDER NO.VBST-30 CODE NO.2008-075

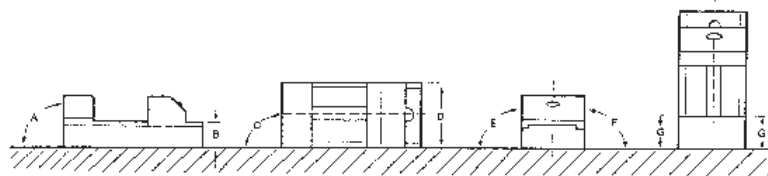
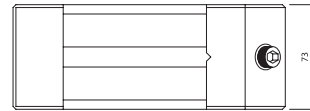
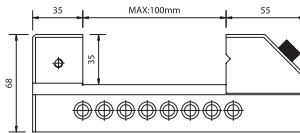
WEIGHT:4.5kgs

FOR EDM



Material: SUS440
Hardness: HRC58°~60°
Squareness: Within 0.005 m/m

Unit:m/m



TOLERANCE	
A	± 0.004 m/m
B	± 0.005 m/m
C	± 0.005 m/m
D	± 0.005 m/m
E	± 0.005 m/m
F	± 0.005 m/m
G	± 0.005 m/m

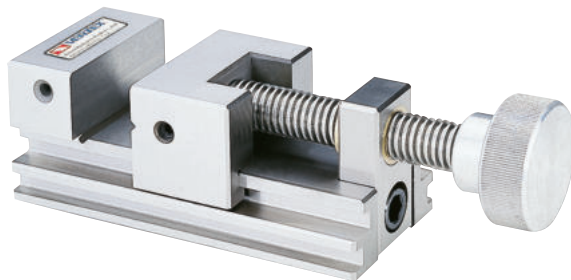


Tool Maker Vice (STAINLESS)

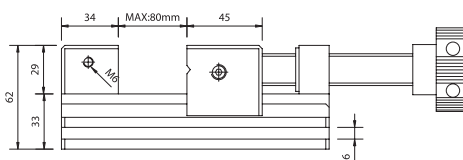
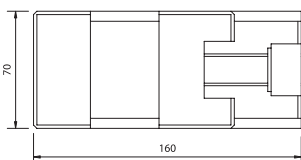
ORDER NO.VSTV-25 CODE NO.2008-080

WEIGHT:4.4kgs

FOR EDM



Material: SUS440
Hardness: HRC56°
Squareness: Within 0.005 m/m
It was made by tool steel of stainless steel system and was precision ground after hardened by heat treatment. So, it well not be rusted even though permeation.
The vise can clamp workpiece by moveable Jaw without lifting.
It is getting more easier and convenient for processing small workpieces.





EDM Tool Marker Vise (STAINLESS)

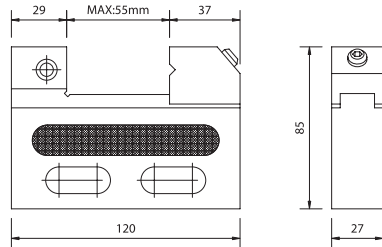
ORDER NO.VSTV-50W

CODE NO.2008-040

WEIGHT:1.4kgs



This vise is for wire cutter use. Each of the parts was manufactured by stainless steel and with the appliance of high erosion resisting.



PARALLELISM	±0.002mm/100mm
SQUARENESS	±0.002mm/100mm

MAX.OPENING	55mm
THICKNESS	27mm
JAW DEEP	25mm
N.W	1.01kgs
MATERIAL	SUS440
HARDNESS	HRC54°±2°

Material: SUS440
Hardness: HRC58°~60°
Squareness: Within 0.005 m/m

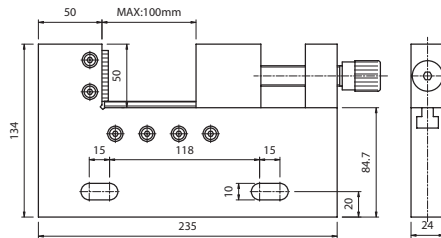
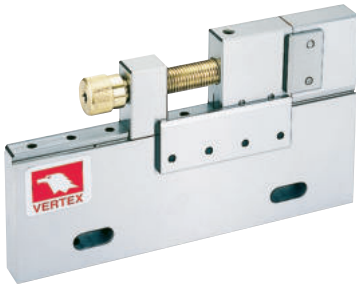


EDM Tool Maker Vise (STAINLESS)

ORDER NO.VSTV-100W

CODE NO.2008-050

WEIGHT: 4.88kgs



PARALLELISM	±0.002mm/100mm
SQUARENESS	±0.002mm/100mm

MAX.OPENING	100mm
THICKNESS	24mm
JAW DEEP	50mm
N.W	4.88kgs
MATERIAL	STAINLESS
HARDNESS	HRC54°±2°

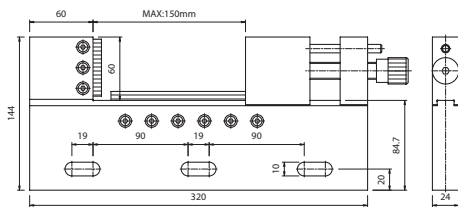
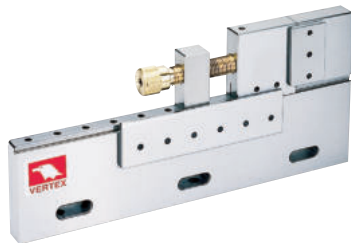


EDM Tool Maker Vise (STAINLESS)

ORDER NO.VSTV-150W

CODE NO.2008-060

WEIGHT: 6.75kgs



PARALLELISM	±0.002mm/100mm
SQUARENESS	±0.002mm/100mm

MAX.OPENING	150mm
THICKNESS	24mm
JAW DEEP	60mm
N.W	6.75kgs
MATERIAL	STAINLESS
HARDNESS	HRC54°±2°

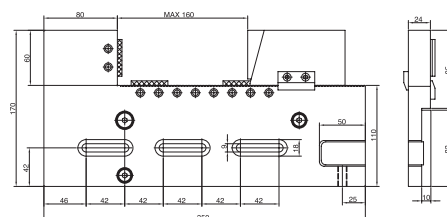
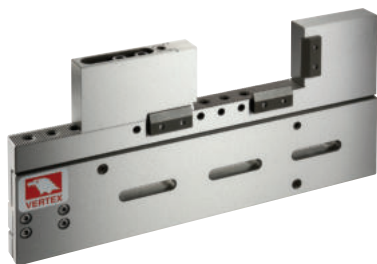


EDM Tool Maker Vise

ORDER NO.VSTV-320W

CODE NO.2008-090

WEIGHT: 8kgs

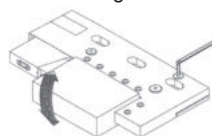


PARALLELISM	±0.003mm/100mm
SQUARENESS	±0.005mm/100mm

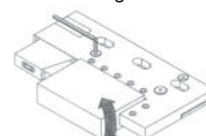
MAX.OPENING	160mm
THICKNESS	24mm
JAW DEEP	60mm
N.W	8kgs
MATERIAL	STAINLESS
HARDNESS	HRC45°~55°

- Parallelism: 0.003/100mm, Squareness: 0.005/100mm.
- Hardness: up to HRC45°~55°.
- The vise can be adjusted up and down, left and right, forth and back to set parallelism.
- High water pressure resistance.

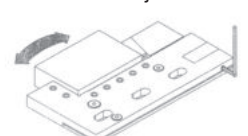
Leveling



Leveling



Parallel Adjustment





EDM Wire (BRASS & COPPER)



Zinc COATING IS ALSO AVAILABLE



FEATURES

CHEMICAL COMPOSITION

65/35 brass equivalent to Alloy No. JIS-H3260 C2700

NO ACID-CORROSION AND NO DAMAGE TO RESINS

The special treatment avoids acid-corrosion on machine and workpiece.

HIGH SURFACE QUALITY

The special treatment makes the wire surface smooth, free from dirt, rust and grease that causes unefficiency to electric discharge.

STANDARD WEIGHT CONTROL

By perfect control in process, we obtain the standard weight per coil that enables us to maintain the stability of processing time and the accuracy of drawing.

NO WELDMENT

The rough surface caused by welding could affect the quality and accuracy of performance. The welded wire tends to break that wastes the time to re-thread.

HIGH-DIMENSIONAL PRECISION

Wire diameter tolerance and roundness tolerance are both limited to $1/\mu\text{m}$.

OUTSTANDING STRAIGHTNESS

Outstanding straightness ensures automatic threading successfully.

※ FLOATING PRICE, CONTACT US BEFORE ORDERING.

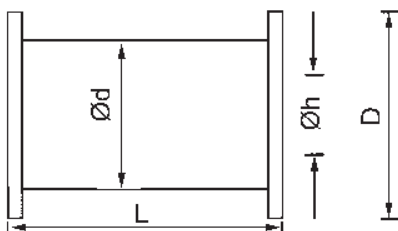
SPECIFICATION

ORDER NO.	WIRE TYPE	DIAMETER		DIAMETER TOLERANCE (mm)	BREAKING LOAD (kgs)	TENSILE STRENGTH (N/mm)	ELONGATION (%)	SUITFUL WORKING STYLE	CODE NO.
		inch	mm						
VEW-10H	HEAD	0.004	0.10	±0.001	0.78	980 ≒	0.4 ≒	STRAIGHT CUTTING a.PASS CUTTING b.ROUGH CUTTING c.FINISH CUTTING	2009-001
VEW-15H		0.006	0.15		1.73				2009-002
VEW-20H		0.008	0.20		3.14				2009-003
VEW-25H		0.010	0.25		4.92				2009-004
VEW-30H		0.012	0.30		7.07				2009-005
VEW-33H		0.013	0.33		8.55				2009-006
VEW-20S	SOFT	0.008	0.20	±0.001	1.41	441 ≒	15 ≒	ANGLE CUTTING	2009-010
VEW-25S		0.010	0.25		2.21				2009-011
VEW-30S		0.012	0.30		3.18				2009-012

THE PACKING USED A STANDARD COIL.

HERE SHOW 3 KINDS OF COIL PACKING TYPE FOR CHOICE. THE POPULAR IS P-5R (5kgs).

OTHER COIL TYPE, WEIGHT WELL BE AVAILABLE.






PACKING COIL TYPE	COIL SHAPE	WIGHT OF WIRE ON COIL (kg)	DIAME-THE OF WIRE (mm)	D (mm)	d (mm)	L (mm)	h (mm)	LENGTH OF WIRE ON COIL (M)	NUMBER OF COILS /BOX	CODE NO.
P-3R		3	0.10 0.15 0.20 0.25	130	80	110	20	39360 18750 10988 6932	6	2009-021
P-5R		5	0.20 0.25 0.30 0.33	160	90	114	20	18314 11553 8001 6750	4	2009-022
K-125		3.5	0.2 0.25	125	80	125	20	5600 4725	4	2009-023
K-160		7	0.20 0.25	160	100	160	22	25640 16174	2	2009-024



Wire Dies Guide

Used to guide wire in wire electro-discharge machines.



ORDER NO.	MAKER	APPLICATION	REMARKS	CODE NO.
 M118	MITSUBISHI	SX, CX, FX Upper 上 (線切割眼模 M118)	C 834G	2009-030
 M119		SX, CX, FX Lower 下 (線切割眼模 M119)	B 243G	2009-031
 M103 Ø3		F, FL, G, Opening Ceramic Stainless (眼模螺絲 Stop screw M108)	D 162G	2009-032
 M108			D 123G	2009-033
 M111		G, H~HA, C, CR, (偏心座 Dies Holder M111)	X 184D226H01	2009-034
 M117 Ø4		H1, HA, B, Z SK/AF Lower 下 (線切割眼模 M117)	B 176G	2009-035
 M107		H1, HA, B, Z SK/AF Upper 上 (線切割眼模 M107)	B123G	2009-036
 M120		H1, A, B, Z/AF Upper 上 (眼模螺絲 Stop screw M120)	C524G	2009-037
 Z141		Ceramic Guides for Small Hole EDM machine (放電打孔機用導管 Z141)		2009-038
 S103	ソデック SODICK	A300, 500, Aw330, 450 EPOC, AP, BF (線切割眼模 S103)	GUIDE (87-3)	2009-039
 S111	SEIBE	F, K Upper & Lower (線切割眼模 S111)		2009-040
 H102	HITACHI	H1-Cut 203, 304, 345, 460 Lower 下 (線切割眼模 H102)		2009-041
 F120	ファナック FANUC	∞°A, °B Upper 上 (線切割眼模 F120)		2009-042
 F121				∞°A, °B Lower 下 (線切割眼模 F121)
 F101		O, P, Q, R, W Upper & Lower 上、下 (線切割眼模 F101, F102)		2009-044
 F102				
 F123		1A, 1B, Upper 上 (線切割眼模 F123)		2009-045
 F124		1A, 1B, Lower 下 (線切割眼模 F124)		2009-046



Electrode (Copper & Brass Pipe Electrode)



STD. STYLE



SUPER 8 STYLE



- BRASS PIPE FOR STEEL & TREATMENT STEEL. COPPER PIPE FOR TUNGSTEN MATERIAL & SMALL HOLE.
- SUPER STYLE HOLE COPPER PIPE FOR HIGH SPEED MACHINING & NON THROUGH HOLE.
- THE LENGTH 300MM OR 400MM OF PRICE IS SAME. PLEASE NOTIFY THE LENGTH WHEN YOU ORDERING.
- EAH UNIT PRICES IS 20 PCS.

STANDARD STYLE HOLE

MATERIAL \ HOLE DIA.		0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3
BRASS	ORDER NO.	VEB-04	VEB-05	VEB-06	VEB-07	VEB-08	VEB-09	VEB-10	VEB-11	VEB-12	VEB-13
	CODE NO.	2010-001	2010-002	2010-003	2010-004	2010-005	2010-006	2010-007	2010-008	2010-009	2010-010
COPPER	ORDER NO.	VEP-04	VEP-05	VEP-06	VEP-07	VEP-08	VEP-09	VEP-10	VEP-11	VEP-12	VEP-13
	CODE NO.	2010-030	2010-031	2010-032	2010-033	2010-034	2010-035	2010-036	2010-037	2010-038	2010-039

MATERIAL \ HOLE DIA.		1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2
BRASS	ORDER NO.	VEB-14	VEB-15	VEB-16	VEB-17	VEB-18	VEB-19	VEB-20	VEB-21	VEB-22
	CODE NO.	2010-011	2010-012	2010-013	2010-014	2010-015	2010-016	2010-017	2010-018	2010-019
COPPER	ORDER NO.	VEP-14	VEP-15	VEP-16	VEP-17	VEP-18	VEP-19	VEP-20	VEP-21	VEP-22
	CODE NO.	2010-040	2010-041	2010-042	2010-043	2010-044	2010-045	2010-046	2010-047	2010-048

SUPER 8 STYLE HOLE COPPER & BRASS PIPE ELECTRODE

MATERIAL \ HOLE DIA.		1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
ORDER NO.		VES-10	VES-11	VES-12	VES-13	VES-14	VES-15	VES-16	VES-17
CODE NO.		2010-064	2010-065	2010-066	2010-067	2010-068	2010-069	2010-070	2010-071

MATERIAL \ HOLE DIA.		1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5
ORDER NO.		VES-18	VES-19	VES-20	VES-21	VES-22	VES-23	VES-24	VES-25
CODE NO.		2010-072	2010-073	2010-074	2010-075	2010-076	2010-077	2010-078	2010-079



EDM Filter For EDM (Oil)



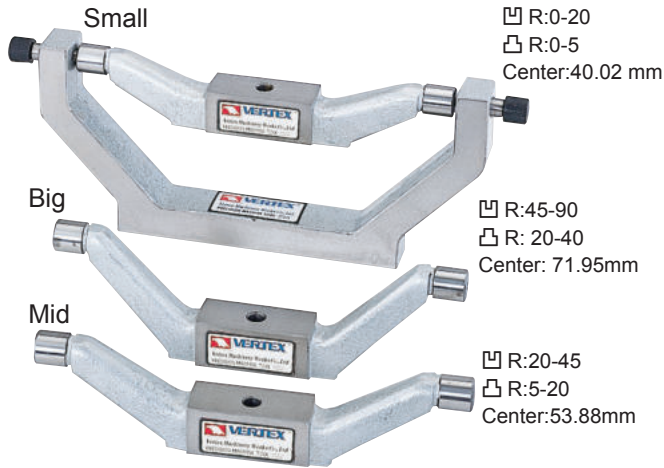
ORDER NO.	OUTER DIA.	INNER DIA.	LENGTH	SUITABLE MODELS	WEIGHT (kg)	CODE NO.
NH-01	150	72	450	SEIBU.JAPAX.SODICK.AMADA	1	2011-001
NH-09	150	33	360	CHARMILLES.AGIE.MITSUBISHI	0.8	2011-002
NH-09S	150	91	309		1.2	2011-003
NH-600L	150	26	600	WITH STEEL NET	1.2	2011-004



Tangimatic Dresser

ORDER NO.V-TDA CODE NO.2012-001

WEIGHT:7kgs



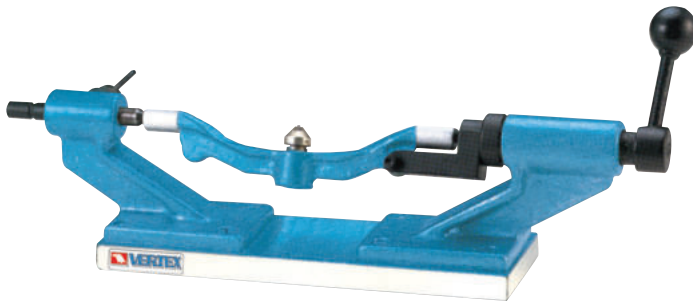
The dresser can be dressing any concave or convex of grinding wheel
 Concave R:0-40R(mm)
 Convex R:0-90R(mm)
 Max. wheel DIA.:8"(200mm)
 Diamond dresser pen 10mm



Tangimatic Dresser Handy Type

ORDER NO.V-TDH CODE NO.2012-002

WEIGHT:4.5kgs



The dresser can be dressing any concave or convex of grinding wheel
 Convex R:0-90R(mm)
 Concave R:0-40R(mm)



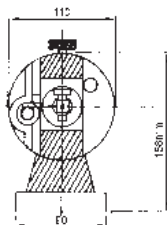
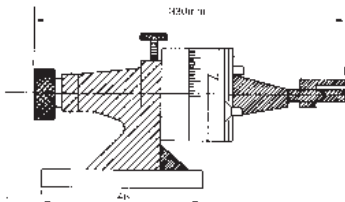
Radius And Angle Dresser

ORDER NO.V-TDB CODE NO.2012-010

WEIGHT:11.5kgs



Convex dressing range: 0.8R-40R
 Concave dressing range: 0-40R
 Max. wheel dressing diameter: 250mm
 Max. wheel extending diameter: 375mm



- Positive setting of the diamond to absolute center with the special gage included with the dresser.
- Simple, fast, accurate radius setting; no height gage or other set-up aids required. Radius is set on the grinder by measuring over the two pins or by inserting a gage block, as shown, for direct reading. Inside or outside radius is determined simply by sliding the dowel pin to the right for concave and to the left for convex.
- 4x90° graduation in full 360° circle. 6 Minute vernier reading. Chrome plated.
- One push-pull type knob for radius and angle control and for safer and faster operations.
- ACCURACY. Exteremely close tolerances are held in the manufacture of this tool, assured by hardening and precision grinding of all critical parts. Ways are chrome hardened.
- ECONOMY. Set-up and dressing time reduced to a bare minimum due to simplicity.



Universal Wheel Dresser

ORDER NO.V-TDC CODE NO.2012-020

WEIGHT:7.8kgs



The wheel dresser that dresses two angles tangent to a radius in one continuous motion with .0001~0.0002m/m accuracy. The wheel dresser with a micrometer feed-0.98"(25mm) travel.

SIMPLE-ELIMINATES HEIGHLY SKILLED OPERATORS

Fluidmotion means YOU CAN dress two angles tangent to a radius in one continuous motion-with only one setting. The diamond automatically returns to center position after dressing angles. Thus even a beginner can dress complex forms quickly and accurately. (center height 195mm)

ELIMINATES ELABORATE SETUPS

No need to pre-set diamond, or use any other tool except a micrometer and a simple hex wrench.

No Gage block-Master Gage setting or Block-Parallel Bar-Surface Plate-Height Gage-Dial Indicator.

No movement of dovetails necessary to form angles. The angle is dressed by continuing to push handle in both directions after radius is formed.

No need to use Gibs & V-Ways other than positioning surfaces.

ACCURATE-RAPID, REPEAT FORM-DRESSING

Fluidmotion generates clean, precise wheel profiles entirely free of chatter marks. Without fluidmotion a perfect blend of angles and radius is improbable.

PRECISE SHARP CONTOURS-concave or convex, at a full 180 degrees, are obtained consistently with (GUARANTEED) 0.001" accuracy.

CONVEX RANGE-0R-76.2R

CONCAVE RANGE-0.8R-88.9R

ACCURATE...FLUIDMOTION...PRECISE...

HOLD INTERSECTING ANGLES 12 to 15 seconds. This is accomplished by operating upright and handle.

Setting up two angles requires 10 seconds. Setting two angles and radius requires less than 3 minutes.

THE MOST DURABLE DRESSER AVAILABLE

Manufactured from hardened, ground and lapped alloy steels.

No wearing surfaces. Swivels on sealed bearings.

This form tangent in one setting-two angles-two radius-one flat.

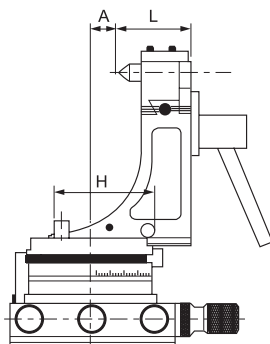
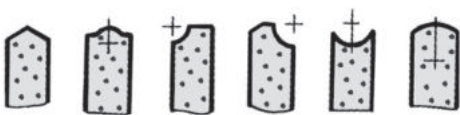
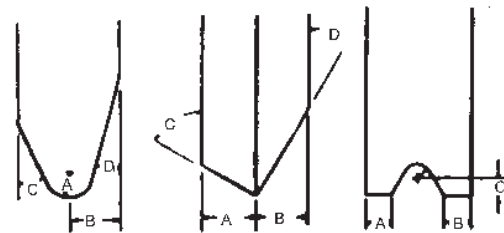
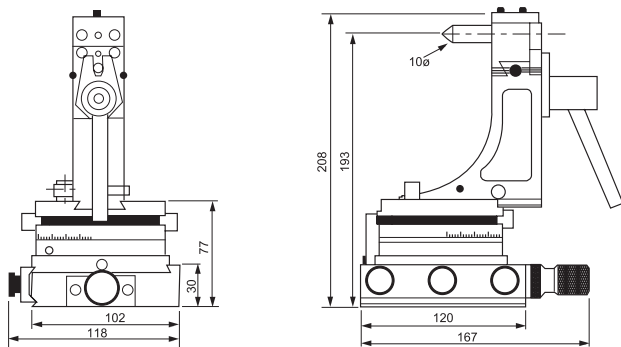
MAX. Swing distance of diamond cutter.....±14mm

Measuring quasi-pin dia.....ø10

MAX. Wheel dia.....ø200mm

Reading accuracy of turret index.....5'

Feed per division of handle scale.....0.01mm



Calculation Method

To dress convex arc surface: $H=L + R$

To dress concave arc surface: $H=L +(-R)$

H: Distance between outer generating lines of two locating pins.

R: Radius of the arc surface to be dressed

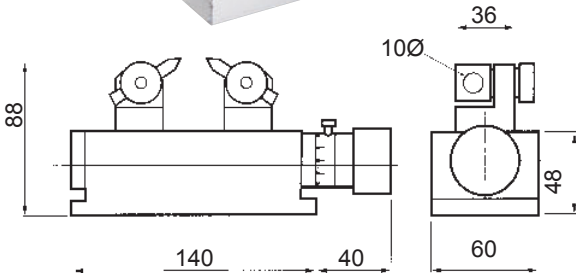
L: Distance from tip of diamond cutter to base plate



Precision Duplex Dresser

ORDER NO.V-TDF CODE NO.2012-030

WEIGHT:3.7kgs



FEATURES

PRECISION DUPLEX DRESSER is designed to simultaneously dress both sides of a grinding wheel, precisely and without deformation. It is useful for the thinning of grinding wheels or the dressing of thin wheels. manufactured of tool steel and hardened through out to HRC 60 for life time use.

Specifications:

Max. width of wheel.....40mm(1-9/16")
Max. dressing depth.....40mm(1-9/16")
Mini dressing width.....0.2mm(0.0079")
Graduation.....0.02mm(0.0001")

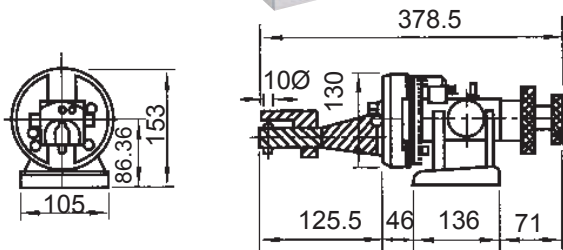
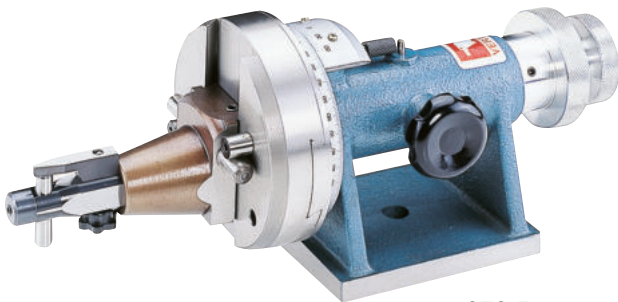
Max.thickness	Min.	Max.	Min
40mm	0.2mm	40mm	0.02mm/div



Radius And Angle Dresser

ORDER NO.V-TDG CODE NO.2012-040

WEIGHT:12kgs



FEATURES

- 6 minute vernier reading.
- 5-1/2" longx6-1/2" high.
- Dual purpose knob for drum & angle movement.
- Stop for concave and convex radius.
- Comes with setting gage for diamond tool.

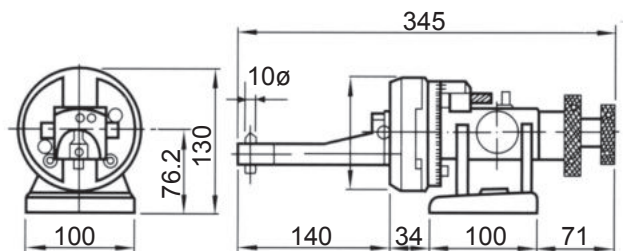
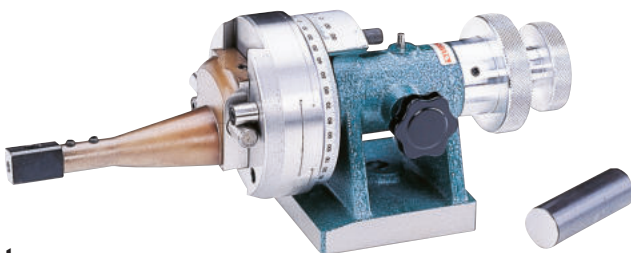
Specifications:	
Max. wheel diameter, standard.....	11"
Concave radius with standard diamonds.....	0-2 ¹ / ₄ "
Concave radius with rta-tail diamonds.....	0-2 ¹ / ₄ "
Convex radius.....	0-4"
Tangent travel in either direction.....	1.950"
Center line.....	3.4"



Radius And Angle Dresser

ORDER NO.V-TDE CODE NO.2012-050

WEIGHT:9.2kgs



Features

- No height gauge or set-up aids required.
- Radius is set on the grinder by measuring over the two pins or by inserting a gauge block for direct reading.
- Concave radius or Convex radius is determined by using either the left or right hand pins.

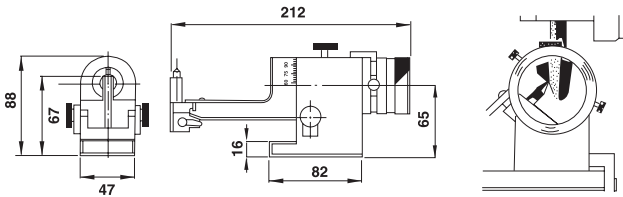




Optical Radius Angle Dresser

ORDER NO.V-TDT CODE NO.2012-060

WEIGHT:4.3kgs **Features**



Universal Wheel Dresser is Adoptable on Surface grinder and universal tool grinder for dressing grinding wheel into various cross sections of flat or curved shapes.

By "SIGHTING" the diamond point through the lens, radius and angles can easily be made perfectly tangent Visually Even with diamonds. Likewise radius can be blended together with most unbelievable accuracy.

Specification

Center height.....65mm
Max. wheel diameter.....200mm
Max. convex radius.....10mm
Max. concave radius.....25.4mm
Dressing angle.....95°-0°-95°
Tangential travel.....Appo x 22.5mm

Grinding wheel dressing application



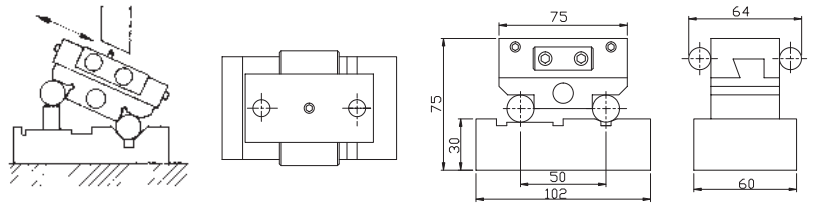
Matco Sine Dresser

ORDER NO.VP-50 CODE NO.2012-070

WEIGHT:2.5kgs



- This fine precision-made unit dresses grinding wheels to any angle from 0°-60° degrees with new smoothness and accuracy.
- The cross feed up to 50mm, center distance 0.01mm, Sine angle absolutely accurate.



SPECIFICATION

BLOCK CENTER DISTANCE	CENTER TOLERANCE	MAX CROSS FEED
50	±0.01	50



Matco Sine Dresser

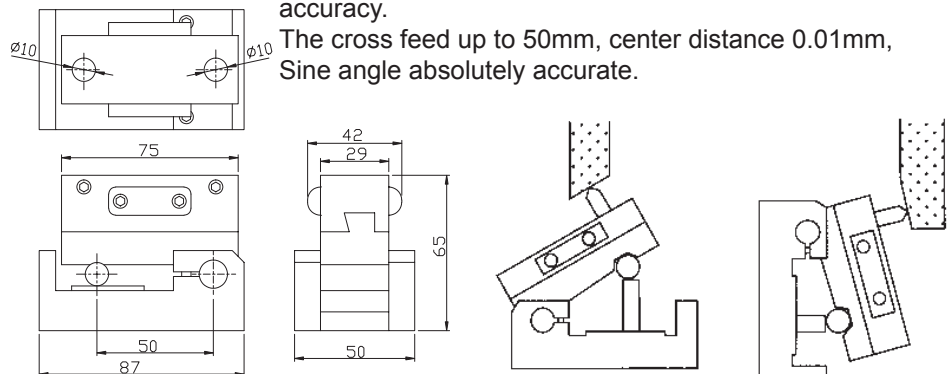
ORDER NO.V-50D CODE NO.2012-080

WEIGHT:1.6kgs



This fine precision-made unit dresses grinding wheels to any angle from 0°-60° degrees with new smoothness and accuracy.

The cross feed up to 50mm, center distance 0.01mm, Sine angle absolutely accurate.



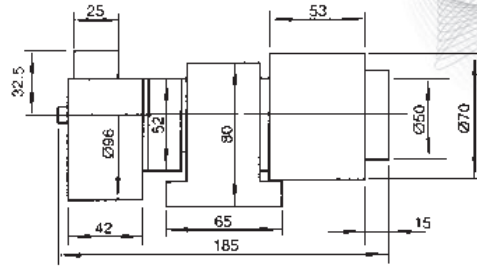


Diamond Wheel Dresser

ORDER NO.V-TDD

CODE NO.2012-090

WEIGHT:4.6kgs



This device is suitably used for Diamond Grinding wheel.

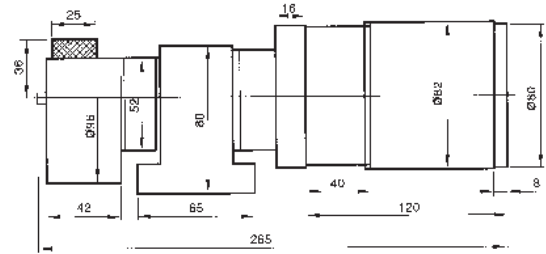
The surface is treated with blaze-dried lacquer.

Axis part is fixed with shaft bearing and can be rotated in high speed & with great precision.

- Sand wheel size: Ø75x26x12.7 ØWA80



Motor Type CBN Flat Wheel Dresser



SAND WHEEL SIZE: Ø75x25x12.7 ØWA80

Unit: mm

ORDER NO	VOLTAGE	RPM	WEIGHT (kgs)	CODE NO.
V-TDM-1	110V	129	6.5	2012-100
V-TDM-2	220V	108	7.1	2012-101

5.5KGS, SINGLE PHASE

0.07HP

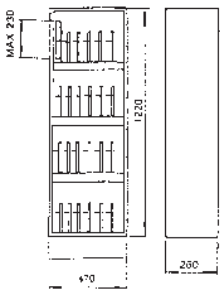


Wheel Hanger

ORDER NO.VWH-24, VWH-32

CODE NO.2013-001, 2013-002

WEIGHT:23.1kgs

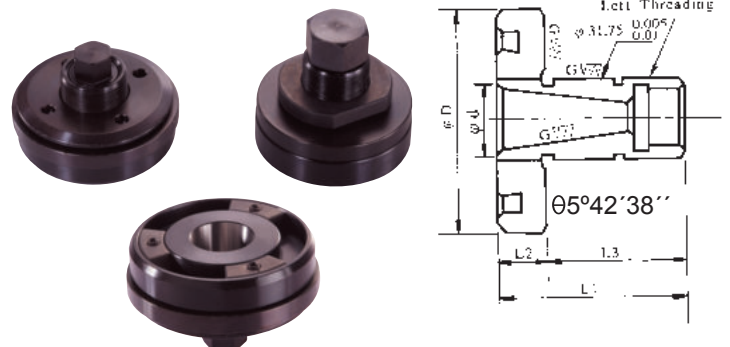


VWH-24 (24pcs)

VWH-32 (32pcs)
653Wx600Dx1460H mm
(excl. wheel height)



Grinding Wheel Flange



Unit: mm

ORDER NO.	ØD	Ød	L1	L2	L3	Brand Mark	WEIGHT (kg)	CODE NO.
FKT-250	78	25.7+0-0.05	40	13	27	KENT PROTH	0.8	2013-010
FTA-350	75	25.4+0-0.05	40	13	34	TATUNG	1	2013-011



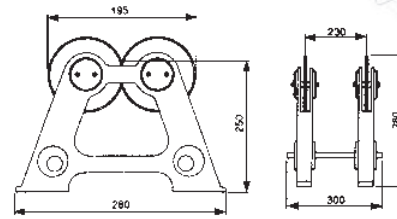
Wheel Balancing Stand

ORDER NO.WBS-300 CODE NO.2014-001

WEIGHT:12.5kgs



MAX.WHEEL DIAMETER ALLOWED Ø 500mm



The stand is specifically designed to improve accuracy and longer life for grinding. It is finished with cast iron and fine through hardened to HRC55°.



Level Balancing Stand

ORDER NO.LBS-100

CODE NO.2014-010

WEIGHT:8.8kgs

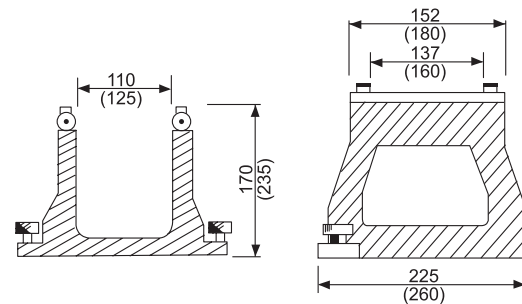
ORDER NO.LBS-350

CODE NO.2014-011

WEIGHT:15.1kgs



()For LBS-350

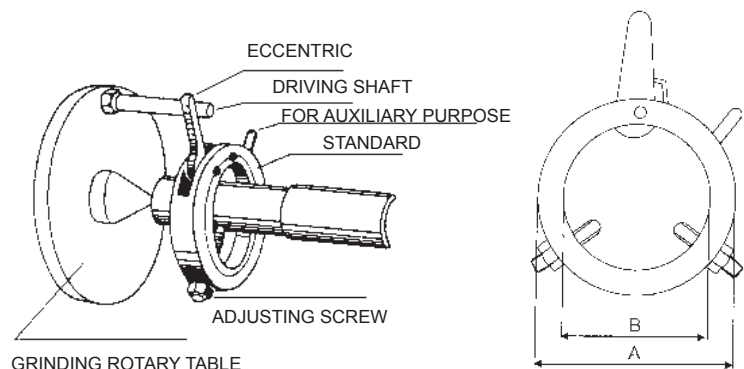
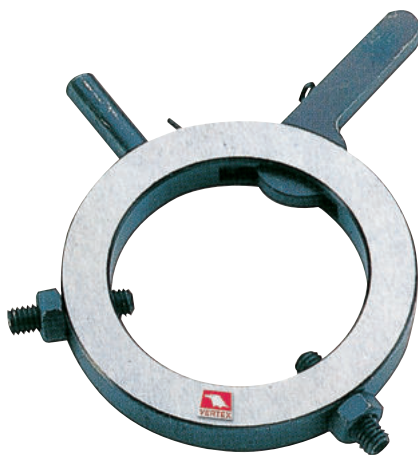


This machine encloses minute leveling instrument. The adjustment of horizontal enable rapidly and accurately.

MAX.WHEEL DIAMETER ALLOWED Ø200mm, Ø350mm



Driving Carrier



GRINDING ROTARY TABLE

FEATURES:

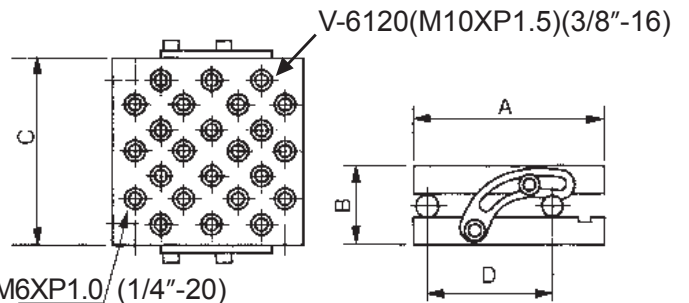
- SUITABLE FOR GRINDING OF SHAFTS.
- EASY ATTACH AND DETACH BY ONE HAND.

ORDER NO	CAPACITY	A	B	WEIGHT (kg)	CODE NO.
VDC-13	Ø6~Ø14	36	18	0.1	2014-020
VDC-22	Ø13~Ø24	48	28	0.2	2014-021
VDC-30	Ø20~Ø33	58	38	0.2	2014-022
VDC-40	Ø31~Ø42	68	48	0.2	2014-023
VDC-50	Ø36~Ø50	78	58	0.3	2014-024
VDC-60	Ø40~Ø62	89	68	0.3	2014-025
VDC-80	Ø60~Ø80	119	88	0.6	2014-026
VDC-100	Ø80~Ø100	140	109	0.7	2014-027



Design by the principles of SINE, angle grinding can be done well. High precision of parallelism within 0.002mm and squareness within 0.005 mm. Setup and dressing time reduced to a bare minimum due to simplicity.(ANGLE 0° - 46°)

- Made of quality steel, hardened to HRC 55° - 56°
- Two hardened and ground side rails and one.
- Locking strap included.

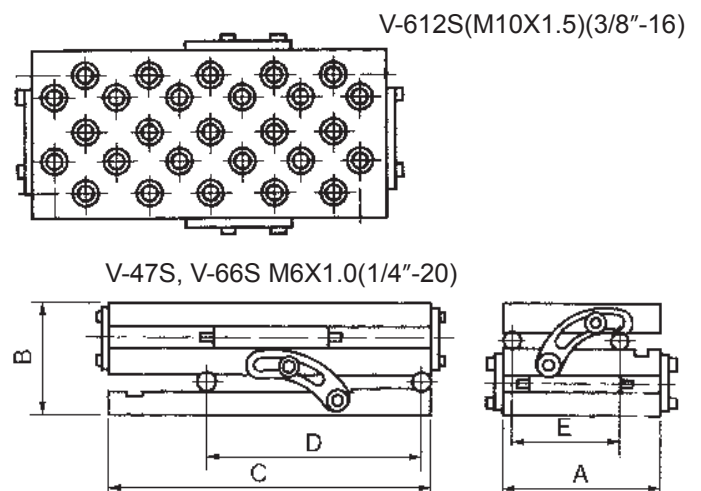


ORDER NO.	A	B	C	D	N.W (kgs)	CODE NO.
V-47	98	66	177	75	8.4	2015-001
V-66	150	62	150	100	9.4	2015-002
V-6120	147	65	300	100	19.8	2015-003

Compound Sine Plate



Made of quality steel, hardened to HRC 55°-62°, angles 0°~60° capacity.
Minute angle step 0.2 built into the front gauge block roll eliminates steps in base plate.
Two end rails and one locking strap included
Tapped holes on the top.
Center distance of tools with 0.005mm(0.0001")V-612S within 0.008mm(0.0003")



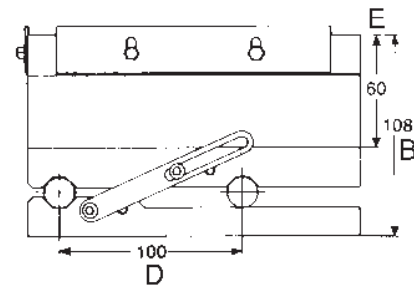
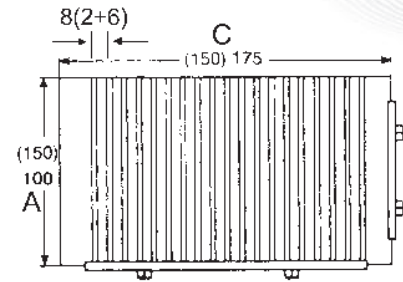
ORDER NO.	A	B	C	D	E	N.W (kgs)	CODE NO.
V-47S	100	100	175	125	75	9.9	2015-010
V-66S	150	100	150	100	100	12.4	2015-011
V-612S	150	100	300	100	100	23.7	2015-012

Magnetic Sine Plate



650 GAUSS

MAGNETIC SINE PLATES with a permanent magnetic, never lose its strong power by press down a screw based on the plate and regain the original after work.

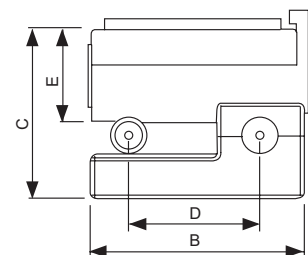
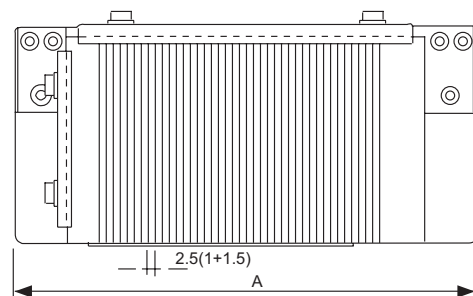
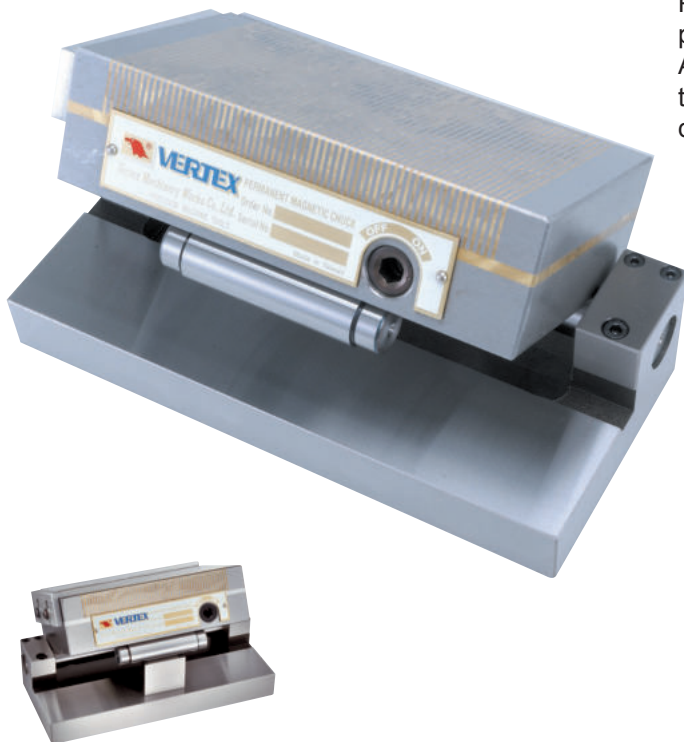


ORDER NO.	A	B	C	D	E	ANGLE	N.W (kgs)	CODE NO.
V-47M	100	108	175	100	60	0°~55°	11.3	2015-020
V-66M	150	108	150	100	60	0°~55°	15.6	2015-021
V-612M	150	108	300	100	60	0°~55°	27	2015-022

Magnetic Sine Plate With Fine Pole

700 GAUSS

Permanent magnetic chuck. Removable handle for positive on/off control, side rails, end rails all included. All have 200 minute angle steps with 0.005mm(0.0002") tolerance in squareness, parallelism and roll center distances. The chuck of pole is 1+1.5



ORDER NO.	A	B	C	D	E	P	ANGLE	N.W (kgs)	CODE NO.
V-47MF	225	102	87	75	47	2.5 (1+1.5)	0°~60°	13.1	2015-030
V-66MF	200	152	87	100	47			16.5	2015-031
V-612MF	366	152	87	100	47			30.3	2015-032



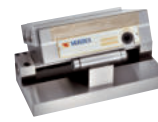
Adjustable Sine Plate With Fine Pole Magnetic Chuck



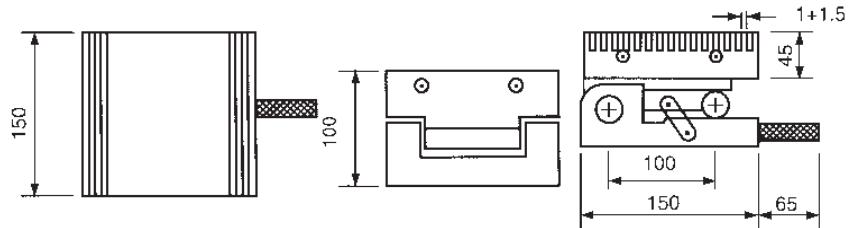
ORDER NO.V-66SA CODE NO.2015-050

700 GAUSS

WEIGHT:17.9kgs



The sine plate with magnetic chuck is with high accuracy and stability. From 0° to 60° can be used for angle, the precision is within 0.003m/m.



Double Way Sine Plate With Permanent Magnetic Chuck

690 GAUSS

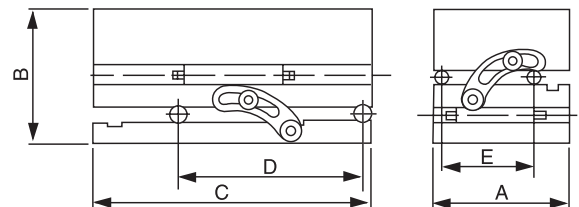


FEATURES:

- Double way sine plate, can be use to grind two way angle at same time.
- Constructed of hardened alloy tool steel.
- Precise angle setting is obtained with gauge block.
- This device provides positive locking at any angle without distortion.
- A positive locking device is mounted on the base.

Unit:mm

ORDER NO.	A	B	C	D	E	P	ANGLE	N.W (kgs)	CODE NO.
V-47MS	100	142	175	100	75	1+3	0°~60°	15.2	2015-060
V-66MS	150	142	150	100	100			18.1	2015-061
V-612MS	150	142	300	200	100			34.7	2015-062



Double Way Sine Plate With Fine Pole Magnetic Chuck

700 GAUSS

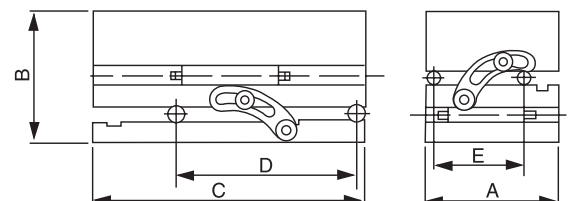


FEATURES:

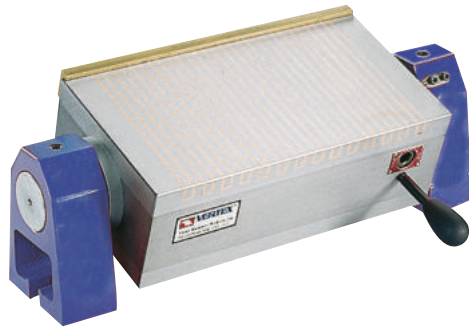
- Double way sine plate, can be grind two way angle at same time.
- Special feature with micropitch magnetic chuck, can fix tiny parts firmly on the chuck.
- Constructed of hardened alloy tool steel.
- Precise angle setting is obtained with gauge block.
- This device provides positive locking at any angle without distortion.
- A positive locking device is mounted on the base.

Unit:mm

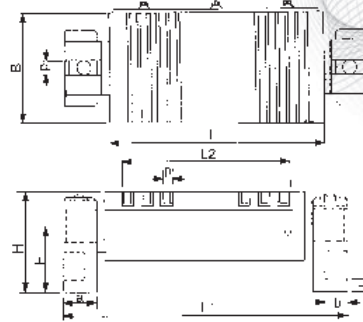
ORDER NO.	A	B	C	D	E	P	ANGLE	N.W (kgs)	CODE NO.
V-47MSF	100	122	175	100	75	2.5 (1+1.5)	0°~60°	14.9	2015-070
V-66MSF	150	122	150	100	100			19.8	2015-071
V-612MSF	150	122	300	200	100			35	2015-072



Rotary Permanent Magnetic Plate



650 GAUSS



- Can grind the (0°-90°) angle work-piece, could be easily set by graduated collar.

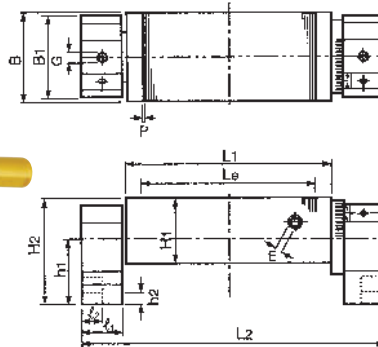
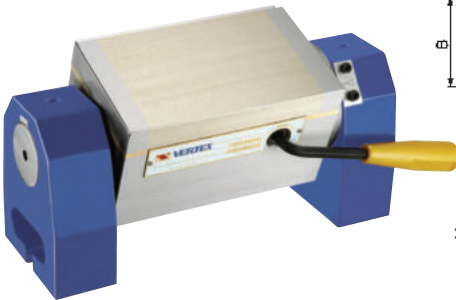
Unit:mm

ORDER NO.	SIZE	OPERATION PLANE			POLE PITCH P	ROTARY SEAT PLANE						HEIGHT H	WEIGHT KGS	CODE NO.
		B	L	L2		a	b	t	F	L1	d			
VLU-510B	125x250	125	250	191	8.5 (2.5+6)	50	35	17	96	380	16	150	33.2	2015-080
VLU-612B	150x300	150	300	245						430				2015-081
VLU-618B	150x450	150	450	414						565				-

Rotary Fine Pole Permanent Magnetic Plate



600 GAUSS



APPLICATION

Suitable for (0°-90°) angle grinding on grinder.

FEATURES

- Rotary shaft with graduation makes it easy to grind at any angle.
- Integrated molding of machine body and rotary spindle.
- Unchanged surface accuracy during ON/OFF change over.
- Design for distance between both magnets enables machining of various unconfirm in thickness & sizes.

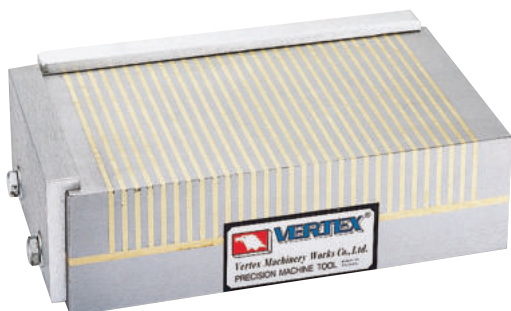
Unit:mm

ORDER NO.	Nominal Dimension	Chuck Dimension				POLE PITCH P	Length L2	Rotary Base						HEIGHT H2	WEIGHT (kgs)	CODE NO.
		B	L1	L2	H1			B	∅1	∅2	G	h1	h2			
VLU-407BF	100X175	100	175	125	78	2 (1+1.5)	293	100	50	25	16	103	50	145	19	2015-090
VLU-510BF	125X250	125	250	200			368								2015-091	
VLU-612BF	150X300	150	300	246			418								31	2015-092
VLU-614BF	150X350		350	296			468								37	2015-093
VLU-618BF	150X450		450	396			568								43	2015-094

Hi-Power Mini Type Permanent Magnetic Plate

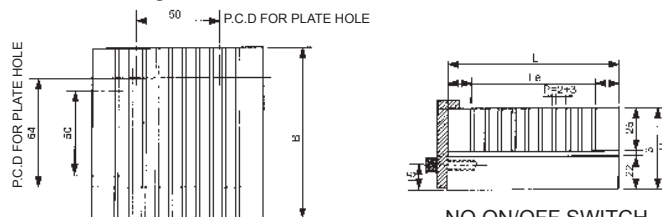


FOR CARBIDE MATERIAL ONLY
CAN NOT FOR ALL STEEL



APPLICATION

This chuck is designed for objects with weaker magnetic force. This chuck can be placed in the plate of large permanent magnetic chuck or electro-magnetic chuck for attraction or attachment.



Unit:mm

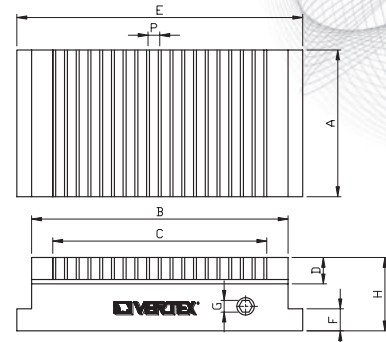
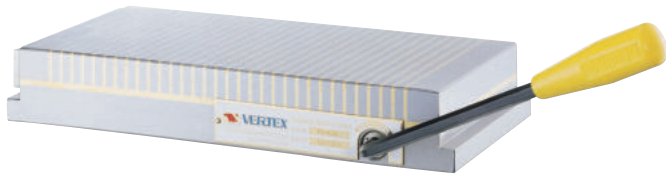
ORDER NO.	DIMENSION	CHUCKING SIZE			POLE PITCH P	HEIGHT H	TESTING BLOCK □ 50x25t TEST BLOCK(TUNGSTEN) 210N(21kgf)	WEIGHT (kgs)	CODE NO.
		B	L	Le					
VG-404H	100X100	100	100	72	5(2+3)	50	4	2015-100	
VG-407H	100X180	100	180	152	5(2+3)	50	7	2015-101	
VG-410H	100X250	100	250	222	5(2+3)	50	10	2015-102	



Angular Permanent Magnetic Plate

650 GAUSS

MAGNETIC FORCE 18KGF



Unit:mm

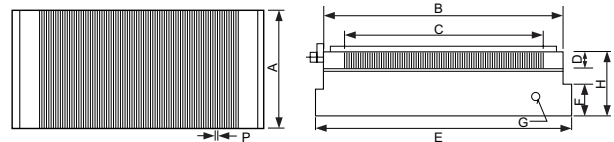
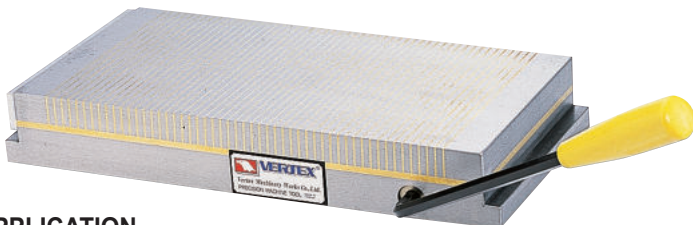
- Permanent magnetic force.
- Operation plane, specially treated, nondeformation and high precision.

ORDER NO.	SIZE	CHUCKING SIZE				POLE PITCH	CHUCK MOUNTING FACE				SWITCH TYPE	HEIGHT H	WEIGHT KGS	CODE NO.
		A	B	C	D		P	G	E	F				
VG-407	100x175	100	175	146	20	8(2+6)	8	15	187	LIVING HEXAGON SOCKET SCREW KEYS	50	7.2	2015-110	
VG-510	125x250	125	250	206					262			2015-111		
VG-612	150x300	150	300	256					318			2015-112		
VG-614	150x350		350	306					368			2015-113		
VG-618	150x450		450	406					468			2015-114		
VG-816	200x400	200	400	365					418			2015-115		
VG-818	200x450		450	406					468			2015-116		
VG-820	200x500		500	456					518			2015-117		
VG-1020	250x500	250	500	456					518			2015-119		
VG-606	150x150	150	150	116					162			2015-121		
VG-1224	300x600	300	600	550	18	620	48	73.5	2015-122					



Middle Pitch Permanent Magnetic Chuck

MAGNETIC FORCE 19KGF
680 GAUSS



APPLICATION

New type of thick chuck, in 50mm thickness, for grinding and electrodischarging works, for thin plate or small works, in wide range of applications, it features a wide effective magnetic area on the chucking face.

FEATURES

- Thin and light to meet versatile applications.
- Fine-pitched magnetic poles, on this model, make it ideally suitable for small and thin works.
- Hexagonal wrench key is used for the magnetic ON/OFF change over handle it is inserted through the side easily removed and operates quite lightly.
- The chuck surface has a wider effective magnetic area than other chucks of similar type.



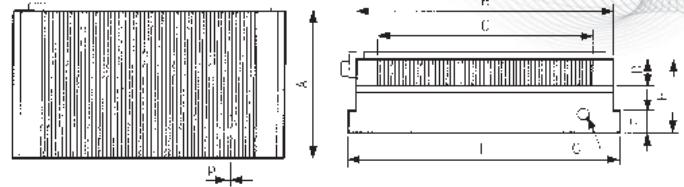
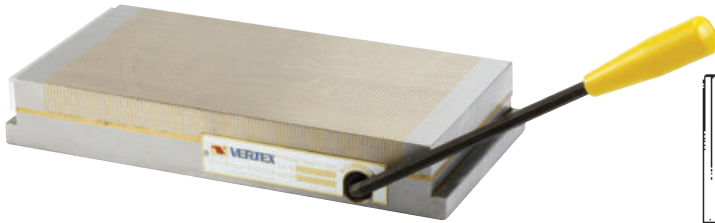
Unit:mm

ORDER NO.	DIMENSION	CHUCKING SIZE				POLE PITCH	CHUCK MOUNTING FACE			HEIGHT H	HEXAGONAL HANDLE HOLE G	WEIGHT KGS N.W.	CODE NO.
		A	B	C	D		A	E	F				
VGF-1018B	100X175	100	175	146	18	5(1+4)	100	195	15	50	8	7.7	2015-160
VGF-1515B	150X150	150	150	116	18	5(1+4)	150	175	15	50	8	10	2015-161
VGF-1530B	150X300	150	300	256	18	5(1+4)	150	320	15	50	8	18.8	2015-162
VGF-1535B	150X350	150	350	306	18	5(1+4)	150	370	15	50	8	21.6	2015-163
VGF-1540B	150X400	150	400	356	18	5(1+4)	150	420	15	50	8	25	2015-164A
VGF-1545B	150X450	150	450	406	18	5(1+4)	150	470	15	50	8	27.4	2015-164
VGF-2040B	200X400	200	400	356	18	5(1+4)	200	420	15	50	8	32.3	2015-165
VGF-2045B	200X450	200	450	406	18	5(1+4)	200	470	15	50	8	36.3	2015-166
VGF-1018BS	100X175	100	175	146	18	5(1+4)	100	175	15	50	8	8	2015-167
VGF-1515BS	150X150	150	150	121	18	5(1+4)	150	150	15	50	8	9	2015-168
VGF-1530BS	150X300	150	300	256	18	5(1+4)	150	300	15	50	8	20	2015-169

Fine Pole Magnetic Plate



MAGNETIC FORCE 21KGF
700 GAUSS



Unit:mm

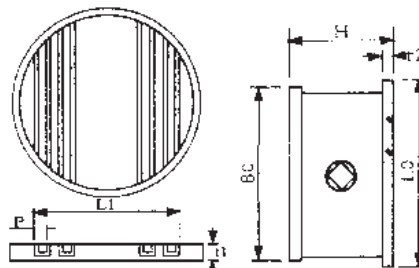
ORDER NO.	SIZE	CHUCKING SIZE				POLE PITCH P	CHUCK MOUNTING FACE			HEIGHT H	WEIGHT KGS	CODE NO.
		A	B	C	D		A	E	F			
VRTW-1018A	100X175	100	175	146	18 2.5 (1+1.5)	100	195	15	50	7.7	2015-130	
VRTW-1515A	150X150	150	150	116		150	170	15		9.8	2015-131	
VRTW-1530A	150X300	150	300	256		150	320	15		18.7	2015-132	
VRTW-1535A	150X350	150	350	306		150	370	15		21.4	2015-133	
VRTW-1540A	150x400	150	400	356		150	420	15		23.7	2015-134	
VRTW-1545A	150X450	150	450	406		150	470	15		27.4	2015-135	
VRTW-2040A	200X400	200	400	356		200	420	15		32.5	2015-137	
VRTW-2045A	200X450	200	450	406		200	470	15		36.4	2015-138	
VRTW-1224A	300X600	306	600	556		300	620	15		73	2015-138A	
VRTW-1018S	100X175	100	175	146		100	175	-		8	2015-139	
VRTW-1515S	150X150	150	150	121		150	150	-		9	2015-140	
VRTW-1530S	150X300	150	300	256		150	300	-		20	2015-141	
VRTW-1325S	125X250	125	250	206		125	250	15		13.1	2015-142	

FEATURES

- Thin and light weight to meet versatile applications.
- Fine-pitched magnetic poles on this micropitch model. Make it ideally suitable for small and thin works.
- Hexagonal wrench key is used for the magnetic ON/OFF change over handle. It is inserted through the side, easily removed and operates quite lightly.
- The chuck surface has a wider effective magnetic area than other chuck of similar type.



Round Type Magnetic Plate



Unit:mm

ORDER NO.	FACE PLATE			BOTTOM PLATE		POLE PITCH P	HEIGHT H	WEIGHT KGS	CODE NO.
	B0	t1	L1	t2	L0				
VGD-06	150	21	101	18	200	9 (2+7)	78	9.8	2015-150
VGD-08	200		137		200			12.8	2015-151
VGD-10	250		191		250			20.2	2015-152
VGD-12	300		227		305			30.4	2015-153

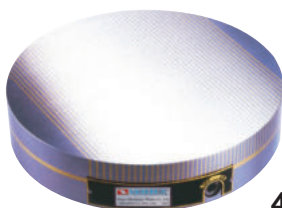
ORDER NO.VGD TYPE

Magnetic field intensity:
Higher than 650 gauss

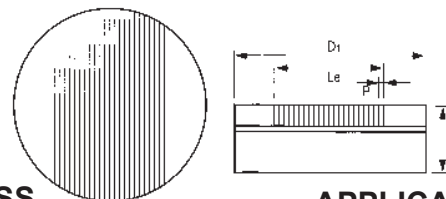
APPLICATION

Suitable for light cutting and grinding on lathe, grinder, EDM and the Rotary Table.

Fine Pole Round Type Magnetic Plate



450 GAUSS



APPLICATION

New type of thin chuck, in 50mm thickness, for grinding and electro-discharging works, for thin plate or small works, in wide range of applications, it features a wide effective magnetic area on the face plate (chucking face).

Unit:mm

ORDER NO.	DIAMETER	TOP PLATE		POLE PITCH P	HEIGHT H	WEIGHT KGS	CODE NO.
		D1	Le				
VGDW-6	160mm	160	115	2.5 (1+1.5)	50	8	2015-154
VGDW-8	200mm	200	155	2.5 (1+1.5)	50	13	2015-155
VGDW-10	250mm	250	205	2.5 (1+1.5)	50	21	2015-156
VGDW-12	300mm	300	255	2.5 (1+1.5)	50	33.5	2015-157



Permanent-Electro Magnetic Chuck

Suitable for Milling



VERTEX®



NEW



5 SIDES MACHINING

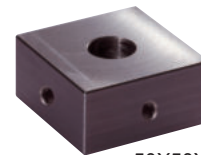


CONTROLLER INCLUDED



49X48X30 m/m

VSB-
SPRING BLOCK



50X50X32.5 m/m

VTJ-
MAGNETIC TRANSISTING SOFT JAW

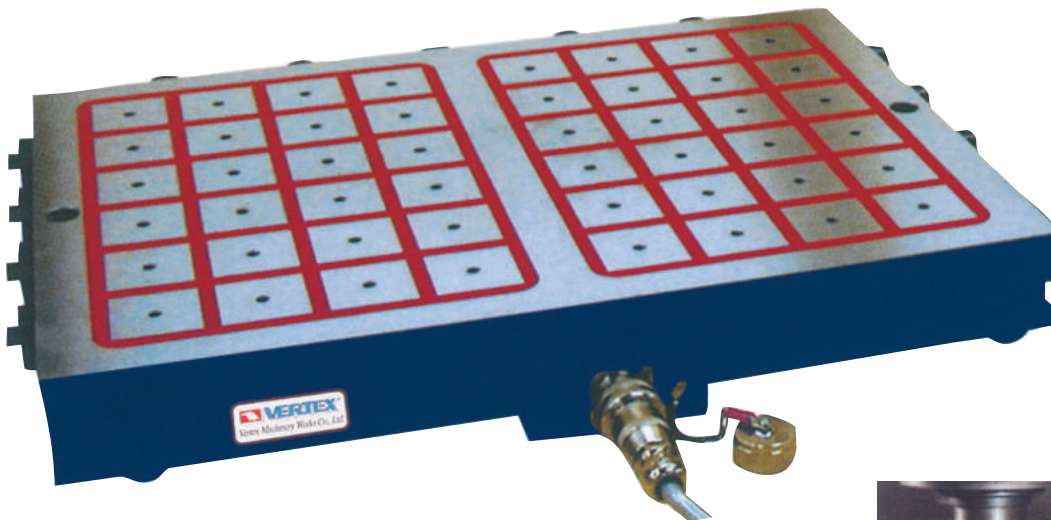
FEATURES

- Ensure higher magnetic and mechanical performances, as well as absolute reliability.
- Owing to no power supply to keep the magnetic chuck ON, it could be used for long time and never get temperature to affect the accuracy of workpiece. "COLD" device, not subject to internal wear or deformation resulting from moving internal parts.
- Easy and convenient to clamp a workpiece, shortens clamping time.
- Most suitable for heavy duty machining on medium, large or even rough components.
- Easily integrated with Pallet Change of Horizontal Machining Center and FMS System the Magnetic Chucks will be as geometrically stable as the table itself.
- For the most powerful machine tools available. Systems are switched ON or OFF with simple electrical pulse. A variable output from 20%-100% is controlled from the operator push button unit.
- Entirely independent of external power supply when holding work pieces. There is no risk, when power fails.
- 2 seconds control for power ON & OFF. No electric Power Supply required to keep the magnetic chuck ON. Safety in case of power failure.
- 10mm MIN. Thin workpiece & MIN. 4 block magnetic pole for workpiece.
- Every work piece need 3 transisting soft jaw to stabilize holding power.
- Spring block has 2.5mm displacement up & down.



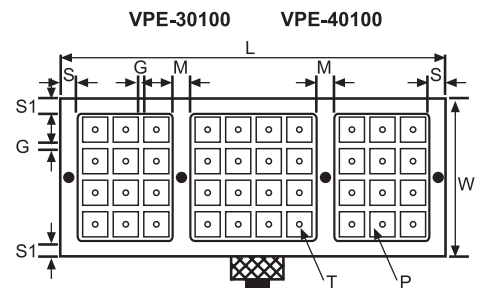
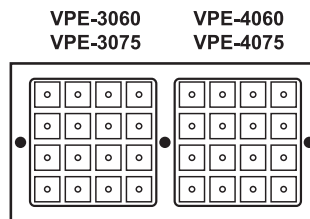
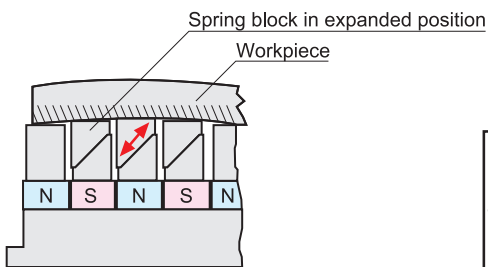
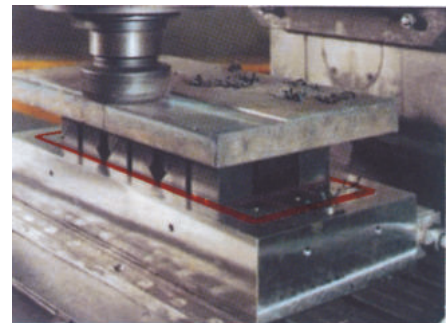
Permanent-Electro Magnetic Chuck

Suitable for Milling



STRONG CLAMPING FORCE, FAST SETTING, HIGH SAFETY

※ Recommend voltage : 380V 3PH



MAGNETIC FORCE 1000 KGS / 100 CM² / 4 SQUARE BLOCKS

ORDER NO.	DIMENSION							PITCH	POLE	No. of POLE	VOLTAGE	AMP	CHUCK N.W	CONTROLLER N.W	CODE NO.
	W	L	S	S1	M	T	HIGHT								
VPE-2540	240	430	30	25	--	M8	70	10	50X50	AC 220V 380V	18	42	10	2033-030	
VPE-2560	240	590			30									24	2033-031
VPE-2580	240	750			30									30	2033-032
VPE-25100	240	990			30									42	2033-033
VPE-3030	300	310			--									16	2033-048
VPE-3040	300	430			--									24	2033-049
VPE-3060	300	590			30									32	2033-050
VPE-3080	300	810			30									44	2033-051
VPE-3090	300	870			30									48	2033-051A
VPE-30100	300	990			30									56	2033-052
VPE-4040	420	430			--									36	2033-052A
VPE-4060	420	590			30									48	2033-053
VPE-4080	420	810			30									66	2033-054
VPE-40100	420	990			30									84	2033-055
VPE-5060	480	590	30	56	2033-060										
VPE-5080	480	750	30	70	2033-061										
VPE-50100	480	990	30	98	2033-062										
VPE-60100	600	990	30	126	2033-063A										



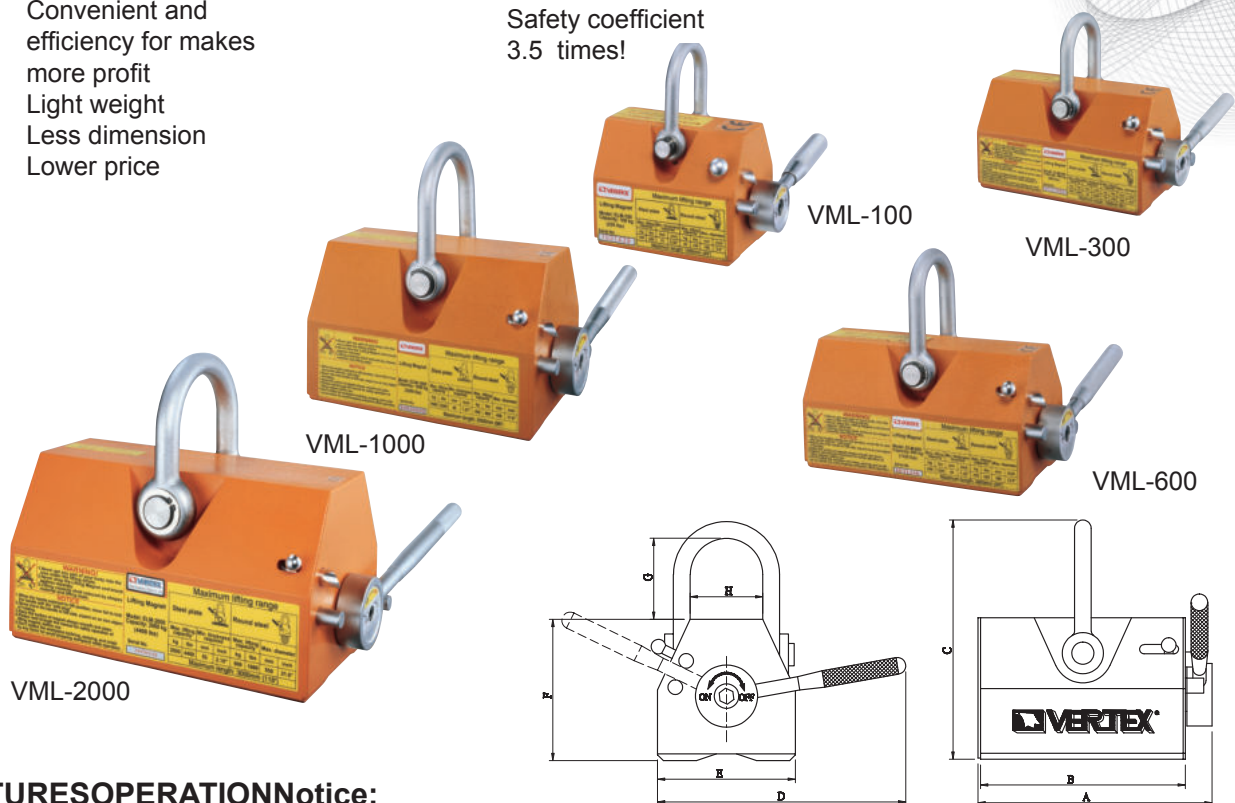
Permanent Magnetic Lifter (ON/OFF Type)



VERTEX®

Convenient and efficiency for makes more profit
 Light weight
 Less dimension
 Lower price

Safety coefficient
 3.5 times!



FEATURES OPERATION Notice:

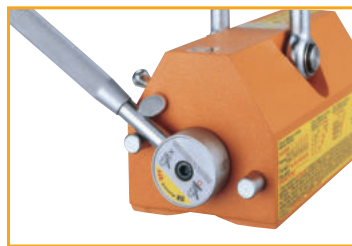
- Each size suit for plate type & round type steel using.
- All new models with “light weight” less dimension” and “lower price”.
- Made by permanent magnet, require no power supply, thus eliminating hazards due to failure wiring system as electric type.
- It features powerful magnetic force, with 3.5 times safety coefficient makes more safety in use.

OPERATION

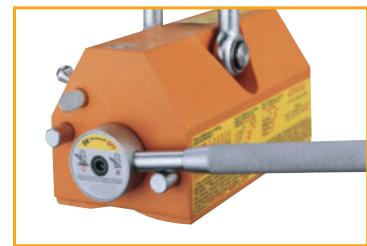
With ON/OFF switch, it is very easy and convenient to operate.

See as the example pictures as below

ON



OFF



Notice:

Never moves the handle to “ON” side, except on an iron object of holding.

DIMENSIONS

ORDER NO.	Capacity	A	B	C	D	E	F	G	H	Weight	SAFETY COEFFICIENT	CODE NO.
	kg lbs	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch			
VML-100	100 220	107 4.2	84 3.3	120 4.7	125 4.9	60 2.4	71 2.8	41 1.6	30 1.2	2.7 5.5	x3.5 times	2018-060
VML-300	300 660	180 7.1	155 6.1	156 6.1	185 7.3	90 3.6	93 3.7	51 2.0	41 1.6	9.1 18.9		2018-061
VML-600	600 1320	255 10	224 8.8	212 8.3	260 10.2	115 4.5	120 4.7	77 3.0	52 2.0	21.5 46		2018-062
VML-1000	1000 2200	280 11	245 9.6	286 11.3	371 14.6	165 6.5	169 6.7	97 3.8	87 3.4	53.4 101		2018-063
VML-2000	2000 4400	422 16.6	380 15	348 13.7	512 20.2	216 8.5	215 8.5	105 4.1	121 4.8	127.8 259		2018-064



Permanent Magnetic Lifter (ON/OFF Type)

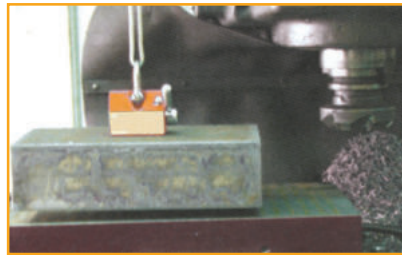


VERTEX



APPLICATIONS

- Suitable for move plate steel, block steel and round steel, such as machine parts, press molds, plastic molds and iron materialetc.



LOAD OF HOLDING POWER

- The load of holding power will changes depending on the thickness, attractive face roughness and quality of material and clearance between the workpiece with magnet.

	Thickness		Percentage of lifting capacity					
	mm	inch	VML-3000	VML-2000	VML-1000	VML-600	VML-300	VML-100
T1	up 60	up 2.36"	100%	100%	100%	100%	100%	100%
T2	55	2.16"	95%					
T3	50	1.97"	90%					
T4	45	1.77"	85%					
T5	40	1.57"	80%	85%	90%	90%	90%	
T6	35	1.38"	70%	75%				
T7	30	1.18"	60%	65%	80%	75%	90%	
T8	25	0.98"	50%	55%	70%			
T9	20	0.79"	40%	45%	60%	75%	90%	
T10	15	0.59"	30%	35%	50%	60%	70%	
T11	10	0.39"	20%	25%	35%	45%	50%	70%
T12	5	0.20"	10%	15%	20%	25%	30%	40%

Table of difference in holding power by attractive face roughness For all models

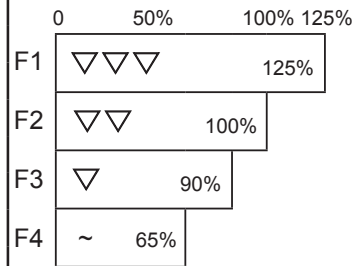
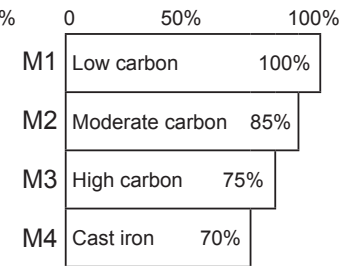


Table of difference in holding power by material quality For all models



Calculating Formula for "Range of Lifting Capacity" → (TxFxMxCapacity of Lifter)

Example:
Terms of workpiece: T8, F1 and M2
90% x 125% x 85% x 600kgs (VML-600)=573kgs

SAFETY COEFFICIENT x 3.5 times

The capacity of magnet indicated as 1/3.5 of holding power, it means the real holding power is 3.3 times of capacity. For example the capacity of VML-600 is 600kgs (1320lbs) but the real holding power is 1980kgs (4350lbs).

The large safety coefficient is consideration for ensuring the use in safety.

MAXIMUM LIFTING RANGE

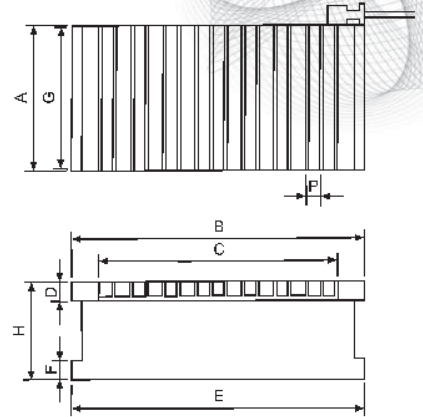
FORM OF MATERIAL	STEEL PLATE		ROUND STEEL			Maximum length
	Max.lifting capacity	Min.thickness required	Max.lifting capacity	Min Dia	Max.diameter	
ORDER NO.	kg lbs	mm inch	kg lbs	mm inch	mm inch	mm inch
VML-100	100 220	15 0.59"	45 99	80	150 5.9"	1000 40"
VML-300	300 660	25 0.98"	135 300	100	250 9.8"	1500 60"
VML-600	600 1320	30 1.18"	270 600	180	350 13.8"	2000 80"
VML-1000	1000 2200	40 1.57"	450 990	230	450 17.8"	2500 98"
VML-2000	2000 4400	55 2.16"	900 1980	260	550 21.6"	3000 118"
VML-3000	3000 6600	60 2.36"	1350 2970	300	650 25.6"	3500 138"



Standard Pole Electro Magnetic Chuck



450 GAUSS



APPLICATION

Most suitable for grinding operation, of standard electromagnetic chuck.

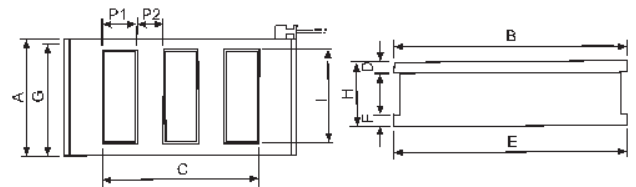
Unit:mm

ORDER NO.	DIMENSION	CHUCKING SIZE				POLE PITCH P	CHUCK MOUNTING FACE				VOLTAGE	CURRENT	WEIGHT (kg)	CODE NO.
		A	B	C	D		G	E	F	H				
VEM-1530A	150x300	150	300	228	20	15(3+12)	144	316	20	70	DC-90V	0.15A	21	2015-221
VEM-1535A	150x350	150	350	288	20	15(3+12)	144	366	20	70	DC-90V	0.18A	25	2015-222
VEM-1545A	150x450	150	450	378	20	15(3+12)	144	466	20	70	DC-90V	0.24A	32	2015-223
VEM-2040A	200x400	200	400	348	20	15(3+12)	194	416	20	70	DC-90V	0.47A	38	2015-224
VEM-2045A	200x450	200	450	378	20	15(3+12)	194	466	20	70	DC-90V	0.35A	43	2015-225
VEM-2550A	250x500	250	500	438	20	15(3+12)	240	500	20	70	DC-90V	0.73A	67	2015-226
VEM-3060A	300x600	300	600	529	20	15(3+12)	290	600	20	70	DC-90V	0.97A	97	2015-227
VEM-4080A	400x800	400	800	725	25	19(3+16)	390	800	20	80	DC-90V	1.56A	182	2015-228
VEM-40100A	400x1000	400	1000	936	25	19(3+16)	390	1000	20	80	DC-90V	1.60A	228	2015-229
VEM-50100A	500x1000	500	1000	936	25	19(3+16)	490	1000	20	80	DC-90V	1.72A	285	2015-230



Super-Powerful Electric Magnetic Chuck

MILLING M / C TYPE
1200 GAUSS



APPLICATION

Most efficient for heavy cutting with milling machine, shaper, planer and planomiller. It displays the power for the thick work and the high speed cutting operation.

Unit:mm

ORDER NO.	DIMENSION	CHUCKING SIZE					POLE PITCH		CHUCK MOUNTING FACE				VOLTAGE	CURRENT	WEIGHT N.W. (kg)	CODE NO.
		A	B	C	D	I	P1	P2	G	E	F	H				
VEM-2040Z	200x400	200	400	332	20	160	40	35	194	400	20	110	DC-90V	0.71	54	2015-251
VEM-2050Z	200x500	200	500	422	20	160	48	34	194	500	20	110	DC-90V	0.91	75	2015-252
VEM-2060Z	200x600	200	600	520	20	160	48	30	194	600	20	110	DC-90V	1.00	80	2015-253
VEM-2550Z	250x500	250	500	422	20	200	42	34	240	500	20	120	DC-90V	1.16	90	2015-254
VEM-3060Z	300x600	300	600	520	20	240	48	30	290	600	20	120	DC-90V	1.63	130	2015-255
VEM-4080Z	400x800	400	800	718	25	340	48	30	390	800	20	120	DC-90V	2.53	230	2015-256
VEM-40100Z	400x1000	400	1000	917	25	340	45	35	390	1000	20	120	DC-90V	2.96	288	2015-257
VEM-50100Z	500x1000	500	1000	917	25	430	45	35	490	1000	20	120	DC-90V	3.96	360	2015-258
VEM-60100Z	600x1000	600	1000	917	25	530	45	35	590	1000	20	120	DC-90V	5.30	432	2015-259

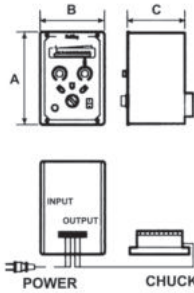


Chuck Controller (For Rectify & Demagnetize)



ORDER NO. VCC-705(5A)

For VGI-618~2048 / VLZ-510~612 / VIW-612~1224 / VEM-1530A~50100A

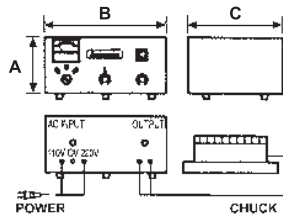


FEATURES

- Suitable for standard type of electric magnetic chucks.
- With current capacity of 5A; demagnetizing time is 6-15 seconds.
- Precisely adjust the magnetic force of electric magnetic chucks and indicate LED voltage.
- Suitable for any kind of electric magnetic chucks.

ORDER NO. VCC-805A (10A) FOR VGI-2060 / VEA-816~1640 / VEM-2040Z~40100Z

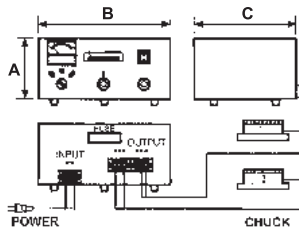
VCC-815 (15A) FOR VEA-2040~VEA2460 / VLZ-2060 / VEM-50100A / VEM-50100Z



FEATURES

- Suitable for standard type of electric magnetic chucks.
- With current capacity of 10A and 15A; demagnetizing time is 6-15 seconds.
- Precisely adjust the magnetic force of electric magnetic chucks and indicate LED voltage and current.
- Suitable for any kind of electric magnetic chucks.

ORDER NO. VCC-820 (20A) FOR VEA-2460~ / VEM-60100Z



FEATURES

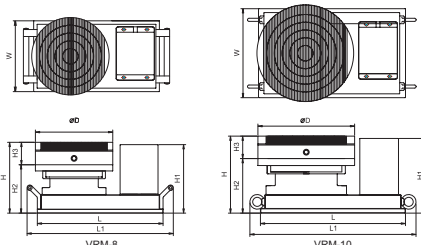
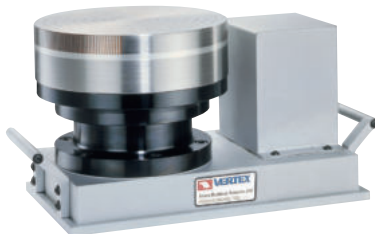
- Suitable for super powerful type of big electric magnetic chucks and could control 2 chucks at the same time.
- With current capacity of 20A; demagnetizing time is 8-15 seconds.
- Precisely adjust the magnetic force of electric magnetic chucks and indicate LED voltage and current.
- Built-in fan for radiating heat.
- Suitable for any kind of electric magnetic chucks.

Unit:mm

ORDER NO.	INPUT VOLTAGE (SINGLE PHASE)	OUTPUT		DIMENSION			NET WEIGHT (KGS)	CODE NO.
		VOLTAGE	CURRENT	A	B	C		
VCC-705	AC 110V/220V	DC 0-100V	5A	200	137	122	3.5	2015-380
VCC-805A	AC 110/220/380/415/440V	DC 0-100V	10A	150	330	260	18	2015-381
VCC-815	AC 220/380/415/440V	DC 0-120V	15A	150	330	260	20	2015-382
VCC-820	AC 220/380/415/440V	DC 0-120V	20A	180	385	295	32	2015-383



Variable Speed Rotary Magnetic Chuck



FEATURES

- This rotary magnetic chuck with the motor. The rotary speed can adjustable.
- It's easy and simple for set up on the surface grinding machine. It's for do rotary grind.
- The precision is within 0.002 m/m. High precision, High efficient.
- It provides well prevention for dust, coolant, and lubricants. Spindle end be applied accuracy bearing, can be assured to keep very steady under load grinding.



ORDER NO.	L	L1	W	H	H1	H2	H3	ØD	VOLT	G.W.	CODE NO.
VRM-8	325	378	183	182	177	124	58	200	220V	57kg	8001-047
VRM-10	376	437	230	200	193	141	58	250	220V	75kg	8001-048

Magnetic Lifter



CAM TYPE

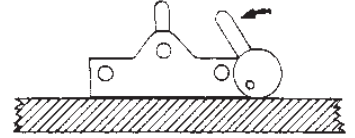


FEATURES

- Normal operation is not influenced on power off or system breakdown, as there is permanent magnet.
- Cam mechanism, easy operation.
- Ground surface of workpiece may be attracted to be scrap occasionally, please be careful.

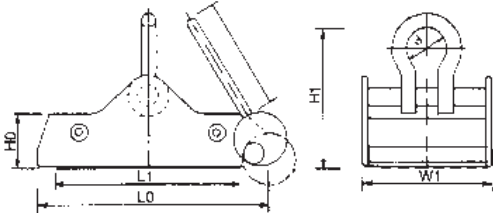
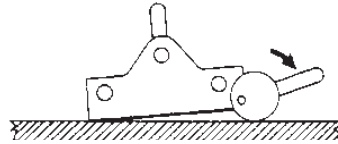
LOADING

- Take the magnetic table on the workpiece, and move it at the vertical position.



UNLOADING

- Move the level at the horizontal position, the workpiece will be separated.



ORDER NO.	CAPACITY	W1	L1	L0	H0	H1	d	l	NET WEIGHT (KGS)	CODE NO.
VGP-100	1000kg	204	298	366	65	125	50	135	25.8	2018-040
VGP-200	2000kg	330	380	445		130			46.8	2018-041

Magnetic Lifter

HANDLE TYPE



VML-80

VML-140

FEATURES

Work is held and released very smoothly.

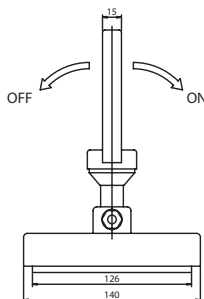
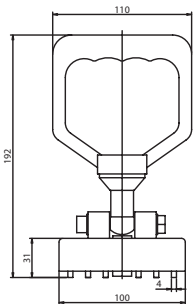
- Most suitable to move materials or semi-finished products such as black steel plate, flat iron and other materials etc.

HOLDING POWER

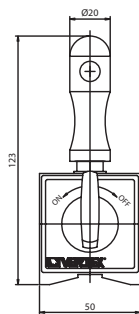
It depends on the attractive face, quality and thickness of material and clearance between the material and magnet.

MAXIMUM HOLDING POWER

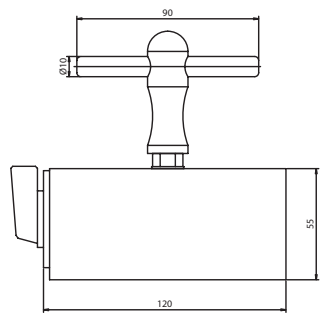
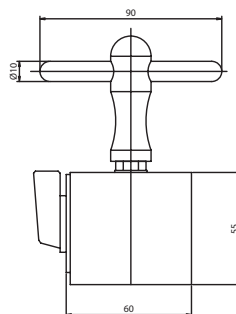
Workpiece must be thick enough and the surface must be free of dust. magnetic attraction is best and with low carbon-soft steels.



VML-150



VML-80



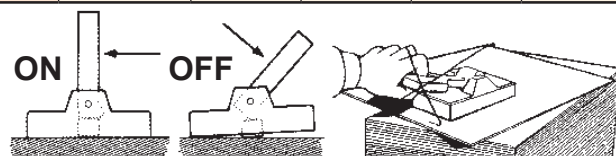
VML-140

Unit:mm

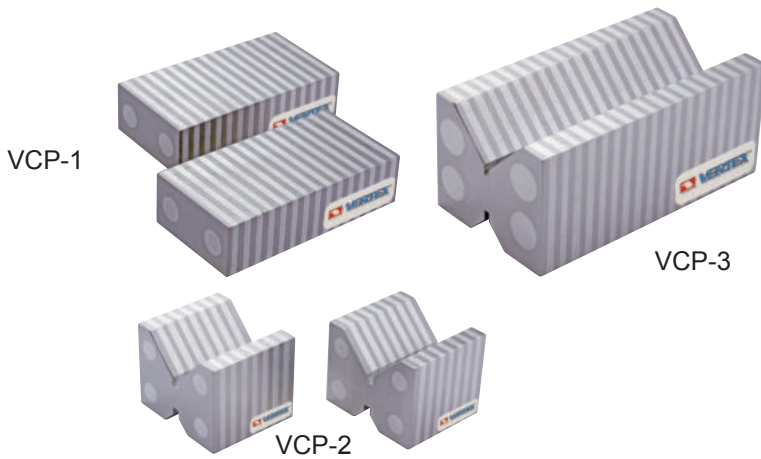


VML-150

ORDER NO.	CAPACITY	L	W	H	N.W (KGS)	CODE NO.
VML-80	80kgf	60	50	55	1.23	2018-054
VML-140	140kgf	120	50	55	2.2	2018-055
VML-150	150kgf	140	100	192	2.5	2018-056



Magnetic Transisting Block



- VCP-1 Chuck Parallels
100x49.5x25 m/m
3¹⁵/₁₆"x2"x1" Matched pair.
- VCP-2 Chuck Blocks
49.5x58x45.5 m/m
1³¹/₃₂"x2⁵/₁₆"x1¹³/₁₆" Matched pair.
- VCP-3 Chuck Block
109x58x46 m/m
4³/₈"x2³/₈"x1⁷/₈"single
- VCP-4 Chuck Block
Each one of VCP-1 & VCP-2

- The V-Blocks and Parallels transfer the magnetism from permanent magnetic chucks. The steel used in all V-Blocks and Parallels is selected for the highest magnetic transfer and is cast integrally with aluminum.

ORDER NO.	WEIGHT KGS	CODE NO.
VCP-1	1.3	2015-401
VCP-2	1.2	2015-402
VCP-3	1.4	2015-403
VCP-4	2.5	2015-404

Magnetic Transisting Block Set

ORDER NO.VCP-6 CODE NO.2015-410

WEIGHT:4.2kgs



Non-magnetic laminated plates and blocks are extras to increase the versatility of chucks. These plates and blocks offer excellent guidance of the magnetic force, and can be used in combination with chucks as 'extensions' for the clamping of workpieces of complex shapes.

BOXED SET

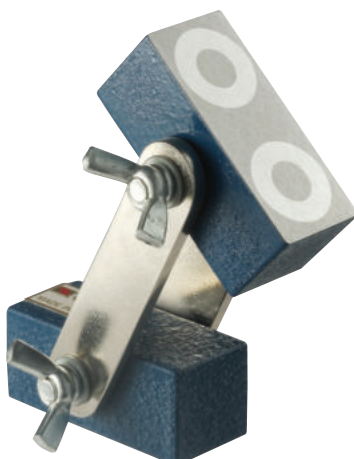
Comprises a selected set of 4 pairs of blocks

NO. of Blocks	STYLE	LxHxWxPCS	USED MODEL
1Pair		60x35x15x2	VCP-0
2Pair		100x50x25x2	VCP-1
1Pair		48x60x50x2	VCP-2

Magnetic Adjustable Link

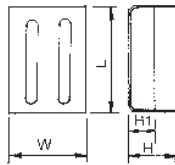
ORDER NO.VCP-5 CODE NO.2015-420

WEIGHT:0.8kg



- Each block 2"x1"x1". Length overall: 4¹/₈". width over all 2¹/₈".
- For Holding and welding.
- Magnetic blocks can be set at any angle by adjustment and locking of the wing nut. When used in multiples, a number of sheets can be held in complicated arrangement.
- Compact in size for holding work in confined spaces.

Magnetic Steel Sheet Separator



APPLICATION

- Suitable for separating a pile of thin iron plates or for chips separation.

FEATURES

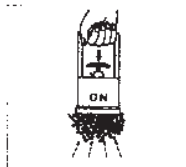
- By the principle of mutual repulsion between same magnetic poles, this item enable easy separation of thin iron plates.
- Also useable for chips separation on the small conveyor belt.



Unit:mm

ORDER NO.	DIMENSION				NET WEIGHT KGS	CODE NO.
	L	W	H	H1		
VCP-10	130	130	65	35	2.6	2015-430
VCP-11	210	155	65	35	4.2	2015-431

Magnetic Chip Collector



Magnet turned ON attracts Powerfully.



Magnet turned OFF Releases by Piling Up Lever.

APPLICATION

- You can use it in a wide range of fields for machining, casting food chemical processing, etc.
- Most suitable for collecting iron pieces scattered on the floor or mixed in the medium, for putting in order, and holding the work at the buffing and other types of operations. This is conveniently applied to uses in selecting and collecting iron powder and granule materials; even for house-hold and educational uses.

FEATURES

- Magnetic force is turned ON/OFF just by operating the level lightly with a hand.
- Powerful magnet ensure very strong adsorptive force with wide attractive face.



ORDER NO.	Dimension	Holding Mass	Weight kgs	CODE NO.
VCP-15	ø112x178H	0.9	1.9	2015-440

Magnetic Separating Bar Unit



VMS-9B

VMS-7B

Magnetic Separating Bar Unit made with Powerful magnet. it is essential to Increase operation efficiency in removing on substances from powder and grain Materials, as in the industries of chemical, various and plastic...etc.

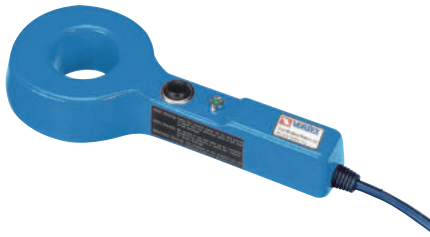
A wide range of applications and easy to mount.

TEMPERATURE LIMIT 60°C

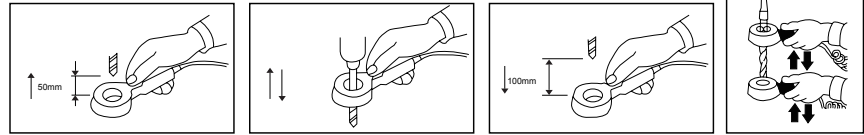
Unit:mm

ORDER NO.	DIMENSION (LxHxW)	WEIGHT KGS	CODE NO.
VMS-7B	180x170x75	2.4	2015-450
VMS-9B	239x220x65	3.8	2015-451

Demagnetizer



- Suit for drill, end mill, hard ware, cutting tool...etc.
- Handy type, it can also use the cutting tool.



ORDER NO.	INPUT VOLTAG	CURRENT	POWER	DUTY CYCLE	HOLE CAPACITY	WEIGHT KGS	CODE NO.
VDM-40	AC110V/220V	0.5A	80W	20%	Ø40MM	1.3	2019-030

NEW



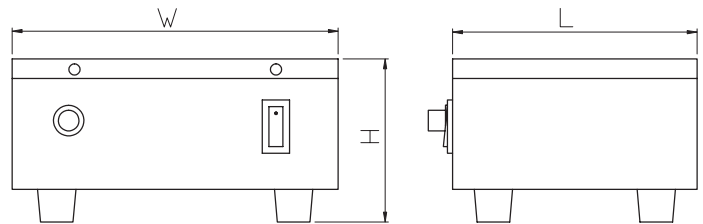
**HANDY TYPE
FOR BIGGER OR HEAVY WORKPIECE
※LIGHT DUTY ONLY**

- Suit for molding.
- Work perfectly in the narrow place.
- No need to remove the workpiece.



ORDER NO.	INPUT VOLTAGE (SINGLE PHASE)	CURRENT	※ USING TIME	DIMENSION			WEIGHT KGS	CODE NO.
				L	M	H		
	110V/220V/19H	1.2A	Demagnetize 1 minute waiting 4 minute	345	35	25	1.2	2019-031

Demagnetizer



FEATURES

- Suitable for general component spare parts, attachments, tools, etc, for fixed way demagnetization.
- Suitable for longtime use; be able to use continuously for 24 hours.
- With the design of double coils inside to avoid heat release.

DELUXE TYPE

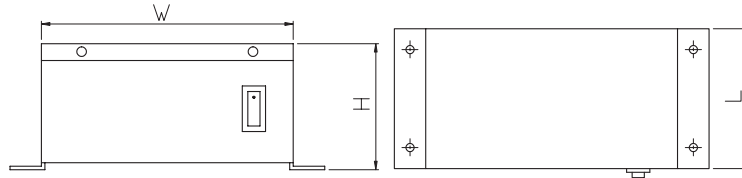
ORDER NO.	INPUT VOLTAGE	CAPACITY	DUTY CYCLE	DIMENSION			NW KGS	CODE NO.
				L	W	H		
VDM-68	110V/220V	AC-330VA	100%	140	195	110	7.4	2019-001

Unit:mm



FEATURES

- Input voltage 110-220 Volts AC.
- With On-Off switch.
- Quickly Demagnetizes tools, drills punches, dies, etc. Held by magnetic chucks. Parts are demagnetized by drawing across surface.
- Voltage 200-240 should be ordered.



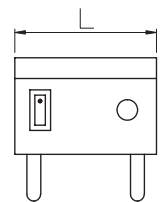
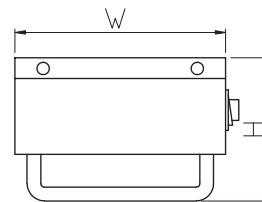
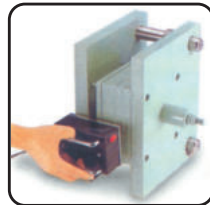
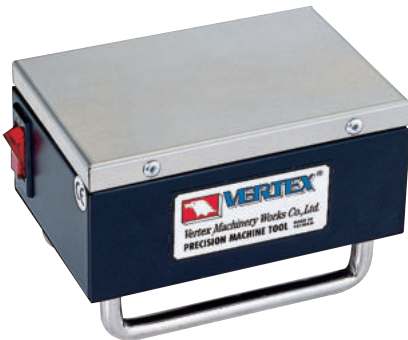
VDM-8, 11

Unit:mm

ORDER NO.	INPUT VOLTAGE	CAPACITY	WORKING SURFACE	HEIGHT	WEIGHT (KGS)	DUTY CYCLE	CODE NO.
VDM-8	AC- 110V 220V	210VA	160X110	100	4.5	50%	2019-011
VDM-11	AC- 110V 220V	550VA	200X280	130	16	100%	2019-021

Mini Type Demagnetizer

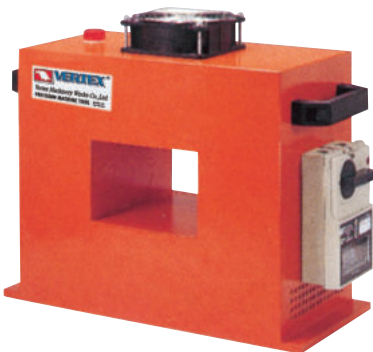
FOR HANDY AND CAN NOT BE MOVED OBJECT



Unit:mm

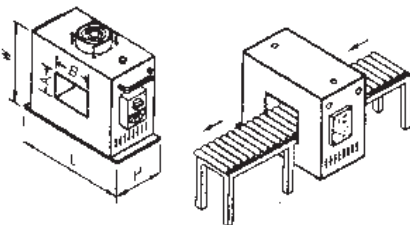
ORDER NO.	INPUT VOLTAGE	CAPACITY	WORKING SURFACE	HEIGHT	WEIGHT (KGS)	DUTY CYCLE	CODE NO.
VDM-9	AC- 110V 220V	110VA	123X83	83	1.8	90%	2019-020

Tunnel Type Demagnetizer And Magnetizer



FEATURES

- Merely using tools to pass through or move into a tunnel will cause a good demagnetizing effect.
- Suitable for planned automatic process; be adapted for delivery belts to proceed in order to increase productivity.
- Suitable for hand manual tools, etc. for filling magnetism.
- Suitable for large production of component spare parts, attachments, tools...etc.
- Suitable for longtime use; be able to use continuously for 24 hours.
- Super efficacy in demagnetizing and magnetizing; suitable for many kinds of metals.
- Attached a fan inside for dissipating heat.



ORDER NO.	POWER SOURCE	CAPACITY	DIMENSION			THROUGH HOLE		NET WEIGHT KGS	DUTY CYCLE	CODE NO.
			L	W	H	A	B			
VDM-150	AC 220/380V (single phase)	3520AV	370	370	200	100	150	33	100%	2019-025
VDM-250		4840AV	470	370	200	150	250			52
VDM-450	AC 220/380V (3 phase)	4400VA	700	500	200	250	450	80		2019-027

Chip Collector Mini Handy Type



NEW



- Pull the trigger to drop attracted items easily.
- Permanent magnet.
- Light and handy design fitting ergonomics.
- Easy to pick up various kinds of hand of hand tools and small iron or steel parts for office, house and factory.
- Impact-proof plastic materials.

Unit:mm

ORDER NO.	PACKING	HOLDING MASS	CUFT	DIMENSION			WEIGHT KGS	CODE NO.
				L	W	H		
VCC-16	Color BOX	0.65	0.09'	110	110	190	0.7	2019-040

Chip Collector With Adjustable Arm Type

NEW



- Work perfectly in the narrow space.
- Pick up ferrous metal items such as tools, bolt, paper clips, nails, etc.
- Deluxe handle for comfort.
- Easy to use, safe, practical and time saving.
- Permanent magnet.
- Weight : 2 kgs

ORDER NO.	MAGNETIC BASE	HOLDING MASS	CUFT	TOTAL LENGTH	CODE NO.
VCC-17A	120x70m/m	0.7	0.4'	700m/m	2019-041A

Chip Collector With Wheels

NEW



- Easy to use, safe and practical time saving device.
- Release magnetic pick up tool has a magnetic device which enable to attract any metal items and spare parts laying on the floor without the trouble to pick them up one by one.
- Pull the trigger to release magnetic force.
- Permanent magnet.

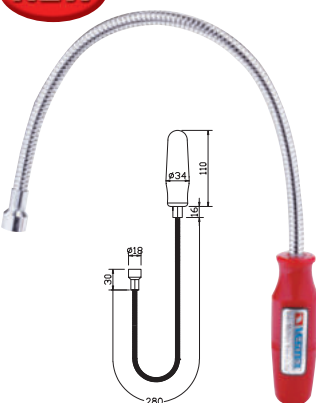
ORDER NO.	PACKING	HOLDING MASS	CUFT	LENGTH	WEIGHT KGS	TOTAL WIDTH	CODE NO.
VCC-19	In Bulk	0.85	1.15'	720~1035m/m	1.5	377m/m	2019-043

Chip Collector With Flexible Arm

Flexible Magnetic Pick-Up Tool

WEIGHT:0.4kg

NEW



ORDER NO.	VCC-20
PACKING	Tied On Card
HOLDING MASS	0.11
CUFT	0.04'
LENGTH	533m/m
CAPACITY	1.2 lbs / 0.54kgs
CODE NO.	2019-044

Chip Collector With LED

Lighted Flexible Magnetic Pick-Up Tool

WEIGHT:0.2kg

NEW



ORDER NO.	VCC-21
PACKING	Tied On Card
HOLDING MASS	0.08
CUFT	0.04'
LENGTH	533m/m
CAPACITY	0.7 lbs / 0.31kgs
CODE NO.	2019-045

With 2pc 1.5V batteries

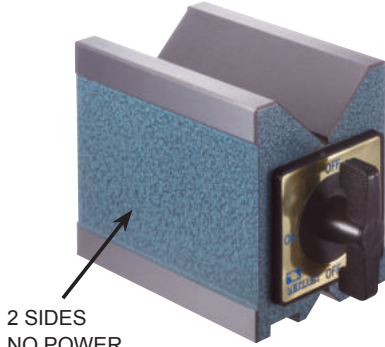


Magnetic V Block

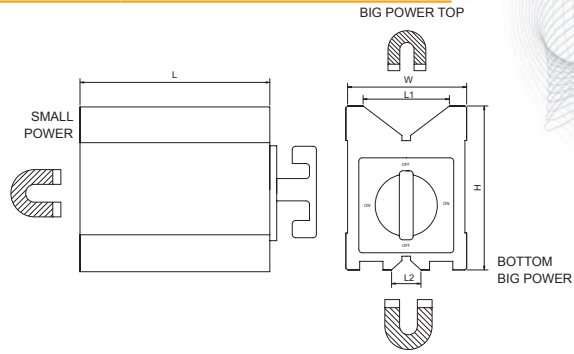
1 PCS



VERTEX®



2 SIDES
NO POWER

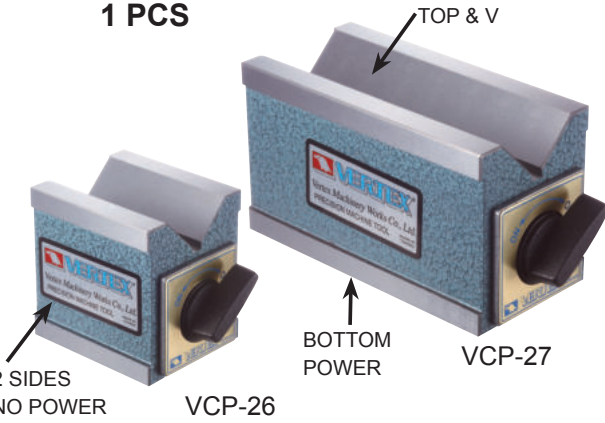


ORDER NO.	Magnetic Power(pull)	Dimension					Wt. kgs	CODE NO.
		H	W	L	L1	L2		
VCP-25	70kgs	95.3 3.75"	70 2.76"	101.6 4"	50 1.97"	20 0.75"	3.9	2015-501



Magnetic V Block

1 PCS

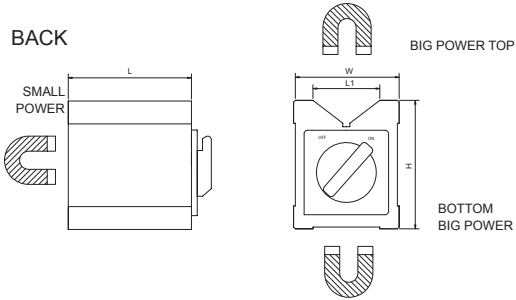


2 SIDES
NO POWER

VCP-26

BOTTOM
POWER

VCP-27



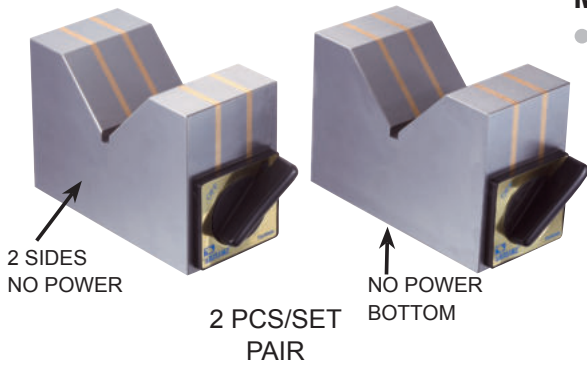
ORDER NO.	Magnetic Power(pull)	Dimension					Wt. kgs	CODE NO.
		H	W	L	L1	L2		
VCP-26	30kgs	73 2.87"	54 2.13"	70 2.76"	38 1.5"		1.8	2015-510
VCP-27	35kgs	73 2.87"	60 2.36"	125 4.29"	38 1.5"		3.3	2015-511



Magnetic V Block

Magnetic V-Block

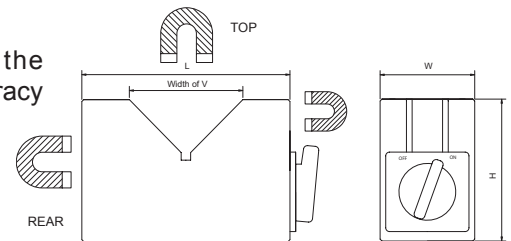
- Two pieces finished to the same dimension and accuracy are used together as a set.



2 SIDES
NO POWER

2 PCS/SET
PAIR

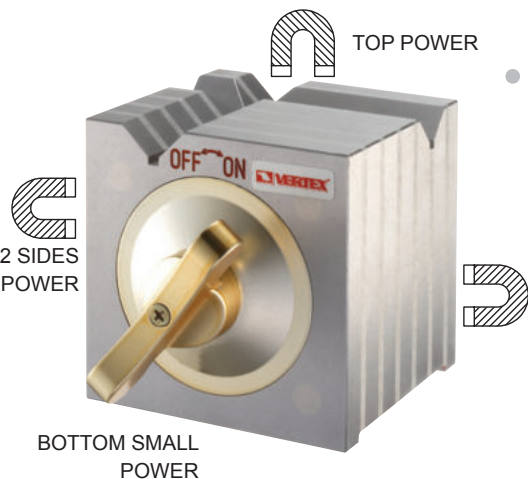
NO POWER
BOTTOM



ORDER NO.	Magnetic Power(pull)	Dimension			Width of V	Wt. kgs	CODE NO.
		H	W	L			
VCP-29	17kgs	74 2.91"	45 1.77"	110 4.33"	60 2.36"	4.9	2015-521
VCP-30	23kgs	100 3.94"	50 1.97"	150 5.91"	90 3.54"	8.9	2015-522



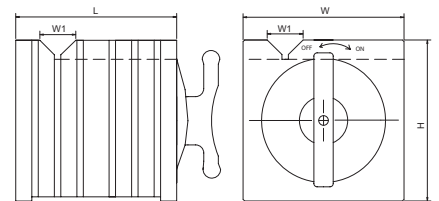
Magnetic Square Block



2 SIDES
POWER

BOTTOM SMALL
POWER

- The V-Blocks and Parallels transfer the magnetism from permanent magnetic chucks. The steel used in all V-Blocks and Parallels is selected for the highest magnetic transfer and is cast integrally with aluminum.



ORDER NO.	Mag Power of V groove	Mag. Power of base	Dimension				Wt. kgs	CODE NO.
			H	W	L	W1		
VCP-31	25kgs	50kgs	100 3.94"	100 3.94"	100 3.94"	26 1.02"	6.5	2015-530
VCP-32	50kgs	140kgs	150 5.91"	150 5.91"	150 5.91"	32 1.26"	20.4	2015-531



Magnetic Tools FOR DIAL GAUGE, INDICATORS



FIXED ARM TYPE VMB-B,01,02 THE DIAL CLAMP HOLE Ø6.5 & Ø8



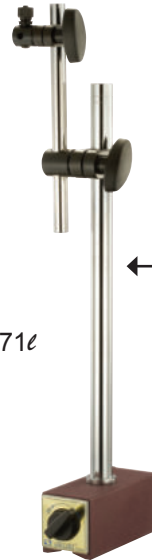
ORDER NO. VMB-B
MAGNETIC BASE
/80kgs



ORDER NO. VMB-01
MAGNETIC BASE
(ADJUSTABLE TYPE)
/80kgs



ORDER NO. VMB-02
MAGNETIC BASE
(ADJUSTABLE TYPE)
/80kgs



ORDER NO. VMB-03
MAGNETIC BASE
HEIGHT ROD TYPE
/130kgs

← Ø20x310

← Ø12x171ℓ



HEAVY
DUTY

ORDER NO. VMB-181
MAGNETIC BASE
/100kgs

ORDER NO.	BASE SIZE LXWXH(MM)	HOLDING POWER	MAIN ROD O.D X L	SUB ROD O.D X L	WEIGHT (KGS)	CODE NO.
VMB-B	60X50X55	80KGS	Ø12X173	Ø10X162	1.6	2015-601
VMB-01	60X50X55	80KGS	Ø12X176	Ø10X150	1.6	2015-602
VMB-02	60X50X55	80KGS	Ø12X171	Ø10X153	1.6	2015-603
VMB-70	73X50X55	100KGS	Ø25X128	Ø25X116	1.7	2015-604
VMB-106	73X50X55	100KGS	Ø25X125	Ø25X125	1.9	2015-605
VMB-106H	75X50X55	100KGS	Ø25X125	Ø25X125	2.2	2015-606
VMB-03	115X50X55	130KGS	Ø20X310	Ø14X200	3.9	2015-607
VMB-160	70x46x60	100KGS	Ø16x230	Ø16x260	2.1	2015-608
VMB-180	75x60x80	100KGS	Ø20x412	Ø16x250	3.8	2015-609
VMB-181	73x50x55	100KGS	Ø30X175.5	Ø21X137	1.9	2015-609A



Ø8

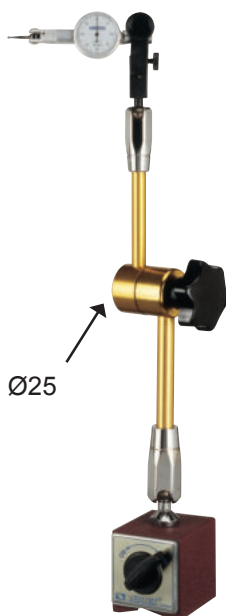


Ø6.5

UNIVERSAL ARM TYPE VMB-70,106,106H WITHOUT DIAL THE DIAL CLAMP HOLE Ø6.5, Ø8 & DOVETAIL



ORDER NO. VMB-70
DELUXE UNIVERSAL
MAGNETIC BASE /100kgs



Ø25

ORDER NO. VMB-106
MECHANICAL ARM
MAGNETIC BASE /100kgs



Ø25

ORDER NO. VMB-106H
HYDRAULIC ARM
MAGNETIC BASE /100kgs



← Ø16x230ℓ

ORDER NO. VMB-160
W/O DIAL INDICATOR



← Ø20x412ℓ

ORDER NO. VMB-180
W/O DIAL INDICATOR

The head also suit for dial indicators



ORDER NO. VMB-185
HYDRAULIC ARM
MAGNETIC BASE/80KGS



ORDER NO. VMB-06
FLEXIBLE ARM
WITH MAGNETEC BASE



ORDER NO. VML-A
MAGNETIC BASE
WORKING BEAM
* FOR 20W/40W/60W 110V
* FOR 20W/40W/60W 220V



ORDER NO. VML-B
MAGNETIC BASE
WORKING BEAM
* FOR 20W/40W/60W 110V
* FOR 20W/40W/60W 220V



ORDER NO. VML-C
MAGNETIC BASE
WORKING BEAM
* FOR 20W/40W/60W 110V
* FOR 20W/40W/60W 220V

ORDER NO.	BASE SIZE LXWXH(MM)	HOLDING POWER	MAIN ROD O.D X L	WEIGHT (KGS)	CODE NO.
VMB-185	73X50X55	100KGS	Ø31X124.5	2.0	2015-609B
VMB-06	60X50X55	75KGS	Ø16X208	1.6	2015-610
VML-A	60X50X55	75KGS	Ø20X200	1.5	2015-611
VML-B	60X50X55	75KGS	Ø26X200	1.5	2015-612
VMB-00	60X50X55	80KGS		1.1	2015-613
VMB-11	117X50X55	140KGS		2.1	2015-614
VMB-12	60X50X55	80KGS		1.1	2015-615
VML-C	60X50X55	80KGS	Ø20X460	2.2	2015-616
VML-M	60X50X55	80KGS	Ø15X325	1.7	2015-617



2X

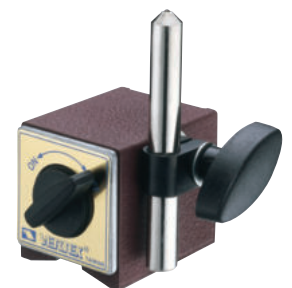
ORDER NO. VML-M
MAGNETIC BASE WITH
MAGNIFYING GLASS
M8X1.25p,80kgs



ORDER NO. VMB-00
MAGNETIC BASE ONLY
M8X1.25p,80kgs



ORDER NO. VMB-11
MAGNETIC BASE ONLY
M8X1.25p,140kgs



ORDER NO. VMB-12
WHEEL DRESSER
CLAMP HOLE 12MM
WITHOUT DIAMOND
DRESSER PEN

MICRO ADJUSTMENT W/O MICRO ADJUSTMENT



ORDER NO. VMF-112
MINI MAGNETIC
BASE

ORDER NO. VMF-113
MINI MAGNETIC
BASE

ORDER NO. VH-70
MINI MAGNETIC
BASE
ROUND BASE OR
SQUARE BASE

ORDER NO. VMF-102A/B
MINI DELUXE UNIVERSAL
MAGNETIC BASE
SUITABLE FOR EDM USING.

ORDER NO. VMS-1/4
ORDER NO. VMS-3/8
STEEL HOSE WITH
NOZZLE

ORDER NO.	BASE SIZE LXWXH(MM)	HOLDING POWER	MAIN ROD O.D X L	SUB ROD O.D X L	WEIGHT (KGS)	CODE NO.
VMF-112	34.5X30X35	17KGS	Ø20 X 70	Ø15 X 65	0.6	2015-619
VMF-113	34.5X30X35	17KGS	Ø20 X 70	Ø15 X 65	0.55	2015-619A
VH-70	31X31X32	15KGS	Ø10 X 70	Ø6 X 90	0.4	2015-620
VMF-102A	34.5X30X35	17KGS	Ø20 X 70	Ø20 X 65	0.57	2015-621A
VMF-102B	Ø31X31H	17KGS	Ø20 X 70	Ø15 X 65	0.5	2015-621B
VMS-1/4			Ø11 X 320	HOSE THREAD 1/4	0.2	2015-640
VMS-3/8			Ø15 X 370	HOSE THREAD 3/8	0.4	2015-641
VMH-54	60X50X55	75KGS	Ø16 X 330	2PCS.HOSE	1.4	2015-622
VMH-62	60X50X55	75KGS	Ø16 X 330	3PCS.HOSE	1.5	2015-623
VMH-63	60X50X55	75KGS	Ø11 X 330	1PCS.HOSE	1.6	2015-642
VMH-64	60X50X55	75KGS	Ø11 X 330	2PCS.HOSE	2	2015-643
VMH-65	60X50X55	75KGS	Ø11 X 330	3PCS.HOSE	2.2	2015-644



ORDER NO. VMH-54
(2 HOSE)
MAGNETIC BASE
WITH HOSE NOZZLE

ORDER NO. VMH-62
(3 HOSE)
MAGNETIC BASE
WITH HOSE NOZZLE

ORDER NO. VMH-63
(1 HOSE)
MAGNETIC BASE
WITH STEEL NOZZLE

ORDER NO. VMH-64
(2 HOSE)
MAGNETIC BASE
WITH STEEL NOZZLE

ORDER NO. VMH-65
(3 HOSE)
MAGNETIC BASE
WITH STEEL NOZZLE



Multi-Function Mist Coolant System



ORDER NO.VCS-500 CODE NO.2015-700

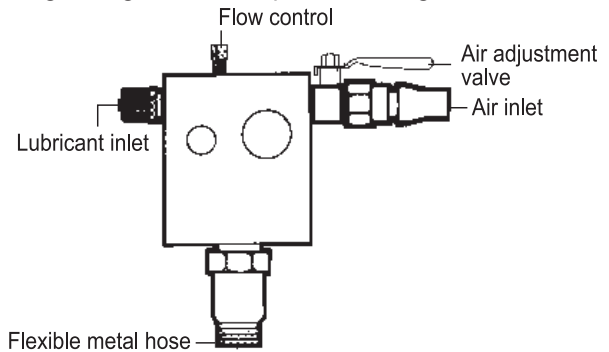
WEIGHT:0.8kg



FEATURES

- Flexible functions as cooling, lubrication and blowing the metal chips can be performed at the same time.
- Designed and manufactured for improving machinability, cutting speed, and extending tool service life, Saving working time and production cost.
- It insures better quality of parts finishing and cutting performance.
- The unit help to creat micro-finish effect even working on tough alloy steels and exotic metals.

This mist coolant systems are suited to fit on lathe, milling, drilling, tapping, grinding, cutter grinding, NC, CNC, press, sawing machine.....



Mist Coolant With Magnetic Base



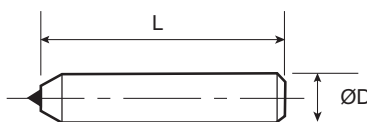
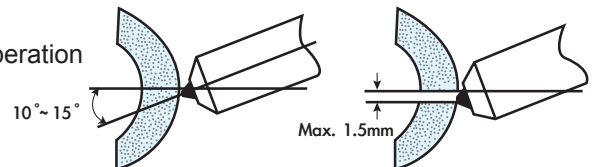
ORDER NO. VMH-71 (1 HOSE)
MAGNETIC BASE WITH
MIST COOLANT SYSTEM

ORDER NO.	BASE SIZE LXWXH(MM)	HOLDING POWER	MAIN ROD O.D X L	SUB ROD O.D X L	WEIGHT (kgs)	CODE NO.
VMH-71	62X50X55.5	75KGS	Ø15X500	1PCS.HOSE	2	2015-618



Diamond Dressing Tools

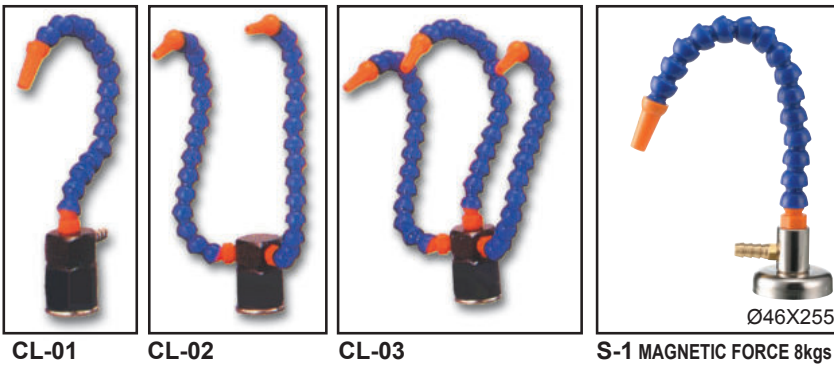
Installation And Operation



SINGLE POINT DIAMOND DRESSERS

ORDER NO.	ØD x L	DIAMOND SIZE. wt.(cts.)	For Grinding Wheels Size(mm)	CODE NO.
VDR-1010	Ø10D x 80L	0.20	Ø150 x 25 or smaller	2015-665
VDR-1012	Ø12D x 100L	0.20		2015-666
VDR-3310	Ø10D x 80L	0.75	Ø150 ~ Ø300 x 25	2015-667
VDR-3312	Ø12D x 100L	0.75		2015-668
VDR-5010	Ø10D x 80L	1.0	Ø300 ~ Ø450 x 25~40	2015-669
VDR-5012	Ø12D x 100L	1.0		2015-670

Adjustable Magnetic Nozzle Kit



- The adjustable magnetic nozzle is suitable for cooling and lubricating in machining process.
- Can be prolonged the cutter life and advance the accuracy and beauty of workpiece.
- By different of usage, there are much models for selection.
- Machine tool made by customer's specification and cooperated to develop.
- When using, please take out the spacer (under the magnetic base)



ORDER NO.	Weight	CODE NO.
CL-01	0.3kgs	2015-624
CL-02		2015-625
CL-03		2015-626
CL-01A		2015-627
CL-02A		2015-628
CL-03A		2015-629
S-1	0.2kgs	2015-630
L2-S	0.5kgs	2015-631

WITH PLASTIC NOZZLE & VALVE
O.D.34XH230mm

WITH STEEL NOZZLE
O.D.68X330H

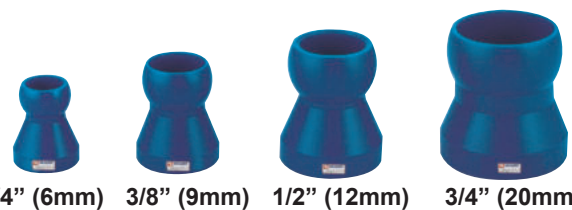
Adjustable Coolant Hose



- 4 kinds of orifice inner diameter are available: 1/4", 3/8", 1/2", and 3/4".
- Adjustable Coolant Hose is highly pliable; it holds its shape well and will not spring back.
- Made of Dupont 100P material, this highly rigid yet resilient acetal (POM) is strongly resistant to oils and chemicals.
- Adjustable Coolant Hose will not damage cutting blade if there were accident contact.
- Adjustable Coolant Hose does not conduct electricity and is good for operating on electrical discharge machine (EDM).
- Bending hose will not reduce inner diameter, hose will not pinch or fatigue.
- Adjustable Coolant Hose is designed for the transport of low-pressure fluids.

List of suitable fluids

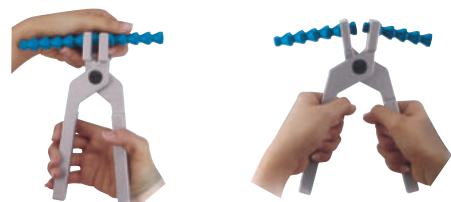
Ordinary Adjustable Coolant Hoses are manufactured from acetal (POM), Hose is available in dark blue and orange colors.



ITEM	SUITABLE	UNSUITABLE
ALCOHOLS, ETHUL	O	
ACIDS		X
ACETONE	O	
BASES, STRONG		X
AMMONIUM HYDROXIDE (STRONG)		X
COMMERCIAL DISH DETERGENTS	O	
GASOLINE	O	
GREASES	O	
HYPOCHLORITE LON SOLUTIONS		X
LACQUER SOLVENTS	O	
OILS	O	
SODIUM HYDROXIDE	O	
SODIUM HYPOCHLORITE		X
INSECTICIDES	O	
BRAKE OILS	O	

Caution:

our materials are good with alcohols, ethyl, acetone, commercial dish detergents, gasoline, greases, lacquer solvents, oils, sodium hydroxide, insecticides, and brake oils. Not good for acids, bases, strong, ammonium hydroxide(strong), Hypo-chlorite Lon solutions, sodium Hypochlorite. Use inappropriate liquids may cause damage.





CODE NO. & DESCRIPTION

FIGURE

1/4" VALVE & HOSE KIT

62220

33CM Length Hose Kit

Assembled with:

1-Acid Resistant 1/4" Male NPT Valve

1-20 Element Segments

1-(1/16" or 1/8" or 1/4") Round Nozzle

ORDER NO. VHK-1/4A CODE NO.2016-001



62720

33CM Length Hose Kit

Assembled with:

1-1/4" Male NPT Valve

1-20 Element Segments

1-(1/16" or 1/8" or 1/4") Round Nozzle

ORDER NO. VHK-1/4 CODE NO.2016-002



3/8" VALVE & HOSE KIT

63320

36CM Length Hose Kit

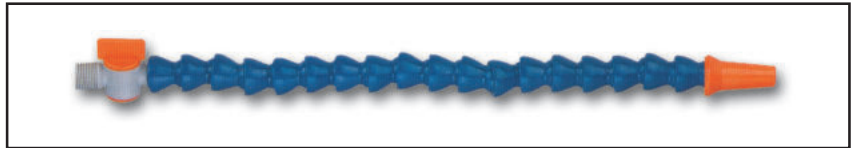
Assembled with:

1-Acid Resistant 3/8" Male PT Valve

1-16 Element Segments

1-(1/4" or 3/8" or 1/2") Round Nozzle

ORDER NO. VHK-3/8A CODE NO.2016-003



63720

36CM Length Hose Kit

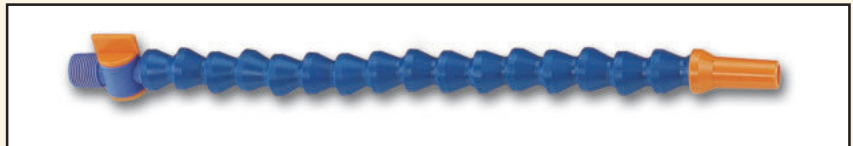
Assembled with:

1-3/8" Male PT Valve

1-16 Element Segments

1-(1/4" or 3/8" or 1/2") Round Nozzle

ORDER NO. VHK-3/8 CODE NO.2016-004



1/2" VALVE & HOSE KIT

64420

33CM Length Hose Kit

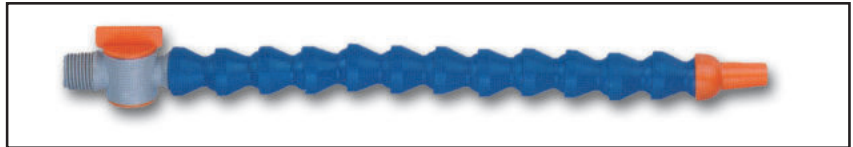
Assembled with:

1-Acid Resistant 1/2" Male NPT Valve

1-12 Element Segments

1-(1/4" or 3/8" or 1/2") Round Nozzle

ORDER NO. VHK-1/2A CODE NO.2016-005



64720

33CM Length Hose Kit

Assembled with:

1-1/2" Male NPT Valve

1-12 Element Segments

1-(1/4" or 3/8" or 1/2") Round Nozzle

ORDER NO. VHK-1/2 CODE NO.2016-006

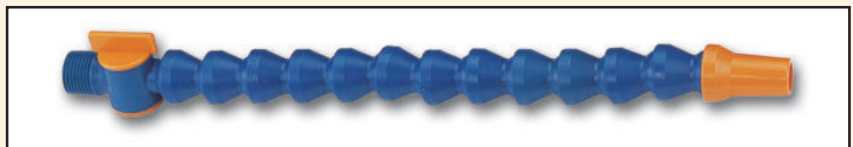




FIG. ITEM NO. DESCRIPTION

	82020	1/4" Hose Kit 33 CM Length with Fittings: 2-14 CM Segments 1/16", 1/8", 1/4" Nozzles 1/4" & 1/8" Male PT connectors CODE NO.2016-101
	82020A	1/4" Hose Kit 33 CM Length with Fittings: 2-14 CM Segments 1/16", 1/8", 1/4" Nozzles 1/4" & 1/8" Male NPT connectors CODE NO.2016-102
	82220	1/4" Extenden Element Kit with Element Clamps Includes 4 each of: 1/4" Extended Elements 1/4" Element Clamps CODE NO.2016-103
	82021	1/4" Segment pack (2-14CM 20pcs) CODE NO.2016-104-1
	82051	1/4" 1524 CM coil CODE NO.2016-104-2
	82071	1/4" 2500 Cm coil CODE NO.2016-104-3 Weight : 0.00177kg
	62423	1/4" Circle Flow Nozzle Kit Assembled with 15 Side Flow Nozzles 1/4" & 1 End Cap 1/4" CODE NO.2016-105
	82221	1/4" Extended Elements, pack of 4 CODE NO.2016-106
	82241	1/4" Extended Elements, pack of 20 CODE NO.2016-107 Weight : 0.00641kg
	82222	1/4" Element Clamps, pack of 4 CODE NO.2016-108
	82242	1/4" Element Clamps, pack of 20 CODE NO.2016-109 Weight : 0.00265kg
	82326	1/4" 90° Nozzle Kit 1 Each: 1/16", 1/8", 1/4" & Spray Bar Nozzles CODE NO.2016-110
	82022	1/16" Round Nozzles Pack of 4 CODE NO.2016-111
	82042	1/16" Round Nozzles Pack of 50 CODE NO.2016-112 Weight : 0.0016kg
	82023	1/8" Round Nozzles Pack of 4 CODE NO.2016-113
	82043	1/8" Round Nozzles Pack of 50 CODE NO.2016-114 Weight : 0.00195kg
	82024	1/4" Round Nozzles Pack of 4 CODE NO.2016-115
	82044	1/4" Round Nozzles Pack of 50 CODE NO.2016-116 Weight : 0.00288kg
	82223	1/16" 90° Nozzles, pack of 4 CODE NO.2016-117
	82243	1/16" 90° Nozzles, pack of 20 CODE NO.2016-118 Weight : 0.00156kg
	82224	1/8" 90° Nozzles, pack of 4 CODE NO.2016-119
	82244	1/8" 90° Nozzles, pack of 20 CODE NO.2016-120 Weight : 0.00183kg

FIG. ITEM NO. DESCRIPTION

	82225	1/4"90° Nozzles, pack of 4 CODE NO.2016-121
	82245	1/4"90° Nozzles, pack of 20 CODE NO.2016-122 Weight : 0.00236kg
	82226	1/4"90° Spray Bar Nozzles, pack of 2 CODE NO.2016-123
	82246	1/4"90° Spray Bar Nozzles, pack of 20 CODE NO.2016-124 Weight : 0.00285kg
	82017	3/8" Flat Nozzles, pack of 2 CODE NO.2016-125
	82037	3/8" Flat Nozzles, pack of 20 CODE NO.2016-126 Weight : 0.00202kg
	82027	1" Flare Nozzles, pack of 2 CODE NO.2016-127
	82047	1" Flare Nozzles, pack of 20 CODE NO.2016-128 Weight : 0.00288kg
	82025	1/8" PT Connectors pack of 4 CODE NO.2016-129
	82035	1/8" PT Connectors pack of 50 CODE NO.2016-130 Weight : 0.00232kg
	82025A	1/8" NPT Connectors pack of 4 CODE NO.2016-131
	82035A	1/8" NPT Connectors pack of 50 CODE NO.2016-132 Weight : 0.0023kg
	82026	1/4" PT Connectors pack of 4 CODE NO.2016-133
	82036	1/4" PT Connectors pack of 50 CODE NO.2016-134 Weight : 0.00259kg
	82026A	1/4" NPT Connectors pack of 4 CODE NO.2016-135
	82036A	1/4" NPT Connectors pack of 50 CODE NO.2016-136 Weight : 0.00267kg
	82028	1/4" Y Fitting Pack of 2 CODE NO.2016-137
	82038	1/4" Y Fitting Pack of 20 CODE NO.2016-138 Weight : 0.00269kg
	82011	1/4" Double Sockets, pack of 4 CODE NO.2016-139
	82031	1/4" Double Sockets, pack of 20 CODE NO.2016-140 Weight : 0.00177kg
	82012	1/4" Socket to 1/8" NPTF, pack of 4 CODE NO.2016-141
	82032	1/4" Socket to 1/8" NPTF, pack of 20 CODE NO.2016-142 Weight : 0.00287kg
	82013	3/8" SAE Flare Nut Adapters, pack of 4 CODE NO.2016-143
	82033	3/8" SAE Flare Nut Adapters, pack of 20 (5/8-18 Thread) CODE NO.2016-144 Weight : 0.00397kg
	82014	1/4" SAE Flare Nut Adapters, pack of 4 CODE NO.2016-145
	82034	1/4" SAE Flare Nut Adapters, pack of 20 (7/16-20 Thread) CODE NO.2016-146 Weight : 0.00167kg
	62420	1/4" Elbow Fittings pack of 2 CODE NO.2016-147
	62430	1/4" Elbow Fittings pack of 20 CODE NO.2016-148 Weight : 0.00242kg
	62426	1/4" T Fitting pack of 2 CODE NO.2016-149
	62436	1/4" T Fitting pack of 20 CODE NO.2016-150 Weight : 0.00375kg
	62422	1/4" Side Flow Nozzles, pack of 4 CODE NO.2016-151
	62442	1/4" Side Flow Nozzles, pack of 20 CODE NO.2016-152 Weight : 0.00275kg

FIG. ITEM NO. DESCRIPTION


	62424	1/4" End Caps, pack of 4 CODE NO.2016-153-1
	62444	1/4" End caps, pack of 20 CODE NO.2016-153-2 Weight : 0.00191kg
	82228	1/4" Swivel Nozzle 40, pack of 2 CODE NO.2016-154
	82248	1/4" Swivel Nozzle 40, pack of 20 CODE NO.2016-155 Weight : 0.00875kg
	82229	1/4" Swivel Nozzle 60, pack of 2 CODE NO.2016-156
	82249	1/4" Swivel Nozzle 60, pack of 20 CODE NO.2016-157 Weight : 0.00845kg
	82721	1/4" NPT Male Hose Nipple Valves pack of 2 CODE NO.2016-158
	82731	1/4" NPT Male Hose Nipple Valves pack of 10 CODE NO.2016-159 Weight : 0.0078kg
	82521	Acid Resistant 1/4" NPT Male Hose Nipple Valves pack of 2 CODE NO.2016-160
	82531	Acid Resistant 1/4" NPT Male Hose Nipple Valves pack of 10 CODE NO.2016-161 Weight : 0.00775kg
	82722	1/4" Connection Valves, pack of 2 CODE NO.2016-162
	82732	1/4" Connection Valves, pack of 10 CODE NO.2016-163 Weight : 0.00693kg
	82522	Acid Resistant 1/4" Connection Valves, pack of 2 CODE NO.2016-164
	82532	Acid Resistant 1/4" Connection Valves, pack of 10 CODE NO.2016-165 Weight : 0.00702kg
	82723	1/4" Male PT Valves, pack of 2 CODE NO.2016-166
	82733	1/4" Male PT Valves, pack of 10 CODE NO.2016-167 Weight : 0.0076kg
	82523	Acid Resistant 1/4" Male NPT Valves, pack of 2 CODE NO.2016-168
	82533	Acid Resistant 1/4" Male NPT Valves, pack of 10 CODE NO.2016-169 Weight : 0.00774kg
	82724	1/4" Female PT Valves, pack of 2 CODE NO.2016-170
	82744	1/4" Female PT Valves, pack of 10 CODE NO.2016-171 Weight : 0.00809kg
	82524	Acid Resistant 1/4" Female NPT Valves, pack of 2 CODE NO.2016-172
	82534	Acid Resistant 1/4" Female NPT Valves, pack of 10 CODE NO.2016-173 Weight : 0.00836kg
	82725	1/4" Connection Check Valves, pack of 2 CODE NO.2016-174
	82745	1/4" Connection Check Valves, pack of 10 CODE NO.2016-175 Weight : 0.00562kg
	52400	Modular Manifold System 1/4" 1/4" Elbow Fitting-1 pcs 1/4" Manifold Bracket-1 pcs 1/4" T Fittings-3 pcs 1/4" Mounting screw-3 pcs CODE NO.2016-176 Weight : 0.0322kg
	52410	1/4" Main Flow Control Manifold System 1/4" Modular Manifold-1 pcs 1/4" Connection Valves-5 pcs CODE NO.2016-177 Weight : 0.0675kg
	52416	1/4" Manifold Brackets pack of 2 CODE NO.2016-178 Weight : 0.00973kg
	26171	1/4" Hose Assembly pliers CODE NO.2016-179




1/2" INSIDE DIAMETER

FIG. ITEM NO. DESCRIPTION

 **84040** 1/2" Hose Kit
33 CM Length with Fittings:
2-14 CM Segments
1/4", 3/8", 1/2" Nozzles
3/8", 1/2" Male PT
connectors
[CODE NO. 2016-201](#)


 **84040A** 1/2" Hose Kit
33 CM Length with Fittings:
2-14 CM Segments
1/4", 3/8", Nozzles
3/8", 1/2" Male NPT
connectors
[CODE NO. 2016-202](#)

 **84440** 1/2" Extended Element Kit
with Element Clamps
Includes 4 each of:
1/2" Extended Elements
1/2" Element Clamps
[CODE NO. 2016-203](#)


84041 Segment pack
(2-14 CM 12pcs)
[CODE NO. 2016-204](#)

 **84081** 1/2" 1524 CM coil
[CODE NO. 2016-205](#)

84091 1/2" 2500 CM coil
[CODE NO. 2016-206](#)
Weight : 0.00555kg

 **84643** 1/2" Circle Flow Nozzle Kit
Assembled with 15 Side
Flow Nozzles 1/2" &
1 End Cap 1/2"
[CODE NO. 2016-207](#)

84441 1/2" Extended Elements,
pack of 4 [CODE NO. 2016-208](#)


 **84461** 1/2" Extended Elements,
pack of 20 [CODE NO. 2016-209](#)
Weight : 0.01186kg

84346 90° Nozzle Kit
1 Each: 1/4", 3/8", 1/2"
& Spray Bar Nozzles
[CODE NO. 2016-210](#)


 **84044** 1/4" Round Nozzles,
pack of 4 [CODE NO. 2016-211](#)

84064 1/4" Round Nozzles,
pack of 50 [CODE NO. 2016-212](#)
Weight : 0.00339kg


84042 3/8" Round Nozzles,
pack of 4 [CODE NO. 2016-213](#)

 **84062** 3/8" Round Nozzles,
pack of 50 [CODE NO. 2016-214](#)
Weight : 0.0435kg

84043 1/2" Round Nozzles,
pack of 4 [CODE NO. 2016-215](#)

 **84063** 1/2" Round Nozzles,
pack of 50 [CODE NO. 2016-216](#)
Weight : 0.0597kg

84443 1/4" 90° Nozzles,
pack of 4 [CODE NO. 2016-217](#)

 **84463** 1/4" 90° Nozzles,
pack of 20 [CODE NO. 2016-218](#)
Weight : 0.0053kg

84444 3/8" 90° Nozzles,
pack of 4 [CODE NO. 2016-219](#)





 **84464** 3/8" 90° Nozzles,
pack of 20 [CODE NO. 2016-220](#)
Weight : 0.00566kg

FIG. ITEM NO. DESCRIPTION


 **84445** 1/2" 90° Nozzles,
pack of 4 [CODE NO. 2016-221](#)

 **84446** 1/2" 90° Nozzles,
pack of 20 [CODE NO. 2016-222](#)
Weight : 0.00552kg


84446 1/2" 90° Spray Bar,
pack of 2 [CODE NO. 2016-223](#)

 **84466** 1/2" 90° Spray Bar,
pack of 20 [CODE NO. 2016-224](#)
Weight : 0.01033kg


84047 1 1/4" Flare Nozzles,
pack of 2 [CODE NO. 2016-225](#)

 **84067** 1 1/4" Flare Nozzles,
pack of 20 [CODE NO. 2016-226](#)
Weight : 0.00696kg


84050 1 3/4" Flare Nozzles,
pack of 2 [CODE NO. 2016-227](#)

 **84070** 1 3/4" Flare Nozzles,
pack of 20 [CODE NO. 2016-228](#)
Weight : 0.0088kg


84052 2 1/2" Flare Nozzles,
pack of 2 [CODE NO. 2016-229](#)

 **84072** 2 1/2" Flare Nozzles,
pack of 20 [CODE NO. 2016-230](#)
Weight : 0.00922kg


84046 3/8" PT Connectors
pack of 4 [CODE NO. 2016-231](#)

 **84066** 3/8" PT Connectors
pack of 50 [CODE NO. 2016-232](#)
Weight : 0.0063kg


84046A 3/8" NPT Connectors
pack of 4 [CODE NO. 2016-233](#)

 **84066A** 3/8" NPT Connectors
pack of 50 [CODE NO. 2016-234](#)
Weight : 0.00602kg


84045 1/2" PT Connectors
pack of 4 [CODE NO. 2016-235](#)

 **84065** 1/2" PT Connectors
pack of 50 [CODE NO. 2016-236](#)
Weight : 0.00732kg


84045A 1/2" NPT Connectors
pack of 4 [CODE NO. 2016-237](#)

 **84065A** 1/2" NPT Connectors
pack of 50 [CODE NO. 2016-238](#)
Weight : 0.00669kg


84048 1/2" Y Fittings
pack of 2 [CODE NO. 2016-239](#)

 **84068** 1/2" Y Fittings
pack of 20 [CODE NO. 2016-240](#)
Weight : 0.0108kg


84049 1/2" to 1/4" Y Reducers,
pack of 2 [CODE NO. 2016-241](#)

 **84069** 1/2" to 1/4" Y Reducers,
pack of 20 [CODE NO. 2016-242](#)
Weight : 0.00608kg

84651 1/2" to 1/4" Adapters,
pack of 2 [CODE NO. 2016-243](#)

 **84851** 1/2" to 1/4" Adapters,
pack of 20 [CODE NO. 2016-244](#)
Weight : 0.00452kg

84011 1/2" Double Sockets,
pack of 4 [CODE NO. 2016-245](#)

 **84031** 1/2" Double Sockets,
pack of 20 [CODE NO. 2016-246](#)
Weight : 0.00452kg


84013 1/4" SAE Flare Nut
Adapters, pack of 4
[CODE NO. 2016-247](#)


 84033 1/4" SAE Flare Nut
Adapters, pack of 20
(5/8-18 Thread)
[CODE NO. 2016-248](#)
Weight : 0.00516kg

64620 1/2" Elbow Fittings,
pack of 2 [CODE NO. 2016-249](#)


 64640 1/2" Elbow Fittings,
pack of 20 [CODE NO. 2016-250](#)
Weight : 0.00666kg

FIG. ITEM NO. DESCRIPTION


 **64626** 1/2" T Fittings,
pack of 2 [CODE NO. 2016-251](#)

 **64646** 1/2" T Fittings,
pack of 20 [CODE NO. 2016-252](#)
Weight : 0.0097kg


64622 1/2" Side Flow Nozzles,
pack of 2 [CODE NO. 2016-253](#)

 **64642** 1/2" Side Flow Nozzles,
pack of 20 [CODE NO. 2016-254](#)
Weight : 0.0078kg


64624 1/2" End caps,
pack of 4 [CODE NO. 2016-255](#)

 **64644** 1/2" End caps,
pack of 20 [CODE NO. 2016-256](#)
Weight : 0.00466kg


84722 1/2" connection Valves,
pack of 2 [CODE NO. 2016-257](#)

 **84742** 1/2" connection Valves,
pack of 10 [CODE NO. 2016-258](#)
Weight : 0.02201kg


84522 Acid Resistant
1/2" connection Valves,
pack of 2 [CODE NO. 2016-259](#)

 **84542** 1/2" connection Valves,
pack of 10 [CODE NO. 2016-260](#)
Weight : 0.02227kg


84723 1/2" Male PT Valves,
pack of 2 [CODE NO. 2016-261](#)

 **84743** 1/2" Male PT Valves,
pack of 10 [CODE NO. 2016-262](#)
Weight : 0.02287kg


84523 Acid Resistant
1/2" Male NPT Valves,
pack of 2 [CODE NO. 2016-263](#)

 **84543** 1/2" Male NPT Valves,
pack of 10 [CODE NO. 2016-264](#)
Weight : 0.02308kg


84724 1/2" Female PT Valves,
pack of 2 [CODE NO. 2016-265](#)

 **84744** 1/2" Female PT Valves,
pack of 10 [CODE NO. 2016-266](#)
Weight : 0.02348kg


84524 Acid Resistant
1/2" Female NPT Valves,
pack of 2 [CODE NO. 2016-267](#)

 **84544** 1/2" Female NPT Valves,
pack of 10 [CODE NO. 2016-268](#)
Weight : 0.02286kg


84725 1/2" connection Chuck
Valves, pack of 2
[CODE NO. 2016-269](#)

 **84745** 1/2" connection Chuck
Valves, pack of 10
[CODE NO. 2016-270](#)
Weight : 0.00878kg

54400 Modular Manifold System
1/2"

 1/2"-Elbow Fitting-1 pcs
1/2"-Manifold Bracket-
1 pcs
1/2"-T Fittings-3 pcs
1/2"-Mounting screws-
3 pcs [CODE NO. 2016-271](#)
Weight : 0.0562kg

54410 Main Flow Control Manifold
System 1/2"

 1-Modular Manifold 1/2"
5-Connection Valves 1/2"
[CODE NO. 2016-272](#)
Weight : 0.16625kg

54416 1/2" Manifold Brackets
of 2
[CODE NO. 2016-273](#)

 Weight : 0.01148kg

26172 1/2" Hose Assembly pliers
[CODE NO. 2016-274](#)



3/8" System



3/8" INSIDE DIAMETER

FIG. ITEM NO. DESCRIPTION








	83030	3/8" Hose Kit 8 pcs of 3/8" Segment - 2 sets 3/8" Nozzles 3/8" Male PT connectors CODE NO.2016-275
	83030A	3/8" Hose Kit 8 pcs of 3/8" Segment - 2 sets 3/8" Nozzles 13/8" Male NPT connectors CODE NO.2016-276
	83430	3/8" Hose Kit 8 pcs of 3/8" Segment - 2 pcs 1/4", 3/8", 1/2" Nozzles 3/8" & 1/2" Male PT connectors CODE NO.2016-277
	83430A	3/8" Hose Kit 8 pcs of 3/8" Segment - 2 pcs 1/4", 3/8", 1/2" Nozzles 3/8" & 1/2" Male NPT connectors CODE NO.2016-278
	83031	3/8" Segment pack (2-14.5CM pcs) CODE NO.2016-279
	83051	3/8" 762 CM coil CODE NO.2016-280
	83091	3/8" 1524 CM coil Weight: 2.8kgs CODE NO.2016-281
	83032	1/4" Round Nozzles, Pack of 4 CODE NO.2016-282
	83052	1/4" Round Nozzles, Pack of 50 CODE NO.2016-283

FIG. ITEM NO. DESCRIPTION






















	83033	3/8" Round Nozzles, pack of 4 CODE NO.2016-284
	83053	3/8" Round Nozzles, pack of 50 CODE NO.2016-285 Wight: 197.2g
	83034	1/2" Round Nozzles, pack of 4 CODE NO.2016-286
	83054	1/2" Round Nozzles, pack of 50 CODE NO.2016-287
	83026	1/4" PT Connector, pack of 4 CODE NO.2016-288
	83046	1/4" PT Connector, pack of 50 CODE NO.2016-289
	83035	3/8" PT Connector, pack of 4 CODE NO.2016-290
	83055	3/8" PT Connector, pack of 50 CODE NO.2016-291
	83035A	3/8" NPT Connector, pack of 4 CODE NO.2016-292
	83055A	3/8" NPT Connector, pack of 50 CODE NO.2016-293
	83036	1/2" PT Connector, pack of 4 CODE NO.2016-294
	83056	1/2" PT Connector, pack of 50 CODE NO.2016-295
	83036A	1/2" NPT Connector, pack of 4 CODE NO.2016-296
	83056A	1/2" NPT Connector, pack of 50 CODE NO.2016-297

FIG. ITEM NO. DESCRIPTION

	83037	1 1/4" Flare Nozzles, pack of 2 CODE NO.2016-298
	83057	1 1/4" Flare Nozzles, pack of 20 CODE NO.2016-299
	83723	3/8" Male PT Valve, pack of 2 CODE NO.2016-302
	83743	3/8" Male PT Valve, pack of 10 CODE NO.2016-303 Wight: 127g
	83723A	3/8" Male NPT Valve, pack of 2 CODE NO.2016-304
	83743A	3/8" Male NPT Valve, pack of 10 CODE NO.2016-305
	83724	3/8" Female PT Valve, pack of 2 CODE NO.2016-306
	83744	3/8" Female PT Valve, pack of 10 CODE NO.2016-307
	83724A	3/8" Female NPT Valev, pack of 2 CODE NO.2016-308
	83744A	3/8" Female NPT Valev, pack of 10 CODE NO.2016-309
	26176	3/8" Hose Assembly pliers CODE NO.2016-310



3/4" System

3/4" INSIDE DIAMETER

FIG. ITEM NO. DESCRIPTION











	86060	3/4" Hose Kit 6 pcs of 3/4" Segment-2 sets 5/8" & 3/4" Nozzles 3/4" Male PT Connector CODE NO.2016-400
	86060A	3/4" Hose Kit 6 pcs of 3/4" Segment-2 sets 5/8" & 3/4" Nozzles 3/4" Male PT Connector CODE NO.2016-401
	86061	3/4" Segment Pack (2-14.5 CM pcs) CODE NO.2016-402
	86081	3/4" 1524 CM Coil CODE NO.2016-403
	86091	3/4" 2500 CM Coil CODE NO.2016-404
	86063	5/8" Round Nozzle, pack of 4 CODE NO.2016-405
	86073	5/8" Round Nozzle, pack of 50 CODE NO.2016-406
	86062	3/4" Round Nozzle, pack of 4 CODE NO.2016-407
	86072	3/4" Round Nozzle, pack of 50 CODE NO.2016-408
	86064	3/4" PT Connector pack of 4 CODE NO.2016-409
	86074	3/4" PT Nozzle, pack of 50 CODE NO.2016-410
	86064A	3/4" NPT Connector pack of 4 CODE NO.2016-411
	86074A	3/4" NPT Nozzle, pack of 50 CODE NO.2016-412

FIG. ITEM NO. DESCRIPTION















	86021	3/4" Fixed Mount, pack of 2 CODE NO.2016-413
	86022	3/4" Magnetic Base, pack of 1 CODE NO.2016-414
	86023	Shield Mounting Elbow, pack of 2 CODE NO.2016-415
	86067	3" Flare Nozzle, pack of 2 CODE NO.2016-416
	86077	3" Flare Nozzle, pack of 20 CODE NO.2016-417
	86068	3/4" Y Fitting, pack of 2 CODE NO.2016-418
	86078	3/4" Y Fitting, pack of 20 CODE NO.2016-419
	86069	3/4" to 1/2" Y Reducer, pack of 2 CODE NO.2016-420
	86079	3/4" to 1/2" Y Reducer, pack of 20 CODE NO.2016-421
	86051	3/4" to 1/2" Adapter, pack of 2 CODE NO.2016-422
	86071	3/4" to 1/2" Adapter, pack of 20 CODE NO.2016-423
	86011	3/4" Double Socket, pack of 4 CODE NO.2016-424
	86031	3/4" Double Socket, pack of 20 CODE NO.2016-425

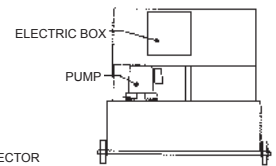
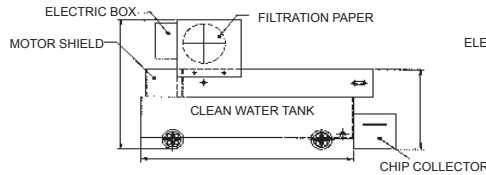
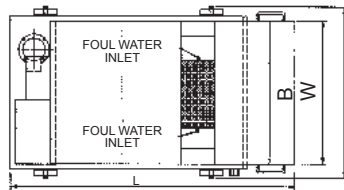
FIG. ITEM NO. DESCRIPTION

	26177	3/4" Hose Assembly Pliers CODE NO.2016-426
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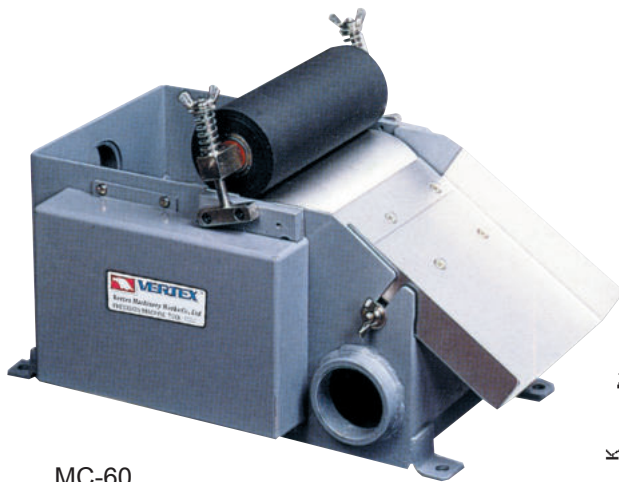
FEATURES

- Applicable to both ferrous and non-ferrous metals.
- Filtration effect depends on paper accuracy.
Use 50 μ , 30 μ , or 15 μ .
- Not suitable for heavy machining for the sake of paper consumption.
- To save filtration material, use magnetic filter for rough filtration.
- Standard accessory: one roll of paper.



ORDER NO.	DISPOSAL CAPACITY L/MIN	WATER TANK CAPACITY	L	A	B	C	W	H	PUMP		PAPER MOTOR	PAPER	REMARKS	N.W (kgs)	GW (kgs)	CODE NO.
									HP	OUTLET						
PF-20	20	100	1050	850	600	400	720	610	1/8	PF1/2"	25W	W:500MM L:90M	wheels attached	95	120	2020-001
PF-40	40	120	1200	1000	600	400	720	660	1/8	PF1/2"	25W			130	150	2020-002
PF-60	60	140	1350	1150	600	400	720	660	1/8	PF1/2"	25W			140	170	2020-003
PF-80	80	160	1500	1300	600	400	720	660	1/4	PF3/4"	25W			170	190	2020-004
PF-120	120	210	1500	1300	800	400	920	740	1/2	PF3/4"	40W	W:700MM L:90M		185	210	2020-005
PF-160	160	260	1800	1600	800	400	920	740	1/2	PF3/4"	40W			250	280	2020-006

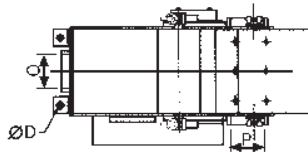
Magnetic Separator



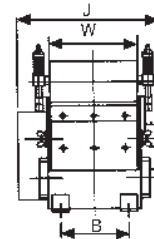
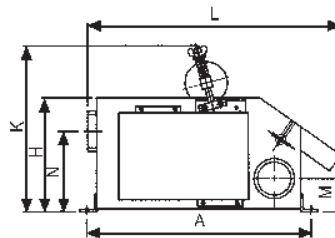
MC-60

FEATURES

- Suitable in heavy machining for ferrous metal.
- No filtration-material consumption.
- Most economic in purchase & utilization cost.
- Able to serve rough filtration in other filtration process.



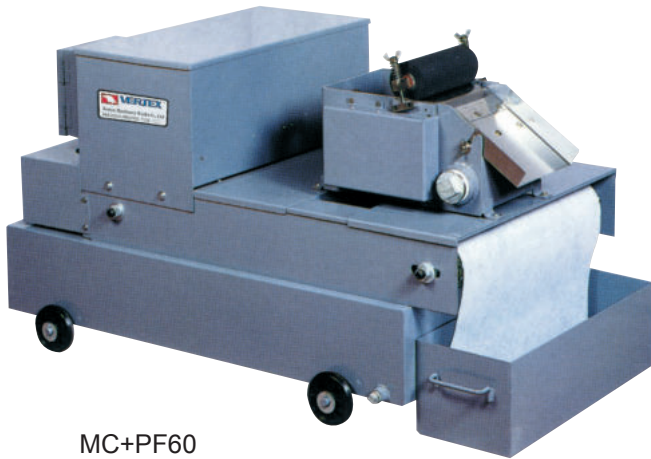
MC-20~160



Standard accessories

- a. Chip collector 1pc
- b. plugs 2pc
- c. Elbow 1pc
- d. Steel tubes 3pc

ORDER NO.	DISPOSAL CAPACITY L/MIN	L	W	H	M	N	A	B	D	J	K	INLET O	OUTLET P	MOTOR	N.W (kgs)	GW (kgs)	CODE NO.
MC-20	20	464	130	205	65	145	398	100	11	230	300	PF1 1/2"	PF1 1/2"	220V3Ø,25W	18	20	2020-010
MC-40	40	464	150	205	65	145	398	120	11	250	300	PF2"	PF2"	220V3Ø,25W	20	23	2020-011
MC-60	60	464	206	205	60	150	398	176	11	306	300	PF2"	PF2"	220V3Ø,25W	25	28	2020-012
MC-80	80	464	242	205	60	150	398	212	11	342	300	PF2"	PF1 1/2"	220V3Ø,25W	30	40	2020-013
MC-120	120	530	270	245	68	185	456	230	11	380	345	PF1 1/2"	PF3"	220V3Ø,40W	50	65	2020-014
MC-160	160	530	354	245	68	185	456	314	11	464	345	PF3"	PF3"	220V3Ø,40W	60	75	2020-015



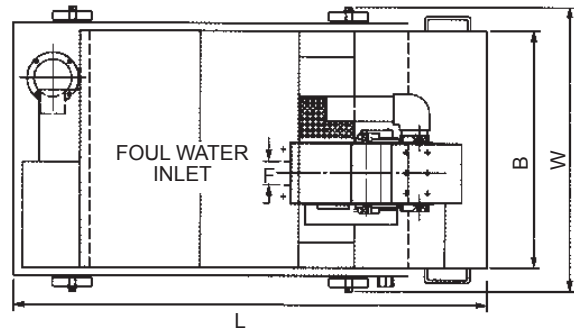
MC+PF60

APPLICABLE TO THE FOLLOWING WORKING MACHINES

- Plane grinding machine.
- Fine-grinding machine.
- Honing machine.
- Deep-hole drill.
- Internal/exterless cylinder grinder.
- Centerless grinder.
- Please specify the power voltage in your order list.
- Specifications are subject to change without notice.

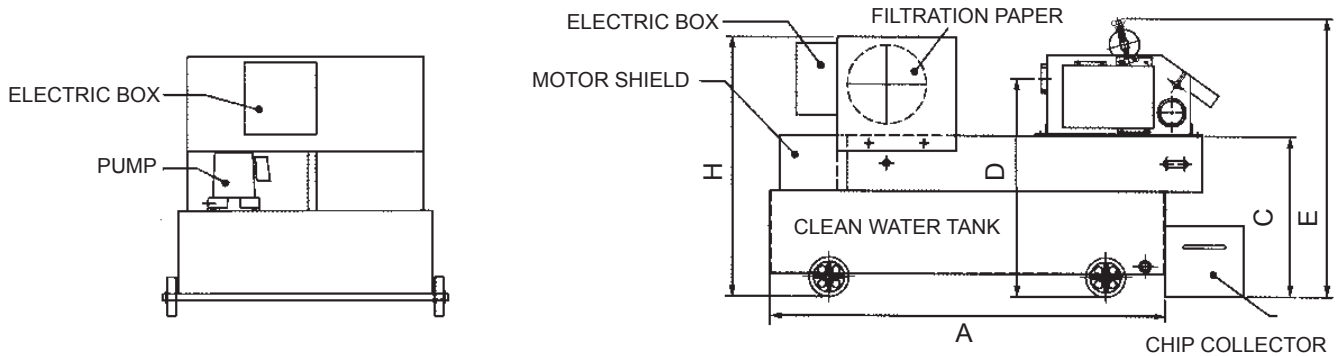
FEATURES

- Applicable to both ferrous and non-ferrous metals.
- Filtration effect depends on paper accuracy. Use 50 μ , 30 μ , or 15 μ .
- Rough filtration for chip in coolant with magnet and then fine filtration for impurities with paper will save the paper and upgrade filtration accuracy



DIMENSION DIAGRAM

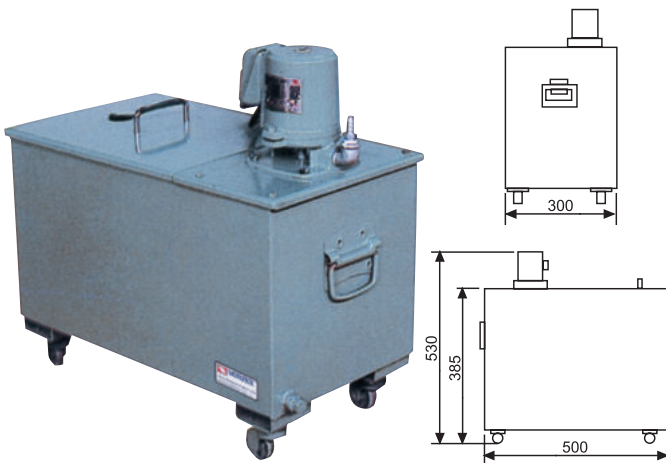
- Standard accessory: one roll paper 30 μ



MAGNETIC SEPARATOR & PAPER FILTER SPECIFICATIONS

ORDER NO.	DISPOSAL CAPACITY L/MIN	WATER TANK CAPACITY	L	A	B	C	D	E	F	H	W	PUMP		PAPER MOTOR	PAPER	REMARKS	N.W (kgs)	GW (kgs)	CODE NO.
												HP	OUTLET						
MC+PF-20	20	100	1050	850	600	400	550	655	PF1 $\frac{1}{2}$ "	610	720	1/8	PF1 $\frac{1}{2}$ "	25W	W:500MM L:90M	NO wheels	115	140	2020-020
MC+PF-40	40	120	1200	1000	600	400	550	705	PF2"	660	720	1/8	PF1 $\frac{1}{2}$ "	25W			150	175	2020-021
MC+PF-60	60	140	1350	1150	600	400	555	705	PF2"	660	720	1/8	PF1 $\frac{1}{2}$ "	25W			165	200	2020-022
MC+PF-80	80	160	1500	1300	600	400	555	705	PF2"	660	720	1/4	PF3/4"	25W			190	225	2020-023
MC+PF-120	120	210	1500	1300	800	400	590	750	PF2 $\frac{1}{2}$ "	740	920	1/2	PF3/4"	40W			235	275	2020-024
MC+PF-160	180	260	1800	1600	800	400	605	750	PF3"	740	920	1/2	PF3/4"	40W			290	335	2020-025

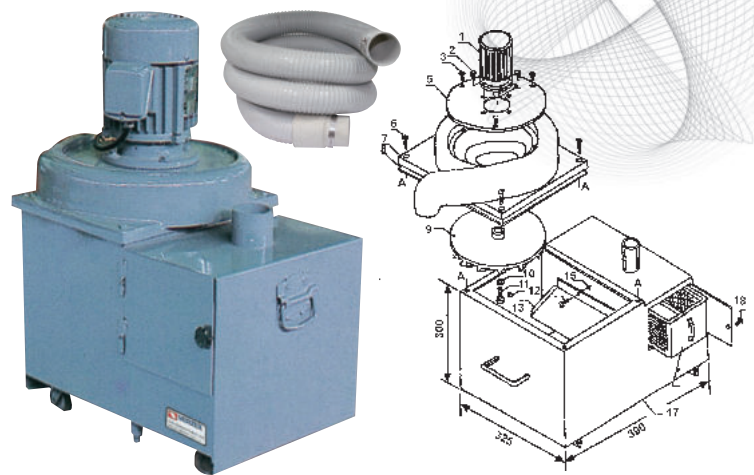
Coolant Tank



Unit: m/m

ORDER NO.	LxWxH	Motor	G.W.	CODE NO.
VC-601	500x300x530	1/8 HP	23kgs	2020-030

Dust Collector

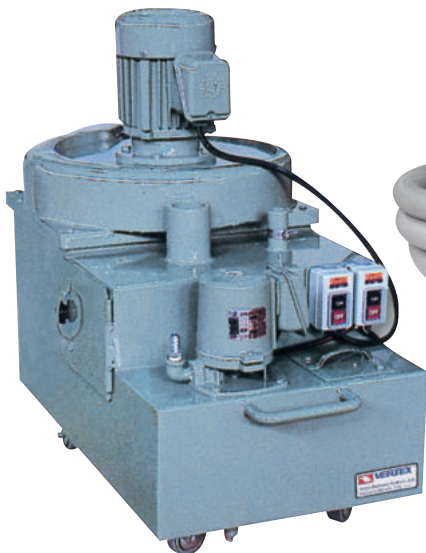


Unit: m/m

ORDER NO.	LxWxH	Motor	G.W.	CODE NO.
VC-602	560x370x720	1/2 HP	47kgs	2020-026

Dust-Suction And Coolant Tank

TWO IN ONE

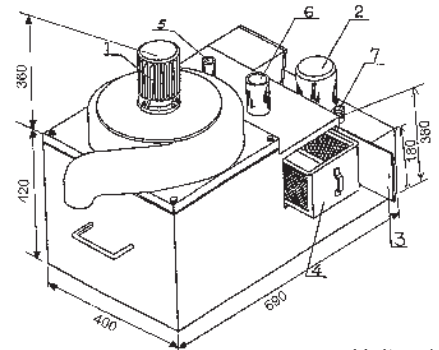


PLEASE NOTIFY VOLTA & PHASE,
WHEN YOU ORDERING.



Combination coolant and
dust collector(10-12 J)

1. Dust suction motor
2. Coolant pump
3. Filter access door
4. Filter
5. Coolant return pipe
6. Dust inlet pipe
7. Pump outlet

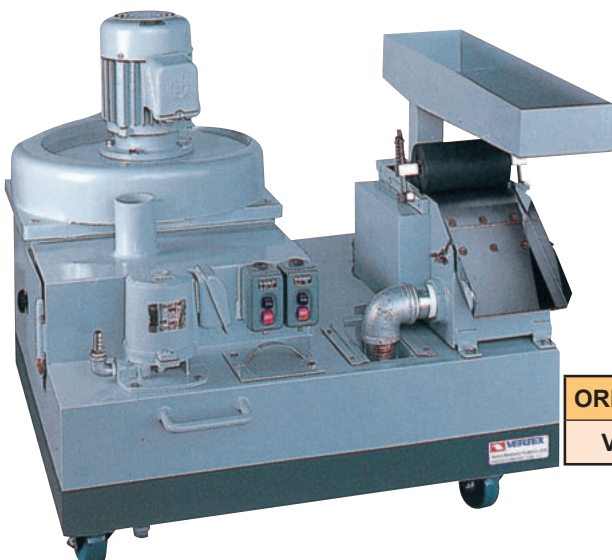


Unit: m/m

ORDER NO.	LxWxH	Motor	G.W.	CODE NO.
VC-603	690x400x780	1/2 HPx1, 1/8 HPx1	80kgs	2020-027

Dust-Suction & Coolant Tank W/Magnetic Separator

THREE IN ONE



PLEASE NOTIFY VOLTA & PHASE,
WHEN YOU ORDERING.

Unit: m/m

ORDER NO.	LxWxH	Motor	G.W.	CODE NO.
VC-606	900x780x850	1/2 HPx1, 1/8 HPx1	110kgs	2020-028



Oil Skimmer With Belt Type

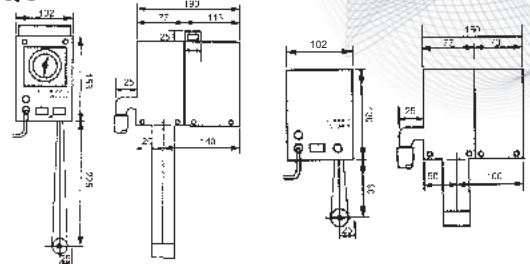


OIL SKIMMER FOR MACHINE TOOL.
IT IS FOR CLEAR FLOATING OIL ON CUTTING LIQUID.



ORDER NO. VOS-800

ORDER NO. VOS-810



FEATURES

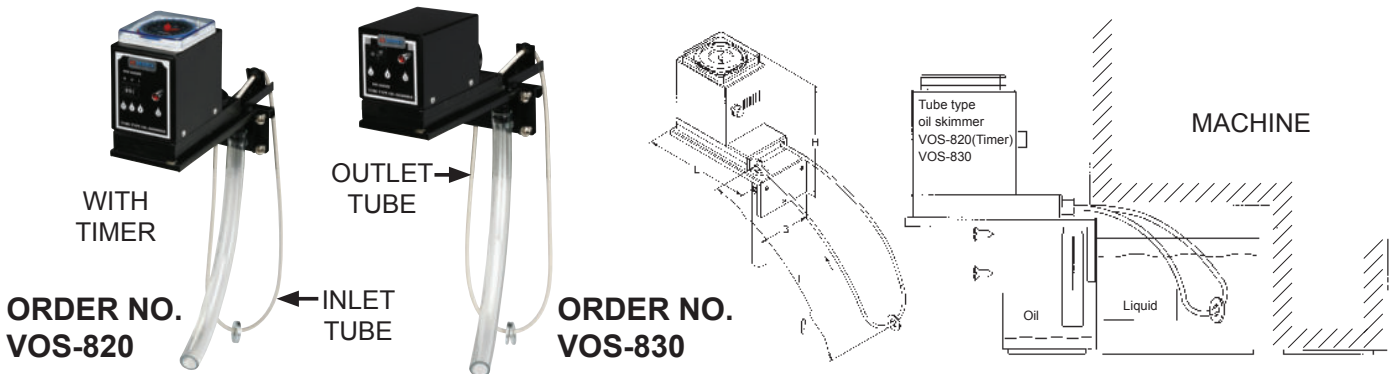
- Oily leather belt cycle for collecting oil and efficiently and completely getting rid of useless oil.
- Much less cost of running., without any material expended.
- Small volume., light weight., easy to install and to operate.
- Special leather belt with feature of excellent durability, heat-resistance, and chemical-resistance.
- VOS-800 attached a 24 hours procedure timer to run repeatedly in accordance with time proportion which it is set, and also provides the best efficiency of sucking floating oil.

Unit: mm

ORDER NO.	POWER SOURCE	CAPACITY	DIMENSION			WEIGHT (kgs)	BELT DIMENSION		DIMENSION OF HOSE	CODE NO.
			L	B	H		B	L		
VOS-800	AC 110/220V	4L/h	190m/m	102m/m	153m/m	3.4	39x800m/m		ø22x600m/m	2020-100
VOS-810			150m/m	102m/m	138m/m	3	39x550m/m			2020-101



Oil Skimmer With Belt Type



ORDER NO. VOS-820

ORDER NO. VOS-830

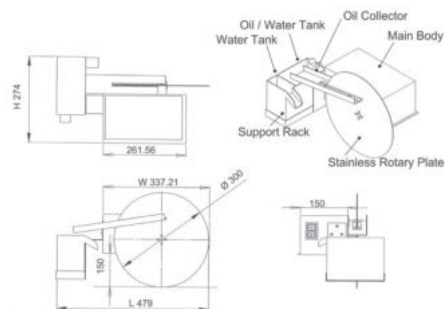
IF THE MACHINE DON'T HAVE SPACE FOR THE OIL SKIMMER. PLEASE CHOICE THIS TYPE.

Unit: mm

ORDER NO.	CAPACITY	DIMENSION			INLET TUBE SIZE	OUTLET TUBE SIZE		POWER SOURCE	WEIGHT (kg)	CODE NO.
		L	B	H		ø	L			
VOS-820	1L/hr	155m/m	78m/m	178m/m	1:350mm	ø22	150m/m	AC 110/220V	1.9	2020-102
VOS-830		155m/m	78m/m	140m/m	2:300mm 3:200mm				2	2020-103



Oil Skimmer With Rotary Plate Type



Unit: mm

ORDER NO.	CAPACITY	POWER SOURCE	DIMENSION			WEIGHT (kgs)	CODE NO.
			L	W	H		
VOS-850	1L/hr	AC 220V	479	337.21	274	8.6	2020-104



Gauge blocks are fundamental standards for linear measurement. For adjusting, checking, or inspecting measuring instruments and tools, and precision workpieces. Gauge blocks are used either individually or in combination of several blocks which are wrung together.

Steel gauge blocks are made of quality alloy steel, and carbide, the ceramics are also available.

The hardness number of the measuring surfaces is no less than HRC64.

The blocks have fine wear resistance, They are heat treated in special ways so as to stabilize their lengths.

JIS/ISO/DIN SIZE OVER UP TO	ACCURACY STANDARD ACCURACY AT 20°C (µm)	
	GRADE 00	GRADE 0
10mm	±0.06	±0.12
10 - 25mm	+0.07	±0.14
25 - 50mm	±0.10	±0.20
50 - 75mm	±0.12	±0.25
75 - 100mm	±0.14	±0.30
100 - 150mm	-	±0.40

SIZE OVER UP TO	ACCURACY AT 20°C (µm)	
	GRADE 1	GRADE 2
10mm	±0.20	±0.45
10 - 25mm	±0.30	±0.60
25 - 50mm	±0.40	±0.80
50 - 75mm	±0.50	±1.00
75 - 100mm	±0.60	±1.20
100 - 150mm	±0.80	±1.60

STEEL METRIC GAUGE BLOCKS

ORDER NO.	Total blocks	Nominal dimension	Steps	No. of blocks	Grade	Weight (kg)	CODE NO.
VGB-112-0	112	1.0005	-	1	0	3.7	2006-070
VGB-112-1		1.001-1.009	0.001	9	1	3.7	2006-170
VGB-112-2		1.01-1.49 0.5-24.5 25-100	0.01 0.05 25	49 49 4	2	3.7	2006-270
VGB-103-0	103	1.005	-	1	0	3.6	2006-072
VGB-103-1		1.01-1.49	0.01	49	1	3.6	2006-172
VGB-103-2		0.5-24.5 25-100	0.5 25	49 4	2	3.6	2006-272
VGB-87-0	87	1.001-1.009	0.001	9	0	3	2006-073
VGB-87-1		1.01-1.49	0.01	49	1	3	2006-173
VGB-87-2		0.5-9.5 10-100	0.5 10	19 10	2	3	2006-273
VGB-47-0	47	1.005	-	1	0	2.4	2006-074
VGB-47-1		1.01-1.09	0.01	9	1	2.4	2006-174
VGB-47-2		1.1-1.9 1-24 25-100	0.1 1 25	9 24 4	2	2.4	2006-274
VGB-38-0	38	1.005	-	1	0	2.5	2006-075
VGB-38-1		1.01-1.09	0.01	9	1	2.5	2006-175
VGB-38-2		1.1-1.9 1-9 10-100	0.1 1 10	9 9 10	2	2.5	2006-275

CARBIDE METRIC GAUGE BLOCKS

ORDER NO.	Total blocks	Nominal dimension	Steps	No. of blocks	Grade	Weight (kgs)	CODE NO.
VGB-112T-0	112	1.0005	-	1	0	5.8	2006-080
VGB-112T-1		1.001-1.009	0.001	9	1	5.8	2006-180
VGB-112T-2		1.01-1.49 0.5-24.5 25-100	0.01 0.05 25	49 49 4	2	5.8	2006-280
VGB-103T-0	103	1.005	-	1	0	5.6	2006-081
VGB-103T-1		1.01-1.49	0.01	49	1	5.7	2006-181
VGB-103T-2		0.5-24.5 25-100	0.5 25	49 4	2	5.7	2006-281
VGB-87T-0	87	1.001-1.009	0.001	9	0	4.8	2006-082
VGB-87T-1		1.01-1.49	0.01	49	1	4.9	2006-182
VGB-87T-2		0.5-9.5 10-100	0.5 10	19 10	2	4.8	2006-282
VGB-47T-0	47	1.005	-	1	0	4.6	2006-083
VGB-47T-1		1.01-1.09	0.01	9	1	4.6	2006-183
VGB-47T-2		1.1-1.9 1-24 25-100	0.1 1 25	9 24 4	2	4.6	2006-283



Gauge blocks are fundamental standards for linear measurement. For adjusting, checking, or inspecting measuring instruments and tools, and precision workpieces.

Gauge blocks are used either individually or in combination of several blocks which are wrung together.

HOW TO CHOOSE THE BLOCK FOR SINE BAR

DISTANCE GAUGE BLOCK CAN GET DEGREE	SINE BAR CENTER		SINE BAR CENTER	
	←50→		←100→	
2°	1.7405	3.4899		
3°	2.6168	5.2336		
4°	3.4878	6.9756		
5°	4.3578	8.7155		
6°	5.2264	10.4528		
7°	6.0935	12.1869		
8°	6.9587	13.9173		
9°	7.8217	15.6434		
10°	8.6824	17.3648		
11°	9.5404	19.0809		
12°	10.3956	20.7911		
13°	11.2476	22.4951		
14°	12.0961	24.1921		
15°	12.9401	25.8819		
16°	13.7819	27.5637		
17°	14.6186	29.2371		
18°	15.4058	30.9017		
19°	16.2784	32.5586		
20°	17.1010	34.2020		
21°	17.9184	35.8367		
22°	18.7303	37.4606		
23°	19.5366	39.0713		
24°	20.3368	40.6736		
25°	21.1309	42.2618		
26°	21.9186	43.8371		
27°	22.6995	45.3990		
28°	23.4736	46.9471		
29°	24.2405	48.4809		
30°	25.0000	50.0000		
31°	25.7519	51.5038		
32°	26.4960	52.9919		
33°	27.2320	54.4639		
34°	27.9596	55.9192		
35°	28.6788	57.3576		
36°	29.3893	58.7785		
37°	30.0908	60.1815		
38°	30.7831	61.5661		
39°	31.4660	62.9320		
40°	32.1394	64.2787		
41°	32.8030	65.6059		
42°	33.4565	66.9130		
43°	34.0999	68.1998		
44°	34.7329	69.4658		
45°	35.3553	70.7106		

JIS/ISO/DIN ACCURACY STANDARD

SIZE OVER UP TO	ACCURACY AT 20°C (µm)	
	GRADE 00	GRADE 0
10mm	±0.06	±0.12
10 - 25mm	+0.07	±0.14
25 - 50mm	±0.10	±0.20
50 - 75mm	±0.12	±0.25
75 - 100mm	±0.14	±0.30
100 - 150mm	-	±0.40

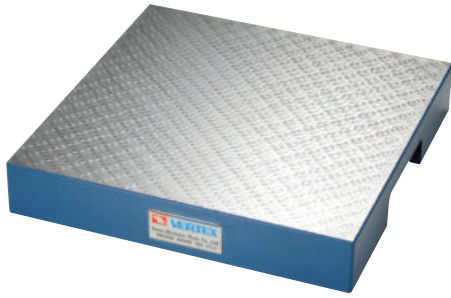
SIZE OVER UP TO	ACCURACY AT 20°C (µm)	
	GRADE 1	GRADE 2
10mm	±0.20	±0.45
10 - 25mm	±0.30	±0.60
25 - 50mm	±0.40	±0.80
50 - 75mm	±0.50	±1.00
75 - 100mm	±0.60	±1.20
100 - 150mm	±0.80	±1.60

CERAMIC GAUGE BLOCKS

ORDER NO.	Total blocks	Nominal dimension	Steps	No. of blocks	Grade	Weight (kgs)	CODE NO.
VGB-112C-0	112	1.0005	-	1	0	3.7	2006-090
VGB-112C-1		1.001-1.009	0.001	9	0	3.7	2006-190
VGB-103C-0	103	1.01-1.49	0.01	49	1	3.6	2006-091
VGB-103C-1		0.5-24.5	0.05	49	1	3.6	2006-191
VGB-87C-0	87	25-100	25	4	1	3.6	2006-191
VGB-87C-1		1.005	-	1	0	3	2006-092
VGB-47C-0	47	1.01-1.09	0.01	9	0	2.4	2006-093
VGB-47C-1		1.1-1.9	0.1	9	1	2.4	2006-193
		1-24	1	24	1	2.4	2006-193
		25-100	25	4	1	2.4	2006-193



Cast Iron Surface Plates



- These surface plates are designed for a diversity of applications where a smooth surface is needed.
- Rigidity and lasting accuracy are ensured by adequate top and side thickness and ribbed construction.
- The surfaces are free from pinholes. Precisely finished by planing and hand scraping, suitable for various kinds of highest precision work, inspection and countless other uses.



Surface Plates

Unit:m/m

ORDER NO.	SIZE	SURFACE ACCURACY	APPROX. WEIGHT	CODE NO.
	mm			
VS-01	200x200x50	0.005/100	7.1	2021-001
VS-02	250x250x50		11.1	2021-002
VS-03	250x300x50		10.9	2021-003
VS-04	300x300x50		12.6	2021-004
VS-05	300x400x60	0.006/100	20.1	2021-005
VS-06	300x450x65		24	2021-006
VS-07	450x450x80		50.5	2021-007
VS-08	500x500x75		56	2021-008
VS-09	450x600x100		64.5	2021-009
VS-10	600x600x100		78	2021-010
VS-11	600x900x110	0.007/100	117	2021-011
VS-12	900x900x130		220	2021-012
VS-13	900x1200x155		305	2021-013

STAND

ORDER NO.	STAND SIZE	KGS	CODE NO.
	mm		
VSD-09	450x600x700		2021-009A
VSD-10	600x600x700		2021-010A
VSD-11	600x900x600	32.45	2021-011A
VSD-12	900x900x600		2021-012A
VSD-13	900x1200x600	75.35	2021-013A



Black Granite Surface Plates



- Black Granite Surface Plates meet or exceed JIS B7513/ISO-8512-2 Federal Specification GGG-P-463c.
- Harder than steel.
- Does not nick or burr.
- Retains accuracy for years.
- Auto-collimator checked for overall accuracy.
- Guaranteed repeat reading. Includes an inspection certificate to show the unilateral accuracy of plate.
- Does not rust or corrode.
- All surface plates include inbound freight from factory.



Surface Plates

Unit:m/m

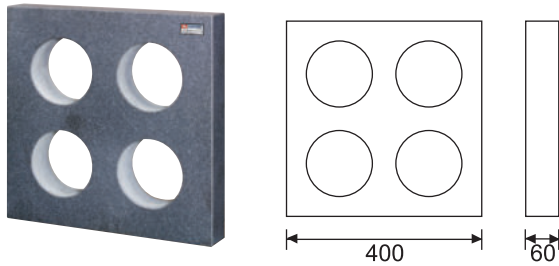
ORDER NO.	SIZE	SURFACE ACCURACY	APPROX. WEIGHT	CODE NO.
	mm			
VSG-05	300x300x60	0.0065	25	2021-020
VSG-06	300x450x60	0.0065	31	2021-021
VSG-07	450x450x75	0.0065	46	2021-022
VSG-09	450x600x100	0.007	79	2021-023
VSG-10	600x600x100	0.009	110	2021-024
VSG-11	600x900x110	0.009	210	2021-025
VSG-13	900x1200x135	0.012	470	2021-027
VSG-14	1000x1000x135	0.012	450	2021-028
VSG-15	1000x1500x200	0.013	670	2021-029
VSG-21	900x900x160	0.013	380	2021-032

STAND

ORDER NO.	STAND SIZE	KGS	CODE NO.
	mm		
VSGD-09	450x600x700	27.4	2021-023A
VSGD-10	600x600x700	30	2021-024A
VSGD-11	600x900x600	33.5	2021-025A
VSGD-13	900x1200x600	86	2021-027A
VSGD-14	1000x1000x600	87	2021-028A
VSGD-15	1000x1500x600	100	2021-029A
VSGD-21	900x900x600	73.4	2021-032A

Accuracy and O-Lodge Style available only in toolroom Grade A

Granite Square Rulers

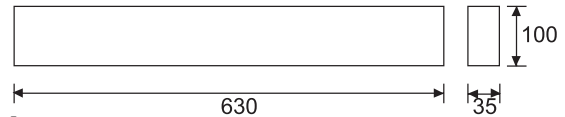


Accuracy:
SQUARENESS 0.002 m/m

Unit: m/m

ORDER NO.	SIZE	G.W.(kgs)	CODE NO.
VQR-400	400x400x60	24.8	2021-050
VQR-500	500x500x60	40.2	2021-051

Granite Straight Rulers



Accuracy:
PARALLELISM 0.002 m/m

Unit: m/m

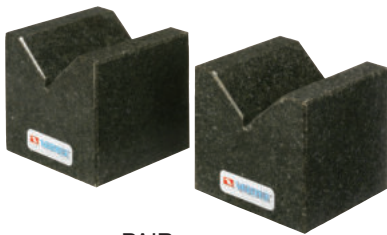
ORDER NO.	SIZE	G.W.(kgs)	CODE NO.
VSR-630	630x100x35	8.7	2021-060
VSR-1000	1000x80x50	13.7	2021-061

Granite Triangle Ruler



ORDER NO.	Size	Squareness	Thickness	Weight (kgs)	CODE NO.
VGT-300	300x200	0.002	30	5.7	2022-020
VGT-400	400x250	0.003	30	8.4	2022-021
VGT-600	600x400	0.004	63	27.5	2022-022

Granite V-Block



PAIR

ORDER NO.	CAPACITY	Size	GRADE	KGS	CODE NO.
VGX-63	Ø10~50	63x63x63	0	1.7	2022-030
VGX-100	Ø50~80	100x100x100	0	6.3	2022-031

Horizontal Leveling Instrument



0.02m/m

ORDER NO.	DIMENSION	Weight (kgs)	CODE NO.
VLI-200A	200x46x46	1.96	2022-043
VLI-300A	300x46x45.90	2.78	2022-044

Precision Square Level



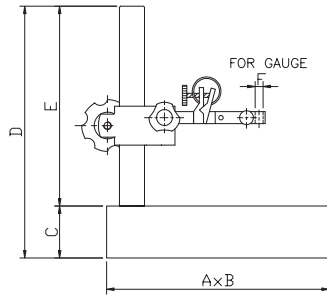
0.02m/m

ORDER NO.	DIMENSION	Weight (kgs)	CODE NO.
VSL-200A	200x200x39.5	4.10	2022-053
VSL-300A	300x300x44.6	8.83	2022-054

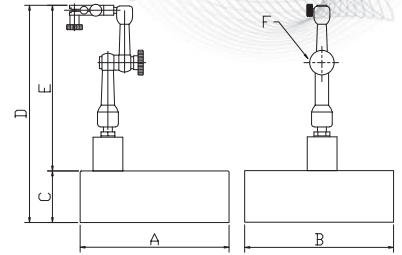
Granite Surface Stand



VH-41-43



VH-45-47



- THE DIAL GAUGE IS OPTIONAL
- ACCURACY: 0.005/100mm

ORDER NO.	AxB GRANITE PLATE DIEMENSION	C	D	E	F	WEIGHT (kgs)	CODE NO.
VH-41	6" x 6" 150x150mm	52	252	200	8m/m	6	2022-001A
VH-42	6" x 9" 150x220mm	52	252	200	8m/m	9	2022-002A
VH-43	9" x 12" 230x300mm	90	290	200	8m/m	22	2022-003A
VH-45	6" x 6" 150x150mm	52	185	133	8m/m	6	2022-005
VH-46	6" x 9" 150x220mm	52	185	133	8m/m	7.9	2022-006
VH-47	9" x 12" 230x300mm	90	223	133	8m/m	19.1	2022-007

Cylindrical Squares Steel

CHECK INSTRUMENT



ORDER NO.	ØD X L	ACCURACY	WEIGHT (kgs)	CODE NO.
VCS-300	100x300	0.005/100 m/m		2022-010
VCS-400	100x400	0.005/100 m/m	16	2022-011

mm

Cleaning Paper



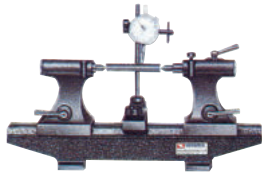
ORDER NO. P-1000(PAPER)
CODE NO.2021-200

SIZE: WIDTH: 240M/M (±1CM)
LENGTH: 350M, G.W. 11kgs
PACK: 2 ROLL/CARTON
COLOR: WHITH

ORDER NO. S-1000(STAND)
CODE NO.2021-220

450L x 330W x 800H
G.W. 2.7kgs

Concentric Test Stand



VCI-400



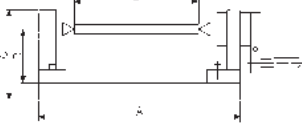
VCI-200

ORDER NO.	LENGTH	WIDTH	HEIGHT	CENTER DISTANCE	CENTER HEIGHT	WEIGHT (kgs)	CODE NO.
VCI-200	490	90	100	200	145	22	2021-101
VCI-300	530	90	100	300	145	26.8	2021-105
VCI-400	650	90	100	400	145	29.6	2021-102
VCI-600	1000	200	230	600	200	138.5	2021-106

WITHOUT INDICATORS



VCI-300P



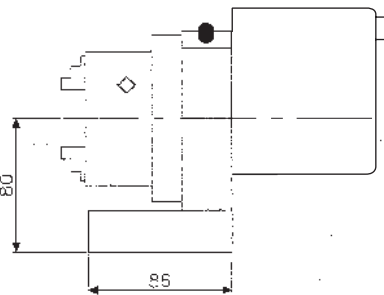
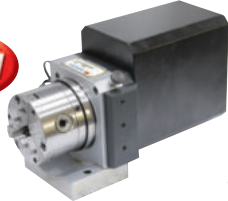
Unit:mm

ORDER NO.	A	B	C	L	Roundness	Parallelism	Squareness	Graduation	N.W. (kgs)	CODE NO.
VCI-300P	300	80	133	0-120	0.002/100	±0.002/100	0.002/100	360°	22	2021-110
VCI-400P	400	80	133	0-220	0.002/100	±0.002/100	0.002/100	360°	25	2021-111
VCI-500P	500	80	133	20-320	0.002/100	±0.002/100	0.002/100	360°	28	2021-112

Fixed Speed Punch Former

ORDER NO.V-PS-80M CODE NO.2021-130

Auto Type



- The Punch Former with a motor attached can be applied to precisely grind a punch to round in a short time and saves the processing time.
- Chuck Type can clamp workpieces in a wide range.

O.D	I,D	Max. Dia. of Workpiece	Center Height	Motor Output-W Input-V	Graduation	N.W. (kg)
2-70	24-64	Ø50	80	15W 110/220V	360°	11.72

Pin Gauge



EACH 0.01mm FOR ONE STEP SIZE

ORDER NO.	NOMINAL DIMENSION EACH 0.01mm FOR 1 PCS	PCS/SET	WEIGHT (kgs)	CODE NO.
VPG-0B	0.50, 0.51, 0.52~1.00	51	1	2022-060
VPG-1A	1.00, 1.01, 1.02~1.50	51	1	2022-061
VPG-1B	1.50, 1.51, 1.52~2.00	51	1	2022-062
VPG-2A	2.00, 2.01, 2.02~2.50	51	1	2022-063
VPG-2B	2.50, 2.51, 2.52~3.00	51	1	2022-064
VPG-3A	3.00, 3.01, 3.02~3.50	51	1	2022-065
VPG-3B	3.50, 3.51, 3.52~4.00	51	1	2022-066
VPG-4A	4.00, 4.01, 4.02~4.50	51	1.5	2022-067
VPG-4B	4.50, 4.51, 4.52~5.00	51	1.5	2022-068
VPG-5A	5.00, 5.01, 5.02~5.50	51	1.5	2022-069
VPG-5B	5.50, 5.51, 5.52~6.00	51	1.5	2022-070
VPG-6A	6.00, 6.01, 6.02~6.50	51	3.1	2022-071
VPG-6B	6.50, 6.51, 6.52~7.00	51	3.2	2022-072
VPG-7A	7.00, 7.01, 7.02~7.50	51	3.5	2022-073
VPG-7B	7.50, 7.51, 7.52~8.00	51	3.5	2022-074
VPG-8A	8.00, 8.01, 8.02~8.50	51	3.8	2022-075
VPG-8B	8.50, 8.51, 8.52~9.00	51	3.8	2022-076
VPG-9A	9.00, 9.01, 9.02~9.50	51	4	2022-077
VPG-9B	9.50, 9.51, 9.52~10.00	51	4	2022-078
VPG-10A	10.00, 10.01, 10.02~10.50	51	5	2022-079
VPG-10B	10.50, 10.51, 10.52~11.00	51	5	2022-080

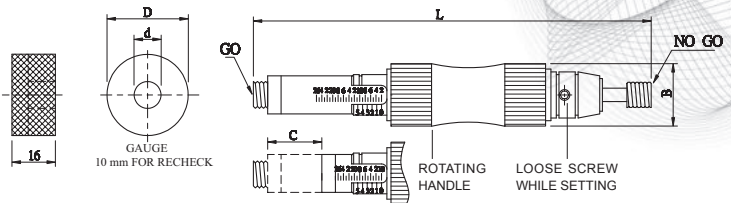
FEATURES:

DIAMETER	EACH STEP SIZE	LENGTH	ACCURACY IN DIAMETER	ROUNDNESS TOLERANCE	HARDNESS
0.05~0.09	0.01	5~10	±0.5um	0.5um	HV480
0.10~0.19	0.01	20	±0.5um	0.5um	HV480
0.20~0.99	0.01	40	±1um	0.8um	HV650
1.00~10.00	0.01	50	±1um	0.8um	HV650
10.01~20.00	0.01	50	±1.5um	1.6um	HV650
20.00~30.00	0.01	50	±1.5um	1.6um	HV650

Thread Size & Depth Gauge



NEW

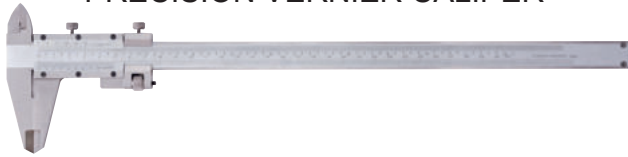


- INSTANT RESULT, QUICK READING
- THREAD PLUG GAUGE CHECK SIZE BY GO/10mm STD ACTION & THREAD DEPTH.
- RING GAUGE TO SET O POINT BEFORE USE
- 1 MARK : 0.2mm, M3 x 0.5-6H IS GRADE.
- ALLOW TO PRESET THE DESIRED THREAD DEPTH

ORDER NO.	SPECIFICATION					C MEASURING Depth(mm)	WEIGHT (kg)	CODE NO.
	A	B	L	D	d			
VSD-M3	M3x0.5-6H	17	120	Ø30	Ø3.3	26	0.12	2022-400
VSD-M4	M4x0.7-6H	17	120	Ø30	Ø4.3	26	0.12	2022-401
VSD-M5	M5x0.8-6H	17	120	Ø30	Ø5.5	26	0.14	2022-402
VSD-M6	M6x1-6H	17	120	Ø30	Ø6.5	26	0.14	2022-403
VSD-M8	M8x1.25-6H	23	140	Ø30	Ø10	26	0.2	2022-404
VSD-M10	M10x1.5-6H	23	145	Ø30	Ø10.5	30	0.2	2022-405

Measuring Instrument

PRECISION VERNIER CALIPER



L: 150, 200, 300 mm

ORDER NO.	1 SCALE	WEIGHT(kg)	CODE NO.
VVC-6"	0.02 mm 1/1000"	0.4	2023-001
VVC-8"		0.5	2023-002
VVC-12"		0.8	2023-003

DIGITAL ELECTRONIC CALIPER



L: 150, 200, 300 mm

ORDER NO.	1 SCALE	WEIGHT(kg)	CODE NO.
VEC-6"	0.01 mm	0.4	2023-010
VEC-8"		0.5	2023-011
VEC-12"		0.8	2023-012

DIAL CALIPER



L: 150, 200, 300 mm

ORDER NO.	1 SCALE	WEIGHT(kg)	CODE NO.
VDC-6	0.02 mm	0.4	2023-050
VDC-8		0.5	2023-051
VDC-12		0.9	2023-052

OUTSIDE MICROMETER



0 - 25 mm
25 - 50 mm
50 - 75 mm
75 - 100 mm
100-125 mm

INSIDE MICROMETER



5 - 30 mm
25 - 50 mm
50 - 75 mm
75 - 100 mm
100-125 mm

ORDER NO.	1 SCALE	WEIGHT(kg)	CODE NO.
VOM-0025	0.01 mm	0.3	2023-060
VOM-2550		0.4	2023-061
VOM-5075		0.5	2023-062
VOM-75100		0.6	2023-063
VOM-100125		1	2023-064

ORDER NO.	1 SCALE	WEIGHT(kg)	CODE NO.
VIM-0530	0.01 mm	0.3	2023-065
VIM-2550		0.4	2023-066
VIM-5075		0.4	2023-067
VIM-75100		0.4	2023-068
VIM-100125		0.42	2023-069

Measuring Instrument



DIAL INDICATOR



0.01~10 mm

ORDER NO.	1 SCALE	WEIGHT(kg)	CODE NO.
VDI-1	0.01 mm	0.3	2023-020

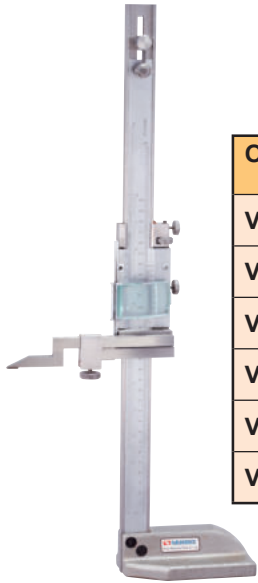
DIAL TEST INDICATOR



0.01~0.8 mm

ORDER NO.	1 SCALE	WEIGHT(kg)	CODE NO.
VDI-0.8A	0.01 mm	0.2	2023-070

HEIGHT VERNIER CALIPER



H: 300, 600, 450, 500

ORDER NO	1 SCALE	WEIGHT (kgs)	CODE NO.
VHG-06	0.02 mm	2	2023-032
VHG-08		2.1	2023-033
VHG-12		4	2023-034
VHG-18		11.9	2023-035
VHG-20		10.7	2023-036
VHG-24		11.8	2023-037

HEIGHT DIAL CALIPER



H: 300, 600 mm

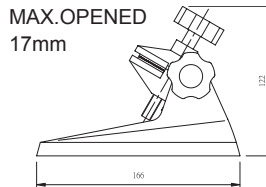
ORDER NO.	1 SCALE	WEIGHT (kgs)	CODE NO.
VHD-12	0.01 mm	4	2023-080
VHD-24		9.4	2023-081

MICROMETER HEAD



ORDER NO.	SCALE x L	WEIGHT(kg)	CODE NO.
VMH-25	0.01x25 mm	0.2	2023-040

MICROMETER STAND



166x110x122 mm

ORDER NO.	WEIGHT(kg)	CODE NO.
VH-19	1.3	2023-090

Measuring Tool Kits

NEW



ORDER NO.	SET INCLUDING	WEIGHT (kg)	CODE NO.
VVC-20	VVC-6 x 1 PCS VOM-0025 x 1 PCS VIM-0530 x 1 PCS	1.37	2023-009

Oil Type Protractor With Magnets



VAL-60



VAL-80



VAL-50



VAL-30



VAL-10



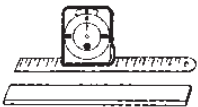
VAL-20

ORDER NO.	LxWxH	BASE	ACU	WEIGHT (kg)	CODE NO.
VAL-10	78x62x14mm	ABS	0.2°	0.2	2033-100
VAL-30	93x79x15mm	ABS	0.1°	0.2	2033-101
VAL-50	93x79x16mm	METAL	0.083°	0.4	2033-102
VAL-60	140x130x20mm	METAL	0.05°	1	2033-103
	70x65x30mm	ABS	0.2°	0.2	2033-104
VAL-80	335x73x30mm	ALUMINUM	0.2	0.2°	2033-105
	13mm ¹ / ₂ "x3M/10'				

- The pointer is rotating in a hydraulic oil for stable, precise and error-eliminating reading, even to a differential subgraduation less than one degree. The two pointers or the vernier versus the annular graduations are read super imposedly with minimum reading error.
- Double annular graduations are provided for preventing visual reading error.
- The transparent temperature-resistant oil may visually amplify the pointer for a better optical reading.
- The double-rail magnet may attract this angle level on a round pipe or a surface of ferrous material.
- An extension rule could be inserted into the bottom slot for measurement and drawing line for wider area.

1. RESET: For setting a pseudo-horizon, upon which a new angle on the pseudo-horizon can be directly measured.
2. DOUBLE CHECK: Double annular graduations provided for calibrating either positive or negative degrees.

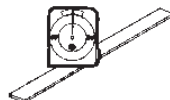
MULTI-FUNCTION ANGLE LEVEL



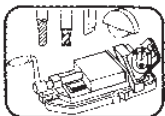
A Thin iron plate (The magnet power the thicker the weaker) may be attracted under the angle level for wider measurement.



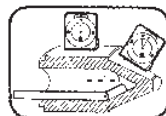
Inserting a straight extension rule into a bottom slot if the angle level.



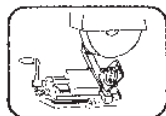
Attracting the angle level on an iron plate for measuring an angle inside a tank.



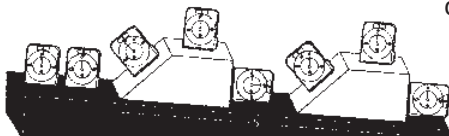
1. Suitable for working machines



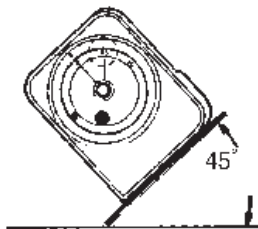
2. Grinding machine



3. Out & inner cone angle

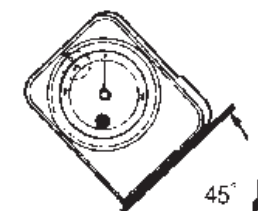


A standard angle block laid on a Non-horizontal Plane showing several measured positions by this angle level.



Finding an angle

Align the movable degree scale 0° reading, in line with the fixed vernier, 0° mark. Set your instrument's bottom surface on the object to be measured. Your reading off the pointer is your angle of inclination from 0°



Setting Specific angles

Align the desired angle on the movable scale to the vernier 0° mark. Tilt the instrument until the pointer is aligned with the 0° mark.

OVERLAP

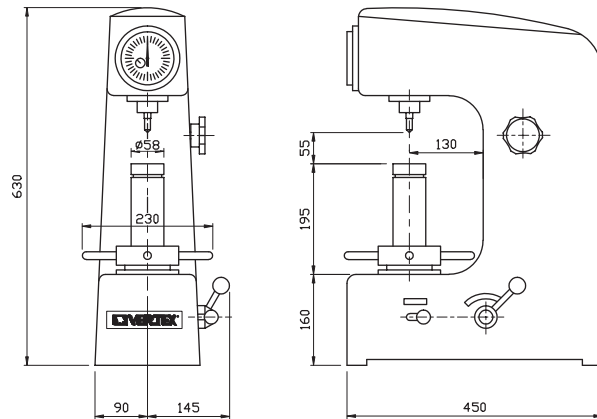


Hardness Tester

ORDER NO.VHT-260 CODE NO.2033-201



NEW



- Swing 260mm
- Workpiece max. height : 170mm
- L x W x H : 466 x 238 x 630 mm
- Weight : 65kgs
- 3 pressure degree : 60, 100, 150 kgs
- Rockwell scale : HRA>70
- HRB 30 - 100
- HRC 20 - 67

ACCESSORIES :

- Diamond tester x 1
- Steel ball tester x 1
- Flat testing table x 2
- Prisma testing table x 1
- Rockwell standard manual x 1



Stainless Steel Ruler

NEW



- Scale : acid - etched,engraved
- Surface treatment : polished finishing.

ORDER NO.	SIZE	DIMENSION(mm)	N.W.(kg)	CODE NO.
VSR-150	6"/15 cm	170x14.7x0.6	0.015	2033-321
VSR-200	8"/20 cm	226x20.0x0.6	0.03	2033-322
VSR-300	12"/30 cm	334x23.7x1.0	0.06	2033-323

NEW



The metric thread plug gauge & ring gauge
 ● Plug Gauge conform to DIN13 / DIN2280;
 ● Ring Gauge conform to DIN13 / DIN2285.

The Metric Thread Ring Gauge In Coarse Thread

Unit : mm

ORDER NO.	Size (mm)	CODE NO.	ORDER NO.	Size (mm)	CODE NO.
VPG-3M	M3 x 0.5P	2033-340	VPG-18M	M18 x 2.5P	2033-349
VPG-4M	M4 x 0.7P	2033-341	VPG-20M	M20 x 2.5P	2033-350
VPG-5M	M5 x 0.8P	2033-342	VPG-22M	M22 x 2.5P	2033-351
VPG-6M	M6 x 1.0P	2033-343	VPG-24M	M24 x 3.0P	2033-352
VPG-8M	M8 x 1.25P	2033-344	VPG-27M	M27 x 3.0P	2033-353
VPG-10M	M10 x 1.5P	2033-345	VPG-30M	M30 x 3.5P	2033-354
VPG-12M	M12 x 1.75P	2033-346	VPG-33M	M33 x 3.5P	2033-355
VPG-14M	M14 x 2.0P	2033-347	VPG-36M	M36 x 4.0P	2033-356
VPG-16M	M16 x 2.0P	2033-348			

NEW



The Metric Thread Ring Gauge In Coarse Thread

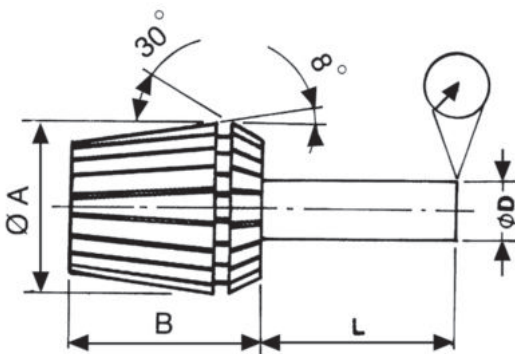
Unit : mm

ORDER NO.	Size (mm)	CODE NO.	ORDER NO.	Size (mm)	CODE NO.
VRG-3	M3 x 0.5P	2033-370	VRG-18	M18 x 2.5P	2033-379
VRG-4	M4 x 0.7P	2033-371	VRG-20	M20 x 2.5P	2033-380
VRG-5	M5 x 0.8P	2033-372	VRG-22	M22 x 2.5P	2033-381
VRG-6	M6 x 1.0P	2033-373	VRG-24	M24 x 3.0P	2033-382
VRG-8	M8 x 1.25P	2033-374	VRG-27	M27 x 3.0P	2033-383
VRG-10	M10 x 1.5P	2033-375	VRG-30	M30 x 3.5P	2033-384
VRG-12	M12 x 1.75P	2033-376	VRG-33	M33 x 3.5P	2033-385
VRG-14	M14 x 2.0P	2033-377	VRG-36	M36 x 4.0P	2033-386
VRG-16	M16 x 2.0P	2033-378			

ER collet system of VERTEX is made of special elastic steel material under excellent heat treatment and precise grinding process, so it has precise accuracy, powerful clamping ability, and is durable. This collet can clamp for a specific standard size and its next size, (Refer to the data sheet on page 2). It can be widely used for boring, milling, drilling and tapping as well as for grinding operation, and is available for all sizes.

ER COLLET DIMENSIONS

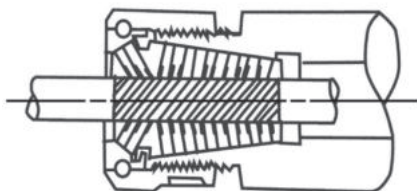
TYPE	A	B
ER-8	8.5	13.5
ER-11	11.5	18
ER-16	17	27
ER-20	21	31
ER-25	26	35
ER-32	33	40
ER-40	41	46
ER-50	52	60



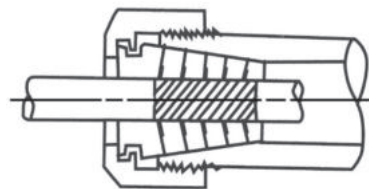
L mm	D mm	DIN6343 Standard precision	VERTEX Standard precision	A Grade Optional
6	1.0-1.4	0.02	0.015	0.01
10	1.5-2.9	0.02	0.015	0.01
16	3.0-5.9	0.02	0.015	0.01
25	6.0-9.9	0.02	0.015	0.01
40	10.0-17.9	0.03	0.02	0.01
50	18.0-26.9	0.03	0.02	0.01
60	27.0-34.9	0.03	0.02	0.01

THE HIGH PRECISION OF A GRADE IS AVAILABLE

double-taper chuck



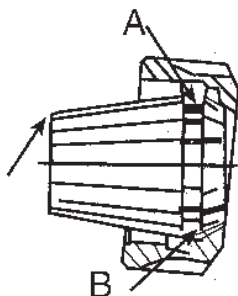
single-taper chuck



POWERFUL CLAMPING STRENGTH

The handle of the drill with double-taper chuck is longer than that with single-taper (grinding spring) collet. The clamping strength will be more powerful, if a screw-driver fastened by steel ball is adopted.

Mounting instructions for ER collets DIN 6499-A and DIN 6499-B



A - Place collet inside nut and rotate the nut to engage with the extractor spiral in collet groove.

B - Only then mount nut and collet together into the collet holder or machine spindle.

Note: Never use a 12-11mm collet to clamp a 12.2mm diameter, but rather use a 13-12mm collet.



ER Spring Collet Chuck System

STANDARD PRECISION TYPE

DIN 6499



ER COLLET SET WITH CLAMPING RANGE

TYPE	ER-8			ER-11			ER-16			ER-20			
COMPLET SET	9PCS/SET			7PCS/SET			10PCS/SET			12PCS/SET			
FULL SET	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	
	V08000	0.5-5.0	3001-101	V11000	0.5-7.0	3002-101	V16000	0.5-10.0	3003-101	V20000	1-13	3004-101	
INDIVIDUAL UNIT	V08010	1.0-0.5	3001-001	V11010	1.0-0.5	3002-001	V16010	1.0-0.5	3003-001	V20020	2-1	3004-001	
	V08015	1.5-1.0	3001-002	V11020	2.0-1.5	3002-002	V16020	2.0-1.0	3003-002	V20030	3-2	3004-002	
	V08020	2.0-1.5	3001-003	V11030	3.0-2.5	3002-003	V16030	3.0-2.0	3003-003	V20040	4-3	3004-003	
	V08025	2.5-2.0	3001-004	V11040	4.0-3.5	3002-004	V16040	4.0-3.0	3003-004	V20050	5-4	3004-004	
	V08030	3.0-2.5	3001-005	V11050	5.0-4.5	3002-005	V16050	5.0-4.0	3003-005	V20060	6-5	3004-005	
	V08035	3.5-3.0	3001-006	V11060	6.0-5.5	3002-006	V16060	6.0-5.0	3003-006	V20070	7-6	3004-006	
	V08040	4.0-3.5	3001-007	V11070	7.0-6.5	3002-007	V16070	7.0-6.0	3003-007	V20080	8-7	3004-007	
	V08045	4.5-4.0	3001-008	V11015	1.5	3002-008	V16080	8.0-7.0	3003-008	V20090	9-8	3004-008	
	V08050	5.0-4.5	3001-009	V11025	2.5	3002-009	V16090	9.0-8.0	3003-009	V20100	10-9	3004-009	
					V11035	3.5	3002-010	V16100	10.0-9.0	3003-010	V20110	11-10	3004-010
					V11045	4.5	3002-011	V16015	1.5	3003-011	V20120	12-11	3004-011
					V11055	5.5	3002-012	V16025	2.5	3003-012	V20130	13-12	3004-012
					V11065	6.5	3002-013	V16035	3.5	3003-013	V20010	1.0	3004-013
								V16045	4.5	3003-014	V20025	2.5	3004-014
								V16055	5.5	3003-015	V20035	3.5	3004-015
								V16065	6.5	3003-016	V20045	4.5	3004-016
								V16075	7.5	3003-017	V20055	5.5	3004-017
								V16085	8.5	3003-018	V20065	6.5	3004-018
								V16095	9.5	3003-019	V20075	7.5	3004-019
											V20085	8.5	3004-020
										V20095	9.5	3004-021	
										V20105	10.5	3004-022	
										V20115	11.5	3004-023	
										V20125	12.5	3004-024	
	Note: APPROXIMATE FOR EACH	WEIGHT (kgs)											
	ER-8	0.01											
	ER-11	0.02											
	ER-16	0.03											
	ER-20	0.05											
	ER-25	0.07											
	ER-32	0.15											
	ER-40	0.28											
	ER-50	0.54											



ER Spring Collet Chuck System

STANDARD PRECISION TYPE

DIN 6499



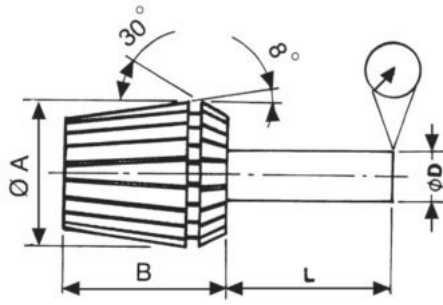
ER COLLET SET WITH CLAMPING RANGE

ER-25			ER-32			ER-40			ER-50		
15PCS/SET			18PCS/SET			23PCS/SET			12PCS/SET		
ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.
V25000	1-16	3005-101	V32000	2-20	3006-101	V40000	3-26	3007-101	V50000	10-34	3008-101
V25020	2-1	3005-001	V32030	3-2	3006-001	V40040	4-3	3007-001	V50120	12-10	3008-001
V25030	3-2	3005-002	V32040	4-3	3006-002	V40050	5-4	3007-002	V50140	14-12	3008-002
V25040	4-3	3005-003	V32050	5-4	3006-003	V40060	6-5	3007-003	V50160	16-14	3008-003
V25050	5-4	3005-004	V32060	6-5	3006-004	V40070	7-6	3007-004	V50180	18-16	3008-004
V25060	6-5	3005-005	V32070	7-6	3006-005	V40080	8-7	3007-005	V50200	20-18	3008-005
V25070	7-6	3005-006	V32080	8-7	3006-006	V40090	9-8	3007-006	V50220	22-20	3008-006
V25080	8-7	3005-007	V32090	9-8	3006-007	V40100	10-9	3007-007	V50240	24-22	3008-007
V25090	9-8	3005-008	V32100	10-9	3006-008	V40110	11-10	3007-008	V50260	26-24	3008-008
V25100	10-9	3005-009	V32110	11-10	3006-009	V40120	12-11	3007-009	V50280	28-26	3008-009
V25110	11-10	3005-010	V32120	12-11	3006-010	V40130	13-12	3007-010	V50300	30-28	3008-010
V25120	12-11	3005-011	V32130	13-12	3006-011	V40140	14-13	3007-011	V50320	32-30	3008-011
V25130	13-12	3005-012	V32140	14-13	3006-012	V40150	15-14	3007-012	V50340	34-32	3008-012
V25140	14-13	3005-013	V32150	15-14	3006-013	V40160	16-15	3007-013			
V25150	15-14	3005-014	V32160	16-15	3006-014	V40170	17-16	3007-014			
V25160	16-15	3005-015	V32170	17-16	3006-015	V40180	18-17	3007-015			
			V32180	18-17	3006-016	V40190	19-18	3007-016			
			V32190	19-18	3006-017	V40200	20-19	3007-017			
			V32200	20-19	3006-018	V40210	21-20	3007-018			
						V40220	22-21	3007-019			
						V40230	23-22	3007-020			
						V40240	24-23	3007-021			
						V40250	25-24	3007-022			
						V40260	26-25	3007-023			



ER Spring Collet Chuck System

SUPER ULTRA PRECISION TYPE



DIMENSIONS

TYPE	A	B
ER08	8.5	13.5
ER11	11.5	18
ER16	17	27
ER20	21	31
ER25	26	35
ER32	33	40
ER40	41	46
ER50	52	60

S GRADE Accuracy

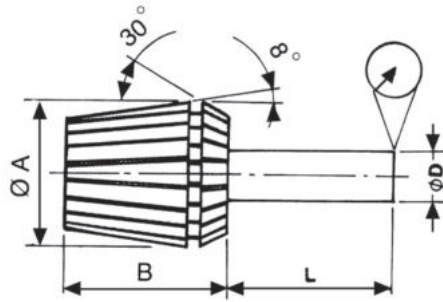
L(mm)	øD(mm)	Ultra Precision(MM)
6	1.0-1.4	0.01
10	1.5-2.9	0.01
16	3.0-5.9	0.01
25	6.0-9.9	0.01
40	10.0-17.9	0.01
50	18.0-26.9	0.01
60	27.0-34.9	0.01

TYPE	ER-8			ER-11			ER-16			ER-20		
COMPLET SET	9PCS/SET			7PCS/SET			10PCS/SET			12PCS/SET		
FULL SET	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.
	V08000S	0.5-5.0	3000-001	V11000S	0.5-7.0	3000-002	V16000S	0.5-10.0	3000-003	V20000S	1-13	3000-004
INDIVIDUAL UNIT	V08010S	1.0-0.5	3000-010	V11010S	1.0-0.5	3000-020	V16010S	1.0-0.5	3000-040	V20020S	2-1	3000-060
	V08015S	1.5-1.0	3000-011	V11020S	2.0-1.5	3000-021	V16020S	2.0-1.0	3000-041	V20030S	3-2	3000-061
	V08020S	2.0-1.5	3000-012	V11030S	3.0-2.5	3000-022	V16030S	3.0-2.0	3000-042	V20040S	4-3	3000-062
	V08025S	2.5-2.0	3000-013	V11040S	4.0-3.5	3000-023	V16040S	4.0-3.0	3000-043	V20050S	5-4	3000-063
	V08030S	3.0-2.5	3000-014	V11050S	5.0-4.5	3000-024	V16050S	5.0-4.0	3000-044	V20060S	6-5	3000-064
	V08035S	3.5-3.0	3000-015	V11060S	6.0-5.5	3000-025	V16060S	6.0-5.0	3000-045	V20070S	7-6	3000-065
	V08040S	4.0-3.5	3000-016	V11070S	7.0-6.5	3000-026	V16070S	7.0-6.0	3000-046	V20080S	8-7	3000-066
	V08045S	4.5-4.0	3000-017	V11015S	1.5	3000-027	V16080S	8.0-7.0	3000-047	V20090S	9-8	3000-067
	V08050S	5.0-4.5	3000-018	V11025S	2.5	3000-028	V16090S	9.0-8.0	3000-048	V20100S	10-9	3000-068
				V11035S	3.5	3000-029	V16100S	10.0-9.0	3000-049	V20110S	11-10	3000-069
				V11045S	4.5	3000-030	V16015S	1.5	3000-050	V20120S	12-11	3000-070
				V11055S	5.5	3000-031	V16025S	2.5	3000-051	V20130S	13-12	3000-071
				V11065S	6.5	3000-032	V16035S	3.5	3000-052	V20010S	1.0	3000-072
							V16045S	4.5	3000-053	V20025S	2.5	3000-073
							V16055S	5.5	3000-054	V20035S	3.5	3000-074
							V16065S	6.5	3000-055	V20045S	4.5	3000-075
							V16075S	7.5	3000-056	V20055S	5.5	3000-076
							V16085S	8.5	3000-057	V20065S	6.5	3000-077
							V16095S	9.5	3000-058	V20075S	7.5	3000-078
										V20085S	8.5	3000-079
									V20095S	9.5	3000-080	
									V20105S	10.5	3000-081	
									V20115S	11.5	3000-082	
									V20125S	12.5	3000-083	



ER Spring Collet Chuck System

SUPER ULTRA PRECISION TYPE



DIMENSIONS

TYPE	A	B
ER08	8.5	13.5
ER11	11.5	18
ER16	17	27
ER20	21	31
ER25	26	35
ER32	33	40
ER40	41	46
ER50	52	60

S GRADE Accuracy

L(mm)	øD(mm)	Ultra Precision(MM)
6	1.0-1.4	0.01
10	1.5-2.9	0.01
16	3.0-5.9	0.01
25	6.0-9.9	0.01
40	10.0-17.9	0.01
50	18.0-26.9	0.01
60	27.0-34.9	0.01

ER-25			ER-32			ER-40			ER-50		
15PCS/SET			18PCS/SET			23PCS/SET			12PCS/SET		
ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.
V25000S	1-16	3000-005	V32000S	2-20	3000-006	V40000S	3-26	3000-007	V50000S	10-34	3000-008
V25020S	2-1	3000-090	V32030S	3-2	3000-110	V40040S	4-3	3000-130	V50120S	12-10	3000-160
V25030S	3-2	3000-091	V32040S	4-3	3000-111	V40050S	5-4	3000-131	V50140S	14-12	3000-161
V25040S	4-3	3000-092	V32050S	5-4	3000-112	V40060S	6-5	3000-132	V50160S	16-14	3000-162
V25050S	5-4	3000-093	V32060S	6-5	3000-113	V40070S	7-6	3000-133	V50180S	18-16	3000-163
V25060S	6-5	3000-094	V32070S	7-6	3000-114	V40080S	8-7	3000-134	V50200S	20-18	3000-164
V25070S	7-6	3000-095	V32080S	8-7	3000-115	V40090S	9-8	3000-135	V50220S	22-20	3000-165
V25080S	8-7	3000-096	V32090S	9-8	3000-116	V40100S	10-9	3000-136	V50240S	24-22	3000-166
V25090S	9-8	3000-097	V32100S	10-9	3000-117	V40110S	11-10	3000-137	V50260S	26-24	3000-167
V25100S	10-9	3000-098	V32110S	11-10	3000-118	V40120S	12-11	3000-138	V50280S	28-26	3000-168
V25110S	11-10	3000-099	V32120S	12-11	3000-119	V40130S	13-12	3000-139	V50300S	30-28	3000-169
V25120S	12-11	3000-100	V32130S	13-12	3000-120	V40140S	14-13	3000-140	V50320S	32-30	3000-170
V25130S	13-12	3000-101	V32140S	14-13	3000-121	V40150S	15-14	3000-141	V50340S	34-32	3000-171
V25140S	14-13	3000-102	V32150S	15-14	3000-122	V40160S	16-15	3000-142			
V25150S	15-14	3000-103	V32160S	16-15	3000-123	V40170S	17-16	3000-143			
V25160S	16-15	3000-104	V32170S	17-16	3000-124	V40180S	18-17	3000-144			
			V32180S	18-17	3000-125	V40190S	19-18	3000-145			
			V32190S	19-18	3000-126	V40200S	20-19	3000-146			
			V32200S	20-19	3000-127	V40210S	21-20	3000-147			
						V40220S	22-21	3000-148			
						V40230S	23-22	3000-149			
						V40240S	24-23	3000-150			
						V40250S	25-24	3000-151			
						V40260S	26-25	3000-152			



ER Spring Collet Chuck System

ER COLLET SET STANDARD PRECISION TYPE

DIN 6499



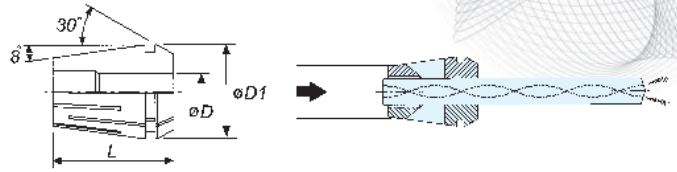
COLLET KITS STANDARD TYPE

ORDER NO.	TYPE	COLLET SIZE INSIDE DIA.	PCS/SET	KGS/PACKING	CODE NO.
V-08000	ER-8	1+0.5-5mm(1,1.5,2,2.5,3,3.5,4,4.5,5mm)	9PCS	1.065(C)	3001-101
V-11000	ER-11	1-7mm(1,2,3,4,5,6,7mm)	7PCS	1.075(C)	3002-101
V-11013		1+0.5-7mm(1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7mm)	13PCS	0.3(C)	3002-102
V-16000	ER-16	1-10mm(1,2,3,4,5,6,7,8,9,10mm)	10PCS	0.7(C)	3003-101
V-16008		3-10mm(3,4,5,6,7,8,9,10mm)	8PCS	0.6(C)	3003-102
V-20000	ER-20	2-13mm(2,3,4,5,6,7,8,9,10,11,12,13mm)	12PCS	0.9(C)	3004-101
V-20008		4-13mm(4,5,6,7,8,9,10,11,12,13mm)	10PCS	0.8(C)	3004-102
V-25000	ER-25	2-16mm(2,3,4,5,6,7,8,9,10,11,12,13,14,15,16mm)	15PCS	1.3(W)	3005-101
V-25008		4-16mm(4,5,6,7,8,9,10,11,12,13,14,15,16mm)	13PCS	1.0(W)	3005-102
V-25009		6,8,10,12,16mm	5PCS	1.325(C)	3005-103
V-25010		4,6,8,10,12,14,16mm	7PCS	0.35(C)	3005-104
V-32000	ER-32	3-20mm(3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20mm)	18PCS	3.3(P)	3006-101
V-32008		4,5,6,8,10,12,13,15,16,18,20mm	11PCS	2.8(C)	3006-102
V-32009		6,8,10,12,16,20mm	6PCS	0.9(C)	3006-103
V-40000	ER-40	4-26mm(4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26mm)	23PCS	6.5(P)	3007-101
V-40008		4,5,6,8,10,12,13,15,16,18,20,21,22,25,26mm	15PCS	4.2(P)	3007-102
V-40009		6,8,10,12,16,20,25mm	7PCS	2.0(P)	3007-103
V-50000	ER-50	12,14,16,18,20,22,24,26,28,30,32,34mm	12PCS	6.5(W)	3008-101



Coolant Collet

● Collets to DIN6499B



COOLANT COLLETS HAS ROUND SMALL THROUGH HOLE ON THE SLOTS, ONLY WHEN THE DIAMETER IS SMALL. THE REST IS SAME AS NORMAL ER COLLET.

ER20 $\phi 4,5$ MM

ER25 $\phi 4,5,6,7$ MM

ER32 $\phi 4,5,6,7,8,9$ MM

ER40 $\phi 4,5,6,7,8,9$ MM

TYPE:ER-16

ORDER NO.	CAP.mm ϕ	CODE NO.
V16040L	4.0-3.0	3000-200
V16050L	5.0-4.0	3000-201
V16060L	6.0-5.0	3000-202
V16070L	7.0-6.0	3000-203
V16080L	8.0-7.0	3000-204
V16090L	9.0-8.0	3000-205
V16100L	10.0-9.0	3000-206

TYPE:ER-20

ORDER NO.	CAP.mm ϕ	CODE NO.
V20040L	4-3	3000-210
V20050L	5-4	3000-211
V20060L	6-5	3000-212
V20070L	7-6	3000-213
V20080L	8-7	3000-214
V20090L	9-8	3000-215
V20100L	10-9	3000-216
V20110L	11-10	3000-217
V20120L	12-11	3000-218
V20130L	13-12	3000-219

TYPE:ER-25

ORDER NO.	CAP.mm ϕ	CODE NO.
V25040L	4-3	3000-221
V25050L	5-4	3000-222
V25060L	6-5	3000-223
V25070L	7-6	3000-224
V25080L	8-7	3000-225
V25090L	9-8	3000-226
V25100L	10-9	3000-227
V25110L	11-10	3000-228
V25120L	12-11	3000-229
V25130L	13-12	3000-230
V25140L	14-13	3000-231
V25150L	15-14	3000-232
V25160L	16-15	3000-233

TYPE:ER-32

ORDER NO.	CAP.mm ϕ	CODE NO.
V32040L	4-3	3000-240
V32050L	5-4	3000-241
V32060L	6-5	3000-242
V32070L	7-6	3000-243
V32080L	8-7	3000-244
V32090L	9-8	3000-245
V32100L	10-9	3000-246
V32110L	11-10	3000-247
V32120L	12-11	3000-248
V32130L	13-12	3000-249
V32140L	14-13	3000-250
V32150L	15-14	3000-251
V32160L	16-15	3000-252
V32170L	17-16	3000-253
V32180L	18-17	3000-254
V32190L	19-18	3000-255
V32200L	20-19	3000-256

TYPE:ER-40

ORDER NO.	CAP.mm ϕ	CODE NO.
V40040L	4-3	3000-260
V40050L	5-4	3000-261
V40060L	6-5	3000-262
V40070L	7-6	3000-263
V40080L	8-7	3000-264
V40090L	9-8	3000-265
V40100L	10-9	3000-266
V40110L	11-10	3000-267
V40120L	12-11	3000-268
V40130L	13-12	3000-269
V40140L	14-13	3000-270
V40150L	15-14	3000-271
V40160L	16-15	3000-272
V40170L	17-16	3000-273
V40180L	18-17	3000-274
V40190L	19-18	3000-275
V40200L	20-19	3000-276
V40210L	21-20	3000-277
V40220L	22-21	3000-278
V40230L	23-22	3000-279
V40240L	24-23	3000-280
V40250L	25-24	3000-281
V40260L	26-25	3000-282

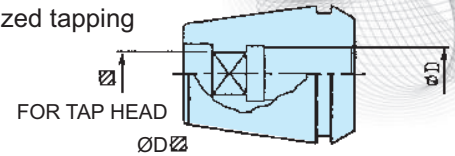
ER-GB Tap Collets



NEW



- Collets to DIN6499B
- Interchangeable with ER-collets
- For synchronized tapping



øD mm	□ mm	TAP SIZE		ER16GB	ER20GB	ER25GB	ER32GB	ER40GB
		DIN	JIS	ORDER NO.	ORDER NO.	ORDER NO.	ORDER NO.	ORDER NO.
				CODE NO.	CODE NO.	CODE NO.	CODE NO.	CODE NO.
4.5	3.4	M6		GB160450	GB200450	GB250450	GB320450	
				3000-400	3000-420	3000-440	3000-460	
5	4		M4	GB160500	GB200500	GB250500	GB320500	
				3000-401	3000-421	3000-441	3000-461	
5.5	4.5		M5	GB160550	GB200550	GB250550	GB320550	
				3000-402	3000-422	3000-442	3000-462	
6	4.5		M6 1/4U	GB160600	GB200600	GB250600	GB320600	GB400600
				3000-403	3000-423	3000-443	3000-463	3000-490
6	4.9	M8		GB160601	GB200601	GB250601	GB320601	GB400601
				3000-404	3000-424	3000-444	3000-464	3000-491
6.1	5		5/16U	GB160610	GB200610	GB250610	GB320610	GB400610
				3000-405	3000-425	3000-445	3000-465	3000-492
6.2	5		M8	GB160620	GB200620	GB250620	GB320620	GB400620
				3000-406	3000-426	3000-446	3000-466	3000-493
7	5.5	M10	M10 3/8U	GB160700	GB200700	GB250700	GB320700	GB400700
				3000-407	3000-427	3000-447	3000-467	3000-494
8	6.2		7/16U	GB160800	GB200800	GB250800	GB320800	GB400800
				3000-408	3000-428	3000-448	3000-468	3000-495
8.5	6.5		M12		GB200850	GB250850	GB320850	GB400850
					3000-429	3000-449	3000-469	3000-496
9	7.1	M12	1/2U		GB200900	GB250900	GB320900	GB400900
					3000-430	3000-450	3000-470	3000-497
10	8				GB201000	GB251000	GB321000	GB401000
					3000-431	3000-451	3000-471	3000-498
10.5	8		M14 9/16U			GB251050	GB321050	GB401050
						3000-452	3000-472	3000-499
11	9	M14				GB251100	GB321100	GB401100
						3000-453	3000-473	3000-500
12	9	M16	5/8U			GB251200	GB321200	GB401200
						3000-454	3000-474	3000-501
12.5	10		M16			GB251250	GB321250	GB401250
						3000-455	3000-475	3000-502
14	11	M18	M18 3/4U				GB321400	GB401400
							3000-476	3000-503
15	12		M20				GB321500	GB401500
							3000-477	3000-504
16	12	M20					GB321600	GB401600
							3000-478	3000-505
17	13		M22 7/8U				GB321700	GB401700
							3000-479	3000-506
18	14.5	M22						GB401800
								3000-507
19	15		M24					GB401900
								3000-508
20	15		M27 1"U					GB402000
								3000-509
20	16	M27						GB402001
								3000-510
22	18	M30						GB402200
								3000-511



ER Spring Collet Chuck System

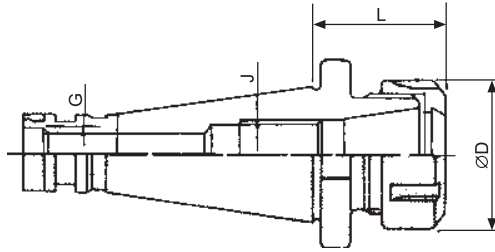
Collet Chuck Kit With ISO Taper Shank

DIN 2080/ISO SHANK

DIN 6499



NT-40



ORDER NO.	TAPER	COLLET TYPE	L	D	G	WEIGHT KGS	CODE NO.
V-101	NT-30	ER-32	55	50	1/2"-12W, M12X1.75P (USA 1/2"-UNC13)	0.7	3020-301
V-102		ER-40	70	63		1.1	3020-302
V-103	NT-40	ER-32	50	60	5/8"-11W or M16X2.0P	1.1	3021-301
V-104		ER-40	60	63		1.3	3021-302
V-105		ER-50	80	78		2	3021-303
V-106	NT-50	ER-32	60	50	1"-8W or M24X3.0P	3.1	3022-301
V-107		ER-40	65	63		3.4	3022-302
V-108		ER-50	65	78		4	3022-303
※ V-109	NT-30	ER-25	55	42	1/2"-12W, M12X1.75P	0.7	3020-303
※ V-110	NT-40	ER-25	50	42	5/8"-11W, M16X2.0P	1.1	3021-304



Collet Chuck kit With ISO Taper Shank

Including shank, full set of collets, wrench and case.



NT-30

Caution:

Please notify the taper size, collet type, set range, and set numbers when ordering.

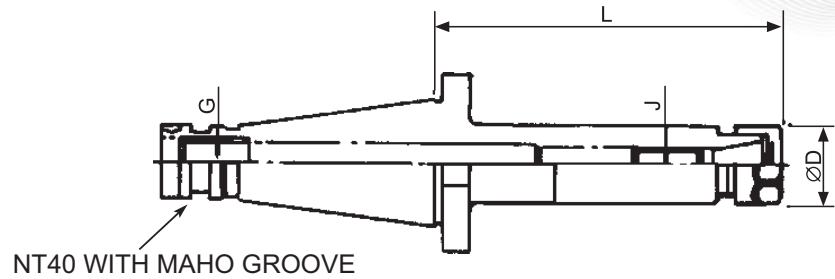
ORDER NO.	TAPER	COLLET TYPE	SET RANGE	SET PCS	WEIGHT KGS	CODE NO.
V-201	NT-30	ER-32	3-20	18	4.2	3020-401
V-202			4-20	11	3.2	3020-402
V-203			6-20	6	2.8	3020-403
V-204	NT-30	ER-40	4-26	23	7.3	3020-404
V-205			4-26	15	6	3020-405
V-206			6-25	7	4.6	3020-406
V-207	NT-40	ER-32	3-20	18	4.8	3021-401
V-208			4-20	11	3.8	3021-402
V-209			6-20	6	3.4	3021-403
V-210	NT-40	ER-40	4-26	23	8.2	3021-404
V-211			4-26	15	6.9	3021-405
V-212			6-25	7	5.2	3021-406
V-213	NT-40	ER-50	12-34	12	10	3021-407
V-214	NT-50	ER-32	3-20	18	6.4	3022-401
V-215			4-20	11	5.4	3022-402
V-216			6-20	6	5.5	3022-403
V-217	NT-50	ER-40	4-26	23	9.8	3022-404
V-218			4-26	15	8.5	3022-405
V-219			6-25	7	7	3022-406
V-220	NT-50	ER-50	12-34	12	11	3022-407
※ V-223	NT-30	ER-25	2-16	7	2.8	3020-407
※ V-224			4-16	15	2.4	3020-408
※ V-225	NT-40	ER-25	2-16	7	3.3	3021-409
※ V-226			4-16	15	3.0	3021-410



ER Spring Collet Chuck System

Extended Collet Holder With ISO Shank
DIN 2080/ISO SHANK EXTENDED CHUCK

DIN 6499



ORDER NO.	TAPER	COLLET TYPE	L	D	G	WEIGHT KG	CODE NO.
V-231	NT-30	ER-16	76	28	1/2"-12W, M12X1.75P (USA 1/2"-UNC13)	0.6	3020-304
V-232	NT-40	ER-16	76	28	5/8"-11W or M16X2.0P	1.1	3021-314
V-233		ER-16	100	28		1.2	3021-305
V-234		ER-20	76	34		1.2	3021-306
V-235		ER-20	100	34		1.4	3021-307



Extended Collet Chuck Kit With ISO Shank

Including shank, full set of collets, wrench and case

Caution:

Please notify the taper size, collette type, set range, and set numbers when ordering.

ORDER NO.	TAPER	COLLET TYPE	RANGE	PCS/SET	L	WEIGHT KGS	CODE NO.		
V-241	NT-30	ER-16	1-10	10	76	1.9	3020-409		
V-242			3-10	8		1.8	3020-410		
V-242A		ER-20	2-13	12		1.8	3020-411		
V-243	NT-40	ER-16	1-10	10	76	2.2	3021-411		
V-244			3-10	8		2.1	3021-412		
V-245		ER-16	1-10	10	100	2.4	3021-413		
V-246			3-10	8		2.3	3021-414		
V-247		ER-20	ER-20	2-13	12	76	2.3	3021-415	
V-248				4-13	10		2.2	3021-416	
V-249			ER-20	ER-20	2-13	12	100	2.6	3021-417
V-250					4-13	10		2.5	3021-418



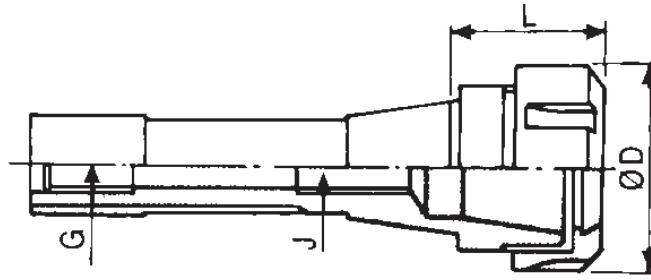
ER Spring Collet Chuck System

Collet Holders With R-8 shank



VERTEX®

R-8 SHANK



ORDER NO.	TAPER	COLLET TYPE	L	D	G	WEIGHT KG	CODE NO.
V-301	R8	ER-16	38	28	7/16"X20 UNF	0.5	3027-301
V-302		ER-32	40	50		0.8	3027-302
V-303		ER-40	70	63		1.3	3027-303



Collet Chuck Kit With R-8 Shank

Including shank, full set of collets, wrench and case. (ER16 no Wrench)



Caution:

Please notify the taper size, collette type, set range, and set numbers when ordering.

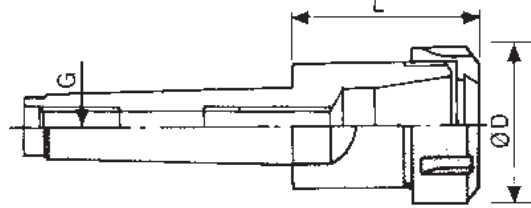
ORDER NO.	TAPER	COLLET TYPE	SET RANGE	SET PCS	WEIGHT KGS	CODE NO.
V-311	R8	ER16	1-10	10	1.5(W)	3027-401
V-312			3-10	8	1.45(P)	3027-402
V-313		ER32	3-20	18	4.3(P)	3027-403
V-314			4-20	11	3.2(P)	3027-404
V-315			6-20	6	2.9(P)	3027-405
V-316		ER40	4-26	23	7.3(P)	3027-406
V-317			4-26	15	6.1(P)	3027-407
V-318			6-25	7	4.6(P)	3027-408



ER Spring Collet Chuck System

Collet Holders With Morse Taper Shank

DIN 6499 DIN 228
MT-SHANK



ORDER NO.	TAPER	COLLET TYPE	L	D	G	WEIGHT KGS	CODE NO.
V-401	MT2	ER16	40	28	3/8"-16W or M10X1.5P	0.2	3023-301
V-402		ER20	43	34		0.3	3023-302
V-403		ER25	47	42		0.4	3023-303
V-404	MT3	ER16	40	28	3/8"-16W or 1/2"-12W	0.3	3024-301
V-405		ER32	70	50	M10X1.5P, M12X1.75P	0.8	3024-302
V-406		ER40	80	63	USA 1/2"-UNC13	1.1	3024-303
V-407		ER20	43	34	1/2"-12NC or M12X1.75P	0.3	3024-304
V-408		ER25	47	42	0.5	3024-305	
V-409	MT4	ER32	60	50	5/8"-11W or M16X2.0P	1	3025-301
V-410		ER40	82	63		1.4	3025-302
V-411	MT5	ER50	85	78	1"-8W or M24X3.0P	2.2	3025-303
V-411		ER40	82	63		2.1	3026-301
V-411		ER50	85	78		2.9	3026-302

NEW



Collet Chuck Kit With Morse Taper Shank

Including shank, full set of collets, wrench and case.
(ER16, ER20 no Wrench)

1. ER16,20,25 Packed in Wooden Box(W)
2. ER32,40,50, Packed in Plastic Box(P)

Caution:

Please notify the taper size, collette type, set range, and set numbers when ordering.

ORDER NO.	TAPER	COLLET TYPE	SET RANGE	SET PCS	WEIGHT KGS.	CODE NO.
V-412	MT2	ER16	1-10	10	1.05	3023-401
V-413		ER16	3-10	8	1	3023-402
V-414		ER20	2-13	12	1.3	3023-403
V-415		ER20	4-13	10	1.2	3023-404
V-416		ER25	2-16	15	2.4	3023-405
V-418		ER25	4-16	7	1.3	3023-407
V-419	MT3	ER16	1-10	10	1.5	3024-401
V-420		ER16	3-10	8	1.1	3024-402
V-441		ER20	2-13	12	1.35	3023-408
V-442		ER20	4-13	10	1.3	3023-409
V-443		ER25	2-16	15	2.5	3023-410
V-444		ER25	4-16	7	2.1	3023-411
V-421		ER32	3-20	18	4.1	3024-403
V-422		ER32	4-20	11	3	3024-404
V-423		ER32	6-20	6	2.7	3024-405
V-424		ER40	4-26	23	7.2	3024-406
V-425		ER40	4-26	15	6	3024-407
V-426		ER40	6-25	7	4.5	3024-408
V-427	MT4	ER32	3-20	18	4.3	3025-401
V-428		ER32	4-20	11	3.2	3025-402
V-429		ER32	6-20	6	2.9	3025-403
V-430		ER40	4-26	23	7.3	3025-404
V-431		ER40	4-26	15	6.1	3025-405
V-432		ER40	6-25	7	4.6	3025-406
V-433	MT5	ER50	12-34	12	9	3025-407
V-434		ER40	4-26	23	8.2	3026-401
V-435		ER40	4-26	15	6.9	3026-402
V-436		ER40	6-25	7	5.4	3026-403
V-437		ER50	12-34	12	9.5	3026-404

NEW



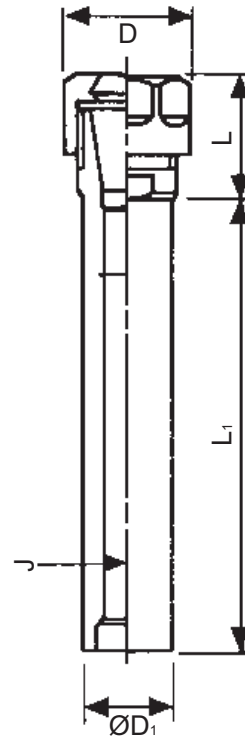
ER Spring Collet Chuck System

Collet Holders With Straight Shank

DIN6499 STRAIGHT SHANK



VERTEX®



NEW

ORDER NO.	COLLET TYPE	SHANK D1XL1	L	D	J	KGS	CODE NO.	
V-530	ER11	Ø16X50	21	19	M10	0.1	3007-300	
V-531		Ø16X100	21	19	M10	0.2	3007-311	
V-532		Ø16X150	21	19	M10	0.3	3007-312	
V-501A	ER16	Ø16X100	21	28	M12	0.3	3003-301A	
V-501		Ø20X50	30	28	M12	0.2	3003-301	
V-502		Ø20X100	30	28	M12	0.3	3003-302	
V-503		Ø20X150	30	28	M12	0.4	3003-303	
V-504		Ø25X100	30	28	M12	0.5	3003-304	
V-504A		Ø25X50	30	28	M12	0.3	3003-306	
V-505		Ø25X150	30	28	M12	0.7	3003-305	
V-505A		Ø25X200	30	28	M12	0.5	3003-307	
V-506		ER20	Ø20X50	36	34	M12	0.3	3004-301
V-507			Ø20X100	36	34	M12	0.3	3004-302
V-508	Ø20X150		36	34	M12	0.5	3004-303	
V-509	Ø25X150		36	34	M12	0.7	3004-304	
V-509A	Ø25X100		36	34	M12	0.5	3004-305	
V-509B	Ø25X50		36	34	M12	0.3	3004-306	
V-510	ER25	Ø20X50	46	42	M12	0.4	3005-301	
V-511		Ø20X100	46	42	M12	0.5	3005-302	
V-512		Ø20X150	46	42	M12	0.6	3005-303	
V-513		Ø25X100	46	42	M12	0.6	3005-304	
V-514		Ø25X150	46	42	M12	0.7	3005-305	
V-515		Ø32X60	46	42	M12	0.6	3005-306	
V-516	ER32	Ø25X80	54	50	M12	0.8	3006-301	
V-517		Ø32X100	54	50	M12	1.1	3006-302	
V-517A		Ø32X150	54	50	M12	1.5	3006-305	
V-518		Ø40X100	54	50	M12	1.4	3006-303	
V-523	ER40	Ø32X100	55	63	M16	1.5	3007-302	
V-524		Ø40X100	55	63	M16	1.8	3007-303	

ER Spring Collet Chuck System

DIN 6499 STRAIGHT SHANK



Collet Chuck Kit With Straight Shank

Including shank, full set of collets, wrench and case.

COLLET CHUCK SETS

ORDER NO.	SHANK D1XL1	COLLET TYPE	SET RANGE	SET PCS	KGS	CODE NO.	
V-601	Ø20X50L	ER16	1-10	10	0.9	3003-401	
V-602	Ø20X50L		3-10	8	0.8	3003-402	
V-603	Ø20X100L		1-10	10	1	3003-403	
V-604	Ø20X100L		3-10	8	0.9	3003-404	
V-605	Ø20X150L		1-10	10	1.1	3003-405	
V-606	Ø20X150L		3-10	8	0.5	3003-406	
V-607	Ø25X100L		1-10	10	1.1	3003-407	
V-607A	Ø25X50L		1-10	10	1.1	3003-411	
V-608	Ø25X100L		3-10	8	1.1	3003-408	
V-608A	Ø25X50L		3-10	8	1.1	3003-412	
V-609	Ø25X150L	ER20	1-10	10	1.3	3003-409	
V-610	Ø25X150L		3-10	8	1.3	3003-410	
V-611	Ø20X50L		2-13	12	1.2	3004-401	
V-612	Ø20X50L		4-13	10	1.2	3004-402	
V-613	Ø20X100L		2-13	12	1.2	3004-403	
V-614	Ø20X100L		4-13	10	1.2	3004-404	
V-615	Ø20X150L		2-13	12	1.4	3004-405	
V-615A	Ø25X50L		2-13	12	1.3	3004-409	
V-616	Ø20X150L		4-13	10	1.3	3004-406	
V-616A	Ø25X50L		4-13	10	1.3	3004-410	
V-617	Ø25X100L	ER25	2-13	12	1.4	3004-407	
V-617A	Ø25X150L		2-13	12	1.5	3004-411	
V-618	Ø25X100L		4-13	10	1.4	3004-408	
V-618A	Ø25X150L		4-13	10	1.5	3004-412	
V-619	Ø20X50L		ER25	2-16	15	2.2	3005-401
V-621	Ø20X50L			4-16	7	1.7	3005-403
V-622	Ø20X100L			2-16	15	2.3	3005-404
V-624	Ø20X100L			4-16	7	1.8	3005-406
V-625	Ø20X150L			2-16	15	2.4	3005-407
V-627	Ø20X150L			4-16	7	2	3005-409
V-628	Ø25X100L	2-16		15	2.3	3005-410	

ORDER NO.	SHANK D1XL1	COLLET TYPE	SET RANGE	SET PCS	KGS	CODE NO.
V-681	Ø16X50L	ER11	1-7	13	0.5	3002-401
V-682	Ø16X50L		1-7	7	0.5	3002-402
V-683	Ø16X100L		1-7	13	0.6	3002-403
V-684	Ø16X100L		1-7	7	0.5	3002-404

ORDER NO.	SHANK D1XL1	COLLET TYPE	SET RANGE	SET PCS	KGS	CODE NO.
V-630	Ø25X100L	ER25	6-16	7	2	3005-412
V-631	Ø25X150L		2-16	15	2.6	3005-413
V-633	Ø25X150L		6-16	7	1.9	3005-415
V-634	Ø32X60L		2-16	15	2.5	3005-416
V-636	Ø32X60L	ER32	6-16	7	1.9	3005-418
V-637	Ø25X80L		3-20	18	4.1	3006-401
V-638	Ø25X80L		4-20	11	3	3006-402
V-639	Ø25X80L		3-20	6	2.7	3006-403
V-640	Ø32X100L		4-20	18	4.3	3006-404
V-641	Ø32X100L		6-20	11	3.2	3006-405
V-642	Ø32X100L		6-20	6	2.9	3006-406
V-643	Ø40X100L		3-20	18	4.6	3006-407
V-644	Ø40X100L		4-20	11	3.5	3006-408
V-645	Ø40X100L		6-20	6	3.2	3006-409
V-646	Ø1"X3L	ER40	3-20	18	4.1	3006-410
V-647	Ø1"X3L		4-20	11	3	3006-411
V-648	Ø1"X3L		6-20	6	2.9	3006-412
V-658	Ø32X100L		4-26	23	7.3	3007-404
V-659	Ø32X100L		4-26	15	6.1	3007-405
V-660	Ø32X100L		6-25	7	4.6	3007-406
V-661	Ø40X100L		4-26	23	7.6	3007-407
V-662	Ø40X100L		4-26	15	6.5	3007-408
V-663	Ø40X100L		6-25	7	5	3007-409

- V-603, V-604 are the most popular item.
- THE ER-20/25/32/40 ARE TO BE CONTINUED
- V-613, V-614 are the most popular item.



ER Spring Collet Chuck System

MINI TYPE STRAIGHT SHANK HOLDER

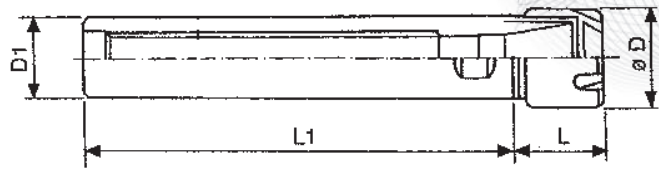
DIN 6499 MINI STRAIGHT SHANK



NEW



MINI TYPE NUT



COLLET HOLDER (MINI TYPE)

ORDER NO.	COLLET TYPE	SHANK D1XL1	D	L	KGS	CODE NO.
V-551	ER11M	ST16X50L	16	22	0.1	3011-301
V-552		ST16X100L	16		0.2	3011-302
V-552A		ST16X150L	16		0.3	3011-303
V-553	ER16M	ST20X50L	22	32	0.2	3012-301
V-554		ST20X100L	22		0.3	3012-302
V-555		ST20X150L	22		0.4	3012-303
V-555A		ST20X200L	22		0.4	3012-307
V-556	ER20M	ST20X50L	28	33	0.2	3013-301
V-557		ST20X100L	28		0.3	3013-302
V-558		ST20X150L	28		0.4	3013-303
V-559		ST25X100L	28		0.4	3013-304
V-560		ST25X150L	28		0.6	3013-305
V-561	ER16M	ST16X100L	22	22	0.2	3012-304
V-562		ST25X100L	22		0.4	3012-305
V-563		ST25X150L	22		0.6	3012-306
V-563A		ST25X200L	22		0.5	3012-308
V-557A	ER20M	ST20X200L	28	35	0.4	3013-306
V-560A		ST25X200L	28		0.5	3013-307

* For the 50L A side of the shank is milled has flate surface.

Collet Chuck Kit With Straight Shank

Including shank,
full set of collets,
wrench and case.



MINI TYPE NUT

MINI TYPE

ORDER NO.	SHANK D1XL1	COLLET TYPE	SET RANGE	SET PCS	KGS	CODE NO.
V-691A	ST16X50L	ER11M	1-7	7	0.5	3011-401
V-691B	ST16X50L		1-7	13	0.5	3011-402
V-692A	ST16X100L		1-7	7	0.6	3011-403
V-692B	ST16X100L		1-7	13	0.6	3011-404
V-693A	ST20X50L	ER16M	1-10	10	0.7	3012-401
V-693B	ST20X50L		3-10	8	1.0	3012-402
V-693C	ST16X100L		1-10	10	0.6	3012-407
V-694A	ST20X100L		1-10	10	0.9	3012-403
V-694B	ST20X100L		3-10	8	1.1	3012-404
V-695A	ST20X150L		1-10	10	1.3	3012-405
V-695B	ST20X150L		3-10	8	1.2	3012-406
V-695C	ST25X100L		1-10	10	1.2	3012-408
V-695D	ST25X150L	1-10	10	1.4	3012-409	
V-696A	ST20X50L	ER20M	2-13	12	1.3	3013-401
V-696B	ST20X50L		4-13	10	1.2	3013-402
V-697A	ST20X100L		2-13	12	1.1	3013-403
V-697B	ST20X100L		4-13	10	1.1	3013-404
V-698A	ST20X150L		2-13	12	1.2	3013-405
V-698B	ST20X150L		4-13	10	1.2	3013-406
V-698C	ST25X100L		2-13	12	1.4	3013-407
V-698D	ST25X150L		2-13	12	1.5	3013-408



Clamping Nuts For Collets

ER CLAMPING NUT SYSTEM



VERTEX®

DIN 6499



ER20M



ER16M



ER11MS



ER40KM
WITH A BEARING



ER40UM



ER16UM

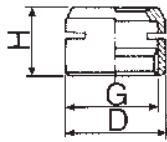


FIG.1 ER11,16,20MS

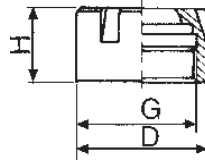


FIG.2 ER11,16,20M
ER8M, 25M

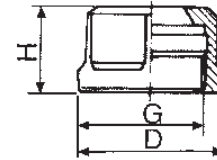


FIG.3 ER11,16,20UM

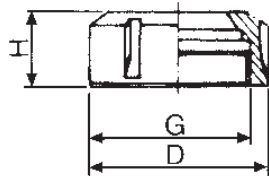


FIG.4 ER25,32,40,50UM

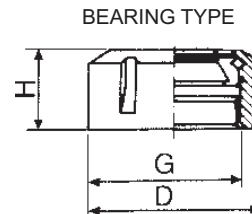


FIG.5 ER40,50KM

CLAMPING NUTS

ORDER NO.	Fig.	COLLET TYPE	D	H	G	WEIGHT KG.	CODE NO.
V-800	3	ER11UM	19	13	M14X0.75P	0.02	3015-001
V-801	3	ER16UM	28	18	M22X1.5P	0.04	3015-002
V-802	3	ER20UM	34	21	M25X1.5P	0.07	3015-003
V-803	4	ER25UM	42	20	M32X1.5P	0.1	3015-004
V-804	4	ER32UM	50	23	M40X1.5P	0.2	3015-005
V-805	4	ER40UM	63	25	M50X1.5P	0.3	3015-006
V-806	4	ER50UM	78	35	M64X2.0P	0.5	3015-007
V-807	1	ER11MS	16	12	M13X0.75P	0.01	3015-008
V-808	2	ER16M	22	18	M19X1.0P	0.02	3015-009
V-809	2	ER20M	28	19	M24X1.0P	0.03	3015-010
V-810A	5	ER40KM	63	29	M50X1.5P	0.4	3015-011
V-810B	5	ER50KM	78	40	M64X2.0P	0.6	3015-012
V-810C	2	ER11M	16	12	M13X0.75P	0.01	3015-013
V-810D	2	ER8M	12	10.8	M10X0.75P	0.01	3015-014
V-810E	2	ER25M	35	20	M30X1.0P	0.05	3015-015
V-811A		ER16MS	22	18	M19X1.0P	0.015	3015-016
V-811B		ER20MS	28	19	M24X1.0P	0.03	3015-017



Clamping Wrench For Collets

ER WRENCH SYSTEM

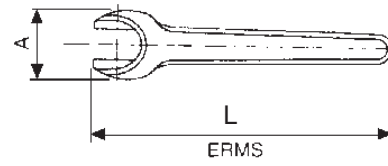


VERTEX®

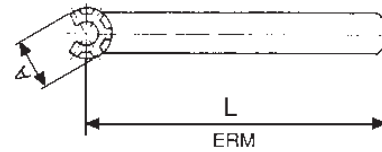
DIN6499



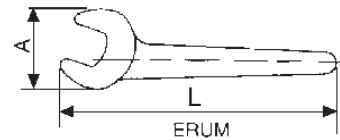
ERMS



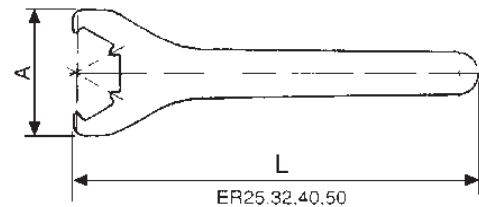
ERM



ERUM11, 16, 20



ERUM25, 32, 40, 50



ORDER NO.	TYPE	A	L	KGS	CODE NO.
V-820	ER11UM	35	135	0.1	3015-100
V-821	ER11MS	22	100	0.04	3015-101
V-822	ER11M	17	95	0.04	3015-102
V-823	ER16M	22.5	118	0.06	3015-103
V-815	ER16UM	44	140	0.2	3015-104
V-824	ER20M	28	130	0.1	3015-105
V-816	ER20UM	53	170	0.2	3015-106
V-811	ER25UM	65	210	0.2	3015-107
V-812	ER32UM	75	250	0.3	3015-108
V-813	ER40UM	90	290	0.5	3015-109
V-814	ER50UM	110	350	0.8	3015-110
V-817	ER8M	13	75	0.02	3015-111
V-818	ER25M	36.5	135	0.1	3015-112



ER Spring Collet Chuck System

Collet Holders With BT Taper Shank
(For CNC Machine Center)
ER-32 ER-40

MAS403 BT-SHANK

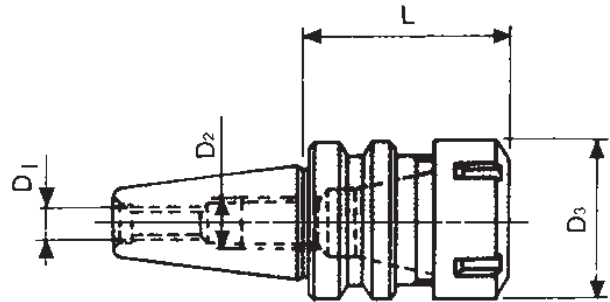


BT-40-ER32



BT-40-ER20M

ACCURACY
RUNOUT 0.005m/m
TAPER SHANK AT-3
R.P.M. 7000



ORDER NO.	TAPER	COLLET TYPE	D1	D2	D3	L	KGS	CODE NO.
V-700	BT30	ER32	M12	M12X1.75P	50	60	0.7	3031-303
V-703A	BT40	ER32	M16X2.0P	M22X1.5P	50	70	1.4	3032-305
V-703B		ER32	M16X2.0P	M22X1.5P	50	100	1.7	3032-306
V-704		ER40	M16X2.0P	M22X1.5P	63	80	1.7	3032-307
V-704B		ER40	M16X2.0P	M22X1.5P	63	100	2	3032-421
V-705		BT50	ER32	M24X3.0P	M28X1.5P	50	100	4.5
V-706	ER40		M24X3.0P	M28X1.5P	63	100	4.6	3033-306
V-706B	ER40		M24X3.0P	M28X1.5P	63	150	5.7	3033-307
V-707	ER50		M24X3.0P	M36X1.5P	78	100	5.1	3033-308
V-710	BT30	ER11	M12	M12X1.75P	19	60	0.5	3033-311
V-711		ER11	M12	M12X1.75P	19	100	0.6	3033-312
V-712		ER11M	M12	M12X1.75P	16	100	0.9	3033-313
V-713		ER16	M12	M12X1.75P	28	100	0.8	3033-314
V-714		ER16M	M12	M12X1.75P	22	100	0.7	3033-315
V-715		ER20	M12	M12X1.75P	34	60	0.6	3033-316
V-716		ER20	M12	M12X1.75P	34	100	0.9	3033-317
V-717		ER20M	M12	M12X1.75P	28	100	0.9	3033-318
V-718		ER25	M12	M12X1.75P	42	60	0.7	3033-319
V-719		ER40	M12	M12X1.75P	63	70	1	3033-320
V-720		BT40	ER11	M16	M22X11.5P	19	70	1.2
V-721	ER11		M16	M22X11.5P	19	100	1.5	3033-322
V-722A	ER11M		M16	M22X11.5P	16	100	1.05	3033-323
V-722B	ER11M		M16	M22X11.5P	16	150	1.3	3033-323A
V-723A	ER16M		M16	M22X11.5P	22	100	1.3	3033-324
V-723B	ER16M		M16	M22X11.5P	22	150	1.5	3033-330
V-724A	ER20M		M16	M22X11.5P	28	100	1.6	3033-325
V-724B	ER20M		M16	M22X11.5P	28	150	1.6	3033-331
V-725	ER25		M16	M22X11.5P	42	70	1.3	3033-326
V-726	ER25		M16	M22X11.5P	42	100	1.6	3033-327
V-727	ER50		M16	M22X11.5P	78	90	2.2	3033-328



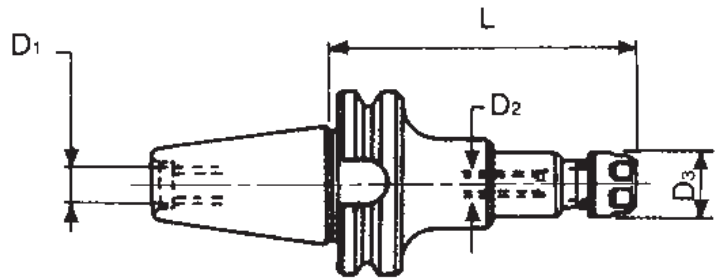
ER Spring Collet Chuck System

Collet Holders With Extension Type BT Taper Shank
ER-16, ER-20



BT-40-ER20

ACCURACY
RUNOUT 0.005m/m
TAPER SHANK AT-3
R.P.M. 7000



ORDER NO.	TAPER	COLLET TYPE	D3	L	D1	WEIGHT KGS	CODE NO.
V-770	BT30	ER16	28	60	M12	0.6	3031-301
V-772	BT40	ER16	28	70	M16	1.2	3032-301
V-773		ER16	28	100	M16	1.4	3032-302
V-774		ER20	34	70	M16	1.3	3032-303
V-774A		ER16	28	150	M16	1.7	3032-308
V-775		ER20	34	100	M16	1.5	3032-304
V-775A		ER20	34	135	M16	1.6	3032-309
V-775B		ER20	34	150	M16	1.9	3032-310
V-775C		ER25	42	150	M16	2.1	3032-311
V-733		ER32	50	150	M16	2	3033-354
V-776		BT50	ER16	28	100	M24	2.3
V-777	ER16		28	150	M24	4.3	3033-302
V-778	ER20		34	100	M24	4.1	3033-303
V-779	ER20		34	150	M24	4.8	3033-304
V-743A	BT50	ER16	28	200	M24	7.5	3033-364
V-735		ER20	34	200	M24	5	3033-356
V-736		ER25	42	100	M24	4.3	3033-357
V-737A		ER25	42	150	M24	4.8	3033-358
V-744A		ER25	42	200	M24	8	3033-365
V-738A		ER32	50	150	M24	5.5	3033-359
V-739A		ER32	50	200	M24	6.5	3033-360
V-741A		ER40	63	200	M24	7.5	3033-362
V-742A		ER50	78	150	M24	6.7	3033-363



Collet Chuck Kit With BT Taper Shank

Including shank, full set of collets, wrench and case.

1. ER16, ER20 PACKED IN WOODEN BOX
2. ER32, ER40, ER50, PACKED IN PLASTIC BOX
3. PACKAGE INCLUDING : CHUCK, COLLET, WRENCH, BOX

Caution:

Please notify the taper size, collet type, set range, and set numbers when ordering.

ORDER NO.	BT TAPER	COLLET TYPE	SET RANGE	COLLET PCS	WEIGHT KGS	CODE NO.
V-780	BT30-60L	ER16	1-10	10	1.9	3031-401
V-780A	BT30-100L	ER16	1-10	10	2	3031-406
V-781	BT40-70L	ER16	1-10	10	2.3	3032-401
V-782	BT40-100L	ER16	1-10	10	2.7	3032-402
V-783	BT30-60L	ER20	2-13	12	2.5	3031-402
V-783A	BT30-100L	ER20	2-13	12	2.6	3032-413
V-783B	BT30-60L	ER25	2-16	15	2.5	3032-414
V-783C	BT30-60L	ER25	4-16	7	2.8	3032-415
V-784	BT40-100L	ER20	2-13	12	3	3032-403
V-784A	BT40-70L	ER20	2-13	12	2.8	3032-416
V-784B	BT40-70L	ER25	2-16	15	3.2	3032-417
V-784C	BT40-100L	ER25	4-16	7	3	3032-418
V-785	BT30-60L	ER32	3-20	18	4.4	3031-403
V-786	BT30-60L	ER32	4-20	11	3.8	3031-404
V-787	BT30-60L	ER32	6-20	6	3.4	3031-405
V-788	BT40-70L	ER32	3-20	18	5.2	3032-404
V-789	BT40-70L	ER32	4-20	11	4.2	3032-405
V-790	BT40-70L	ER32	6-20	6	3.8	3032-406
V-791	BT40-100L	ER32	3-20	18	5.7	3032-407
V-792	BT40-100L	ER32	4-20	11	4.7	3032-408
V-793	BT40-100L	ER32	6-20	6	4.3	3032-409
V-794	BT40-80L	ER40	4-26	23	8.9	3032-410
V-795	BT40-80L	ER40	4-26	15	7.6	3032-411
V-796	BT40-80L	ER40	6-25	7	6	3032-412
V-797	BT50-100L	ER40	4-26	23	11.3	3033-401
V-798	BT50-100L	ER40	4-26	15	10	3033-402
V-799	BT50-100L	ER40	6-26	7	8.5	3033-403
V-737	BT50-150L	ER40	4-26	23	12.2	3033-404
V-738	BT50-150L	ER40	4-26	15	11	3033-405
V-739	BT50-150L	ER40	6-26	7	9.5	3033-406
V-740	BT50-100L	ER50	12-34	12	12	3033-407
V-740C	BT40-90L	ER50	12-34	12	9	3033-408
V-740B	BT50-100L	ER32	3-20	18	7.5	3033-409



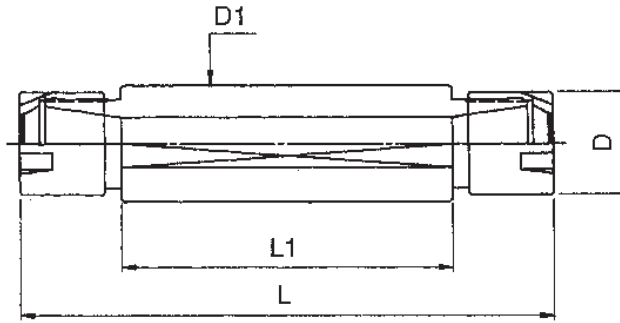
ST/ER Straight Shank With Double Head Spindle



VERTEX®

M TYPE DOUBLE HEAD

FOR CNC LATHE ONLY



ORDER NO.	COLLET TYPE	SHANK (ØD1-ER-L1)	L	L1	D	WEIGHT (KGS)	CODE NO.
V-830	ER11	Ø20-ER11M2-50	70	50	16	0.2	3032-430
V-831	ER11	Ø20-ER11M2-78	108	78	16	0.3	3032-431
V-832	ER16	Ø20-ER16M2-50	82	50	22	0.2	3032-432
V-833	ER16	Ø20-ER16M2-70	112	70	22	0.32	3032-433
V-834	ER16	Ø25-ER16M2-50	92	50	22	0.25	3032-434
V-835	ER16	Ø25-ER16M2-80	122	80	22	0.35	3032-435
V-836	ER20	Ø25-ER20M2-50	92	50	28	0.3	3032-436
V-837	ER20	Ø25-ER20 M2-80	122	80	28	0.35	3032-437

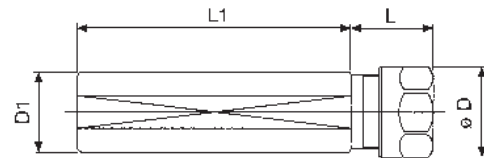


ST/ER Straight Shank With Single Head Spindle

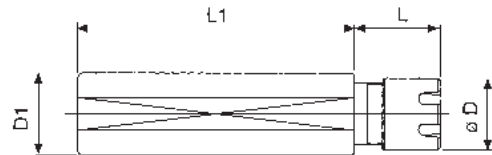
FOR CNC LATHE ONLY

M TYPE SINGLE HEAD

UM TYPE



M TYPE SINGLE HEAD



UM TYPE

ORDER NO.	COLLET TYPE	SHANK (ØD1-ER-L1)	L	L1	D	WEIGHT (KGS)	CODE NO.
V-841	ER16	Ø20-ER16M-70	21	70	22	0.2	3032-441
V-842	ER16	Ø25-ER16M-70	21	70	22	0.25	3032-442
V-843	ER16	Ø3/4"-ER16M-70	21	70	22	0.2	3032-443
V-844	ER16	Ø20-ER16UM-70	21	70	28	0.2	3032-444
V-845	ER16	Ø25-ER16UM-70	21	70	28	0.25	3032-445
V-846	ER16	Ø3/4"-ER16UM-70	21	70	28	0.2	3032-446
V-847	ER20	Ø22-ER20UM-70	23	70	34	0.25	3032-447
V-848	ER20	Ø25-ER20UM-70	23	70	34	0.3	3032-448

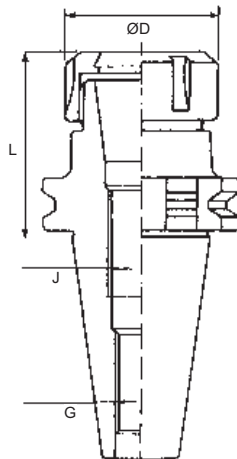
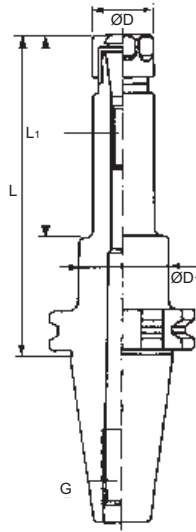


ER-SK Taper Shank

COLLET HOLDER WITH SK-SHANK
DIN 69871



& COLLET CHUCK SET
DIN 69871



COLLET CHUCK KIT WITH SK-SHANK DIN 69871

INCLUDING SHANK, FULL SET OF COLLETS,
WRENCH AND CASE.



ORDER NO.	COLLET TYPE	TAPER	D	L	G	WEIGHT KGS	CODE NO.
V-741	ER16	SK40	28	100	M16	1.5	3029-301
V-741K	ER16	SK30	28	60	M12	0.45	3029-311
V-741B	ER16	SK50	28	100	M24	3.5	3029-317
V-742	ER20	SK40	34	100	M16	1.5	3029-302
V-742K	ER20	SK30	34	60	M12	0.5	3029-312
V-742C	ER16	SK40	28	70	M16	1.1	3029-315
V-742D	ER20	SK40	34	70	M16	1.2	3029-316
V-742E	ER20	SK50	34	100	M24	3.5	3029-318
V-743	ER16	SK50	28	150	M24	4.8	3030-301
V-744	ER20	SK50	34	150	M24	4.8	3030-302

ORDER NO.	COLLET TYPE	TAPER	D	L	G	WEIGHT KGS	CODE NO.
V-745	ER32	SK40	50	70	M16	1.2	3029-303
V-745A	ER32	SK30	50	60	M12	0.8	3029-314
V-745B	ER32	SK50	50	100	M24	3.7	3029-320
V-746	ER40	SK40	63	80	M16	1.6	3029-304
V-747	ER40	SK50	63	100	M24	4.2	3030-303
V-749	ER25	SK40	42	70	M16	1.1	3030-304
V-749A	ER25	SK50	42	100	M24	3.4	3029-319

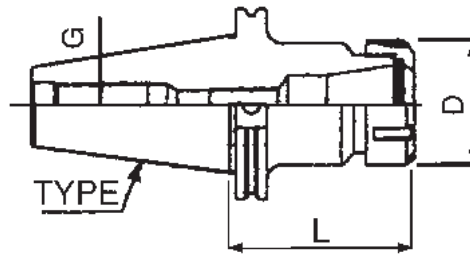
ORDER NO.	ER TYPE	SK TAPER	SET RANGE	SET PCS	WEIGHT KGS	CODE NO.
V-751	ER16	SK40-70L	1-10	10PCS	2.3	3029-401
V-751A	ER16	SK30-60L	1-10	10PCS	1.8	3029-420
V-752	ER20	SK40-70L	2-13	12PCS	3	3029-402
V-752A	ER20	SK30-60L	2-13	12PCS	2.4	3029-421
V-753	ER32	SK40-70L	3-20	18PCS	5.2	3029-403
V-754	ER32	SK40-70L	4-20	11PCS	4.2	3029-404
V-754A	ER32	SK30-60L	3-20	18PCS	4.2	3029-423
V-754B	ER32	SK50-100L	3-20	18PCS	7	3029-424
V-755	ER32	SK40-60L	6-20	6PCS	3.8	3029-405
V-756	ER40	SK40-80L	4-26	23PCS	8.9	3029-406
V-757	ER40	SK40-80L	4-26	15PCS	7.6	3029-407
V-758	ER40	SK40-80L	6-25	7PCS	6	3029-408
V-759	ER40	SK50-100L	4-26	23PCS	11.3	3030-401
V-760	ER40	SK50-100L	4-26	15PCS	10	3030-402
V-761	ER40	SK50-100L	6-26	7PCS	8.5	3030-403
V-762	ER25	SK40-70L	2-16	15PCS	3.5	3029-409
V-763	ER25	SK40-70L	4-26	7PCS	3.2	3029-410

ER16, ER20 PACKED IN WOODEN CASE
ER32, ER40 PACKED IN PLASTIC CASE



ER Spring Collet Chuck System

COLLET HOLDER WITH CAT-SHANK



ORDER NO.	COLLET TYPE	TAPER	D	L	G	WEIGHT KGS	CODE NO.
V-870	ER16	CAT30	28	2"	1/2"-13	0.8	3034-301
V-871	ER16	CAT40	28	3"	5/8"-11	1.1	3035-301
V-872	ER20		34	3"		1.2	3035-302
V-873	ER25		42	2-1/2"		1.2	3035-303
V-874	ER32		50	2-1/2"		1.2	3035-304
V-875	ER40		63	3"		1.5	3035-305
V-876	ER40	CAT50	63	3-1/2"	1/8"	4	3036-301

COLLET CHUCK KIT WITH CAT-SHANK

INCLUDING SHANK, FULL SET OF COLLET, WRENCH AND CASE.

1. ER16, ER20, ER25 PACKED IN WOODEN BOX.
2. ER32, ER40, PACKED IN PLASTIC BOX.
3. PACKAGE INCLUDING: CHUCK, COLLET, WRENCH, BOX.



ORDER NO.	COLLET TYPE	CAT TAPER	SET RANGE	SET PCS	WEIGHT KGS	CODE NO.
V-878	ER16	CAT40-3"L	1.0-10	10	2.3	3035-401
V-879	ER20	CAT40-3"L	2.0-13	12	2.5	3035-402
V-880	ER25	CAT40-2 1/2"L	2.0-16	15	3	3035-403
V-881		CAT40-2 1/2"L	4.0-16	7	2.8	3035-404
V-882	ER32	CAT40-2 1/2"L	3.0-20	18	5.2	3035-405
V-883		CAT40-2 1/2"L	4.0-20	11	4.2	3035-406
V-884		CAT40-2 1/2"L	6.0-20	6	3.8	3035-407
V-885	ER40	CAT40-3"L	4.0-26	23	8.9	3035-408
V-886		CAT40-3"L	4.0-26	15	7.6	3035-409
V-887		CAT40-3"L	6.0-25	7	6	3035-410
V-888	ER40	CAT50-3 1/2"L	4.0-26	23	11.2	3036-401
V-889		CAT50-3 1/2"L	4.0-26	15	9.8	3036-402
V-890		CAT50-3 1/2"L	6.0-25	7	8.3	3036-403



Milling Chuck



**COLLET HOLDER WITH #25
COLLET CHUCK DIN 6388 TYPE A
OZ-25**

**DIN 6388 # 25 SERIES
DIN 2080 NT-SHANK**



1. Best selected quality tool steel hardened & Precision ground.
2. Accuracy of concentric to within 0.008" per inch. (0.02mm per 25mm)
3. High rigidity & Clamping force.
4. 1 set including 1 chuck shank holder
1 wrench 1 case.
7 or 15 pcs of collet.

**OZ
SYSTEM**

CHUCK SHANK ONLY

ORDER NO.	CHUCK SHANK	DRAW BAR THREADS		WEIGHT(kg)		MEAS. CFT	CODE NO.
		SAE	METRIC	SAE	METRIC		
VB-MT-2	MT2		M10X1.5P	1	1	0.3	3101-001
VB-MT-3	MT3	3/8"-16	M10X1.5P	1.1	1	0.3	3101-002
		1/2"-12					
		1/2"-13	M12X1.75P				
VB-MT-4	MT4	5/8"-11	M16X2.0P		1.4	0.3	3101-003
VB-MT-5	MT5	1"-8	M24X3.0P		2	0.5	3101-004
VB-R8	R-8	7/16"-20		1.3		0.3	3101-005
VB-NT30	NT30	1/2"-12	M12X1.75P	1.1	1.1	0.3	3101-006
		1/2"-13					
VB-NT40	NT40	5/8"-11	M16X2.0P	1.5	1.5	0.3	3101-007
VB-NT50	NT50	1"-8	M24X3.0P	3.4	3.4	0.5	3101-008

Please Notify the Draw Bar Thread Size When ordering.

MILLING COLLET CHUCK KIT

Including Shank, full set of collets, wrench and case.

Collet Chuck Kit



DIN 6388
OZ-25 TYPE

FULL SET

ORDER NO.	COLLETS SIZE OZ-25		PCS	WEIGHT (KGS)	CODE NO.
	TAPER	COLLETS			
VB-101	NT30		7	3.7	3101-101
VB-102			15	5.2	3101-102
VB-103	NT40		7	4	3101-103
VB-104			15	5.5	3101-104
VB-105	NT50		7	6.5	3101-105
VB-106			15	8.5	3101-106
VB-107	MT3	Inch 1/8"-1" 15PCS 1/4"-1" 7PCS	7	3.3	3101-107
VB-108			15	5.2	3101-108
VB-109	MT4	Metric 3mm-25mm 15pcs 6mm-25mm 7pcs	7	3.9	3101-109
VB-110			15	5.4	3101-110
VB-111	MT5		7	4.7	3101-111
VB-112			15	6.2	3101-112
VB-113	R8		7	3.7	3101-113
VB-114			15	5.2	3101-114
VB-115	MT2		7	3.6	3101-115
VB-116			15	5.1	3101-116

Please Notify the Type Size, Collet Type, Set Range, and Set Numbers When Ordering.

CONTENT COLLET SET SIZE

7 PCS/SET	MM	6, 8, 10, 12, 16, 20, 25MM
	INCH	1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"
15 PCS/SET	MM	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 18, 20, 25MM
	INCH	1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"





DIN 6388 Collet For Milling Chuck

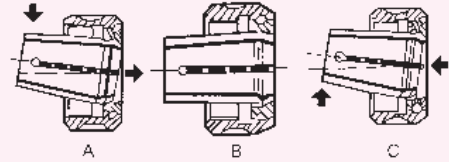
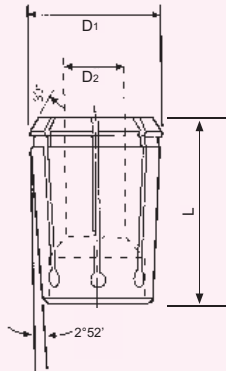


COLLET DIN 6388, TYPE A

DIN 6388 #16,#25,#32 SERIES

COLLET MUST BE ASSEMBLED INTO THE CLAMPING NUT BEFORE INSERTING INTO THE CHUCK

OZ
SYSTEM



METRIC

ORDER NO.	D1	L	D2(MM)
OZ-16-□	25.5	40	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
OZ-25-□	35.05	52	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 20, 25
OZ-32-□	44	60	6, 8, 10, 12, 16, 20, 25, 32

INCH

ORDER NO.	D1	L	D2(INCH)
OZ-25-□	35.05	52	1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"
OZ-32-□	43.7	60	1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1 1/8", 1 1/4"

■ RANGE SIZE:3-25(1/8"-1")

OZ-25 ■ D:35.05 ■ L:52 ■ TAPER:1:10 ■ WEIGHT:0.18KGS

ORDER NO.	MM SIZE	CODE NO.
OZ-2503	3.0	3100-101
OZ-2504	4.0	3100-102
OZ-2505	5.0	3100-103
OZ-2506	6.0	3100-104
OZ-2507	7.0	3100-105
OZ-2508	8.0	3100-106
OZ-2509	9.0	3100-107
OZ-2510	10	3100-108
OZ-2511	11	3100-109
OZ-2512	12	3100-110
OZ-2513	13	3100-111
OZ-2514	14	3100-112
OZ-2515	15	3100-113
OZ-2516	16	3100-114
OZ-2517	17	3100-115
OZ-2518	18	3100-116
OZ-2519	19	3100-117
OZ-2520	20	3100-118
OZ-2521	21	3100-119
OZ-2522	22	3100-120
OZ-2523	23	3100-121
OZ-2524	24	3100-122
OZ-2525	25	3100-123

ORDER NO.	INCH SIZE	CODE NO.
OZ-2526	1/8"	3100-124
OZ-2527	3/16"	3100-125
OZ-2528	1/4"	3100-126
OZ-2529	5/16"	3100-127
OZ-2530	3/8"	3100-128
OZ-2531	7/16"	3100-129
OZ-2532	1/2"	3100-130
OZ-2533	9/16"	3100-131
OZ-2534	5/8"	3100-132
OZ-2535	11/16"	3100-133
OZ-2536	3/4"	3100-134
OZ-2537	13/16"	3100-135
OZ-2538	7/8"	3100-136
OZ-2539	15/16"	3100-137
OZ-2540	1"	3100-138



DIN 6388 Collet For Milling Chuck



COLLET DIN 6388, TYPE A

DIN 6388 #16,#25,#32 SERIES

COLLET MUST BE ASSEMBLED INTO THE CLAMPING NUT BEFORE INSERTING INTO THE CHUCK



DIN6388 32# ■ RANGE SIZE:6-32(1/4"-1 1/4")
OZ-32 ■ D:43.7 ■ L:60 ■ TAPER:1:10
■ WEIGHT:0.25KGS

ORDER NO.	MM SIZE	CODE NO.
OZ-3206	6.0	3100-201
OZ-3207	7.0	3100-202
OZ-3208	8.0	3100-203
OZ-3209	9.0	3100-204
OZ-3210	10	3100-205
OZ-3211	11	3100-206
OZ-3212	12	3100-207
OZ-3213	13	3100-208
OZ-3214	14	3100-209
OZ-3215	15	3100-210
OZ-3216	16	3100-211
OZ-3217	17	3100-212
OZ-3218	18	3100-213
OZ-3219	19	3100-214
OZ-3220	20	3100-215
OZ-3221	21	3100-216
OZ-3222	22	3100-217
OZ-3223	23	3100-218
OZ-3224	24	3100-219
OZ-3225	25	3100-220
OZ-3226	26	3100-221
OZ-3227	27	3100-222
OZ-3228	28	3100-223
OZ-3229	29	3100-224
OZ-3230	30	3100-225
OZ-3231	31	3100-226
OZ-3232	32	3100-227

ORDER NO.	INCH SIZE	CODE NO.
OZ-3233	1/4"	3100-228
OZ-3234	5/16"	3100-229
OZ-3235	3/8"	3100-230
OZ-3236	7/16"	3100-231
OZ-3237	1/2"	3100-232
OZ-3238	9/16"	3100-233
OZ-3239	5/8"	3100-234
OZ-3240	11/16"	3100-235
OZ-3241	3/4"	3100-236
OZ-3242	13/16"	3100-237
OZ-3243	7/8"	3100-238
OZ-3244	15/16"	3100-239
OZ-3245	1"	3100-240
OZ-3246	1-1/8"	3100-241
OZ-3247	1-1/4"	3100-242

OZ SYSTEM



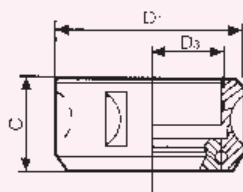
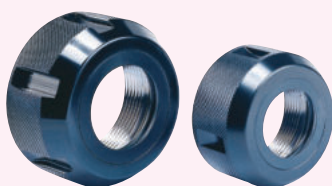
■ DIN 6388 16#
■ OZ-16 COLLET

ORDER NO.	MM SIZE	CODE NO.
OZ-1602	2.0	3100-001
OZ-1603	3.0	3100-002
OZ-1604	4.0	3100-003
OZ-1605	5.0	3100-004
OZ-1606	6.0	3100-005
OZ-1607	7.0	3100-006
OZ-1608	8.0	3100-007
OZ-1609	9.0	3100-008
OZ-1610	10	3100-009
OZ-1611	11	3100-010
OZ-1612	12	3100-011
OZ-1613	13	3100-012
OZ-1614	14	3100-013
OZ-1615	15	3100-014
OZ-1616	16	3100-015



DIN 6388 Nuts & Wrench

BALL BEARING, NUTS FOR COLLETS DIN6388, TYPE A



Unit:mm

ORDER NO.	C	D1	D3	COLLETS	WEIGHT kgs	CODE NO.
OZ-25N	33	60	M48X2	OZ-25	0.3	3100-301
OZ-32N	40	72	M60X2.5	OZ-32	0.7	3100-302

WRENCH FOR COLLETS DIN6388 TYPE A



Unit:mm

ORDER NO.	D1	COLLETS	WEIGHT kgs	CODE NO.
OZ-25W	60	OZ-25	0.35	3100-310
OZ-32W	72	OZ-32	0.4	3100-311



Milling Collet Chuck

OZ-25
COLLET HOLDER WITH BT-SHANK



VERTEX[®]

DIN 6388 # 25 SERIES MAS
403 BT-SHANK

OZ
SYSTEM



ORDER NO.	TAPER	DIN 6388	L	DRAW BAR	WEIGHT KGS	CODE NO.
VB-BT40	BT40	#25	80	M16X2.0P	1.7	3101-009
VB-BT50	BT50	#25	100	M24X3.0P	4.6	3101-010

Milling Collet Chuck Kit

Including Shank, full set of collets, wrench and case.



METRIC COLLET SYSTEM

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-241	BT40	7	4.4	3101-117
VB-242		15	5.9	3101-118
VB-251	BT50	7	7.5	3101-119
VB-252		15	9.5	3101-120

CONTENT COLLET SET SIZE

METRIC RANGE SET SIZE
7PCS: 6, 8, 10, 12, 16, 20, 25mm
15PCS: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 18, 20, 25mm

INCH COLLET SET SIZE

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-231	BT40	7	4.4	3101-121
VB-232		15	5.9	3101-122
VB-233	BT50	7	7.5	3101-123
VB-234		15	9.5	3101-124

INCH RANGE SET SIZE

7PCS: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"
15PCS: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"



Milling Collet Chuck

COLLET HOLDER WITH BT-SHANK
OZ-32 MAS 403



DIN 6388 # 32 SERIES

OZ
SYSTEM



ORDER NO.	TAPER	DIN 6388	L	DRAW BAR	WEIGHT KGS	CODE NO.
VB-226	BT40-OZ-32	#32	90	M16X2.0P	2.3	3102-003
VB-227	BT50-OZ-32	#32	100	M24X3.0P	5.1	3102-004
VB-228			150	M24X3.0P	6.8	3102-005

Milling Collet Chuck Kit

Including Shank, full set of collets, wrench and case.

**#32 SERIES BT-TYPE
MAS 403 BT-SHANK**

METRIC COLLET SYSTEM SET

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-243	BT40	8	7.4	3102-109
VB-244		15	9.4	3102-110
VB-253	BT50	8	10	3102-111
VB-254		15	12	3102-112

CONTENT COLLET SET SIZE

METRIC RANGE SET SIZE
8PCS:6, 8, 10, 12, 16, 20, 25, 32mm
15PCS:6, 8, 9, 10, 12, 13, 14, 15, 16, 18, 20, 22, 25, 26, 30, 32mm

INCH COLLET SYSTEM SET

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-256	BT40	10	7.4	3102-113
VB-257		15	9.4	3102-114
VB-258	BT50	10	10	3102-115
VB-259		15	12	3102-116

INCH RANGE SET SIZE

10PCS: $1/4$ " $5/16$ " $3/8$ " $1/2$ " $5/8$ " $3/4$ " $7/8$ " 1 " $1-1/8$ " $1-1/4$ "
15PCS: $1/4$ " $5/16$ " $3/8$ " $7/16$ " $1/2$ " $9/16$ " $5/8$ " $11/16$ " $3/4$ " $13/16$ " $7/8$ " $15/16$ " 1 " $1-1/8$ " $1-1/4$ "





Milling Collet Chuck

COLLET HOLDER WITH ISO-SHANK
OZ-32



DIN 6388 # 32 SERIES
DIN 2080 NT-SHANK

OZ
SYSTEM



ORDER NO.	TAPER	DIN 6388	DRAW BAR	WEIGHT KGS	CODE NO.
VB-130	NT30	#32	1.M12X1.75P 2.1/2"-12W	2	3102-006
VB-131	NT40	#32	1.M16X2.0P 2.5/8"-11W	2.2	3102-001
VB-132	NT50	#32	1.M24X3.0P 2.1"-8W	3.9	3102-002



Milling Collet Chuck Kit

Including Shank, full set of collets, wrench and case.

OZ-32 DIN 6388



METRIC COLLET SYSTEM

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-121	NT40	8	7.5	3102-101
VB-121B	NT40	15	9.2	3102-102
VB-122	NT50	8	9.8	3102-103
VB-122B	NT50	15	11.8	3102-104
VB-123	NT30	8	7	3102-090
VB-123B	NT30	15	9	3102-091
VB-124	MTB5	8	8	3102-092
VB-124B	MTB5	15	10	3102-093

CONTENT COLLET SET SIZE

METRIC RANGE SET SIZE
8PCS:6, 8, 10, 12, 16, 20, 25, 32mm
15PCS:6, 7, 8, 9, 10, 11, 12, 13, 16, 18, 20, 25, 26,30, 32mm

INCH COLLET SYSTEM

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-162	NT30	10	7	3102-094
VB-162B	NT30	15	9	3102-095
VB-163	NT40	10	7.2	3102-105
VB-164	NT40	15	9.2	3102-106
VB-165	NT50	10	9.8	3102-107
VB-166	NT50	15	11.8	3102-108
VB-167	MTB5	10	8	3102-096
VB-167B	MTB5	15	10	3102-097

INCH RANGE SET SIZE
10PCS:1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4"
15PCS:1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1-1/8", 1-1/4"



Milling Collet Chuck



COLLET HOLDER WITH
DIN 69871 & CAT TPE

DIN 6388 # 25, #32 SERIES



DIN 69871A & CAT SHANK

ORDER NO.	TAPER	DIN 6388	DRAW BAR	WEIGHT KGS	CODE NO.
VB-261	SK40-OZ25-80L	#25	M16X2.0P	1.6	3101-011
VB-262	SK50-OZ25-100L		M24X3.0P	4.2	3101-012
VB-263	CAT40-OZ25-3"L		5/8"-11W	1.9	3101-013
VB-264	CAT50-OZ25-3 1/2"L		1"-8W	4	3101-014
VB-265	SK40-OZ32-80L	#32	M16X2.0P	2.3	3102-011
VB-266	SK50-OZ32-100L		M24X3.0P	5	3102-012
VB-267	CAT40-OZ32-3"L		5/8"-11W	2.3	3102-013

OZ
SYSTEM

Milling Collet Chuck Kit

Including Shank, full set of
collets, wrench and case.



METRIC COLLET SYSTEM SET DIN69871A SK-TYPE WITH #25,#32

ORDER NO.	COLLET HOLDER	TYPE	DIN 6388	RANGE	SET PCS	KGS	CODE NO.
VB-271	SK40-OZ25-80L	SK40	#25	3.0-25	15PCS	5.7	3101-125
VB-272	SK40-OZ25-80L		#25	6.0-25	7PCS	4.2	3101-126
VB-273	SK40-OZ32-90L		#32	6.0-32	15PCS	9.2	3101-127
VB-274	SK40-OZ32-90L		#32	6.0-32	8PCS	7.2	3101-128
VB-275	SK50-OZ25-100L	SK50	#25	3.0-25	15PCS	9.3	3101-129
VB-276	SK50-OZ25-100L		#25	6.0-25	7PCS	7.3	3101-130
VB-277	SK50-OZ32-100L		#32	6.0-32	15PCS	11.8	3102-117
VB-278	SK50-OZ32-100L		#32	6.0-32	8PCS	9.8	3102-118

INCH COLLET SYSTEM SET CAT-TYPE WITH #25,#32

ORDER NO.	COLLET HOLDER	TYPE	DIN 6388	RANGE	SET PCS	KGS	CODE NO.
VB-281	CAT40-OZ25-3"L	CAT40	#25	1/8"-1"	15PCS	5.7	3101-131
VB-282	CAT40-OZ25-3"L		#25	1/4"-1"	7PCS	4.2	3101-132
VB-286	CAT40-OZ32-3"L		#32	1/4"-1 1/4"	15PCS	9.2	3102-119
VB-287	CAT40-OZ32-3"L		#32	1/4"-1 1/4"	10PCS	7.2	3102-120
VB-288	CAT50-OZ25-3 1/2"L	CAT50	#25	1/8"-1"	15PCS	9.3	3101-133
VB-289	CAT50-OZ25-3 1/2"L		#25	1/4"-1"	7PCS	7.3	3101-134
VB-290	CAT50-OZ32-3 1/2"L		#32	1/4"-1 1/4"	15PCS	11.8	3102-121
VB-291	CAT50-OZ32-3 1/2"L		#32	1/4"-1 1/4"	10PCS	10	3102-122



Posi-Lock Milling Collet Chuck

COLLET HOLDER WITH MT, R-8, NT TAPER SHANK
POSI-LOCK COLLET TYPE



ORDER NO.	TAPER	WEIGHT KGS	DRAW BAR		CODE NO.
VC-115	MT2	0.7	1.M10x1.5	2.3/8"-16	3203-001
VC-116	MT3	0.9	1.M12x1.75 3.3/8"-16	2.M10X1.5 4.1/2"-12	3203-002
VC-117	MT4	1	1.M16X2.0P	2.5/8"-11	3203-003
VC-118	R8	1	1.7/16"-20UNF		3203-004
VC-123	NT30	1	1.M12X1.75	2.1/2"-12	3203-005
VC-124	NT40	1.2	1.M16X2.0	2.5/8"-11	3203-006
VC-125	NT50	3	1.M24X3.0	2.1"-8	3203-007

EACH COLLET WEIGHT IS 0.09kgs

ORDER NO.	SIZE	CODE NO.
PLI- 1/4	1/4"	3203-130
PLI- 3/8	3/8"	3203-131
PLI- 1/2	1/2"	3203-132
PLI- 5/8	5/8"	3203-133
PLM- 6	6mm	3203-134
PLM- 10	10mm	3203-135
PLM- 12	12mm	3203-136
PLM- 16	16mm	3203-137

POSI-LOCK MILLING COLLET CHUCK KIT

Including Collet Chuck, Full Set of Collets and Wrench Compact design for maximum clearance. Gradual collet taper for powerful clamping action over entire collet. Fast & simple tool changing.

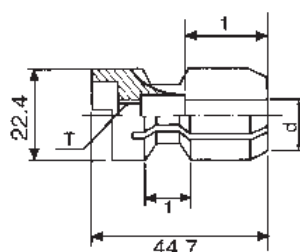


COLLET SET RANGE SIZE
METRIC 4PCS: 6, 10, 12, 16mm
INCH 4PCS: 1/4", 3/8", 1/2", 5/8"
SIZE 8PCS: 6, 10, 12, 16mm, 1/4", 3/8", 1/2", 5/8"

ORDER NO.	TYPER	DRAW BAR	COLLET SIZE	COLLET PCS	WEIGHT KGS	CODE NO.
VC-101	MT2	1. M10x1.5P 2. 3/8"-16	METRIC	4	1.8	3203-101
VC-101I			INCH	4	1.8	3203-102
VC-101A			MM+INCH	8	2.3	3203-103
VC-102	MT3	1. M10x1.5P 2. M12X1.75 3. 3/8"-16 4. 1/2"-12	METRIC	4	2	3203-104
VC-102I			INCH	4	2	3203-105
VC-102A			MM+INCH	8	5	3203-106
VC-103	MT4	1. M16x2.0P 2. 5/8"-11	METRIC	4	2	3203-107
VC-103I			INCH	4	2	3203-108
VC-103A			MM+INCH	8	2.5	3203-109
VC-104	R8	1. 7/16"-20UNF	METRIC	4	2.2	3203-110
VC-104I			INCH	4	2	3203-111
VC-104A			MM+INCH	8	2.5	3203-112
VC-105	NT30	1. M12x1.75P 2. 1/2"-12	METRIC	4	2	3203-113
VC-105I			INCH	4	2	3203-114
VC-105A			MM+INCH	8	2.5	3203-115
VC-106	NT40	1. M16x2.0P 2. 5/8"-11	METRIC	4	2.3	3203-116
VC-106I			INCH	4	2.3	3203-117
VC-106A			MM+INCH	8	2.8	3203-118
VC-107	NT50	1. M24x3.0P 2. 1"-8	METRIC	4	4.3	3203-119
VC-107I			INCH	4	4.3	3203-120
VC-107A			MM+INCH	8	4.8	3203-121



COLLET SIZE
FOR POSI-LOCK



INDIVIDUAL UNIT

ORDER NO.	Q'TY	T	d COLLET SIZE
PLI - □	1PC	5/8"-20TPI	Ø1/4", 3/8", 1/2", 5/8"
PLM - □	1PC	M16-1.25P	Ø6, 10, 12, 16mm

FULL SET

ORDER NO.	COLLET SIZE	WEIGHT (KG)	CODE NO.
VC-111	4pcs - 6, 10, 12, 16mm	0.36	3203-200
VC-112	4pcs - 1/4", 3/8", 1/2", 5/8"	0.36	3203-201
VC-113	8pcs - 6, 10, 12, 16mm, 1/4", 3/8", 1/2", 5/8"	0.72	3203-202



Multi-Lock Milling Chuck



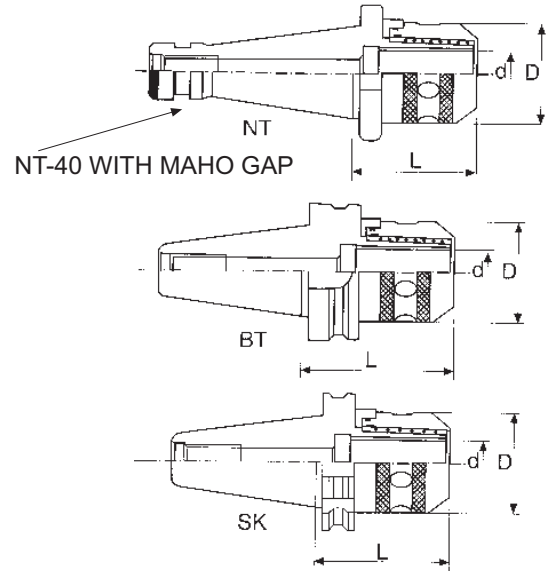
COLLET HOLDER WITH ISO, BT & SK TAPER SHANK

STRAIGHT COLLET TYPE

C-32 C-42

DIN 2080, MAS 403 DIN 69871A

C-20,25,32,42 TYPE



ORDER NO.	TAPER	CHUCK	d	D	L	DRAW BAR	KGS	CODE NO.
VB-431	NT40	NT40-MC32-95L	32	75	95	5/8"-11	3	3202-001
VB-432		NT40-MC32-95L	32	75	95	M16x2.0P	3.1	3202-002
VB-433	NT50	NT50-MC32-100L	32	75	100	1"-8	4.8	3202-003
VB-434		NT50-MC32-100L	32	75	100	M24x3.0P	5.1	3202-004
VB-435A	BT40	BT40-MC32-105L	32	75	105	M16x2.0P	3.2	3202-005
VB-435B		BT40-MC32-150L	32	75	150	M16x2.0P	3.5	3202-020
VB-436	BT50	BT50-MC32-110L	32	75	110	M24x3.0P	5.2	3202-006
VB-437		BT50-MC32-150L	32	75	135	M24x3.0P	7	3202-007
VB-438	NT50	NT50-MC42-110L	42	87	110	1"-8	6	3202-008
VB-439		NT50-MC42-110L	42	87	110	M24x3.0P	6.1	3202-009
VB-440	BT50	BT50-MC42-115L	42	87	115	M24x3.0P	6.1	3202-010
VB-441		BT50-MC42-150L	42	87	140	M24x3.0P	7.8	3202-011
VB-442	SK40	SK40-MC32-100L	32	75	100	M16x2.0P	3.1	3202-012
VB-443	SK50	SK50-MC32-105L	32	75	105	M24x3.0P	5.3	3202-013
VB-444A	BT30	BT30-MC20-95	20	52	95	M12x1.75P	1.3	3202-014
VB-446A	BT40	BT40-MC20-80	20	52	80	M16x2.0P	3	3202-016
VB-446B		BT40-MC20-120	20	52	120	M16x2.0P	2.7	3202-017
VB-447A		BT40-MC25-90	25	58	90	M16x2.0P	4.5	3202-018
VB-447B		BT40-MC25-135	25	58	135	M16x2.0P	3.2	3202-019
VB-448A	NT30	NT30-MC20-80	20	52	80	1. M12X1.75P 2. 1/2"-12	1.5	3202-030
VB-448B		NT30-MC25-85	25	58	85	1. M12X1.75P 2. 1/2"-12	1.5	3202-031
VB-449B	NT40	NT40-MC25-85	25	58	85	1. M16X2.0P 2. 5/8"-11	2	3202-033
VB-451A	SK40	SK40-MC20-80	20	52	80	M16X2.0P	2	3202-035
VB-451B		SK40-MC25-90	25	58	90	M16X2.0P	2	3202-036
VB-452	SK50	SK50-MC42-110	42	87	110	M24X3.0P	5.7	3202-037



Multi-Lock Milling Chuck



MULTI-LOCK MILLING CHUCK KIT

Including shank, full set of collets,
wrench and case.

DIN 2080 NT-SHANK

MAS 403 BT-SHANK

DIN 69871A SK-SHANK

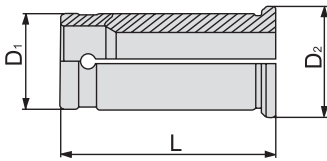


ORDER NO.	TAPER	CHUCK	COLLET	DRAW BAR	KGS	CODE NO.
VB-444I	NT40	NT40-MC32-95L	7PCS	5/8"-11	7	3202-101
VB-444		NT40-MC32-95L	7PCS	M16x2.0P	7	3202-102
VB-454I	NT50	NT50-MC32-100L	7PCS	1"-8	9	3202-103
VB-454		NT50-MC32-100L	7PCS	M24x3.0P	9	3202-104
VB-344A	BT40	BT40-MC32-105L	7PCS	M16x2.0P	7	3202-105
VB-344B		BT40-MC32-150L	7PCS	M16x2.0P	11.5	3202-118
VB-354A	BT50	BT50-MC32-110L	7PCS	M24x3.0P	9.5	3202-106
VB-354B		BT50-MC32-150L	7PCS	M24x3.0P	13	3202-119
VB-554	NT50	NT50-MC42-110L	8PCS	M24x3.0P	12	3202-107
VB-554I		NT50-MC42-110L	8PCS	1"-8	12	3202-108
VB-564A	BT50	BT50-MC42-115L	8PCS	M24x3.0P	12	3202-109
VB-564B		BT50-MC42-150L	8PCS	M24x3.0P	14	3202-109B
VB-565	SK-40	SK40-MC32-100L	7PCS	M16x2.0P	7	3202-110
VB-566	SK-50	SK50-MC32-105L	7PCS	M24x3.0P	9.5	3202-111
VB-567	BT-30	BT30-MC20-95	6PCS	M12x1.75P	6	3202-112
VB-569A	BT-40	BT40-MC20-80	6PCS	M16x2.0P	7	3202-114
VB-569B		BT40-MC20-120	6PCS	M16x2.0P	8	3202-115
VB-570A		BT40-MC25-90	7PCS	M16x2.0P	9.5	3202-116
VB-570B		BT40-MC25-135	7PCS	M16x2.0P	10.5	3202-117
VB-571	NT30	NT30-MC20-80L	6PCS	1. M12X1.75P 2. 1/2"-12	4	3202-120
VB-572		NT30-MC25-85L	7PCS	1. M12X1.75P 2. 1/2"-12	4	3202-121
VB-574	NT40	NT40-MC25-85L	7PCS	1. M16X2.0P 2. 5/8"-11	4.5	3202-123
VB-576	SK40	SK40-MC20-80L	6PCS	M16X2.0P	4.5	3202-125
VB-577		SK40-MC25-90L	7PCS	M16X2.0P	4.8	3202-126
VB-578	SK50	SK50-MC42-110L	8PCS	M24X3.0P	12	3202-127



C-20,25,32,42 Collet

C-TYPE COLLET



ORDER NO.	WEIGHT
C-20	0.1
C-25	0.18
C-32	0.22
C-42	0.35

20, 25, 32, 42 STRAIGHT COLLET

METRIC

ORDER NO.	COLLET	COLLETS SIZE d INSIDE DIAMETER	D1 O.D.	D2	L	PCS/SET	CODE NO.
C-20-6P	C-20	4, 6, 8, 10, 12, 16	20	25	52	6	3202-180
C-25-7P	C-25	4, 6, 8, 10, 12, 16, 20	25	31	60	7	3202-181
C-32-7P	C-32	6, 8, 10, 12, 16, 20, 25	32	37	73	7	3202-182
C-42-8P	C-42	6, 8, 10, 12, 16, 20, 25, 32	42	48	80	8	3202-183

20, 25, 32, 42 STRAIGHT COLLET

INCH

ORDER NO.	COLLET	COLLETS SIZE d INSIDE DIAMETER	D1 O.D.	D2	L	PCS/SET	CODE NO.
C-20-6I	C-20	1/4", 5/16", 3/8", 1/2", 5/8", 3/16"	20	25	52	6	3202-184
C-25-7I	C-25	1/4", 5/16", 3/8", 1/2", 5/8", 3/16", 3/4"	25	31	60	7	3202-185
C-32-7I	C-32	1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"	32	37	73	7	3202-186
C-42-8I	C-42	1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1", 1 1/4"	42	48	80	8	3202-187

METRIC

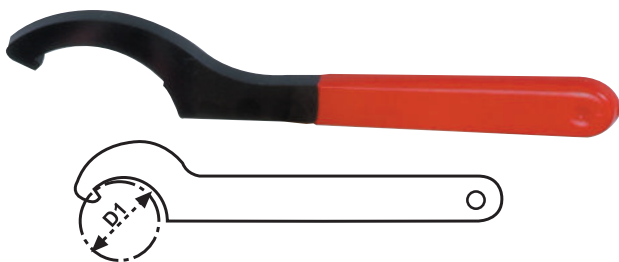
ORDER NO.	d	CODE NO.
C-20-4	4	3202-200
C-20-6	6	3202-201
C-20-8	8	3202-202
C-20-10	10	3202-203
C-20-12	12	3202-204
C-20-16	16	3202-205
C-25-4	4	3202-229
C-25-6	6	3202-230
C-25-8	8	3202-231
C-25-10	10	3202-232
C-25-12	12	3202-233
C-25-16	16	3202-234
C-25-20	20	3202-235
C-32-6	6	3202-250
C-32-8	8	3202-251
C-32-10	10	3202-252
C-32-12	12	3202-253
C-32-16	16	3202-254
C-32-20	20	3202-255
C-32-25	25	3202-256
C-42-6	6	3202-280
C-42-8	8	3202-281
C-42-10	10	3202-282
C-42-12	12	3202-283
C-42-16	16	3202-284
C-42-20	20	3202-285
C-42-25	25	3202-286
C-42-32	32	3202-287

INCH

ORDER NO.	d	CODE NO.
C-20-3/16"	3/16"	3202-210
C-20-1/4"	1/4"	3202-211
C-20-5/16"	5/16"	3202-212
C-20-3/8"	3/8"	3202-213
C-20-1/2"	1/2"	3202-214
C-20-5/8"	5/8"	3202-215
C-25-3/16"	3/16"	3202-240
C-25-1/4"	1/4"	3202-241
C-25-5/16"	5/16"	3202-242
C-25-3/8"	3/8"	3202-243
C-25-1/2"	1/2"	3202-244
C-25-5/8"	5/8"	3202-245
C-25-3/4"	3/4"	3202-246
C-32-3/16"	3/16"	3202-260
C-32-1/4"	1/4"	3202-261
C-32-5/16"	5/16"	3202-262
C-32-3/8"	3/8"	3202-263
C-32-1/2"	1/2"	3202-264
C-32-5/8"	5/8"	3202-265
C-32-3/4"	3/4"	3202-266
C-32-7/8"	7/8"	3202-267
C-32-1"	1"	3202-268
C-42-1/4"	1/4"	3202-290
C-42-5/16"	5/16"	3202-291
C-42-3/8"	3/8"	3202-292
C-42-1/2"	1/2"	3202-293
C-42-5/8"	5/8"	3202-294
C-42-3/4"	3/4"	3202-295
C-42-7/8"	7/8"	3202-296
C-42-1"	1"	3202-297
C-42-1 1/4"	1 1/4"	3202-298



C-20,25,32,42 Wrenchs

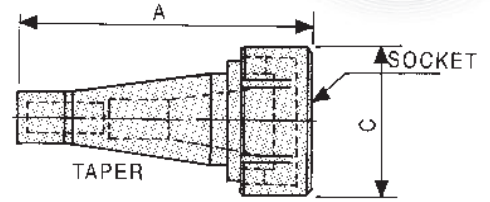


ORDER NO.	L	D	WEIGHT KGS	COLLETS	CODE NO.
C-20W	227	52	0.22	C-20	3202-311
C-25W	227	58	0.22	C-25	3202-312
C-32W	260	75	0.33	C-32	3202-313
C-42W	270	87	0.35	C42	3202-314



Quick-Change Tooling System

MILLING-QUICK CHANGE HOLDER



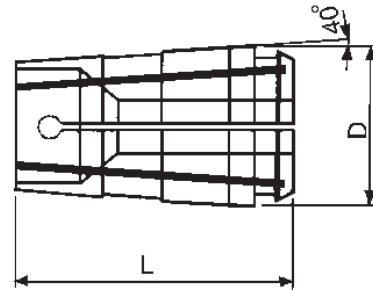
- QUICK-CHANGE CHUCK TAPER ACCORDING TO DIN 2080 SPECIFICATION.
- EASY AND FAST CHANGING MILLING CHUCK(HOLDER).
- CHUCK TAPER PRECISELY MACHINED SUITABLE FOR HEAVY CUTTING.
- ALL THE HOLDER SIZE ARE SPECIAL FOR THIS QUICK-CHANGE TOOLING SYSTEM ONLY.

ORDER NO.	TAPER	SOCKET	A	C	WEIGHT KGS	CODE NO.
VD-101	NT30	NT30	144	70	1.3	3201-001
VD-102	NT40	NT30	150	70	2	3201-002
VD-103	NT40	NT40	181	89	2.4	3201-003
VD-105	NT50	NT40	175	89	3.8	3201-004

MILLING-QUICK CHANGE SYSTEM KIT



ORDER NO.	TAPER	SOCKET	FULL SET	WEIGHT KGS	CODE NO.
VD-111	NT30	NT30	1.MILLING QUICK-CHANGE HOLDER 2.DRILL CHUCK HOLDER 3.MORSE TAPER HOLDER 4.FACE MILL HOLDER 5.DIN6388 #25 COLLET CHUCK HOLDER 6.DIN6388 #25 15PCS COLLET 7.WRENCH 8.WOODEN BOX	10	3201-006
VD-112	NT40	NT30		10.5	3201-007
VD-113	NT40	NT40		14	3201-008
VD-115	NT50	NT40		16	3201-009



■ RANGE SIZE: 1/8" - 63/64"

TG-100 ■ D:35 ■ L:61 ■ TAPER:4 ■ WEIGHT:0.2KGS

ORDER NO.	INCH	CODE NO.
TG10-01	1/8"	3204-001
TG10-02	3/6"	3204-002
TG10-03	1/4"	3204-003
TG10-04	5/16"	3204-004
TG10-05	3/8"	3204-005
TG10-06	7/16"	3204-006
TG10-07	1/2"	3204-007
TG10-08	9/16"	3204-008
TG10-09	5/8"	3204-009
TG10-10	11/16"	3204-010
TG10-11	3/4"	3204-011
TG10-12	13/16"	3204-012
TG10-13	7/8"	3204-013
TG10-14	15/16"	3204-014
TG10-15	1"	3204-015
TG10-16	5/32"	3204-016
TG10-17	7/32"	3204-017
TG10-18	9/32"	3204-018
TG10-19	11/32"	3204-019
TG10-20	13/32"	3204-020
TG10-21	15/32"	3204-021
TG10-22	17/32"	3204-022
TG10-23	19/32"	3204-023
TG10-24	21/32"	3204-024
TG10-25	23/32"	3204-025
TG10-26	25/32"	3204-026
TG10-27	27/32"	3204-027
TG10-28	29/32"	3204-028
TG10-29	31/32"	3204-029

ORDER NO.	INCH	CODE NO.
TG10-30	9/64"	3204-030
TG10-31	11/64"	3204-031
TG10-32	13/64"	3204-032
TG10-33	15/64"	3204-033
TG10-34	17/64"	3204-034
TG10-35	19/64"	3204-035
TG10-36	21/64"	3204-036
TG10-37	23/64"	3204-037
TG10-38	25/64"	3204-038
TG10-39	27/64"	3204-039
TG10-40	29/64"	3204-040
TG10-41	31/64"	3204-041
TG10-42	33/64"	3204-042
TG10-43	35/64"	3204-043
TG10-44	37/64"	3204-044
TG10-45	39/64"	3204-045
TG10-46	41/64"	3204-046
TG10-47	43/64"	3204-047
TG10-48	45/64"	3204-048
TG10-49	47/64"	3204-049
TG10-50	49/64"	3204-050
TG10-51	51/64"	3204-051
TG10-52	53/64"	3204-052
TG10-53	55/64"	3204-053
TG10-54	57/64"	3204-054
TG10-55	59/64"	3204-055
TG10-56	61/64"	3204-056
TG10-57	63/64"	3204-057



5C Collet System

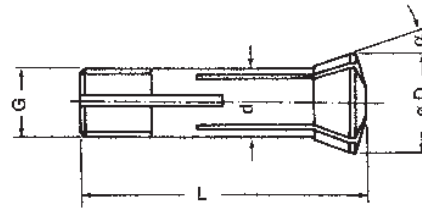
5C RANGE



mm



5C Collet



- L:87 ■ D:37.5 ■ d:31.75 ■ Accuracy: ±0.02mm
- α:10° ■ WEIGHT:0.21KGS ■ Hardness: HRC47°

ORDER NO.	Q'TY	RANGE SIZE
5C-□	1 PC	∅ 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25MM
5C-□	1 PC	∅ 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"

COMPLETE SET AVAILABLE SIZE

ORDER NO.	Q'TY	RANGE SIZE	PACKING	WEIGHT KGS	CODE NO.
VE-102	7PCS	6, 8, 10, 12, 16, 20, 25	CARTON	1.5	3205-100
VE-102	7PCS	1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"	CARTON	1.5	3205-101

ORDER NO.	d	CODE NO.
5C-3	3	3205-001
5C-4	4	3205-002
5C-5	5	3205-003
5C-6	6	3205-004
5C-7	7	3205-005
5C-8	8	3205-006
5C-9	9	3205-007
5C-10	10	3205-008
5C-11	11	3205-009
5C-12	12	3205-010
5C-13	13	3205-011
5C-14	14	3205-012
5C-15	15	3205-013
5C-16	16	3205-014
5C-17	17	3205-015
5C-18	18	3205-016
5C-19	19	3205-017
5C-20	20	3205-018
5C-21	21	3205-019
5C-22	22	3205-020
5C-23	23	3205-021
5C-24	24	3205-022
5C-25	25	3205-023

inch

ORDER NO.	d	CODE NO.
5C-1/8	1/8"	3205-024
5C-3/16	3/16"	3205-025
5C-1/4	1/4"	3205-026
5C-5/16	5/16"	3205-027
5C-3/8	3/8"	3205-028
5C-7/16	7/16"	3205-029
5C-1/2	1/2"	3205-030
5C-9/16	9/16"	3205-031
5C-5/8	5/8"	3205-032
5C-11/16	11/16"	3205-033
5C-3/4	3/4"	3205-034
5C-13/16	13/16"	3205-035
5C-7/8	7/8"	3205-036
5C-15/16	15/16"	3205-037
5C-1	1"	3205-038



EMERGENCY TYPE SOFT COLLET

ORDER NO.	MATERIAL	kgs	CODE NO.
VE-5CS	STEEL		3205-201
VE-5CB	BRASS	0.35	3205-202
VE-5CN	NYLON		3205-203

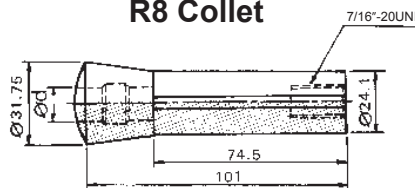


R8 Collet System

mm



R8 Collet



- L:105 ■ D:31.75 ■ d:24.1 ■ Accuracy: ±0.02mm
- G:7/16"-20UNF ■ α:8°30' ■ WEIGHT:0.21KGS ■ Hardness: HRC47°

ORDER NO.	Q'TY	RANGE SIZE
R8-□	1 PC	∅ 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 MM
R8-□	1 PC	∅ 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

COMPLETE SET AVAILABLE SIZE

ORDER NO.	Q'TY	RANGE SIZE	WEIGHT KGS	CODE NO.
VE-110	6PCS	6, 8, 10, 12, 16, 20 MM	1.5	3206-100
VE-114	7PCS	6, 8, 10, 12, 14, 16, 20 MM	1.5	3206-101

EMERGENCY TYPE SOFT COLLET

ORDER NO.	Q'TY	RANGE SIZE	WEIGHT KGS	CODE NO.
VE-109I	5PCS	1/4", 3/8", 1/2", 5/8", 3/4",	1.1	3206-102
VE-110I	6PCS	1/4", 5/16", 3/8", 1/2", 5/8", 3/4"	1.5	3206-103
VE-114I	7PCS	3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4"	1.5	3206-104

ORDER NO.	d	CODE NO.
R8-3	3	3206-001
R8-4	4	3206-002
R8-5	5	3206-003
R8-6	6	3206-004
R8-7	7	3206-005
R8-8	8	3206-006
R8-9	9	3206-007
R8-10	10	3206-008
R8-11	11	3206-009
R8-12	12	3206-010
R8-13	13	3206-011
R8-14	14	3206-012
R8-15	15	3206-013
R8-16	16	3206-014
R8-17	17	3206-015
R8-18	18	3206-016
R8-19	19	3206-017
R8-20	20	3206-018

inch

ORDER NO.	d	CODE NO.
R8-1/8	1/8"	3206-019
R8-3/16	3/16"	3206-020
R8-1/4	1/4"	3206-021
R8-5/16	5/16"	3206-022
R8-3/8	3/8"	3206-023
R8-7/16	7/16"	3206-024
R8-1/2	1/2"	3206-025
R8-9/16	9/16"	3206-026
R8-5/8	5/8"	3206-027
R8-11/16	11/16"	3206-028
R8-3/4	3/4"	3206-029



U2 Collet System



NO.1 U2 COLLET RANGE SIZE 3~16mm

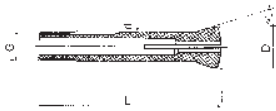
NO.2 U2 COLLET RANGE SIZE 18~25mm

■ L:120 ■ D:28 ■ d:20 ■ G:2.0P ■ Accuracy: ±0.02mm
 ■ α:17°30' ■ WEIGHT:0.18KGS ■ Hardness: HRC47°

NO.1



NO.2



ORDER NO.	Q'TY	RANGE SIZE
VE-U2-□	1 PC	NO.1 Ø 1.5, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 NO.2 Ø 18, 20, 25MM
VE-U2-□	1 PC	Ø 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8"

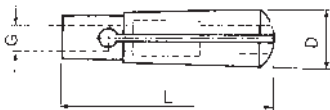
ORDER NO.	d	CODE NO.	ORDER NO.	d	CODE NO.	ORDER NO.	d	CODE NO.
VE-U2-1.5	1.5	3207-026	VE-U2-10	10	3207-008	VE-U2-1/8	1/8"	3207-018
VE-U2-2	2	3207-027	VE-U2-11	11	3207-009	VE-U2-3/16	3/16"	3207-019
VE-U2-3	3	3207-001	VE-U2-12	12	3207-010	VE-U2-1/4	1/4"	3207-020
VE-U2-4	4	3207-002	VE-U2-13	13	3207-011	VE-U2-5/16	5/16"	3207-021
VE-U2-5	5	3207-003	VE-U2-14	14	3207-012	VE-U2-3/8	3/8"	3207-022
VE-U2-6	6	3207-004	VE-U2-15	15	3207-013	VE-U2-1/2	1/2"	3207-023
VE-U2-7	7	3207-005	VE-U2-16	16	3207-014	VE-U2-5/8	5/8"	3207-024
VE-U2-8	8	3207-006	VE-U2-18	18	3207-015			
VE-U2-9	9	3207-007	VE-U2-20	20	3207-016			
			VE-U2-25	25	3207-017			



MT3 Collet System



■ D:24.1 ■ L:87 ■ WEIGHT:0.18KGS
 ■ DRAW BAR SIZE: G1.M12X1.75P
 G3.1/2"-12
 G4.3/8"-16



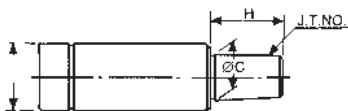
ORDER NO.	Q'TY	RANGE SIZE	DRAW BAR SIZE
MT3-□	1 PC	Ø 4, 6, 8, 10, 12, 16, 20MM	G1,G2
MT3-□	1 PC	Ø 1/8", 1/4", 3/8", 1/2", 5/8", 3/4"	G3,G4

ORDER NO.	d	CODE NO.	ORDER NO.	d	CODE NO.
MT3-4	4	3208-100	MT3-1/8	1/8"	3208-107
MT3-6	6	3208-101	MT3-1/4	1/4"	3208-108
MT3-8	8	3208-102	MT3-3/8	3/8"	3208-109
MT3-10	10	3208-103	MT3-1/2	1/2"	3208-110
MT3-12	12	3208-104	MT3-5/8	5/8"	3208-111
MT3-16	16	3208-105	MT3-3/4	3/4"	3208-112
MT3-20	20	3208-106			



Drill Chucks Arbor

C20.25.32



MT3.4.5

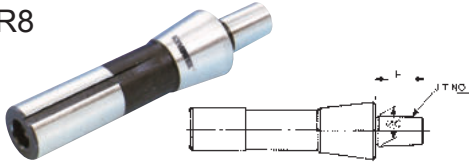


ORDER NO.	SHANK ØD	JT NO.	C	H	WEIGHT (kg)	CODE NO.
VJ-139-1	C20	JT0	6.35	9	0.2	3209-058A
VJ-139	C20	JT1	9.754	19	0.2	3209-058
VJ-140	C20	JT2	14.20	25	0.2	3209-059
VJ-140-1	C20	JT3	20.60	35	0.2	3209-059A
VJ-141	C20	JT6	17.17	26	0.2	3209-060
VJ-140-3	C20	B12	12.1	22.5	0.2	3209-060A
VJ-140-4	C20	B16	15.733	29	0.2	3209-060B
VJ-142	C25	JT6	17.17	26	0.3	3209-061
VJ-143	C32	JT6	17.17	26	0.5	3209-062

ORDER NO.	TAPER	JT NO.	C	H	WEIGHT (kg)	CODE NO.
VJ-132-6	MT4	JT33	15.85	28	0.65	3209-031E
VJ-135	MT4	B16	15.733	29	0.7	3209-036
VJ-132-8	MT4	B18	17.78	37	0.7	3209-031F
VJ-133-4	MT5	JT2	14.2	26	1.6	3209-032D
VJ-133-1	MT5	JT3	20.60	35	1.6	3209-032A
VJ-133-2	MT5	JT4	28.55	46	1.8	3209-032B
VJ-133-3	MT5	JT5	35.89	51	2	3209-032C
VJ-133	MT5	JT6	17.17	26	1.6	3209-032
VJ-133-5	MT5	JT33	15.85	29	1.6	3209-032E

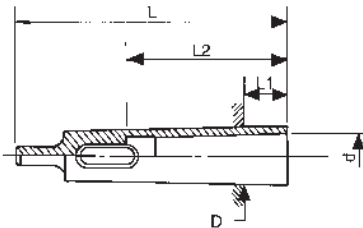
ORDER NO.	TAPER	JT NO.	C	H	WEIGHT (kg)	CODE NO.
VJ-137	MT2	JT2	14.2	25	0.2	3209-056
VJ-126	MT2	JT3	20.6	34	0.24	3209-006
VJ-130-4	MT2	JT4	28.55	45	0.4	3209-029B
VJ-130-2	MT2	JT5	35.89	50	0.5	3209-029A
VJ-130	MT2	JT6	17.17	28	0.22	3209-029
VJ-126-1	MT2	B16	15.733	29	0.2	3209-006A
VJ-126-3	MT2	B18	17.78	37	0.21	3209-006B
VJ-138	MT3	JT2	14.2	25	0.3	3209-034A
VJ-138-1	MT3	JT3	20.60	34	0.35	3209-034
VJ-138-2	MT3	JT4	28.55	45	0.5	3209-035
VJ-131-2	MT3	JT5	35.89	50	0.7	3209-030A
VJ-131	MT3	JT6	17.17	26	0.4	3209-030
VJ-131-4	MT3	JT33	15.85	28	0.3	3209-030B
VJ-134	MT3	B16	15.733	24	0.3	3209-033
VJ-134-2	MT3	B18	17.78	37	0.4	3209-033A
VJ-132-5	MT4	JT2	14.2	25		3209-031D
VJ-132-1	MT4	JT3	20.60	34	0.7	3209-031A
VJ-132-7	MT4	JT4	28.55	45	0.85	3209-031B
VJ-132-4	MT4	JT5	35.89	50	1	3209-031C
VJ-132	MT4	JT6	17.17	26	0.7	3209-031

R8



ORDER NO.	TAPER	JT NO.	C	H	WEIGHT (kg)	CODE NO.
VJ-121	R8	JT1	9.754	18	0.5	3209-001
VJ-122		JT2	13.94	20	0.5	3209-002
VJ-123		JT6	17.17	26	0.5	3209-003
VJ-124		B16	15.733	24	0.5	3209-004

Morse Taper Sleeve

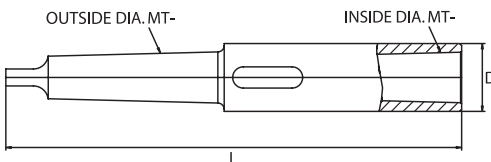


ORDER NO.	I.D.xO.D.	D	d	L	l1	l2	WEIGHT (kg)	CODE NO.
VQ-100	MT1xMT3	23.825	12.065	100	6	55	0.2	3210-011
VQ-100-1	MT1xMT2	17.780	12.065	89	14	55	0.22	3210-012
VQ-100-2	MT1xMT4	31.267	12.065	124	6.5	55	0.89	3210-013
VQ-100-3	MT1xMT5	44.399	12.065	156	7	55	1.33	3210-014
VQ-101	MT2xMT3	23.825	17.780	112	18	67	0.2	3210-001
VQ-102	MT2xMT4	31.267	17.780	124	6.5	67	0.5	3210-002
VQ-103	MT2xMT5	44.399	17.780	156	6.5	67	1.4	3210-003
VQ-105	MT3xMT4	31.267	23.825	140	22.5	84	0.4	3210-005
VQ-106	MT3xMT5	44.399	23.825	156	6.5	84	1.3	3210-006
VQ-107	MT3xMT6	63.348	23.825	218	8	84	4	3210-007
VQ-108	MT4xMT5	44.399	31.267	171	21.5	107	1	3210-008
VQ-109	MT4xMT6	63.348	31.267	218	8	107	3.7	3210-009
VQ-110	MT5xMT6	63.348	44.399	218	8	133	2.9	3210-010

Morse Taper Extension Sockets

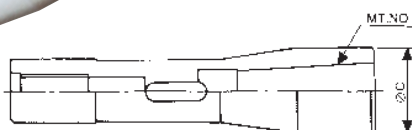
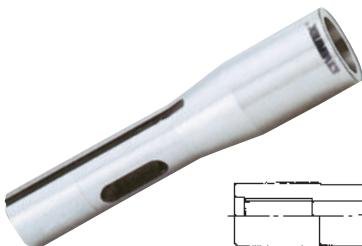
MORSE TAPER EXTENSION SOCKETS

- For adapting tools with morse taper shanks to machine having smaller morse taper spindle or for adapting tools with morse taper shanks to machine having the same or larger morse taper spindle.
- Hardened and ground throughout.



ORDER NO.	I.D.xO.D.	D	L	WEIGHT (kg)	CODE NO.
VQ-111-3	MT1xMT2	18.2	160	0.28	3210-018
VQ-111-1	MT1xMT3	20.2	175	0.4	3210-019
VQ-111-2	MT1xMT4	20.2	204		3210-020
VQ-112	MT2xMT2	24.2	175	0.35	3210-021
VQ-112-1	MT2xMT3	24.2	194	0.5	3210-022
VQ-112-2	MT2xMT4	24.2	219	0.9	3210-022A
VQ-112-3	MT2xMT5	24.2	254	1.85	3210-022B
VQ-113	MT3xMT2	32.2	196	0.56	3210-023
VQ-114	MT3xMT3	32.2	215	0.7	3210-024
VQ-115	MT3xMT4	32.2	240	1.1	3210-025
VQ-115-1	MT3xMT5	32.2	275	2.1	3210-025A
VQ-115-2	MT4xMT2	45.2	221	1.25	3210-026A
VQ-116	MT4xMT3	45.2	240	1.4	3210-026
VQ-117	MT4xMT4	45.2	265	1.7	3210-027
VQ-118	MT4xMT5	45.2	300	2.7	3210-028
VQ-119-1	MT5xMT3	63.2	275	3	3210-029A
VQ-119	MT5xMT4	63.2	300	3.25	3210-029
VQ-120	MT5xMT5	63.2	335		3210-030

R8 With Morse Taper Sleeve



ORDER NO.	SHANK	SIZE	MT NO.	WEIGHT (kg)	CODE NO.
VQ-122	R8	R8-MT2	MT2	0.4	3211-001
VQ-123	R8	R8-MT3	MT3	0.5	3211-002



Face Mill Arbor

NT30, 40, 50, R8, MT3, 4



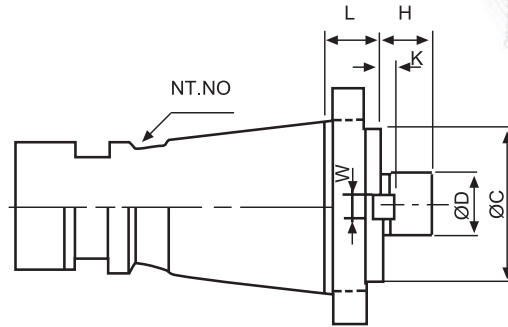
DIN 2080/ISO SHANK



NT40 WITH MAHO GAP



NT30



MATERIAL:SCM-21 HARDNESS:HRC 50°-55°

Squareness of mounting surface:Less than 0.0002"(0.005M/M)

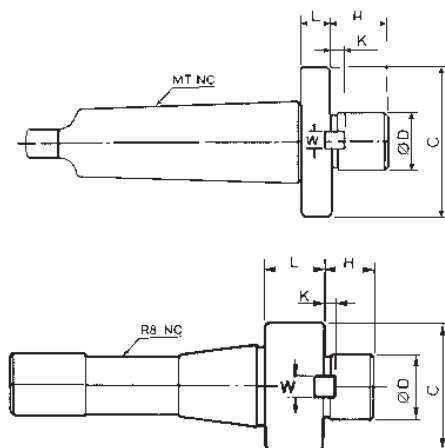
Deflection in shaft and taper:Less than 0.0002"(0.005M/M)

INCH FMA TYPE

ORDER NO.	TAPER	SHAFT SIZE				MOUNTING SIZE		WEIGHT (kg)	CODE NO.
		D	H	W	K	C	L		
VF-101	NT30	25.4	20	9.57	5	65	20	0.7	3212-001
VF-102	NT30	31.75	23	12.75	7	73	20	1	3212-002
VF-103	NT30	38.1	22	15.90	9	82	20	1.1	3212-003
VF-104	NT40	25.4	20	9.57	5	65	20	1.2	3212-004
VF-105	NT40	31.75	22	12.75	7	73	20	1.5	3212-005
VF-106	NT40	38.1	23	15.90	9	82	20	1.8	3212-006
VF-109	NT50	25.4	20	9.57	5	65	20	3.2	3212-009
VF-110	NT50	31.75	22	12.75	7	73	20	3.3	3212-010
VF-111	NT50	38.1	23	15.90	9	82	20	3.6	3212-011
VF-112	NT50	50.8	24	19.05	10	95	20	4	3212-012
VF-114	R8	25.4	20	9.57	5	40	20	0.9	3212-014
VF-115	R8	31.75	22	12.75	7	53	20	1.2	3212-015
VF-116	MT-3	25.4	20	9.57	5	40	20	0.7	3212-016
VF-117	MT-4	25.4	20	9.57	5	40	20	1	3212-017

METRIC FMB TYPE

ORDER NO.	TAPER	SHAFT SIZE				MOUNTING SIZE		WEIGHT (kg)	CODE NO.
		D	H	W	K	C	L		
VF-120	NT30	22	18	9.57	5	40	20	0.7	3212-100
VF-121	NT30	27	20	12.75	7	53	20	0.8	3212-101
VF-122	NT30	32	23	15.90	7	63	20	1.1	3212-102
VF-123	NT40	22	18	9.57	5	40	20	1.2	3212-103
VF-123-1	NT40	16	17	16.4		40	20	1.17	3212-103A
VF-124	NT40	27	20	12.75	7	53	20	1.3	3212-104
VF-125	NT40	32	23	15.90	7	63	20	1.4	3212-105
VF-126	NT40	40	26	19.05	8	85	20	1.9	3212-106
VF-127	NT40	60	32	25.40	5	128	24	4	3212-107
VF-128	NT50	22	18	9.57	5	40	20	3.1	3212-108
VF-129	NT50	27	20	12.75	7	53	20	3.3	3212-109
VF-130	NT50	32	23	15.90	7	63	20	3.5	3212-110
VF-131	NT50	40	26	19.05	8	85	20	3.7	3212-111
VF-132	NT50	60	32	25.40	5	128.57	24	5.4	3212-112
VF-134	R8	22	18	9.57	5	40	20	0.9	3212-113
VF-135	R8	27	20	12.75	7	53	20	1	3212-114
VF-136	MT-3	27	20	9.57	7	53	20	0.7	3212-115
VF-137	MT4	27	20	9.57	7	53	20	1.1	3212-116





Morse Taper Adapter

NT-30, 40, 50, R8, MT3, 4

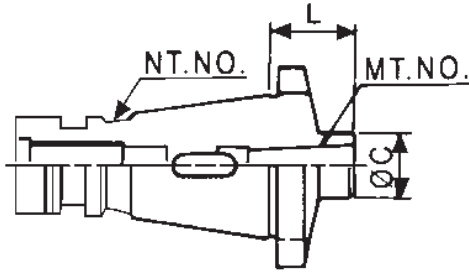


VERTEX®

DIN 2080/ISO SHANK



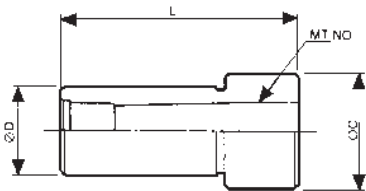
MORSE TAPER ADAPTER WITH STRAIGHT SHANK



STANDARD TYPE

ORDER NO.	TAPER	TYPE	C	L	WEIGHT (kgs)	CODE NO.
VI-101	NT30	MT1	25	25	0.6	3211-030
VI-102	NT30	MT2	32	50	0.6	3211-031
VI-103	NT30	MT3	35	65	0.7	3211-032
VI-104	NT40	MT1	25	30	0.9	3211-033
VI-105	NT40	MT2	32	30	1	3211-034
VI-106	NT40	MT3	40	70	1.2	3211-035
VI-107	NT40	MT4	50	90	1.5	3211-036
VI-108	NT50	MT2	32	30	2.8	3211-037
VI-109	NT50	MT3	40	30	2.7	3211-038
VI-110	NT50	MT4	50	45	3.2	3211-039
VI-111	NT50	MT5	65	105	3.7	3211-040

PLEASE NOTIFY THE DRAW BAR THREAD SIZE IS MM SIZE OR INCH SIZE WHEN ORDERING.



STANDARD TYPE

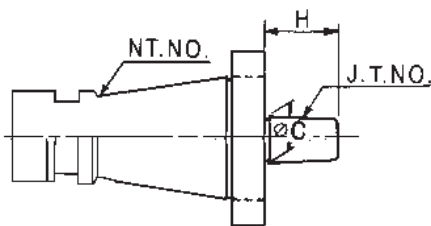
ORDER NO.	TAPER	SIZE	D	MT NO	C	L	WEIGHT (kg)	CODE NO.
VI-131	C20	C20-MT1	20	MT1	27	60	0.2	3211-060
VI-132	C20	C20-MT2	20	MT2	27	70	0.2	3211-061
VI-133	C25	C25-MT1	25	MT1	33	60	0.3	3211-062
VI-134	C25	C25-MT2	25	MT2	33	70	0.2	3211-063
VI-135	C25	C25-MT3	25	MT3	33	90	0.2	3211-064
VI-136	C32	C32-MT1	32	MT1	37	60	0.4	3211-065
VI-137	C32	C32-MT2	32	MT2	37	70	0.4	3211-066
VI-138	C32	C32-MT3	32	MT3	37	90	0.4	3211-067



Jacobs Taper Drill Chuck Arbor

NT30, 40, 50-JT & B

DIN 2080/ISO SHANK



ORDER NO.	TAPER	JT NO	C	H	WEIGHT (kgs)	CODE NO.
VJ-103	NT30	JT6	17.17	26	0.6	3209-092
VJ-106	NT40	JT6	17.17	26	1	3209-095
VJ-109	NT50	JT6	17.17	26	3.2	3209-098
VJ-111	NT30	B16	15.733	24	0.5	3209-099
VJ-112	NT40	B16	15.733	24	1	3209-100

PLEASE NOTIFY THE DRAW BAR THREAD SIZE IS MM SIZE OR INCH SIZE WHEN ORDERING.



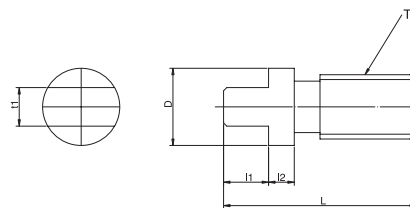
Tang For Morse Taper Shank

SURFACE TREATMENT: BLACKENING

HRC 45°



NEW



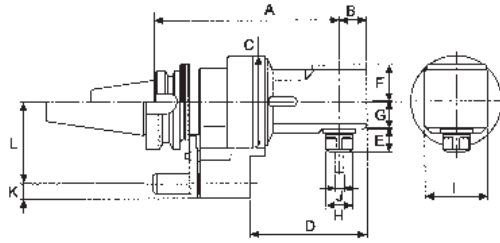
Tang for draw bar thread type to tang type



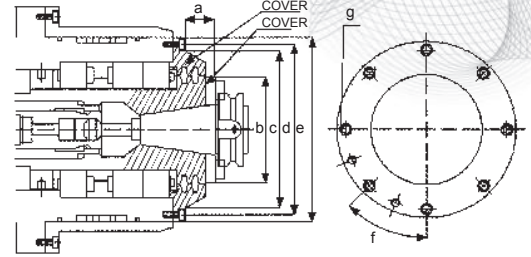
ORDER NO.	Morse	D	L	11	12	T	t1	WEIGHT	CODE NO.
VMT-2	2	12	30	7	4	M10X1.5	6	0.02	3209-201
VMT-3	3	17	40	12	4	M12X1.75	7.5	0.04	3209-202
VMT-4	4	24	46	13	5	M16X2	11.5	0.09	3209-203
VMT-5	5	34	47	14	5	M24X3	15.5	0.18	3029-204



Right Angle Heads For Machining Center



Please provide spindle dimension in metric for mounting



a: _____ mm
 b: _____ mm
 c: _____ mm
 d: _____ mm
 P.C.D For g

e: _____ mm
 f: _____ mm
 g: _____ mm
 thread ØD x pitch
 x holes number

- Compact body design is the best tool for internal processing.
- 6000 rpm high speed processing. Increases machining efficiency.
- Allow automatic tool changed. Increases productivity.

Concentricity:	0.002mm
Squareness:	10 Arc Second
Material:	FCD60~FCD65
R.P.M.:	Max. 6000RPM
Gear Ration:	1:1
Spindle Type:	BT
Standard Accessory:	27mm Wrench, ER Wrench, ER Nut

ORDER NO.	A	B	C	D	E	F	G	H	I	J	K	L	N.W.(KGS)	CODE NO.
VHA-BT40-ER20	192	29	95	122	28.5	38	28	28	66	1~13(ER20)	15.5	65	6.2	3500-020
VHA-BT50-ER20	203	29	95	122	28.5	38	28	28	66	1~13(ER20)	15.5	80/85	9.5	3500-021

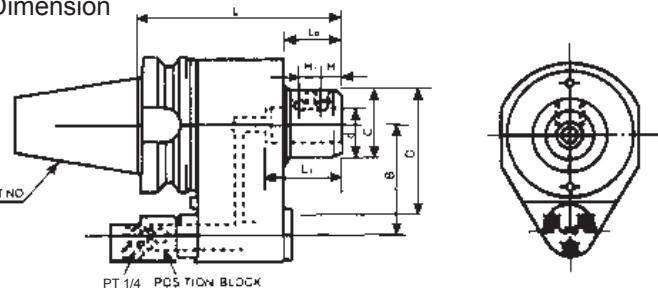


Oil-Feed Holder / Slo

Coolant hole holder for straight shank
 BT40,BT50



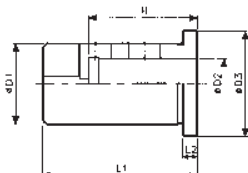
Dimension



Unit:mm

ORDER NO.	d	L	B	C	D	L0	L1	H	H1	WEIGHT(kgs)	CODE NO.
BT40SLO32-165	32	165	65	53	90	52	60	15	15	4KGS	3214-001
BT40SLO40-165	40	165	65	70	90	52	70	19	18	4.6KGS	3214-002
BT50SLO32-150	32	150	80	54	100	42	60	15	15	7.1KGS	3214-003
BT50SLO40-150	40	150	80	64	100	52	70	19	18	7.8KGS	3214-004

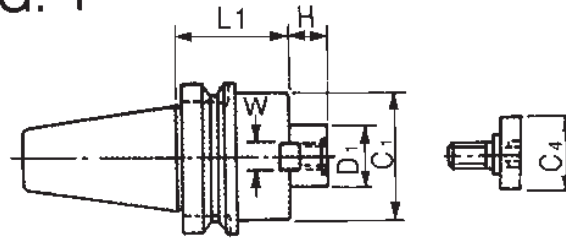
Reducing sleeve for oil feed holder.



ORDER NO.	D1	D2	D3	L1	L2	H	WEIGHT(kg)	CODE NO.
OC32-20	32	20	42	63	6	48	0.4	3214-103
OC32-25		25				54	0.3	3214-104
OC40-25	40	25	50	63	6	54	0.6	3214-105
OC40-32		32				58	0.5	3214-106



FIG. 1



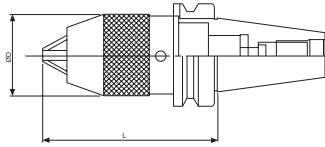
INCH FMA TYPE

ORDER NO.	TAPER	FIG	D1	L1	H	C1	W	C4	N.W. (KG)	CODE NO.
BT-101	BT30	1	25.4	50	22	45	9.5	33	1.0	3212-201
BT-103	BT40	1	25.4	45	22	50	9.5	33	1.6	3212-203
BT-105	BT40	1	25.4	90	22	50	9.5	33	1.6	3212-205
BT-106	BT40	1	31.75	45	30	60	12.7	40	1.8	3212-206
BT-108	BT40	1	31.75	90	30	60	12.7	40	2.8	3212-208
BT-109	BT40	1	38.1	60	34	74	15.9	50	2.5	3212-209
BT-111	BT50	1	25.4	45	22	60	9.5	33	4.2	3212-211
BT-112	BT50	1	25.4	105	22	50	9.5	33	4.9	3212-212
BT-113	BT50	1	25.4	150	22	50	9.5	33	6.2	3212-213
BT-114	BT50	1	31.75	45	30	70	12.7	40	4.0	3212-214
BT-115	BT50	1	31.75	75	30	60	12.7	40	4.8	3212-215
BT-116	BT50	1	31.75	105	30	60	12.7	40	5.6	3212-216
BT-117	BT50	1	38.1	45	34	85	15.9	50	4.6	3212-217
BT-118	BT50	1	38.1	75	34	85	15.9	50	5.6	3212-218
BT-119	BT50	1	50.8	45	36	95	19.05	65	4.8	3212-219
BT-121	BT50	1	47.625	75	38	128.57	25.4	-	7.9	3212-221

METRIC FMB TYPE

ORDER NO.	TAPER	FIG	D1	L1	H	C1	W	C4	N.W. (KG)	CODE NO.
BT-150	BT30	1	22	45	18	48	10	33	2.0	3212-267
BT-151	BT30	1	27	45	20	60	12	33	2.2	3212-268
BT-152	BT40	1	22	45	18	48	10	50	1.5	3212-269
BT-153	BT40	1	22	90	18	48	10	33	2.2	3212-270
BT-154	BT40	1	27	45	20	60	12	33	1.7	3212-271
BT-155	BT40	1	27	90	20	60	12	33	2.7	3212-272
BT-156	BT40	1	32	45	22	62	14	50	1.8	3212-273
BT-157	BT40	1	40	60	26	85	16	50	2.7	3212-274
BT-158	BT50	1	22	45	18	60	10	33	4.2	3212-275
BT-159	BT50	1	22	75	18	60	10	33	4.6	3212-276
BT-160	BT50	1	27	45	20	70	12	33	4.3	3212-277
BT-161	BT50	1	27	75	20	60	12	33	4.9	3212-278
BT-162	BT50	1	27	105	20	60	12	33	5.7	3212-279
BT-163	BT50	1	32	75	22	75	14	50	5.5	3212-280
BT-164	BT50	1	32	105	22	80	14	33	6.5	3212-281
BT-165	BT50	1	32	150	22	80	14	33	8.7	3212-282
BT-166	BT50	1	40	75	26	85	16	50	6	3212-283

Drill Chuck Holder/APU

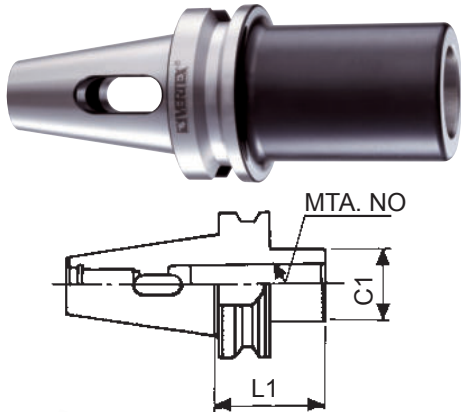


ORDER NO.	TAPER	ØD	KGS	CODE NO.
BT-180	BT30-APU08	37	1	3212-301
BT-181	BT30-APU13	50	1.4	3212-302
BT-182	BT40-APU08	37	1.5	3212-303
BT-183	BT40-APU13	50	2	3212-304
BT-184	BT40-APU16	58	2.5	3212-305
BT-186	BT50-APU13	50	4.7	3212-307
BT-188	BT50-APU16	58	4.8	3212-309

Morse Taper Adaptor

BT30,40,50-MTA,MTB

MAS 403 BT-SHANK

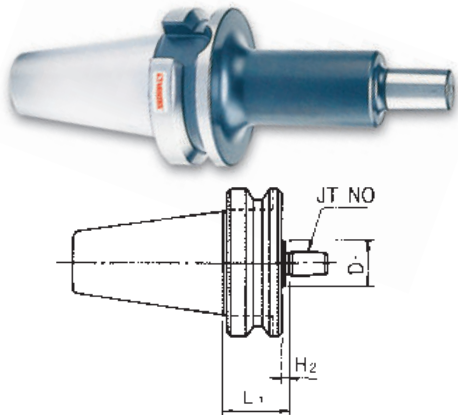


MTA TYPE (STANDARD TYPE)

ORDER NO.	TAPER	MT.NO.	L1	C1	WEIGHT(KG)	CODE NO.
BT-204	BT30	MT-2	60	32	0.6	3211-091
BT-207	BT30	MT-3	80	40	1.2	3211-092
BT-209	BT40	MT-1	50	25	1.1	3211-094
BT-212	BT40	MT-2	50	32	1.1	3211-095
BT-215	BT40	MT-3	75	40	1.3	3211-096
BT-218	BT40	MT-4	95	50	1.5	3211-097
BT-220	BT50	MT-1	45	25	3.5	3211-098
BT-223	BT50	MT-2	50	32	3.5	3211-099
BT-226	BT50	MT-3	65	40	3.6	3211-100
BT-229	BT50	MT-4	75	50	3.6	3211-101
BT-231	BT50	MT-5	105	65	4.2	3211-102

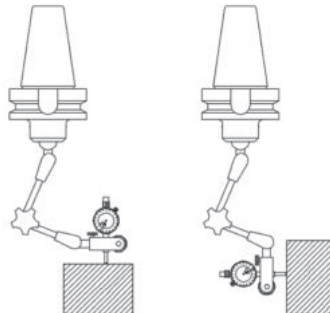
Jacobs Taper Arbor

MAS 403 BT-SHANK

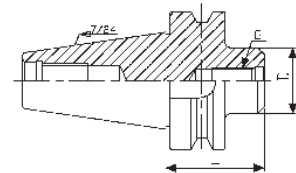


ORDER NO.	TAPER	JT.NO.	L1	D1	H2	WEIGHT (KG)	CODE NO.
BT-315	BT40	JT-6	45	30	4	1.2	3209-147
BT-316	BT40	JT-6	90	30	4	1.4	3209-148
BT-325	BT50	JT-6	45	30	4	4.2	3209-151
BT-332	BT40	B16※	45	30	4	1.45	3209-155
BT-332-1	BT40	B18※	45				3209-155A
BT-333	BT50	B16※	45	30	4	5.1	3209-156
BT-333-1	BT50	B18※	45				3209-156A

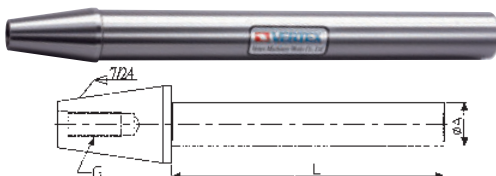
Lever Checking Holders



ORDER NO.	L	ØD	G	kgs	CODE NO.
BT40-M8	47	30	M8	1.3	3029-160
BT50-M8	58	30	M8		3029-161



Test Arbor



ORDER NO.	TAPER	G CAN FOR PULL STUD	A	L	KGS	CODE NO.
A50	BT-50	M24xP3.0	40	250	5.3	3405-412
A40	BT-40	M16xP2.0	40		3.9	3405-413
A30	BT-30	M12xP1.75	30		2.4	3405-414



Sidelock End Mill Holder

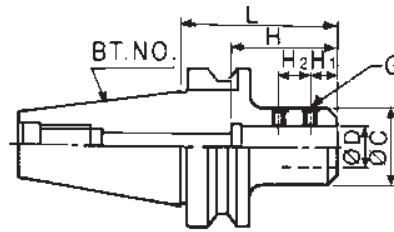
BT 30, 40, 50-SLA



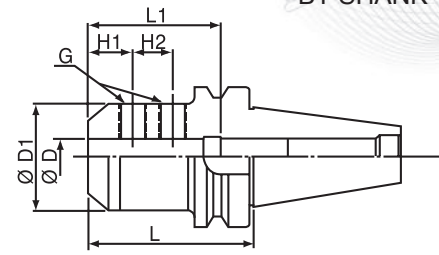
MAS 403



WELDON TYPE



BT-SHANK



Unit:mm

ORDER NO.	SIZE	ØD	ØD1	L	L1	H1	H2	G	WEIGHT (kgs)	CODE NO.
BT-436	BT30-SLA6-60	6	25	60	30	12	10	M6x1.0	0.7	3213-126
BT-437	BT30-SLA8-60	8	28	60	35	14	12	M8x1.25	0.7	3213-127
BT-438	BT30-SLA10-60	10	35	60	40	15	14	M8x1.25	0.7	3213-128
BT-439	BT30-SLA12-60	12	42	60	50	20	16	M12x1.5	0.8	3213-129
BT-440	BT30-SLA16-75	16	48	75	60	20	18	M12x1.5	0.9	3213-130
BT-441	BT30-SLA20-75	20	52	75	70	23	19	M12x1.5	1.2	3213-131
BT-442	BT40-SLA6-75	6	25	75	30	12	10	M6x1.0	1.2	3213-132
BT-443	BT40-SLA8-75	8	28	75	35	14	12	M8x1.25	1.3	3213-133
BT-444	BT40-SLA10-75	10	35	75	40	15	14	M8x1.25	1.4	3213-134
BT-445	BT40-SLA12-75	12	42	75	50	20	16	M12x1.5	1.5	3213-135
BT-446	BT40-SLA14-75	14	44	75	50	20	16	M12x1.5	1.5	3213-136
BT-447	BT40-SLA16-75	16	48	75	60	20	18	M12x1.5	1.6	3213-137
BT-448	BT40-SLA18-75	18	50	75	60	20	18	M12x1.5	1.6	3213-138
BT-449	BT40-SLA20-90	20	52	90	70	23	19	M12x1.5	1.9	3213-139
BT-450	BT40-SLA25-90	25	62	90	80	24	25	M18x1.5	2.2	3213-140
BT-451	BT40-SLA32-90	32	63	90	80	24	28	M20x1.5	2	3213-141
BT-452	BT40-SLA40-105	40	79	105	80	24	28	M20x1.5	3.2	3213-142
BT-453	BT40-SLA42-105	42	79	105	80	24	28	M20x1.5	3.1	3213-143
BT-454	BT50-SLA6-90	6	25	90	30	12	10	M6x1.0	3.9	3213-144
BT-455	BT50-SLA6-150	6	25	150	30	12	10	M6x1.0	4	3213-145
BT-456	BT50-SLA8-90	8	28	90	35	14	12	M8x1.25	3.7	3213-146
BT-457	BT50-SLA8-150	8	28	150	35	14	12	M8x1.25	4.2	3213-147
BT-458	BT50-SLA10-90	10	35	90	40	15	14	M8x1.25	4.2	3213-148
BT-459	BT50-SLA10-150	10	35	150	40	15	14	M8x1.25	4.3	3213-149
BT-460	BT50-SLA12-90	12	42	90	50	20	16	M12x1.5	4.2	3213-150
BT-461	BT50-SLA12-150	12	42	150	50	20	16	M12x1.5	4.9	3213-151
BT-462	BT50-SLA14-90	14	44	90	55	20	16	M12x1.5	4.2	3213-152
BT-463	BT50-SLA16-90	16	48	90	60	20	18	M12x1.5	4.3	3213-153
BT-464	BT50-SLA16-150	16	48	150	60	20	18	M12x1.5	5	3213-154
BT-465	BT50-SLA18-90	18	50	90	60	20	18	M12x1.5	4.3	3213-155
BT-466	BT50-SLA20-105	20	52	105	70	23	19	M12x1.5P	4.5	3213-156
BT-466-1	BT50-SLA20-90	20	50	90	60	20	18	M12x1.5P	4.4	3213-156A
BT-467	BT50-SLA20-150	20	52	150	70	23	19	M12x1.5	4.5	3213-157
BT-468	BT50-SLA20-200	20	52	200	70	23	19	M12x1.5	6.4	3213-158
BT-470	BT50-SLA25-105	25	65	105	80	24	25	M18x1.5	5	3213-160
BT-471	BT50-SLA25-150	25	65	150	80	24	25	M18x1.5P	6.3	3213-161
BT-472	BT50-SLA25-200	25	65	200	80	24	25	M18x1.5P	7.6	3213-162
BT-474	BT50-SLA32-105	32	72	105	80	24	28	M20x1.5	5.3	3213-164
BT-477	BT50-SLA32-250	32	72	250	80	24	28	M20x1.5	9.8	3213-167
BT-478	BT50-SLA40-120	40	90	120	90	30	32	M20x1.5	6.5	3213-168
BT-479	BT50-SLA42-120	42	90	120	90	30	32	M20x1.5	6.7	3213-169



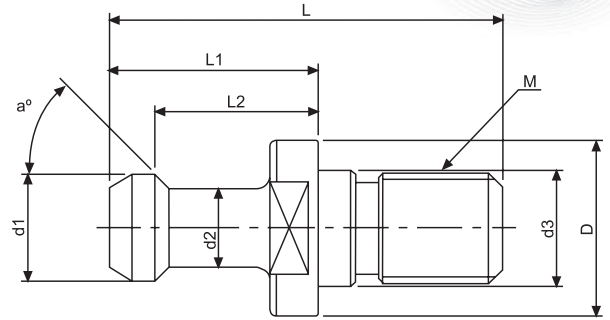
Pull Studs

BT 30, 40, 50

- MATERIAL: SNCM 21
- HARDNESS: HRC 54°±2°



FOR MAS 403



THREAD GROUND

Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	D	d1	d2	d3	M	CODE NO.
BT-510	BT30X90°	90	43	23	18	16.5	11	7	12.5	M12	3215-007
BT-501	BT30X45°	45	43	23	18	16.5	11	7	12.5	M12	3215-008
BT-502	BT30X60°	60	43	23	18	16.5	11	7	12.5	M12	3215-009
BT-511	BT40X90°	90	60	35	28	23	15	10	17	M16	3215-010
BT-503	BT40X45°	45	60	35	28	23	15	10	17	M16	3215-011
BT-504	BT40X60°	60	60	35	28	23	15	10	17	M16	3215-012
BT-512	BT50X90°	90	85	45	35	38	23	17	25	M24	3215-013
BT-505	BT50X45°	45	85	45	35	38	23	17	25	M24	3215-014
BT-506	BT50X60°	60	85	45	35	38	23	17	25	M24	3215-015



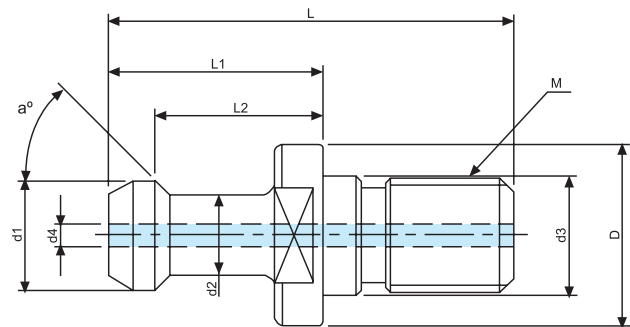
Pull Studs

MAS 403 BT-40,50

FOR MAS 403



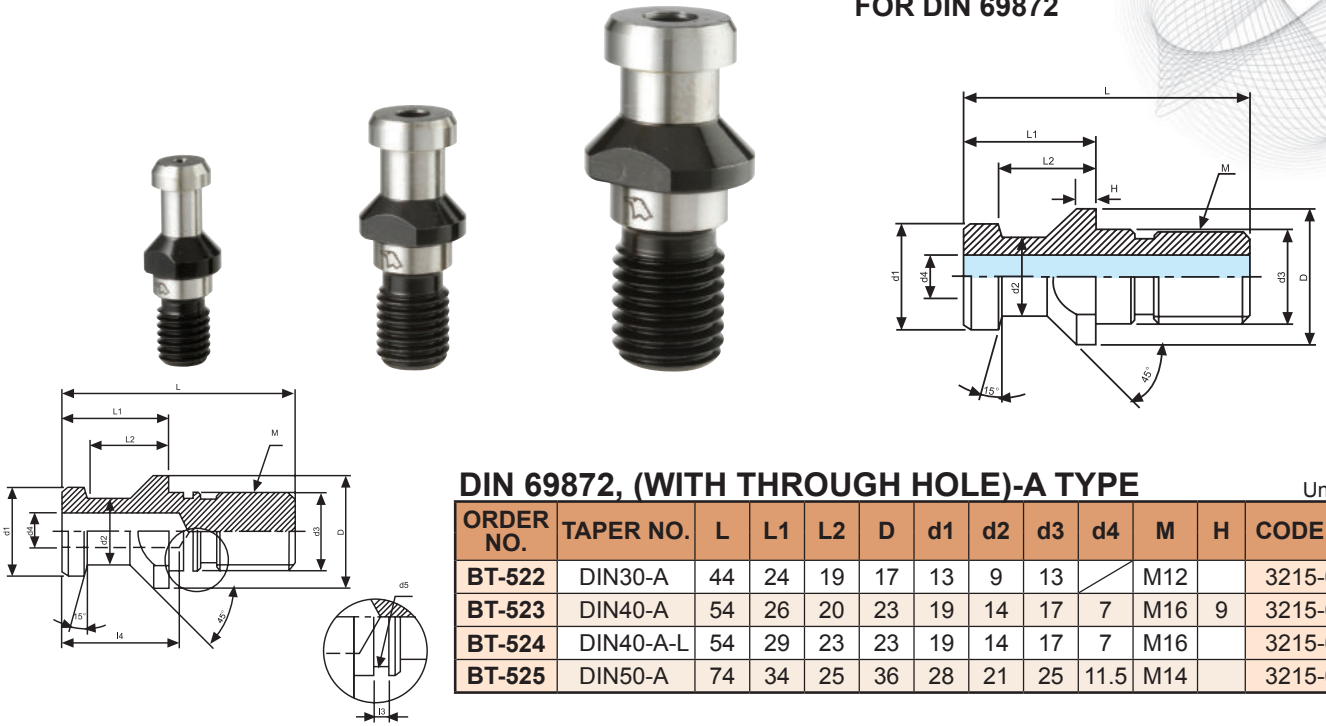
- With through hole for internal coolant



Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	D	d1	d2	d3	d4	M	CODE NO.
BT-516	BT40X45°W	45	60	35	28	23	15	10	17	4	M16	3215-060
BT-517	BT40X60°W	60	60	35	28	23	15	10	17	4	M16	3215-061
BT-518	BT40X90°W	90	60	35	28	23	15	10	17	4	M16	3215-062
BT-519	BT50X45°W	45	85	45	35	38	23	17	25	7	M24	3215-063
BT-520	BT50X60°W	60	85	45	35	38	23	17	25	7	M24	3215-064
BT-521	BT50X90°W	90	85	45	35	38	23	17	25	7	M24	3215-065

FOR DIN 69872



DIN 69872, (WITH THROUGH HOLE)-A TYPE

Unit:mm

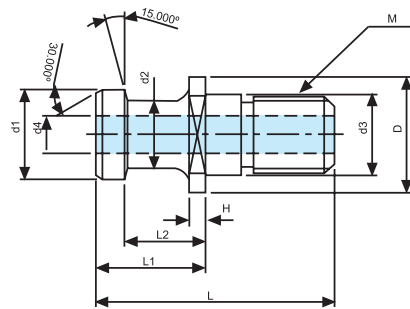
ORDER NO.	TAPER NO.	L	L1	L2	D	d1	d2	d3	d4	M	H	CODE NO.
BT-522	DIN30-A	44	24	19	17	13	9	13		M12		3215-066
BT-523	DIN40-A	54	26	20	23	19	14	17	7	M16	9	3215-067
BT-524	DIN40-A-L	54	29	23	23	19	14	17	7	M16		3215-068
BT-525	DIN50-A	74	34	25	36	28	21	25	11.5	M14		3215-069

WITHOUT O-RING DIN69872-B TYPE

Unit:mm

ORDER NO.	TAPER NO.	L	L1	L2	I3	I4	D	d1	d2	d3	d4	M	CODE NO.
BT-526	DIN30-B	44	24	19	1.4		17	13	9	13		M12	3215-070
BT-527	DIN40-B	54	26	20	1.9	27	23	19	14	17	7	M16	3215-071
BT-528	DIN50-B	74	34	25	3	37	36	28	21	25	11.5	M24	3215-072

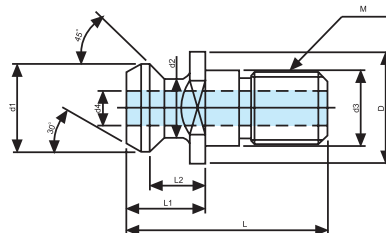
ISO-A TYPE FOR ISO/JIS 7388/2/A



Unit:mm

ORDER NO.	TAPER NO.	L	L1	L2	D	d1	d2	d3	d4	M	H	CODE NO.
BT-529	ISO40-A	54	26	20	23	29	24	27	7	M16	6	3215-073
BT-530	ISO50-A	74	34	25	36	28	21	25	11.5	M24		3215-074

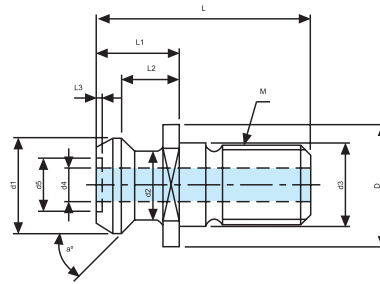
ISO-B TYPE FOR ISO/JIS 7388/2/B



Unit:mm

ORDER NO.	TAPER NO.	L	L1	L2	D	d1	d2	d3	d4	M	CODE NO.
BT-531	ISO40-B	44.5	16.4	11.15	22.5	18.95	12.95	17	7.35	M16	3215-075
BT-532	ISO50-B	65.5	25.5	17.95	37	29.1	19.6	25	11.55	M24	3215-076

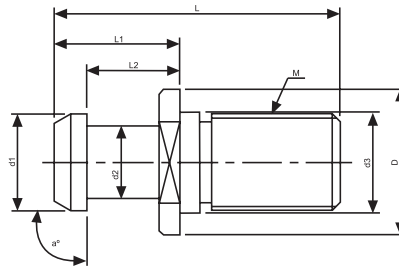
MAZAK FOR MAZAK MACHINE



Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	L3	D	d1	d2	d3	d4	d5	M	CODE NO.
BT-533	MAZAK BT50	45	65.2	25.2	17.58	1.8	37	28.95	20.83	25	10	16	M24	3215-077
BT-534	MAZAK BT40	45	44.1	19.1	14	/	22	18.8	12.45	17	7	/	M16	3215-078
BT-535	MAZAK CAT40	45	44.1	16.1	11	/	22	18.8	12.45	17	7	/	M16	3215-079

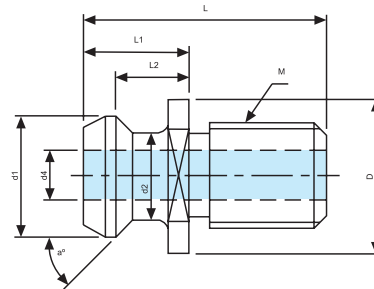
MITSUI FOR MITSUI MACHINE



Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	D	d1	d2	d3	M	CODE NO.
BT-536	MITSUI BT40	90	50	25	18	23	15	10	17	M16	3215-080
BT-537	MITSUI BT50	90	71	31	23	36	24	18	25	M24	3215-081

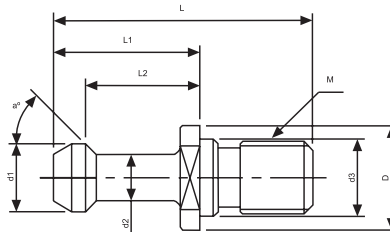
CAT FOR ANSI B5-50



Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	D	d1	d2	d4	M	CODE NO.
BT-538	CAT40	45	38.1	16.2	11.2	23.8	18.8	12.4	7.1	5/8"	3215-082
BT-539	CAT50	45	58.4	25.4	17.8	36	28.9	20.8	11.8	1"	3215-083

CAT-BT FOR BT MACHINE



Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	D	d1	d2	d3	M	CODE NO.
BT-540	CAT40X45°	45	57	32	25	23	15	10	/	5/8"	3215-084
BT-541	CAT40X60°	60	57	32	25	23	15	10	/	5/8"	3215-085
BT-542	CAT40X90°	90	57	32	25	23	15	10	/	5/8"	3215-086
BT-543	CAT50X45°	45	78.6	45	35.2	38	23	17	/	1"	3215-087
BT-544	CAT50X60°	60	78.6	45	35.2	38	23	17	/	1"	3215-088
BT-545	CAT50X90°	90	78.6	45	35.2	38	23	17	/	1"	3215-089
BT-546	CAT40X45°M	45	57	32	25	23	15	10	17	M16	3215-090
BT-547	CAT40X60°M	60	57	32	25	23	15	10	17	M16	3215-091
BT-548	CAT40X90°M	90	57	32	25	23	15	10	17	M16	3215-092

We recommend a complete set which is included tool holder, collet chuck, collet set, pull stud, tooling locking stand, edge finder for NC machining center. it is popular and suitable sale-mix in the market.



ORDER NO. VBT-30-0720 CODE NO. 3216-001 BT-30 WITH 7PCS. HOLDER & ER-20 COLLET

ITEM NO.	Descriptions	Figures	Quantity	Explanation
1	ER20 COLLET CHUCK BT30-ER20-60		3pcs.	For small Dia. End mill and Drills
2	MORSE TAPER ADAPTOR BT30-MTA1-50		1pc.	For drills with Morse taper Shank No.1.
3	MORSE TAPER ADAPTOR BT30-MTA2-60		1pc.	For drills with Morse taper Shank No.2.
4	END MILL HOLDER BT-30-SL12-60		1pc.	For straight shank end mill with Sidelock edge Dia. 12mm(WELDON Type)
5	END MILL HOLDER BT30-SL16-75		1pc.	For straight shank end mill with Sidelock edge Dia. 16mm(WELDON Type)
6	ER20 SPRING COLLET ER20-dØ		11pcs.	For item 1. Including 11 collets as below: Ø3,4,5,6,7,8,9,10,11,12,13mm
7	PULL STUD BT-501, BT-502		7pcs.	BT-501 θ =45° BT-502 θ =60°
8	TOOL HOLDER LOCKING STAND VTS-BT-30		1pc.	For locking the pull studs or preparing Cutting tools of tool holders.
9	ELECTRONIC EDGE FINDER VPS-20B		1pc.	For setting work coordinate on Machine Centers.


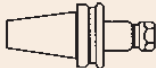




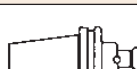

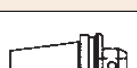

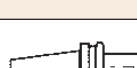

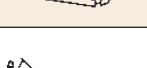


ORDER NO. VBT-30-1520 CODE NO. 3216-011 BT-30 WITH 15PCS. HOLDER & ER-20 COLLET

ITEM NO.	Descriptions	Figures	Quantity	Explanation
1	ER20 COLLET CHUCK BT30-ER20-60		6pcs.	For small Dia. End mill and Drills
2	MORSE TAPER ADAPTOR BT30-MTA1-50		1pc.	For drills with Morse taper Shank No.1.
3	MORSE TAPER ADAPTOR BT30-MTA2-60		1pc.	For drills with Morse taper Shank No.2.
4	FACE MILL ARBOR BT30-FMB22-45		1pc.	For Holding the face milling Cutter Dia.50, 63mm
5	END MILL HOLDER BT-30-SL12-60		2pcs.	For straight shank end mill with Sidelock edge Dia. 12mm(WELDON Type)
6	END MILL HOLDER BT30-SL16-60		2pcs.	For straight shank end mill with Sidelock edge Dia. 16mm(WELDON Type)
7	END MILL HOLDER BT30-SL20-75		2pcs.	For straight shank end mill with Sidelock edge Dia. 20mm(WELDON Type)
8	ER20 SPRING COLLET ER20-dØ		11pcs.	For item 1. Including 11 collets as below: Ø3,4,5,6,7,8,9,10,11,12,13mm
9	PULL STUD BT-501, BT-502		15pcs.	BT-501 θ =45° BT-502 θ =60°
10	TOOL HOLDER LOCKING STAND VTS-BT-30		1pc.	For locking the pull studs or preparing Cutting tools of tool holders.
11	ELECTRONIC EDGE FINDER VPS-20B		1pc.	For setting work coordinate on Machine Centers.

We recommend a complete set which is included tool holder, collet chuck, collet set, pull stud, tooling locking stand, edge finder for NC machining center. it is popular and suitable sale-mix in the market.

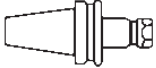
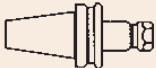





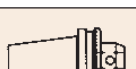
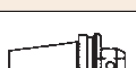



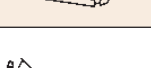

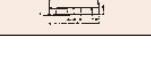
G.W.:39.6 kgs

ORDER NO. VBT-40-1532 CODE NO. 3216-002 BT-40 WITH 15PCS. HOLDER & ER-32 COLLET

ITEM NO.	Descriptions	Figures	Quantity	Explanation
1	ER32 COLLET CHUCK BT40-ER32-70		3pcs.	For small Dia. End mill and Drills
2	ER32 COLLET CHUCK BT40-ER32-100		3pcs.	For small Dia. End mill and Drills
3	MORSE TAPER ADAPTOR BT40-MTA1-50		1pc.	For drills with Morse taper Shank No.1.
4	MORSE TAPER ADAPTOR BT40-MTA2-50		1pc.	For drills with Morse taper Shank No.2.
5	MORSE TAPER ADAPTOR BT40-MTA3-75		1pc.	For drills with Morse taper Shank No.3.
6	FACE MILL ARBOR BT40-FMB22-45		1pc.	For holding the face milling Cutter Dia.50, 63mm
7	FACE MILL ARBOR BT40-FMB27-45		1pc.	For holding the face milling Cutter Dia.80mm
8	END MILL HOLDER BT40-SL16-75		1pc.	For straight shank end mill with Sidelock edge Dia. 16mm(WELDON Type)
9	END MILL HOLDER BT40-SL20-90		1pc.	For straight shank end mill with Sidelock edge Dia. 20mm(WELDON Type)
10	END MILL HOLDER BT40-SL25-90		1pc.	For straight shank end mill with Sidelock edge Dia. 25mm(WELDON Type)
11	END MILL HOLDER BT40-SL32-90		1pc.	For straight shank end mill with Sidelock edge Dia. 32mm(WELDON Type)
12	ER32 SPRING COLLET ER32-dØ		11pcs.	For item 1.2. Including 11 collets as below: Ø4,5,6,8,10,12,13,15,16,18,20mm
13	PULL STUD BT-503 OR BT-504		15pcs.	BT-503 $\theta = 45^\circ$ BT-504 $\theta = 60^\circ$
14	TOOL HOLDER LOCKING STAND VTS-BT-40		1pc.	For locking the pull studs or preparing Cutting tools of tool holders.
15	ELECTRONIC EDGE FINDER VPS-20B		1pc.	For setting work coordinate on Machine Centers.

We recommend a complete set which is included tool holder, collet chuck, collet set, pull stud, tooling locking stand, edge finder for NC machining center. it is popular and suitable sale-mix in the market.

ORDER NO. VBT-40-2432 CODE NO. 3216-003 BT-40 WITH 23PCS. HOLDER & ER-32 COLLET

ITEM NO.	Descriptions	Figures	Quantity	Explanation
1	ER32 COLLET CHUCK BT40-ER32-70		4pcs.	For small Dia. End mill and Drills
2	ER32 COLLET CHUCK BT40-ER32-100		4pcs.	For small Dia. End mill and Drills
3	MORSE TAPER ADAPTOR BT40-MTA1-45		1pc.	For drills with Morse taper Shank No.1.
4	MORSE TAPER ADAPTOR BT40-MTA2-45		2pc.	For drills with Morse taper Shank No.2.
5	MORSE TAPER ADAPTOR BT40-MTA3-75		2pc.	For drills with Morse taper Shank No.3.
6	FACE MILL ARBOR BT40-FMB22-45		1pc.	For holding the face milling Cutter Dia.50, 63mm
7	FACE MILL ARBOR BT40-FMB27-45		1pc.	For holding the face milling Cutter Dia.80mm
8	END MILL ARBOR BT40-SL16-75		2pc.	For straight shank end mill with Sidelock edge Dia. 16mm(WELDON Type)
9	END MILL ARBOR BT40-SL20-90		2pc.	For straight shank end mill with Sidelock edge Dia. 20mm(WELDON Type)
10	END MILL ARBOR BT40-SL25-90		2pc.	For straight shank end mill with Sidelock edge Dia. 25mm(WELDON Type)
11	END MILL ARBOR BT40-SL32-90		2pc.	For straight shank end mill with Sidelock edge Dia. 32mm(WELDON Type)
12	ER32 SPRING COLLET ER32-dØ		11pcs.	For item 1.2. Including 11 collets as below: Ø4,5,6,8,10,12,13,15,16,18,20mm
13	PULL STUD BT-503 OR BT-504		23pcs.	BT-503 $\theta = 45^\circ$ BT-504 $\theta = 60^\circ$
14	TOOL HOLDER LOCKING STAND VTS-BT-40		1pc.	For locking the pull studs or preparing Cutting tools of tool holders.
15	ELECTRONIC EDGE FINDER VPS-20B		1pc.	For setting work coordinate on Machine Centers.

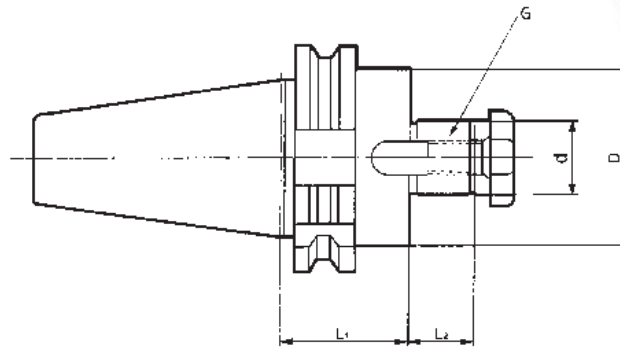


Face Mill Holder

Holder For Face Mill Cutter.
DIN69871 A



DIN 69871A



Unit:mm

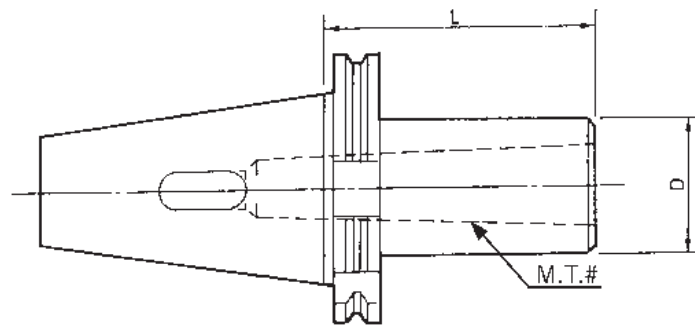
ORDER NO.	SIZE	d	D	L1	L2	G	WEIGHT(kg)	CODE NO.
SK-112	SK40-FMB22-50	22	48	50	18	M10	1.5	3211-202
SK-113	SK40-FMB27-50	27	60	50	20	M12	1.6	3211-203
SK-114	SK40-FMB32-50	32	62	50	22	M16	2.1	3211-204
SK-117	SK50-FMB22-50	22	60	50	18	M10	3.5	3211-205
SK-118	SK50-FMB27-50	27	70	50	20	M12	3.5	3211-206
SK-119	SK50-FMB32-60	32	75	60	22	M16	3.7	3211-207
SK-120	SK50-FMB40-60	40	85	60	26	M20	4.7	3211-208



Morse Taper Holder-DIN 6383

Holder For Morse Taper Shank With Tang.
DIN69871 A

DIN 69871A



Unit:mm

ORDER NO.	SIZE	M.T.#	L	D	WEIGHT(kg)	CODE NO.
SK-214	SK40-MT1-45	1	45	25	1	3211-133
SK-215	SK40-MT2-50	2	50	32	1	3211-134
SK-216	SK40-MT3-70	3	70	40	1.2	3211-135
SK-217	SK40-MT4-95	4	95	48	1.3	3211-136
SK-218	SK50-MT1-45	1	45	25	3	3211-137
SK-219	SK50-MT2-60	2	60	32	2.9	3211-138
SK-220	SK50-MT3-65	3	65	40	3	3211-139



Sidelock End Mill Holder

DIN69871 A

WELDON TYPE

DIN 69871A



■ Dimensions:

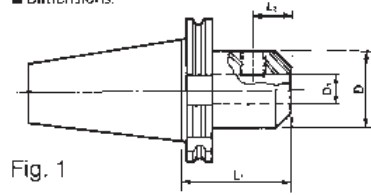


Fig. 1

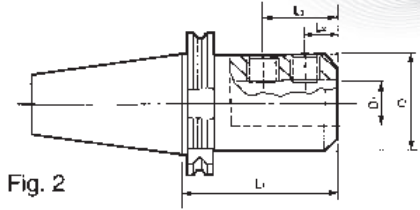


Fig. 2

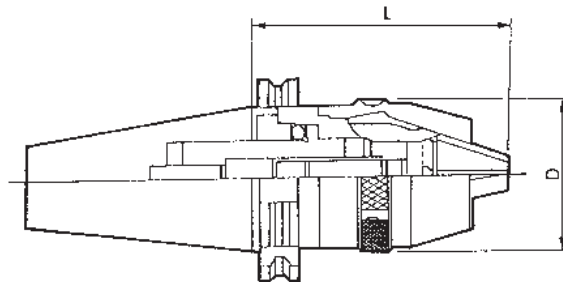
Unit:mm

ORDER NO.	SIZE	Fig.	D1	D	L1	L2	L3	WEIGHT (kg)	CODE NO.
SK-417	SK40-EM6-50	1	6	25	50	18	-	1	3213-207
SK-418	SK40-EM8-50	1	8	28	50	18	-	1.1	3213-208
SK-419	SK40-EM10-50	1	10	35	50	20	-	1.1	3213-209
SK-420	SK40-EM12-50	1	12	42	50	22.5	-	1.2	3213-210
SK-421	SK40-EM16-63	1	16	48	63	24	-	1.5	3213-211
SK-422	SK40-EM20-63	1	20	52	63	25	-	1.4	3213-212
SK-423	SK40-EM25-100	2	25	65	100	24	49	2.4	3213-213
SK-427	SK50-EM10-63	1	10	35	63	20	-	3.4	3213-217
SK-428	SK50-EM12-63	1	12	42	63	22.5	-	3.4	3213-218
SK-429	SK50-EM16-63	1	16	48	63	24	-	3.5	3213-219
SK-430	SK50-EM20-63	1	20	52	63	25	-	3.5	3213-220
SK-431	SK50-EM25-80	2	25	65	80	24	49	3.8	3213-221



Drill Chuck Holder / APU

DIN 69871A



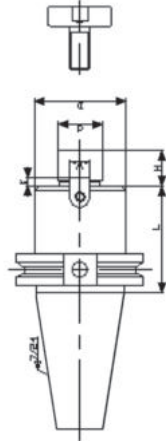
Unit:mm

ORDER NO.	SIZE	Clamping range (Ømm)	D	L		WEIGHT (kg)	CODE NO.
				Minimum	Maximum		
SK-511	SK40-APU08-81	1-8	35.6	81	90	1.4	3301-001
SK-512	SK40-APU13-99	1-13	52	99	111	1.9	3301-002
SK-514	SK50-APU13-94	1-13	52	93	106	3.9	3301-004
SK-509	SK50-APU13-94	0.5-8	35.6	80	88	0.7	3301-005
SK-510	SK30-APU13-82	0.5-13	52	98	104	1.34	3301-006
SK-515	SK40-APU16-127	3-16	56.8	127	140	2.4	3301-007
SK-516	SK50-APU16-98	3-16	56.8	98	111	3.9	3301-008

Face Mill Holder



CAT-FMA



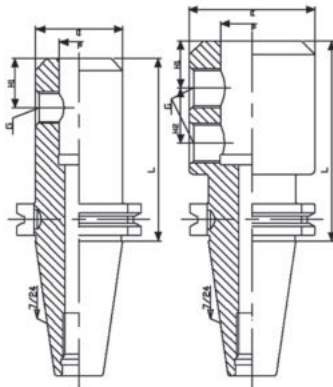
ORDER NO.	L	Ød(h6)	ØD	H	K	W	CODE NO.
CAT40-FMA25.4-2.0"	2.0"	25.4	50	20	5	9.5	3213-230
CAT40-FMA31.75-2.25"	2.25"	31.75	60	22	7	12.7	3213-231
CAT40-FMA38.1-2.4"	2.4"	38.1	80	25	9	15.9	3213-232
CAT50-FMA25.4-2.0"	2.0"	25.4	50	20	5	9.5	3213-233
CAT50-FMA31.75-1.5"	1.5"	31.75	60	22	7	12.7	3213-234
CAT50-FMA38.1-2.4"	2.4"	38.1	80	25	9	15.9	3213-235
CAT50-FMA50.8-2.4"	2.4"	50.8	100	28	12	15.9	3213-236

Side Lock Holders

CAT-SL



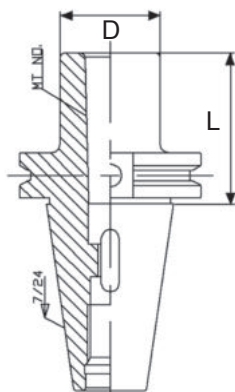
FIG 1 FIG 2



ORDER NO.	FIG	L	Ød	ØD	H1	H2	G	CODE NO.
CAT40-SL08-2.50"	1	2.5"	8	28	18	-	M8	3213-240
CAT40-SL10-2.50"			10	35	20		M10	3213-241
CAT40-SL12-2.62"		2.62"	12	42	22.5		M12	3213-242
CAT40-SL16-2.75"		2.75"	16	48	24		M14	3213-243
CAT40-SL20-3.50"		3.5"	20	48	25		M16	3213-244
CAT40-SL25-4.00"	2	4.0"	25	62	24	25	M18	3213-245
CAT40-SL32-4.00"			32	72	28	M20	3213-246	
CAT50-SL08-2.50"	1	2.5"	8	28	18	-	M8	3213-247
CAT50-SL10-2.50"			10	35	20		M10	3213-248
CAT50-SL12-2.62"		2.62"	12	42	22.5		M12	3213-249
CAT50-SL16-2.75"		2.75"	16	48	24		M14	3213-250
CAT50-SL20-3.50"		3.5"	20	52	25		M16	3213-251
CAT50-SL25-4.00"	2	4.0"	25	65	24	25	M18	3213-252
CAT50-SL32-4.00"			32	72	28	M20	3213-253	
CAT50-SL40-4.70"			4.7"	40	90		30	32

Mose Taper Holders

CAT-MTA



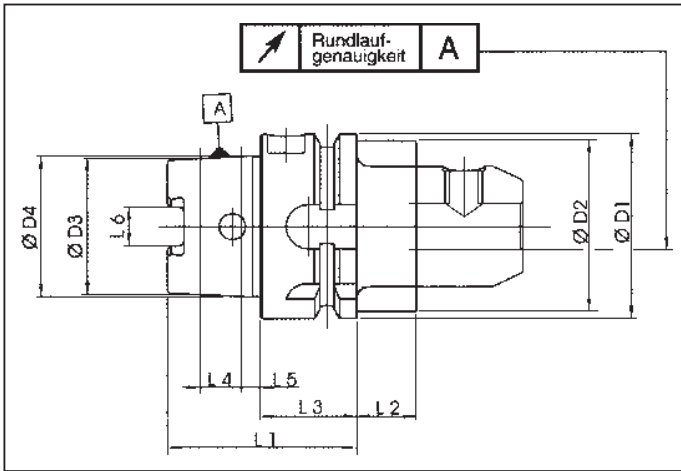
ORDER NO.	MT NO.	L	ØD	CODE NO.
CAT30-MTA2-60	2	60	32	3213-260
CAT30-MTA3-80	3	80	40	3213-261
CAT40-MTA2-60	2	60	32	3213-262
CAT40-MTA3-75	3	75	40	3213-263
CAT40-MTA4-90	4	90	50	3213-264
CAT50-MTA2-45	2	45	32	3213-265
CAT50-MTA3-45	3	45	40	3213-266
CAT50-MTA4-75	4	75	50	3213-267
CAT50-MTA5-105	5	105	65	3213-268



HSK-A63,A100(DIN-69893) Tool Holder



Form A



Compared to the steep taper the HSK has the following advantages

- High repetition accuracy when clamping tools into spindle
- Fix axial positioning by flat contact surface
- Suitable for high speed cutting
- No pull stud necessary

Material

- Special Cast-hardening steel for highly stressed parts
- Surface hardness 58-2 HRC

Tensile strength in core min. 1000 N / mm²

DIN 69893

SIZE	ØD1	ØD2	ØD3	ØD4	L1	L2	L3	L4	L5	L6
HSK 63	63	53	46.53	48	58	16	26	14.7	6.3	12.54

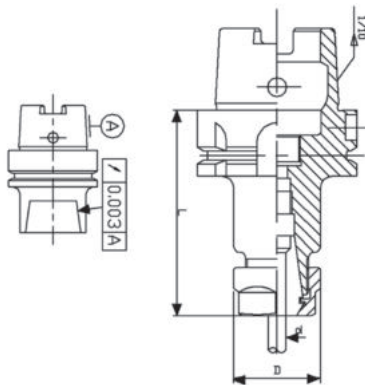


HSK-A63,A100(DIN69893A) ER Collet Chucks

DIN69893 A

10000 R.P.M. G6.3

Caution: Excessive torque will damage the chuck, nut or collet.



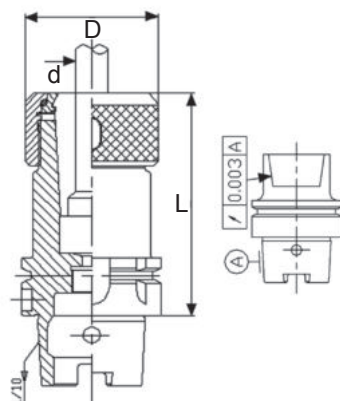
ORDER NO.	L	ØD	ØD RANG	WEIGHT (kgs)	CODE NO.
HSK-A63-ER16-100	100	30	0.5-10	1.07	3217-100
HSK-A63-ER16-150	150			1.33	3217-101
HSK-A63-ER20-100	100	35	1.0-13	1.07	3217-102
HSK-A63-ER20-150	150			1.47	3217-103
HSK-A63-ER25-100	100	42	1.0-16	1.29	3217-104
HSK-A63-ER25-150	150			1.80	3217-105
HSK-A63-ER32-100	100	50	2.0-20	1.48	3217-106
HSK-A63-ER32-150	150			2.16	3217-107
HSK-A63-ER40-100	100	63	3.0-26	1.56	3217-108
HSK-A63-ER40-150	150			2.27	3217-109
HSK-A100-ER16-100	100	30	0.5-10		3217-110
HSK-A100-ER16-150	150				3217-111
HSK-A100-ER20-100	100	35	1.0-13		3217-112
HSK-A100-ER20-150	150				3217-113
HSK-A100-ER25-100	100	42	1.0-16	2.64	3217-114
HSK-A100-ER25-150	150			3.2	3217-115
HSK-A100-ER32-100	100	50	2.0-20	2.8	3217-116
HSK-A100-ER32-150	150			3.67	3217-117
HSK-A100-ER40-100	100	63	3.0-26		3217-118
HSK-A100-ER40-150	150				3217-119



HSK-A63,A100(DIN69893A) OZ Collet Chucks

DIN69893 A

10000 R.P.M. G6.3



ORDER NO.	L	ØD	ØD RANG	CODE NO.
HSK-A63-OZ25-100	100	60	2-25	3217-121
HSK-A63-OZ32-120	120	78	4-32	3217-122
HSK-A100-OZ25-100	100	60	2-25	3217-123
HSK-A100-OZ32-120	120	78	4-32	3217-124

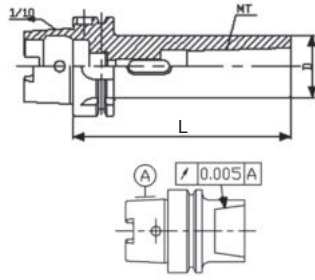


HSK-A63,A100 Morse Taper Holders



DIN69892 A

DIN 69892A



10000 R.P.M. G6.3

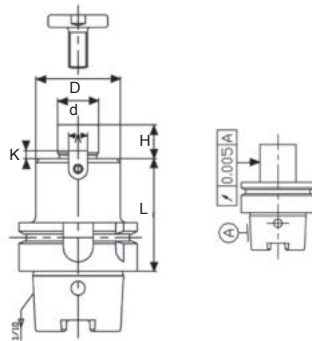
ORDER NO.	MT NO.	L	ØD	kgs	CODE NO.
HSK-A63-MTA1-100	1	100	25	1	3217-130
HSK-A63-MTA2-120	2	120	35	1.3	3217-131
HSK-A63-MTA3-140	3	140	40	1.6	3217-132
HSK-A63-MTA4-160	4	160	50	2.2	3217-133
HSK-A100-MTA1-110	1	100	25		3217-134
HSK-A100-MTA2-120	2	120	35		3217-135
HSK-A100-MTA3-150	3	140	40		3217-136
HSK-A100-MTA4-170	4	160	50		3217-137
HSK-A100-MTA5-200	5	200	65		3217-138



HSK-A63,A100 Face Mill Holders

DIN69893 A

DIN 69893A



10000 R.P.M. G6.3

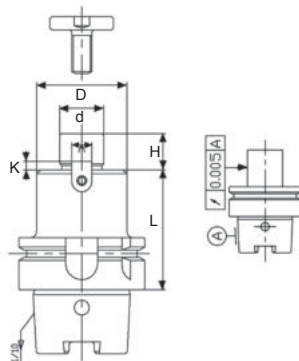
ORDER NO.	L	Ø d(h6)	ØD	H	K	W	CODE NO.
HSK-A63-FMA25.4-60	60	25.4	50	20	5	9.5	3217-140
HSK-A63-FMA25.4-120	120						3217-141
HSK-A63-FMA31.75-60	60	31.75	60	22	7	12.7	3217-142
HSK-A63-FMA31.75-120	120						3217-143
HSK-A63-FMA38.1-60	60	38.1	80	25	9	15.9	3217-144
HSK-A63-FMA38.1-120	120						3217-145
HSK-A100-FMA25.4-60	60	25.4	50	20	5	9.5	3217-146
HSK-A100-FMA25.4-120	120						3217-147
HSK-A100-FMA31.75-60	60	31.75	60	22	7	12.7	3217-148
HSK-A100-FMA31.75-120	120						3217-149
HSK-A100-FMA38.1-60	60	38.1	80	25	9	15.9	3217-150
HSK-A100-FMA38.1-120	120						3217-151
HSK-A100-FMA50.8-60	60	50.8	100	28	12		3217-152
HSK-A100-FMA50.8-120	120					3217-153	



HSK-A63,A100 Face Mill Holders

DIN69893 A

DIN 69893A



10000 R.P.M. G6.3

ORDER NO.	L	Ø d(h6)	ØD	H	K	W	CODE NO.
HSK-A63-FMB22-50	50	22	48	18	5	10	3217-156
HSK-A63-FMB22-120	120						3217-157
HSK-A63-FMB27-60	60	27	60	20	6	12	3217-158
HSK-A63-FMB27-120	120						3217-159
HSK-A63-FMB32-60	60	32	72	22	7	14	3217-160
HSK-A63-FMB32-120	120						3217-161
HSK-A63-FMB40-60	60	40	80	25	8	16	3217-162
HSK-A63-FMB40-120	120						3217-163
HSK-A100-FMB22-50	50	22	48	18	5	10	3217-164
HSK-A100-FMB22-120	120						3217-165
HSK-A100-FMB27-60	60	27	60	20	6	12	3217-166
HSK-A100-FMB27-120	120						3217-167
HSK-A100-FMB32-60	60	32	72	22	7	14	3217-168
HSK-A100-FMB32-120	120						3217-169
HSK-A100-FMB40-60	60	40	80	25	8	16	3217-170
HSK-A100-FMB40-120	120						3217-171

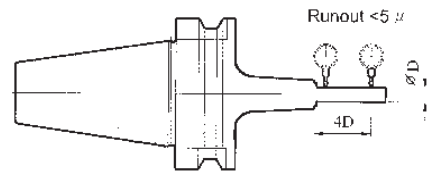
DC High Speed Slim Chuck System



5 μ
30.000
rpm

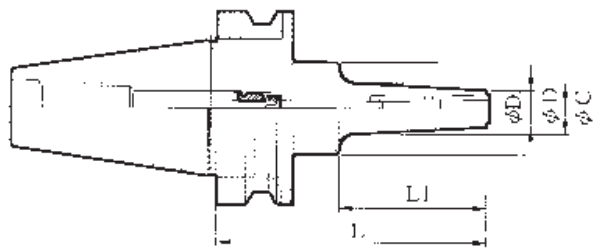


- Smallest outer diameter in the world: $\phi 12$; this can solve the difficulties during thin processing on mold manufacture.
- Collets with different sizes can be used on all kind of end mills, reamers, drills and tapping below 6m/m.
- High speed balancing :30,000rpm; G2.5
- Runout: <math><5 \mu</math>(Length 4D)



MAS BT30/40 Collet Chuck

DC Collet System



- Runout: below 0.005mm.(length 4D)
- Smallest outer diameter in the world : $\phi 12$ (Collet inside diameter $\phi 1.75 \sim \phi 6$)
- Max speed :30.000rpm;G2.5.

ORDER NO.	L	L1	D	D1	C	WEIGHT(kg)	CODE NO.
BT30-DC6-60	60	38	16	12	-	0.5	3218-044
BT30-DC6-90	90	50	17	12	30	0.7	3218-045
BT40-DC6-60	60	48	15	12	30	1.1	3218-046
BT40-DC6-90	90	48	15	12	30	1.2	3218-047



Cylindrical Shank Of DC Slim Chuck

DC Collet System



VERTEX[®]



Fig. 1

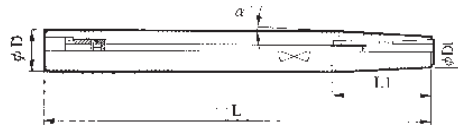


Fig. 2

- Runout: below 0.005mm.(length 4D)
- Smallest outer diameter in the world : $\phi 12$ (Collet inside diameter $\phi 1.75 \sim \phi 6$)
- Using anti-vibration material, surface hardness HRC 65°

ORDER NO.	Fig	L	L1	D	D1	α	WEIGHT(kg)	CODE NO.
ST12-DC6-120	1	120	-	12	14	-	0.4	3218-048
ST16-DC6-150	2	150	38	16	14	3°	0.4	3218-049
ST20-DC6-200	2	200	76	20	14	3°	0.6	3218-050
ST25-DC6-250	2	250	124	25	14	3°	0.9	3218-051



Set Of DC Collets And Collet Chuck

DC Collet System



ORDER NO.	Collet Chuck	Collets	Spanner	WEIGHT(kg)	CODE NO.
SST12-DC6-120E	ST12-DC6-120	EACH SET	30109-205	0.7	3218-052
SST16-DC6-150E	ST16-DC6-150	DC6-3E X 1pc	30109-205	0.7	3218-053
SST20-DC6-200E	ST20-DC6-200	DC6-4E X 1pc	30109-205	1.1	3218-054
SST25-DC6-250E	ST25-DC6-250	DC6-6E X 1pc	30109-205	1.5	3218-055



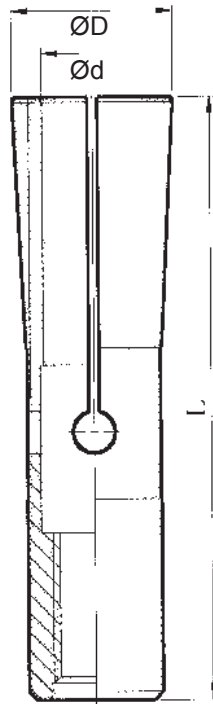
Small Collet Of Slim Collet Chuck



VERTEX®

DC Collet System

- Below $\phi 6$ can clamp any shank.
- DC6 series : for clamping drills, reamers and taps.
- DC6-E series:for clamping end mills.
- Runout : below 0.005mm. (length 4D)

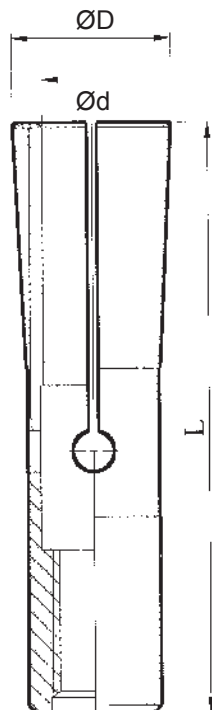


ORDER NO.	ØD	L	Range(d)	WEIGHT(kg)	CODE NO.
DC6-2	9.5	36	1.75-2.00	0.02	3218-056
DC6-2.5	9.5	36	2.25-2.50	0.02	3218-058
DC6-3	9.5	36	2.75-3.00	0.02	3218-065
DC6-3.5	9.5	36	3.25-3.50	0.02	3218-067
DC6-3.175	9.5	36	3.50-3.75	0.02	3218-068
DC6-4	9.5	36	3.75-4.00	0.02	3218-069
DC6-4.5	9.5	36	4.25-4.50	0.02	3218-071
DC6-5	9.5	36	4.75-5.00	0.02	3218-073
DC6-5.5	9.5	36	5.25-5.50	0.02	3218-075
DC6-6	9.5	36	5.75-6.00	0.02	3218-077



Collet For End Mill Shank

DC Collet System



ORDER NO.	Ød	ØD	L	WEIGHT(kg)	CODE NO.
DC6-3E	3	9.6	36	0.02	3218-078
DC6-4E	4	9.6	36	0.02	3218-079
DC6-6E	6	9.6	36	0.02	3218-081

UC COLLET CHUCK

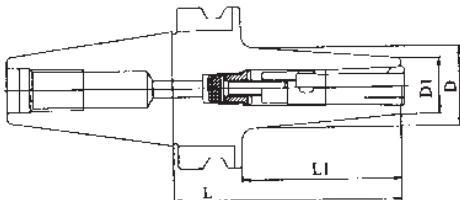
For clamping HSC(High speed cutting) tools on machining centers.
 Maximum speed:15,000 R.P.M.
 High accuracy:0.005mm T.I.R

Features

Taper of UC spring collet is 1/120, self-locked function makes high gripping power to prevent slip-out of the cutting tools.
 UC spring collet chucks are made by high alloy steel and cast hardened up to HRC59° and ground to ultra precision.
 UC spring collets are slit with a patented slotted-design for increasing gripping power and accuracy. (PAT.103654)

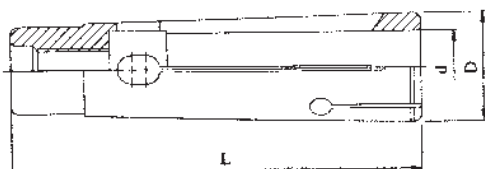


UC



ORDER NO.	L	L1	D	D1	Collets	WEIGHT (kgs)	CODE NO.
BT30-UC10-70	70	48	30	22	UC10	0.7	3218-001
BT40-UC10-90	90	63	32	22	UC10	1.4	3218-002
BT40-UC16-90	90	63	40	30	UC16	1.5	3218-003
BT50-UC10-110	110	72	36	22	UC10	4.1	3218-004
BT50-UC16-120	120	82	42	30	UC16	4.5	3218-005

UC SPRING COLLETS



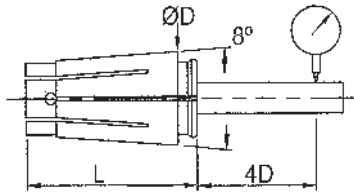
ORDER NO.	d	D	L	WEIGHT(kg)	CODE NO.
UC10-6	6	15	56.5	0.06	3218-060
UC10-8	8			0.05	3218-061
UC10-10	10			0.04	3218-062
UC16-10	10	21	67	0.12	3218-090
UC16-12	12			0.11	3218-091
UC16-14	14			0.09	3218-092
UC16-16	16			0.07	3218-093

SK Spring Collet System



JIS STD. 15000 R.P.M.

A GRADE



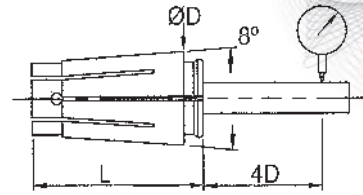
TYPE	D	L
SK6	10.5	25
SK10	15.5	30.5
SK16	24.5	45
SK20	29.5	50
SK25	35.5	57

THE GRIPPING RANGE OF DIA. BELOW 3MM IS 0.25MM
 THE GRIPPING RANGE OF DIA. OVER 3MM IS 0.5MM
 THE RUNOUT OF A COLLET IS 10µ.

TYPE	SK-6				SK-10				SK-16				SK-20				SK-25			
	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.
INDIVIDUAL UNIT	SK0601A	2	2-1.75	3218-400	SK1001A	2	2-1.75	3218-411	SK1601A	3	3-2.75	3218-430	SK2001A	3	3-2.75	3218-460	SK2501A	6	6-5.5	3218-470
	SK0602A	2.5	2.5-2.25	3218-401	SK1002A	2.5	2.5-2.25	3218-412	SK1602A	3.175	3.175-2.7	3218-431	SK2002A	4	4-3.5	3218-461	SK2502A	8	8-7.5	3218-471
	SK0603A	3	3-2.75	3218-402	SK1003A	3	3-2.75	3218-413	SK1603A	3.5	3.5-3	3218-432	SK2003A	6	6-5.5	3218-462	SK2503A	10	10-9.5	3218-472
	SK0604A	3.5	3.5-3	3218-403	SK1004A	3.175	3.175-2.7	3218-414	SK1604A	4	4-3.5	3218-433	SK2004A	8	8-7.5	3218-463	SK2504A	12	12-11.5	3218-473
	SK0605A	4	4-3.5	3218-404	SK1005A	3.5	3.5-3	3218-415	SK1605A	4.5	4.5-4	3218-434	SK2005A	10	10-9.5	3218-464	SK2505A	14	14-13.5	3218-474
	SK0606A	4.5	4.5-4	3218-405	SK1006A	4	4-3.5	3218-416	SK1606A	5	5-4.5	3218-435	SK2006A	12	12-11.5	3218-465	SK2506A	16	16-15.5	3218-475
	SK0607A	5	5-4.5	3218-406	SK1007A	4.5	4.5-4	3218-417	SK1607A	5.5	5.5-5	3218-436	SK2007A	16	16-15.5	3218-466	SK2507A	18	18-17.5	3218-476
	SK0608A	5.5	5.5-5	3218-407	SK1008A	5	5-4.5	3218-418	SK1608A	6	6-5.5	3218-437	SK2008A	20	20-19.5	3218-467	SK2508A	20	20-19.5	3218-477
	SK0609A	6	6-5.5	3218-408	SK1009A	5.5	5.5-5	3218-419	SK1609A	6.5	6.5-6	3218-438				SK2509A	22	22-21.5	3218-478	
					SK1010A	6	6-5.5	3218-420	SK1610A	7	7-6.5	3218-439				SK2510A	24	24-23.5	3218-479	
					SK1011A	6.5	6.5-6	3218-421	SK1611A	7.5	7.5-7	3218-440				SK2511A	25	25-24.5	3218-480	
					SK1012A	7	7-6.5	3218-422	SK1612A	8	8-7.5	3218-441				SK2512A	25.4	25.4-25	3218-481	
					SK1013A	7.5	7.5-7	3218-423	SK1613A	8.5	8.5-8	3218-442								
					SK1014A	8	8-7.5	3218-424	SK1614A	9	9-8.5	3218-443								
					SK1015A	8.5	8.5-8	3218-425	SK1615A	9.5	9.5-9	3218-444								
					SK1016A	9	9-8.5	3218-426	SK1616A	10	10-9.5	3218-445								
					SK1017A	9.5	9.5-9	3218-427	SK1617A	10.5	10.5-10	3218-446								
					SK1018A	10	10-9.5	3218-428	SK1618A	11	11-10.5	3218-447								
									SK1619A	11.5	11.5-11	3218-448								
									SK1620A	12	12-11.5	3218-449								
								SK1621A	12.5	12.5-12	3218-450									
								SK1622A	13	13-12.5	3218-451									
								SK1623A	13.5	13.5-13	3218-452									
								SK1624A	14	14-13.5	3218-453									
								SK1625A	14.5	14.5-14	3218-454									
								SK1626A	15	15-14.5	3218-455									
								SK1627A	15.5	15.5-15	3218-456									
								SK1628A	16	16-15.5	3218-457									

JIS STD. 15000 R.P.M.

AA GRADE



THE GRIPPING RANGE OF DIA. BELOW 3MM IS 0.25MM
 THE GRIPPING RANGE OF DIA. OVER 3MM IS 0.5MM
 THE RUNOUT OF AA COLLET IS 5 μ .

TYPE	SK-6				SK-10				SK-16				SK-20				SK-25			
	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.
INDIVIDUAL UNIT	SK0601AA	2	2-1.75	3218-500	SK1001AA	2	2-1.75	3218-511	SK1601AA	3	3-2.75	3218-530	SK2001AA	3	3-2.75	3218-560	SK2501AA	6	6-5.5	3218-570
	SK0602AA	2.5	2.5-2.25	3218-501	SK1002AA	2.5	2.5-2.25	3218-512	SK1602AA	3.175	3.175-2.7	3218-531	SK2002AA	4	4-3.5	3218-561	SK2502AA	8	8-7.5	3218-571
	SK0603AA	3	3-2.75	3218-502	SK1003AA	3	3-2.75	3218-513	SK1603AA	3.5	3.5-3	3218-532	SK2003AA	6	6-5.5	3218-562	SK2503AA	10	10-9.5	3218-572
	SK0604AA	3.5	3.5-3	3218-503	SK1004AA	3.175	3.175-2.7	3218-514	SK1604AA	4	4-3.5	3218-533	SK2004AA	8	8-7.5	3218-563	SK2504AA	12	12-11.5	3218-573
	SK0605AA	4	4-3.5	3218-504	SK1005AA	3.5	3.5-3	3218-515	SK1605AA	4.5	4.5-4	3218-534	SK2005AA	10	10-9.5	3218-564	SK2505AA	14	14-13.5	3218-574
	SK0606AA	4.5	4.5-4	3218-505	SK1006AA	4	4-3.5	3218-516	SK1606AA	5	5-4.5	3218-535	SK2006AA	12	12-11.5	3218-565	SK2506AA	16	16-15.5	3218-575
	SK0607AA	5	5-4.5	3218-506	SK1007AA	4.5	4.5-4	3218-517	SK1607AA	5.5	5.5-5	3218-536	SK2007AA	16	16-15.5	3218-566	SK2507AA	18	18-17.5	3218-576
	SK0608AA	5.5	5.5-5	3218-507	SK1008AA	5	5-4.5	3218-518	SK1608AA	6	6-5.5	3218-537	SK2008AA	20	20-19.5	3218-567	SK2508AA	20	20-19.5	3218-577
	SK0609AA	6	6-5.5	3218-508	SK1009AA	5.5	5.5-5	3218-519	SK1609AA	6.5	6.5-6	3218-538					SK2509AA	22	22-21.5	3218-578
					SK1010AA	6	6-5.5	3218-520	SK1610AA	7	7-6.5	3218-539					SK2510AA	24	24-23.5	3218-579
					SK1011AA	6.5	6.5-6	3218-521	SK1611AA	7.5	7.5-7	3218-540					SK2511AA	25	25-24.5	3218-580
					SK1012AA	7	7-6.5	3218-522	SK1612AA	8	8-7.5	3218-541					SK2512AA	25.4	25.4-25	3218-581
					SK1013AA	7.5	7.5-7	3218-523	SK1613AA	8.5	8.5-8	3218-542								
					SK1014AA	8	8-7.5	3218-524	SK1614AA	9	9-8.5	3218-543								
					SK1015AA	8.5	8.5-8	3218-525	SK1615AA	9.5	9.5-9	3218-544								
					SK1016AA	9	9-8.5	3218-526	SK1616AA	10	10-9.5	3218-545								
					SK1017AA	9.5	9.5-9	3218-527	SK1617AA	10.5	10.5-10	3218-546								
					SK1018AA	10	10-9.5	3218-528	SK1618AA	11	11-10.5	3218-547								
									SK1619AA	11.5	11.5-11	3218-548								
									SK1620AA	12	12-11.5	3218-549								
									SK1621AA	12.5	12.5-12	3218-550								
									SK1622AA	13	13-12.5	3218-551								
									SK1623AA	13.5	13.5-13	3218-552								
									SK1624AA	14	14-13.5	3218-553								
									SK1625AA	14.5	14.5-14	3218-554								
									SK1626AA	15	15-14.5	3218-555								
									SK1627AA	15.5	15.5-15	3218-556								
									SK1628AA	16	16-15.5	3218-557								

BT-SK Collet Chuck System



AA

JIS STD.



- THE SK CHUCK IS ACCORDING TO THE DESIGN OF ANGEL 8 WITH HIGH ACCURACY AND HIGH GRIPPING RANGE. THE GRIPPING TORQUE IS HIGHER THAN STANDARD ER CHUCK.
- THE DYNAMIC BALANCE OF SK CHUCK CAN BE REACHED 15000RPM X 2.5G.

ORDER NO.	BT TYPE	COLLET TYPE	COLLET SIZE	D	L	L1	WEIGHT (kgs)	CODE NO.
SKB-201	BT-30-SK6-60	SK6	2-6	20	60	38	0.5	3218-600
SKB-202	BT-30-SK6-90	SK6	2-6	20	90	68	0.55	3218-601
SKB-203	BT-30-SK10-60	SK10	2-10	28	60	38	0.5	3218-602
SKB-204	BT-30-SK10-90	SK10	2-10	28	90	68	0.7	3218-603
SKB-205	BT-30-SK16-60	SK16	3-16	40	60	38	0.6	3218-604
SKB-206	BT-30-SK16-90	SK16	3-16	40	90	68	0.7	3218-605
SKB-207	BT-40-SK6-60	SK6	2-6	20	60	33	0.9	3218-606
SKB-208	BT-40-SK6-90	SK6	2-6	20	90	63	1	3218-607
SKB-209	BT-40-SK6-120	SK6	2-6	20	120	93	1.2	3218-608
SKB-210	BT-40-SK10-60	SK10	2-10	28	60	33	1	3218-609
SKB-211	BT-40-SK10-90	SK10	2-10	28	90	63	1.1	3218-610
SKB-212	BT-40-SK10-120	SK10	2-10	28	120	93	1.2	3218-611
SKB-213	BT-40-SK10-150	SK10	2-10	28	150	123	1.3	3218-612
SKB-214	BT-40-SK16-60	SK16	3-16	40	60	33	1.2	3218-613
SKB-215	BT-40-SK16-90	SK16	3-16	40	90	63	1.3	3218-614
SKB-216	BT-40-SK16-120	SK16	3-16	40	120	93	1.4	3218-615
SKB-217	BT-40-SK16-150	SK16	3-16	40	150	123	1.5	3218-616
SKB-218	BT-40-SK20-60	SK20	3-20	50	60	33	1.2	3218-617
SKB-219	BT-40-SK20-90	SK20	3-20	50	90	63	1.3	3218-618
SKB-221	BT-40-SK20-150	SK20	3-20	50	150	123	1.5	3218-620
SKB-222	BT-40-SK25-80	SK25	6-25	55	80	53	1.5	3218-621
SKB-223	BT-40-SK25-100	SK25	6-25	55	100	73	1.65	3218-622
SKB-224	BT-50-SK6-100	SK6	2-6	20	100	62	3.6	3218-623
SKB-225	BT-50-SK6-150	SK6	2-6	20	150	112	4	3218-624
SKB-226	BT-50-SK10-100	SK10	2-10	28	100	62	3.6	3218-625
SKB-227	BT-50-SK10-150	SK10	2-10	28	150	112	4	3218-626
SKB-228	BT-50-SK16-100	SK16	3-16	40	100	62	4	3218-627
SKB-229	BT-50-SK16-150	SK16	3-16	40	150	112	4.5	3218-628
SKB-230	BT-50-SK20-100	SK20	3-20	50	100	62	4.3	3218-629
SKB-231	BT-50-SK20-150	SK20	3-20	50	150	112	5.3	3218-630
SKB-232	BT-50-SK25-100	SK25	6-25	55	100	62	4.5	3218-631
SKB-233	BT-50-SK25-150	SK25	6-25	55	150	112	5.5	3218-632

D
L1
L

Set Of SK Collet And MAS BT Chuck

JIS STD.

15000 R.P.M.

AA



SK COLLET SET

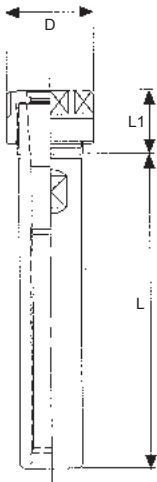
METRIC RANGE SET SIZE
SK06/5pcs : Ø2, 3, 4, 5, 6
SK10/8pcs : Ø3, 4, 5, 6, 7, 8, 9, 10
SK16/8pcs : Ø3, 4, 6, 8, 10, 12, 14, 16
SK20/8pcs : Ø3, 4, 6, 8, 10, 12, 16, 20
SK25/7pcs : Ø6, 8, 10, 12, 16, 20, 25

ORDER NO.	BT TYPE	COLLET TYPE	SET RANGE	COLLET PCS	WEIGHT (kg)	CODE NO.
SKB-301	BT-30-SK6-60L	SK6	2-6	5	1.3	3218-640
SKB-302	BT-30-SK6-90L	SK6	2-6	5	1.45	3218-641
SKB-303	BT-30-SK10-60L	SK10	3-10	8	1.7	3218-642
SKB-304	BT-30-SK10-90L	SK10	3-10	8	1.9	3218-643
SKB-305	BT-30-SK16-60L	SK16	3-16	8	2.5	3218-644
SKB-306	BT-30-SK16-90L	SK16	3-16	8	2.8	3218-645
SKB-307	BT-40-SK6-60L	SK6	2-6	5	2.1	3218-646
SKB-308	BT-40-SK6-90L	SK6	2-6	5	2.3	3218-647
SKB-309	BT-40-SK10-60L	SK10	3-10	8	2.6	3218-648
SKB-310	BT-40-SK10-90L	SK10	3-10	8	2.8	3218-649
SKB-311	BT-40-SK16-60L	SK16	3-16	8	3	3218-650
SKB-312	BT-40-SK16-90L	SK16	3-16	8	3.3	3218-651
SKB-313	BT-40-SK20-60L	SK20	4-20	8	3.8	3218-652
SKB-314	BT-40-SK20-90L	SK20	4-20	8	4.1	3218-653
SKB-315	BT-40-SK25-80L	SK25	6-25	7	4.5	3218-654

ST-SK Straight Chuck



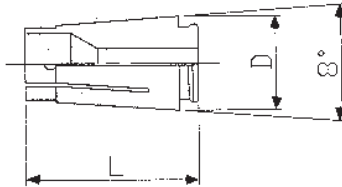
JIS STD. 15000 R.P.M.



ORDER NO.	TYPE	COLLET	D	L	L1	WEIGHT(kg)	CODE NO.
SKS-210	ST-20-SK6-100	SK6	20	100	20	0.25	3218-660
SKS-211	ST-20-SK6-150	SK6	20	150	20	0.3	3218-661
SKS-212	ST-20-SK10-100	SK10	28	100	20	0.3	3218-662
SKS-213	ST-20-SK10-150	SK10	28	150	20	0.45	3218-663
SKS-214	ST-20-SK10-200	SK10	28	200	20	0.55	3218-664

Set Of SK Collet And Straight Chuck

JIS STD. 15000 R.P.M.



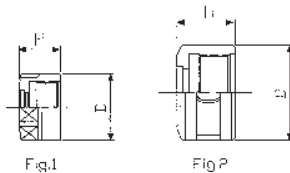
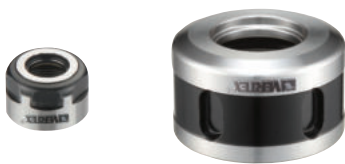
SK COLLET SET

METRIC RANGE SET SIZE
SK06/5pcs : Ø2, 3, 4, 5, 6
SK10/8pcs : Ø3, 4, 5, 6, 7, 8, 9, 10

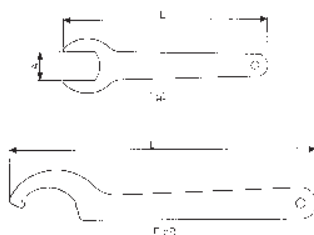
ORDER NO.	ST TYPE	COLLET	SET RANGE	COLLET SET	WEIGHT (kg)	CODE NO.
SKS-231	ST-20-SK6-100	SK6	2-6	5	0.7	3218-670
SKS-232	ST-20-SK6-150	SK6	2-6	5	0.8	3218-671
SKS-233	ST-20-SK10-100	SK10	3-10	8	1.1	3218-672
SKS-234	ST-20-SK10-150	SK10	3-10	8	1.3	3218-673

SK Nut And Wrench

SK NUT



ORDER NO.	FIG	COLLET TYPE	D	H	WEIGHT (kg)	CODE NO.
SKN-601	1	SK06	19.5	15	0.05	3218-680
SKN-101	1	SK10	28	17	0.05	3218-681
SKN-161	2	SK16	40	24	0.08	3218-682
SKN-201	2	SK20	50	25	0.1	3218-683
SKN-251	2	SK25	55	30	0.12	3218-684



SK WRENCH

ORDER NO.	FIG	COLLET TYPE	A	L	WEIGHT (kg)	CODE NO.
SKW-601	1	SK06	18	130	0.08	3218-690
SKW-101	1	SK10	25	140	0.08	3218-691
SKW-161	2	SK16	X	195	0.2	3218-692
SKW-201	2	SK20	X	228	0.22	3218-693
SKW-251	2	SK25	X	228	0.22	3218-694

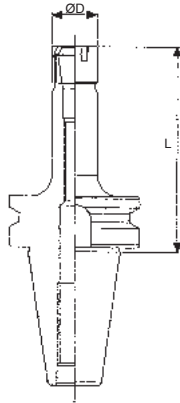


ER Collet Chuck System



MAS403 BT30/40/50 SHANK

ULTRA PRECISION TYPE
MAX. SPEED: 15,000RPM; G2.5
DYNAMIC BALANCE TESTED



ORDER NO.	L	ØD	COLLET	WEIGHT (kg)	CODE NO.
BT30-ER11-60-B	60	19	ER11	0.5	3033-500
BT30-ER11-100-B	100	19	ER11	0.55	3033-501
BT30-ER16-60-B	60	28	ER16	0.5	3033-502
BT30-ER16-100-B	100	28	ER16	0.7	3033-503
BT30-ER20-60-B	60	34	ER20	0.55	3033-504
BT30-ER20-100-B	100	34	ER20	0.8	3033-505
BT30-ER25-60-B	60	42	ER25	0.6	3033-506
BT30-ER32-60-B	60	50	ER32	0.65	3033-507
BT40-ER11-70-B	70	19	ER11	1	3033-509
BT40-ER11-100-B	100	19	ER11	1.1	3033-510
BT40-ER16-70-B	70	28	ER16	1.1	3033-511
BT40-ER16-100-B	100	28	ER16	1.2	3033-512
BT40-ER20-70-B	70	34	ER20	1.2	3033-514
BT40-ER20-100-B	100	34	ER20	1.4	3033-515
BT40-ER25-70-B	70	42	ER25	1.2	3033-518
BT40-ER25-100-B	100	42	ER25	1.45	3033-519
BT40-ER32-70-B	70	50	ER32	1.3	3033-521
BT40-ER32-100-B	100	50	ER32	1.5	3033-522
BT30-ER11M-100-B	100	16	ER11	0.5	3033-523
BT30-ER16M-100-B	100	22	ER16	0.55	3033-524
BT30-ER20M-100-B	100	28	ER20	0.65	3033-525
BT40-ER11M-100-B	100	16	ER11	1.05	3033-526
BT40-ER16M-100-B	100	22	ER16	1.1	3033-527
BT40-ER20M-100-B	100	28	ER20	1.2	3033-528



KNT Type Keyless Drill Chucks

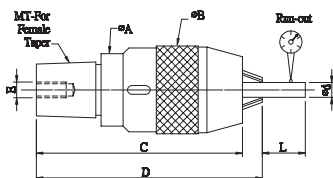
This chuck for CNC keyless drill chuck holders, built by the highest engineering standard.



- Integrated drill chuck and holder once lock with a pull stud, the chuck will never come off.
- Special design ensures high rigidity.
- High service reliability.
- Easy to operate, long service life.
- 100% test and strict quality control assure the highest accuracy.

ACCURACY

ITEM NO.	Ød mm	L mm	Max Run-out mm	Torque kgf-cm
KNT-8	3	35	0.05	160
	6			
	8			
KNT-13	5	55	0.05	320
	10			
	13			
KNT-16	5	55	0.05	480
	10			
	16			



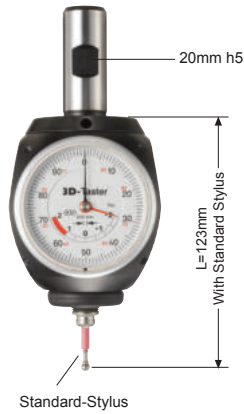
ORDER NO.	Clamping Capacity	For Female Taper	ØA	ØB	C	D	E	kg	QTY Pcs/Cu-Ft	NW/GW Kgs	CODE NO.
KNT-8	0.5-8	MT2	30	35	82.5	90	M6x1.0	0.3	40/0.6	15/16	3033-600
KNT-13	0.5-13	MT2	30	56	76	101	M8x1.25	1	30/0.6	30/31	3033-601
		MT3	38		106	118					3033-601A
KNT-16	3-16	MT3	43	56	115	128	M8x1.25	1.3	18/0.6	24/25	3033-602



3D-Taster

ORDER NO.V-3D

CODE NO.3219-001



Find your exact zero points in all three axes in seconds with the new distance measuring scale (graduated and analogue).

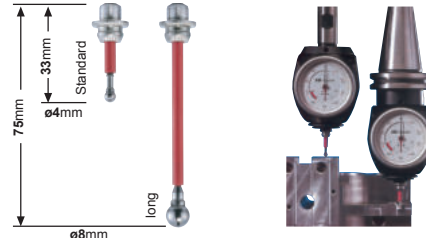
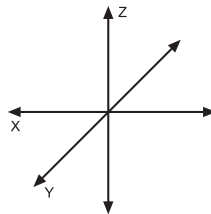
- Black scale for radial deflection.
- Red scale for axial deflection
- Precise and effortless calipering of fixtures and workpiece edges.
- Setting of NC-programme zero points in seconds.
- Measuring of clamped workpieces.
- Generous overrun allowances prevent damage to Taster stylus.
- Easy and precise change of stylus.
- Weight: 0.93KGS

STYLUS

Change stylus in seconds

No screws or special tools required

Easy precision plug-in mechanism

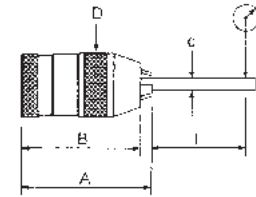


ORDER NO.	TYPE	WEIGHT	CODE NO.
V-3D-05	ø4x33 standard stylus	10g	3219-005
V-3D-06	ø8x75 long stylus	15g	3219-006

TYPE	ACCURACY
3D-Taster	0.01mm



Integrated Type Keyless Drill Chucks



ACCURACY

ORDER NO.	Clamping Capacity		Taper	OUTER Ø / mm	WEIGHT (kgs)	CODE NO.
	mm	inch				
INT-8-CAT30	0.5-8	1/64"-1/8"	CAT30	Ø35	0.8	3301-073
INT-13-CAT30	0.5-13	1/64"-1/2"		Ø51.5	1	3301-074
INT-8-CAT40	0.5-8	1/64"-1/8"	CAT40	Ø35	1.32	3301-075
INT-13-CAT40	0.5-13	1/64"-1/2"		Ø51.5	2.1	3301-076
INT-16-CAT40	3-16	1/8"-5/8"		Ø58	2.26	3301-077
INT-13-CAT50	0.5-13	1/64"-1/2"	CAT50	Ø51.5	3.95	3301-078
INT-16-CAT50	3-16	1/8"-5/8"		Ø58	4.2	3301-079

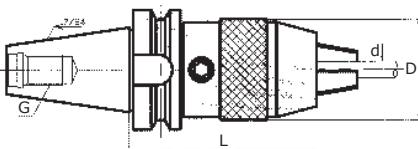
ITEM NO.	d mm	L mm	Max Tolerance mm	Torque kgf-cm
INT-8	3	25	0.05	160
	6			
	8	30		
INT-10	3	25	0.05	260
	6			
	10	30		
INT-13	5	30	0.05	400
	10			
	13	25		
INT-16	5	25	0.05	480
	10			
	16	30		



Integrated Type Keyless Drill Chucks

RL type keyless drill chuck with BT SHANK

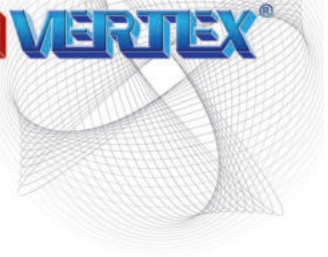
- RL type drill has reinforce torque design to increase more clamping capacity.
- Right turn and left turn allowable.
- No sudden drop when stop or suddenly shift to different direction.
- Highest speed 6000rpm.
- Shorten the shank length which is stronger than traditional design improves the total rigidity.



ORDER NO.	Clamping Capacity mm / d	L	D	G	CODE NO.
BT40-VRL13	0.5-13	95	50	M16	3301-090
BT40-VRL16	3-16	113	57	M16	3301-091
SK40-VRL13	0.5-13	85	50	M16	3301-092
SK40-VRL16	3-16	95	57	M16	3301-093
NT40-VRL13	0.5-13	112	50	5/8"-11unc	3301-094
NT40-VRL16	3-16	120	57	M16	3301-095



Integrated Type Keyless Drill Chucks



FOR SPECIFICATION PLEASE SEE P.C68

The main-shafts is of integrated type, which is much more superior than the traditional design. The major features are as follows:

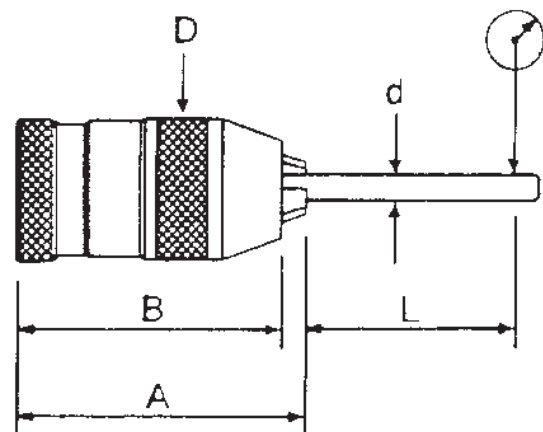
- Extremely rigid construction. Accuracy is same as page C66
- The accumulative tolerances can be reduced to a minimum, since the traditional mechanism requiring an ARBOR to connect the Drill Chucks which will generate the accumulative tolerances. The Integrated type Keyless Drill Chuck is designed to solve this problem totally.
- Prevent the Drill Chucks from falling out.
- Extremely safe in operation.



STANDARD ACCES.

ACCURACY

ITEM NO.	d mm	L mm	Max Tolerance mm	Torque kgf-cm
INT-8	3	25	0.05	160
	6			
	8			
INT-10	3	25	0.05	260
	6			
	10			
INT-13	5	30	0.05	400
	10			
	13			
INT-16	5	25	0.05	480
	10			
	16			



SK TYPE



CAT TYPE





Integrated Type Keyless Drill Chucks



ORDER NO.	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø / mm	Length		WEIGHT (kgs)	CODE NO.
	Ø mm	Ø inch			Open B mm	Closed A mm		
INT-8-MT-2	0.5-8	0-5/16"	MT-2	35	140	148	0.8	3301-030
INT-8-JC-20	0.5-8	0-5/16"	JC-20	35	124	132	0.8	3301-031
INT-8-BT30	0.5-8	1/64"-1/8"	BT30	35			1	3301-070
INT-8-BT40	0.5-8	1/64"-1/8"	BT40	51.5			1.5	3301-072
INT-8-NT30	0.5-8	1/64"-1/8"	NT30	51.5			0.8	3301-080
INT-8-NT40	0.5-8	1/64"-1/8"	NT40	51.5			1.3	3301-081
INT-13-R8	1-13	1/64"-1/2"	R8	51.5	175	183	1.5	3301-032
INT-13-MT2	1-13	0-1/2"	MT-2	51.5	172	184	1.3	3301-082
INT-13-MT3	1-13	0-1/2"	MT-3	51.5	182	194	1.4	3301-033
INT-13-MT4	1-13	0-1/2"	MT-4	51.5	182	194	1.8	3301-034
INT-13-JC-20	1-13	0-1/2"	JC-20	51.5	138	150	1.4	3301-035
INT-13-JC-25	1-13	0-1/2"	JC-25	51.5	138	150	1.6	3301-036
INT-13-JC-32	1-13	0-1/2"	JC-32	51.5	138	150	1.8	3301-037
INT-13-NT30	1-13	0-1/2"	NT-30	51.5	138	150	1.4	3301-038
INT-13-NT40	1-13	0-1/2"	NT-40	51.5	98	109	1.8	3301-039
INT-13-BT30	1-13	1/64"-1/2"	BT30	51.5			1.4	3301-071
INT-13-BT40	1-13	0-1/2"	BT-40	51.5	95	106	2	3301-040
INT-13-BT50	1-13	0-1/2"	BT-50	51.5	105	116	4.7	3301-041
INT-13-NT50	1-13	0-1/2"	NT-50	51.5			4.3	3301-059
INT-16-R8	3-16	1/8"-5/8"	R8	58	188	202	1.9	3301-042
INT-16-MT3	3-16	1/8"-5/8"	MT3	58	188	202	1.9	3301-043
INT-16-MT4	3-16	1/8"-5/8"	MT4	58	188	202	2	3301-044
INT-16-JC-20	3-16	1/8"-5/8"	JC-20	58	140	155	1.8	3301-045
INT-16-JC-25	3-16	1/8"-5/8"	JC-25	58	150	165	1.7	3301-046
INT-16-JC-32	3-16	1/8"-5/8"	JC-32	58	150	165	2.2	3301-047
INT-16-NT40	3-16	1/8"-5/8"	NT-40	58	116	130	2.6	3301-049
INT-16-BT40	3-16	1/8"-5/8"	BT-40	58	116	130	2.5	3301-050
INT-16-BT50	3-16	1/8"-5/8"	BT-50	58	126	140	5	3301-051
INT-16-NT50	3-16	1/8"-5/8"	NT-50	58			4.5	3301-056
INT-16-SK40	3-16	1/8"-5/8"	SK-40	56		127	2.4	3301-057
INT-16-SK50	3-16	1/8"-5/8"	SK-50	56		98	3.9	3301-058

ORDER NO.	SIZE	Clamping range (Ømm)	D	L		WEIGHT (kg)	CODE NO.
				Minimum	Maximum		
SK-511	SK40-APU08-81	1-8	35.6	81	90	1.4	3301-001
SK-512	SK40-APU13-99	1-13	52	99	111	1.9	3301-002
SK-514	SK50-APU13-94	1-13	52	93	106	3.9	3301-004
SK-509	SK50-APU13-94	0.5-8	35.6	80	88	0.7	3301-005
SK-510	SK30-APU13-82	0.5-13	52	98	104	1.34	3301-006
SK-515	SK40-APU16-127	3-16	56.8	127	140	2.4	3301-007
SK-516	SK50-APU16-98	3-16	56.8	98	111	3.9	3301-008

ORDER NO.	Clamping Capacity		Taper	OUTER Ø / mm	WEIGHT (kgs)	CODE NO.
	mm	inch				
INT-8-CAT30	0.5-8	1/64"-1/8"	CAT30	Ø35	0.8	3301-073
INT-13-CAT30	0.5-13	1/64"-1/2"		Ø51.5	1	3301-074
INT-8-CAT40	0.5-8	1/64"-1/8"	CAT40	Ø35	1.32	3301-075
INT-13-CAT40	0.5-13	1/64"-1/2"		Ø51.5	2.1	3301-076
INT-16-CAT40	3-16	1/8"-5/8"		Ø58	2.26	3301-077
INT-13-CAT50	0.5-13	1/64"-1/2"	CAT50	Ø51.5	3.95	3301-078
INT-16-CAT50	3-16	1/8"-5/8"		Ø58	4.2	3301-079

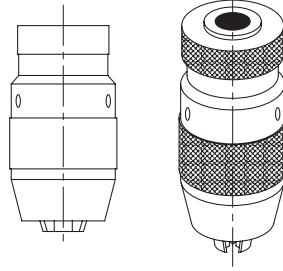


Keyless Drill Chucks

TYPE: XHSP




SPECIAL HEAVY DUTY TYPE



OPTIONAL ACCES.

- Special design & manufacture against for super heavy torque(Clamping capacity) use.
- Owing to inspecting strictly & with excellent RUNOUT Accuracy and quality guaranteed the gripping power is double than the general brand.
- Avoid the drill dropped when used in instaneous change of direction and equipped with spanner hole for tightening perfect safety.
- Especially suitable for CNC machining center & milling machine use.
- Accuracy: 50mm length within 0.05mm
- The key is optional

Unit:mm

ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø / mm	Length		Wt g	QTY Pcs./ Cu-Ft	N.W/G.W kgs	CODE NO.
		Ø mm	Ø inch			Open B mm	Closed A mm				
11015	8XHSP	0.5-8	0-5 / 16"	B10	34.3	64.8	72.7	320	40/0.6	13/14	3302-002
11016				J1	34.3	64.8	72.7	320	40/0.6	13/14	3302-003
11017				B12	34.3	64.8	72.7	320	40/0.6	13/14	3302-004
11018	10XHSP	1-10	0-3 / 8"	J33	42.4	80.8	91.1	700	40/0.6	28/29	3302-005
11019				J2S	42.4	80.8	91.1	700	40/0.6	28/29	3302-006
11020				B12	42.4	80.8	91.1	700	40/0.6	28/29	3302-007
11021				B16	42.4	80.8	91.1	700	40/0.6	28/29	3302-008
11025	13XHSP	1-13	0-1 / 2"	J6	50.3	93.7	105.3	1030	30/0.6	31/32	3302-009
11026				J33	50.3	93.7	105.3	1035	30/0.6	31/32	3302-010
11027				B16	50.3	93.7	105.3	1030	30/0.6	31/32	3302-011
11028	16XHSP	3-16	1/8 - 5/8"	J6	52	97	110.3	1450	24/0.6	35/36	3302-012
11029				B16	52	96.1	110.3	1450	24/0.6	35/36	3302-013
11030				B18	52	97	110.4	1450	24/0.6	35/36	3302-014
11035				J3	52	100.5	105.3	1450	24/0.6	35/36	3302-015
17000				6XHSP	0.5-6.5	1/64" - 1/4"	B12	34	64.8	72.7	320
17002	J1	34	64.8				72.7	320	40/0.6	13/14	3304-011
17004	B10	34	64.8				72.7	320	40/0.6	13/14	3304-012
11031	Key	13XHSP	OPTIONAL ACCES. 								3304-001
11032		16XHSP									3304-002
11033		8XHSP									3304-003
11034		10XHSP									3304-004



Keyless Drill Chucks

TYPE: H

STANDARD TYPE



Unit:mm

- Industrial design especially for life and safety while in operation.
- All hardened parts ensure long term for milling machines and drilling.
- Accuracy: 35 m/m length within 0.08 m/m

ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø mm	Length		Wt g	CODE NO.
		Ø mm	Ø inch			Open B mm	Closed A mm		
11061	6H	0-6.5	0-1 / 4"	J1	34	64.8	72.7	410	3302-030
11062				B10	34	64.8	72.7	400	3302-031
11063	8H	0.5-8	0-5 / 16"	J1	34	64.8	72.7	400	3302-032
11064				B10	34	64.8	72.7	400	3302-033
11065	10H	1-10	0-3 / 8"	J2S	42.5	80.8	91.1	720	3302-034
11066				J33	42.5	80.8	91.1	700	3302-035
11067				B12	42.5	80.8	91.1	720	3302-036
11068				B16	42.5	80.8	91.1	700	3302-037
11070	13H	1-13	0-1 / 2"	J6	50.5	93.7	105.3	1070	3302-039
11071				J33	50.5	93.7	105.3	1035	3302-040
11072				B16	50.5	93.7	105.3	1080	3302-041
11073	16H	3-16	1/8 - 5/8"	J6	50.5	93.7	105.8	1070	3302-042
11074				B16	50.5	93.8	105.9	1080	3302-043
11075				B18	50.5	97.7	110	1090	3302-044



Keyless Drill Chucks

TYPE:S



HEAVY DUTY TYPE S

Extremely high accuracy and precision design, suitable for CNC machines and machine center. All parts are ground, heat treated, surface treated and under specific QC condition.



ORDER NO.	Size	Capacity		Taper Mount No DIN or Jacobs	Length(m/m)		Outer Dia (m/m)	Weight (g)	CODE NO.
		mm	inch		Open	Closed			
12201-1	8S	0.5-8	0-5/16	JT1	68	76	38	460	3302-060
12201-2				JT2S	68	76	38	450	3302-061
12201-3				B10	68	76	38	420	3302-062
12201-4				B12	68	76	38	450	3302-063
12202-1	10S	1-10	0-3/8	JT2	80	92	43	660	3302-064
12202-2				JT33	80	92	43	630	3302-065
12202-3				B10	80	92	43	640	3302-066
12202-4				B12	80	92	43	670	3302-067
12203-1	13S	1-13	0-1/2	JT33	90	102	49	970	3302-068
12203-2				JT6	90	102	49	1020	3302-069
12203-3				B12	90	102	49	1040	3302-070
12203-4				B16	90	102	49	1030	3302-071
12205-1	16S	3-16	1/8-5/8	JT6	97	110	55	1330	3302-073
12205-2				JT3	97	110	55	1330	3302-074
12205-3				B16	97	110	55	1340	3302-075
12205-4				B18	97	110	55	1360	3302-076



Keys Steel



ORDER NO.	Type	Dmm	Lmm	Weight(g)	Packing	CODE NO.
14001	T1	3.2	35	20	Plastic Bag	3304-100
14002	T2	4	42	40		3304-101
14003	T3	5.5	44	45		3304-102
14004	T4	6	45	55		3304-103
14005	T5	6.5	45	50		3304-104
14007	T7	8	50	80		3304-106
14008	T8	9.5	65	150		3304-107
14009	T9	11	100	320		3304-108

Key Type Drill Chucks

TYPE: G



- Representative products, super precision durable & rigity
- Big outside diameter suit for heavy duty
- The nut and jaws adopt AISI-52100 (bearing steel) and heat-treated, durability the precision can be lssted.
- The taper is precision ground, advance the precision.
- Accuracy: 90mm length within 0.08mm
- With keys

ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø / mm	Length		Wt g	Key Size	QTY Pcs./ Cu-Ft	N.W/G.W kgs	CODE NO.
		mm	inch			Open B mm	Closed A mm					
10006	G-6H	0.5-6.5	1/64"-1/4"	J1	32	41	50	200	CK3	100/0.82	20/21	3303-001
10050	G-13XH	0.5-13	1/64"-1/2"	J6	56	70.5	88	800	P6	36/0.83	30/31	3303-006
10051				B16	56	70.5	88	800	P6	36/0.83	30/31	3303-007
10052				J33	56	70.5	88	800	P6	36/0.83	30/31	3303-008
10068	G-16XH	1-16	1/32"-5/8"	J3	65	81	101	1000	P7	24/0.84	24/25	3303-009
10070				B18	65	81	101	1000	P7	24/0.84	24/25	3303-010
10074	G-19XH	3-19	1/8"-3/4"	J4	74	99.5	126	2150	P7	18/0.83	39/40	3303-011

Ball Bearing Key Type Super Chucks

TYPE: H



- Suitable for heavy duty drilling use.
- By using anti-thrust bearing to increase the gripping power so that high speed drilling can be performed.
- All parts hardened by heat treatment and precision ground precision can be lasted, super clamping power.
- Accuracy:100m/m length is within 0.08m/m
- With keys

ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø / mm	Length		Wt g	Key Size	CODE NO.
		mm	inch			Open B mm	Closed A mm			
12011	10BXH	1-10	1/32"-3/8"	J2S	45	56	64	390	P4	3303-030
12006	13BXH	1-13	1/32"-1/2"	J3	62	75	95	1200	P6	3303-031
12001				J6						3303-032
12002				J33						3303-033
12003	16BXH	1-16	1/32"-5/8"	J3	65	81	101	1500	P7	3303-034
12005	19BXH	1-19	1/32"-3/4"	J4	74	100	130	2150	P7	3303-036

Key Type Drill Chucks



- Suitable for use on heavy duty & extra heavy duty.
- For milling machine, lathe, drill machine & wood working machine.
- With keys

ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	Female Thread Inch or metric	OUTER Ø / mm	Length		Wt g	Key Size	CODE NO.
		mm	inch				Open B mm	Closed A mm			
10001	4H	0.5-4	1/64"-5/32"	JO		22	29	35	120	T1	3303-060
10002B	5HB	0.5-6		5D		27.5	33	43	100	T2A	3303-061
10003	6H	0.5-6.5	1/64"-1/4"	J1		32	40	50	230	T2	3303-062
10004				B10		32	40	50	190	T2	3303-063
10010	10H	1-10	1/32"-3/8"	J2		38	50.5	64	320	T3	3303-065
10010-3					1/2-20	38	50.5	64	290	T3	3303-065-3
10011				J2S		38	50.5	64	320	T3	3303-066
10012				B12		38	50.5	64	330	T3	3303-067
10038	13H	1-13	1/32"-1/2"	J2S		47	65	81	520	T5	3303-071
10038-2					3/8-24	47	65	81	520	T5	3303-071-2
10038-3					1/2-20	47	65	81	330	T5	3303-071-3
10039				J6		47	65	81	570	T5	3303-072
10040				B16		47	65	81	580	T5	3303-073
10041				J33		47	65	81	580	T5	3303-074
10061	16H	1-16	1/32"-5/8"	J6		56	78	96	990	T7	3303-077
10062				J3		56	78	96	960	T7	3303-078
10063				B16		56	78	96	990	T7	3303-079
10063-3					5/8-16	56	78	96	800	T7	3303-079-3
10064				B18		56	78	96	970	T7	3303-080
10072	19H	3-19	1/8"-3/4"	B22		67.5	89	126	1660	T8	3303-083
10073				J3		67.5	89	126	1680	T8	3303-084
10046	13XH	1-13	1/32"-1/2"	J6	1/2-20	52	69	82	770	T7	3303-086
10048				J33	1/2-20	52	69	82	770	T7	3303-088
10079	19XH	1-19		J4		69	94	132	1720	T8	3303-089

Material Analysis Table

PART NO.	PART NAME	MATERIAL	HEAT TREATED
1	Body	JIS-4051 SAE 1045	HRC45-48
2	Case	JIS-4018 SAE 1018	HRC38-40
3	Jaw	JIS-4051 SAE 1045	HRC52±2
4	Nut	JIS-4051 SAE 1045	HRC61±2

Run-out Accuracy & Torque Inspection Table

Type	4H	5H	6.5H	10H	13H	16H	19H	13XH	19XH
Ødmm	3.5	4.5	6	9	12	15	18	12	18
Lmm	60	80	90	110	140	150	150	140	150
L1mm	40	60	70	85	110	120	120	110	120
Max Run-out	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Torque kg-m	18	20	45	75	85	250	300	190	300

Keys Type Drill Chucks Stainless



TAPER & THREAD MOUNT

NEW



Enlarged photo

FEATURES:

- Stainless - Anti - Rust
- Good Resistance - Acid Resistance
- Smooth operation
- Suit for EDM, Food, marine industry.

ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø / mm	Length		Wt g	Key Size	CODE NO.
		mm	inch			Open B mm	Closed A mm			
10090	4KST	0.3-4	1/64-5/32	JT0	22	28	35	50	T0-3S	3303-100
10091	6KST	0.3-6.5	1/64-1/4	JT1	28.5	40.5	49	125	T1-3S	3303-101
10092-1	10KST	0.3-10	1/64-3/8	JT2S	39	51	63	250	T2-3S	3303-102
10092-2				D13	37	57	69	250		3303-103
10092-3				D15	37	57	69	250		3303-104



Keyless Drill Chucks Stainless

KEYLESS TAPER & THREAD MOUNT

NEW



Enlarged photo

FEATURES:

- Stainless - Anti - Rust
- Good Resistance - Acid Resistance
- Smooth operation
- Suit for EDM, Food, marine industry.

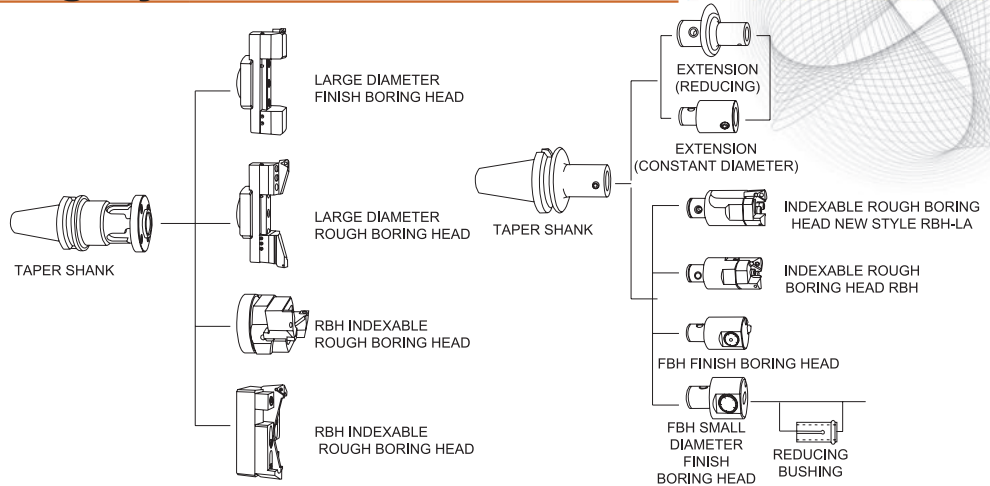
ORDER NO.	Size	Capacity		Taper Mount No DIN or Jacobs	Length(m/m)		Outer Dia (m/m)	Weight (g)	CODE NO.
		mm	inch		Open	Closed			
16001-30	3ST	0.3-3	1/64-1/8	JT0	44	50	30	110	3303-111
16001-31				JT1	44	48.5	24	110	3303-112
16001-61	6ST	0.3-6.5	1/64-1/4	JT1	62	68	33	300	3303-113

Keys For Stainless Kep Typ Drill Chuck

NEW



ORDER NO.	Type	Dmm	Lmm	Weight(g)	Packing	CODE NO.
15001	T0-3S	3.2	60	16		3303-121
15002	T1-3S	4.0	65	40		3303-122
15003	T2-3S	5.5	71	45		3303-123



Taper Shank For Boring Heads Series BST, VBK

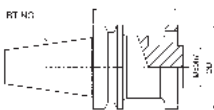
BST SERIES



VBK SERIES



ORDER NO.	Length (L)	External Diameter (D)	Applicable Boring Heads	Weight (kgs)	CODE NO.
BT30-VBK1-70	70	19	FBH20	0.5	3320-214
BT30-VBK2-80	80	24	RBH25 ; FBH25	0.6	3320-215
BT30-VBK3-80	80	31	RBH32 ; FBH32	0.7	3320-216
BT30-VBK4-70	70	39	RBH40 ; FBH40 ; CBI4	0.8	3320-217
BT30-VBK5-60	60	50	RBH52 ; FBH52 ; CBI5	0.8	3320-218
BT30-VBK6-60	60	64	RBH68 ; RBH90 ; FBH68 FBH100 ; FBH150 ; CBI6	1.0	3320-219
BT40-VBK1-75	75	19	FBH20	1.2	3320-220
BT40-VBK2-85	85	23	RBH25 ; FBH25	1.2	3320-221
BT40-VBK3-95	95	30	RBH32 ; FBH32	1.45	3320-222
BT40-VBK4-85	85	38	RBH40 ; FBH40 ; CBI4	1.5	3320-223
BT40-VBK5-75	75	50	RBH52 ; FBH52 ; CBI5	1.8	3320-225
BT40-VBK6-65	65	64	RBH68 ; RBH90 ; FBH68 FBH100 ; FBH150 ; CBI6	2.15	3320-227
BT40-BST-70	70	95	RBH120 ; FBH200 RBH120 and above; FBH200 and above	3.2	3320-228
BT50-VBK1-115	115	19	FBH20	3.5	3320-229
BT50-VBK2-110	110	23	RBH25 ; FBH25	4	3320-230
BT50-VBK3-125	125	30	RBH32; FBH32	4.4	3320-232
BT50-VBK4-115	115	38	RBH40; FBH40; CBI4	4.8	3320-234
BT50-VBK4-175	175			5.2	3320-235
BT50-VBK5-105	105	50	RBH52; FBH52; CBI5	5.4	3320-236
BT50-VBK5-180	180			6.2	3320-237
BT50-VBK5-240	240			6.4	3320-238
BT50-VBK6-95	95	64	RBH68 ; RBH90 ; FBH68 FBH100 ; FBH150 ; CBI6	5.9	3320-239
BT50-VBK6-170	170			6.5	3320-240
BT50-VBK6-230	230			6.9	3320-241
BT50-BST-100	100	95	RBH120 RBH120 and above; RBH200LA - 500LA; large diameter boring heads series FBH200-500	5.71	3320-242
BT50-BST-200	200			8.79	3320-244
BT50-BST-300	300			11.25	3320-246
BT50-BST-400	400			19.3	3320-247





Large Diameter Twin-bit Rough Boring



New Modular Style For Diameter Over 200mm
Boring diameter range from $\varnothing 200$ - $\varnothing 1250$ mm

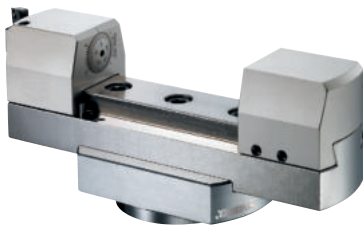


Boring Head Type	ORDER NO.	RBH 200LA	RBH 300LA	RBH 400LA	RBH 500LA	RBH 600LA	RBH 900LA
	Length	130	130	130	130	150	150
	(kgs) Total Weight Steel/Alloy	9.5	11.5	13.5	15.5	33	43
	D(mm) Boring Diameter Range	200-310	300-410	400-510	500-610	600-900	900-1200
Module	Taper Shank	BT50-BST				BT50-FMA-47.625	
	Flange (kgs)Weight Steel/Alloy	BR200 2.7				BR600 8.8kg	BR900 13.5kg
	Extension Slide	RST200	RST300	RST400	RST500	RST300 x2pcs	RST400 x2pcs
	(kg)Weight Steel/Alloy	3.4kg	5.4kg	7.4kg	9.4kg	10.8kg	14.8kg
	Clamp Base (kg)Weight	RS200 0.98 kg					
	Height Setting Shim (kg)Weight	RS201 0.05 kg					
	Insert Holder	RB200C12	RB200T16	RB200T22	RB200S12		
	Applicable Insert	CCMT120404	TCMT16T304	TCMT220404	SCMT120404		
	(kg)Weight	0.68KG					
	CODE NO.	3320-250	3320-251	3320-252	3320-253	3320-254	3320-255



Large Diameter Finish Boring Head

New Modular Style For Diameter Over 200mm
Boring diameter from $\varnothing 200$ - $\varnothing 1250$ mm



Boring Head Type	ORDER NO.	FBH200	FBH300	FBH400	FBH500	FBH600	FBH900
	Length	130	130	130	130	150	150
	(kgs) Total Weight Steel/Alloy	7	7.8	8.6	9.4	15.8	22.1
	D(mm) Boring Diameter	200-310	300-410	400-510	500-610	600-900	900-1200
Module	Taper Shank	BT50-BST				BT50-FMA-47.625	
	Flange (kg)Weight Steel/Alloy	BR200 2.7 kg				BR600 8.8kg	BR900 13.5kg
	Extension Slide	RST200	RST300	RST400	RST500	RST300 x2pcs	RST400 x2pcs
	(kgs)Weight	1.1kg	1.9kg	2.7kg	3.5kg	3.8kg	5.4kg
	Balance Weight (kg)Weight	RBN200 1.6 kg					
	Finish Head (kgs)Weight	CB200 1.6kg					
	Applicable Insert	TP08/Ø3.2xM2/T6, TP09/M2.5/T8, TC11/M2.5/T8					
	CODE NO.	3320-260	3320-261	3320-262	3320-263	3320-264	3320-265



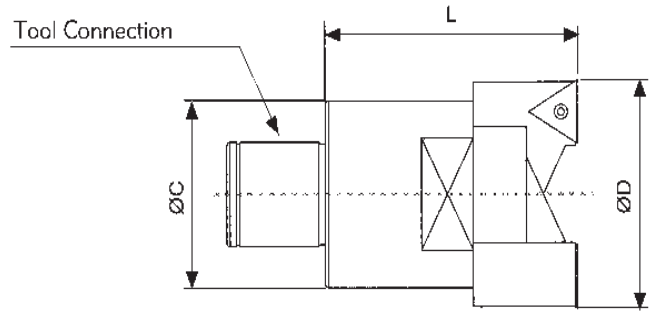
Indexable Twin-bit Rough Boring Head RBH



VERTEX

VMH-SYSTEM

Boring diameter from $\varnothing 25$ - $\varnothing 350$ mm



- INSERT STYLE -T ▲
- C ◆
- S ■

	ORDER NO.	Tool connection	D(mm) Boring Range		L (mm)	C (mm)	Insert	Weight (g)	CODE NO.
		RBH25-33-C	VBK2	25	33	45	24	CCMT060204	0.15
RBH32-42-C		VBK3	32	42	55	31	CCMT060204	0.3	3320-271
RBH32-42-T							TCMT110204		3320-272
RBH40-55-C		VBK4	40	55	65	39	CCMT09T304	0.5	3320-273
RBH40-55-T							TCMT16T304		3320-274
RBH40-55-S							SCMT09T304		3320-275
RBH52-70-C		VBK5	52	70	75	50	CCMT09T304	1	3320-276
RBH52-70-T							TCMT16T304		3320-277
RBH52-70-S							SCMT09T304		3320-278
RBH68-92-C		VBK6	68	92	85	64	CCMT120408	2	3320-279
RBH68-92-T							TCMT16T304		3320-280
RBH68-92-S							SCMT120404		3320-281
RBH90-122-C		VBK6	90	122	100	80	CCMT120408	2.9	3320-282
RBH90-122-T							TCMT220408		3320-283
RBH90-122-S							SCMT120404		3320-284
	RBH120-164-C	BST	120	164	95	100	CCMT120408	3.8	3320-285
	RBH120-164-T					TCMT220408	3320-286		
	RBH120-164-S					SCMT120404	3320-287		
	RBH160-204-C	BST	160	204	130	170	CCMT120408	4.8	3320-288
	RBH160-204-T					TCMT220408	3320-289		
	RBH160-204-S					SCMT120404	3320-290		
	RBH200-300-C	BST Series	200	300	95	170	CCMT120408	6.5	3320-291A
	RBH200-300-T					TCMT220408	3320-292A		
	RBH200-300-S					SCMT120404	3320-293A		
	RBH300-400-C	BST Series	300	400	260	170	CCMT120408	10	3320-297A
	RBH300-400-T					TCMT220408	3320-298A		
	RBH300-400-S					SCMT120404	3320-299A		

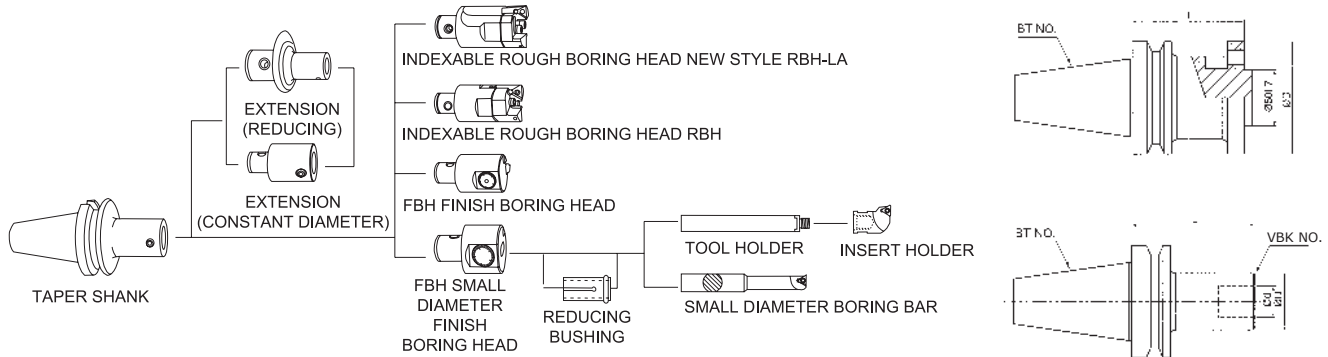


Taper Shank For Boring Heads Series BST, VBK

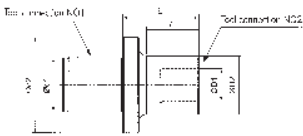


VERTEX®

Modular Boring Systems



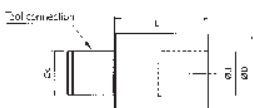
Extension (Reduced)



ORDER NO.	d1	d2	D1	D2	L	l	Applicable Boring Heads	Weight (kg)	CODE NO.
VBK2-1-36L	14	24	11	19	36	30	FBH20	0.1	3320-301
VBK3-1-41L	18	31			41	30	FBH20	0.15	3320-302
VBK3-2-37L			14	24	37	25	RBH25 ; FBH25	0.15	3320-303
VBK4-1-58L	22	39	11	19	58	40	FBH20	0.3	3320-304
VBK4-2-50L			14	24	50	36	RBH25 ; FBH25	0.3	3320-305
VBK4-3-50L			18	31	50	37	RBH32 ; FBH32	0.35	3320-306
VBK5-1-60L	28	50	11	19	60	40	FBH20	0.45	3320-307
VBK5-2-54L			14	24	54	35	RBH25 ; FBH25	0.45	3320-308
VBK5-2-74L					74	55	RBH25 ; FBH25	0.5	3320-309
VBK5-3-47L			18	31	47	29	RBH32 ; FBH32	0.5	3320-310
VBK5-3-72L					72	54	RBH32 ; FBH32	0.6	3320-311
VBK5-4-42L					42	25	RBH40 ; FBH40	0.5	3320-312
VBK5-4-67L			22	39	67	50	RBH40 ; FBH40	0.7	3320-313
VBK6-1-70L			36	64	11	19	70	40	FBH20
VBK6-2-63L	14	24			63	45	RBH25 ; FBH25	0.7	3320-315
VBK6-2-93L					93	75	RBH25 ; FBH25	0.8	3320-316
VBK6-3-56L	18	31			56	39	RBH32 ; FBH32	0.75	3320-317
VBK6-3-96L					96	79	RBH32 ; FBH32	0.95	3320-318
VBK6-4-51L					51	35	RBH40 ; FBH40	0.85	3320-319
VBK6-4-101L	22	39			101	85	RBH40 ; FBH40	1.3	3320-320
VBK6-5-41L	28	50			41	25	RBH52 ; FBH52	0.85	3320-321
VBK6-5-91L					91	75	RBH52 ; FBH52	1.45	3320-322



Extension (Constant Diameter)



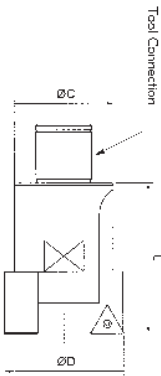
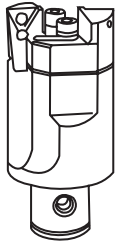
ORDER NO.	d	D	L	Applicable Boring Heads	Weight (kg)	CODE NO.
VBK1-1-30L	11	19	30	FBH20	0.07	3320-323
VBK2-2-30L	14	24	30	RBH25 ; FBH25	0.1	3320-324
VBK3-3-30L	18	31	30	RBH32 ; FBH32	0.15	3320-325
VBK4-4-45L	22	39	45	RBH40 ; FBH40 ; CBI4	0.4	3320-326
VBK5-5-60L	28	50	60	RBH52 ; FBH52 ; CBI5	0.8	3320-327
VBK6-6-60L	36	64	60	RBH68/RBH90 ; FBH68, 100, 150 ; CBI6	1.4	3320-328



Indexable Twin-bit Rough Boring Head RBH-LA



Boring range from $\varnothing 25\text{mm}$ to $\varnothing 1250\text{mm}$;
a variety of tool holders and boring heads are for your selection.

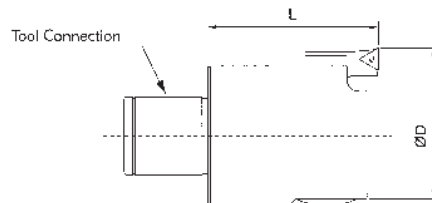


ORDER NO.	Tool connection	D(mm) Boring Range	L (mm)	C (mm)	Insert	Weight (g)	CODE NO.		
RBH25-35LA-C	VBK2	25~35	50	24	CCMT060204	0.15	3320-340		
RBH32-45LA-C					CCMT060204		3320-341		
RBH32-45LA-T	VBK3	32~45	60	31	TCMT110204	0.3	3320-342		
RBH40-55LA-C					CCMT09T304		3320-343		
RBH40-55LA-T					TCMT16T304		3320-344		
RBH40-55LA-S	VBK4	40~55	74	39	SCMT09T304	0.6	3320-345		
RBH52-75LA-C					CCMT09T304		3320-346		
RBH52-75LA-T					TCMT16T304		3320-347		
RBH52-75LA-S	VBK5	52~75	80	50	SCMT09T304	1	3320-348		
RBH68-100LA-C					CCMT120408		3320-349		
RBH68-100LA-T					TCMT16T304		3320-350		
RBH68-100LA-S	VBK6	68~100	90	66	SCMT120404	2.5	3320-351		
RBH90-130LA-C					CCMT120408		3320-352		
RBH90-130LA-T					TCMT16T304		3320-353		
RBH90-130LA-S	VBK6	90~130	100	88	SCMT120404	3.1	3320-354		
RBH120-164LA-C					CCMT120408		3320-355		
RBH120-164LA-T					TCMT220408		3320-356		
RBH120-164LA-S	BST	120~164	95	100	SCMT120404	3.8	3320-357		
RBH160-204LA-C					CCMT120408		3320-358		
RBH160-204LA-T					TCMT220408		3320-359		
RBH160-204LA-S	BST	160~204	130	130	SCMT120404	4.8	3320-360		
RBH200-310LA					CCMT120408		3320-361		
RBH300-410LA					TCMT220408		3320-362		
RBH400-510LA	BST Series	300~410	130	280	Optional Inserts	11.5	3320-362		
RBH500-610LA							380	13.5	3320-363
RBH600-900LA									480
RBH900-1200LA	FMA-47.625	900~1200	150	580	SCMT120404	23	3320-365		
RBH900-1200LA							680	32	3320-366

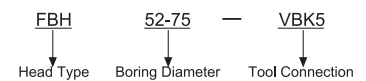


FBH Finish Boring Head

Boring diameter from $\varnothing 20$ - $\varnothing 1250\text{mm}$



Ordering Example



FEATURES:

- FBH finish boring head is suitable for finish boring with working ranges from $\varnothing 20\text{mm}$ to $\varnothing 1250\text{mm}$ on diameter.
- The dial has been graduated into 50 divisions, each of which is 0.01mm on diameter. Available is a sub-dial for finer adjustment.
- High precision internal lead screw with inner lubrication is free from the effects of chip, featuring high durability.
- Coolant nozzle easily cools the insert and prolongs insert's working life.
- Cartridge unit is housed in a square structure with two face support, proving high stability and rigidity.

ORDER NO.	Tool Connection	ØD Boring Range	length	Weight (kg)	Insert/Clamping/Screw	CODE NO.
FBH20	VBK1	20-26	35	0.1	TPGH080204/Ø2.7xM2/T6	3320-370
FBH25	VBK2	25-33	40	0.2		3320-371
FBH32	VBK3	32-42		0.3		3320-372
FBH40	VBK4	40-55	50	0.5	TPGH080204/Ø3.2xM2/T6	3320-373
FBH52	VBK5	52-75	60	1		3320-374
FBH68	VBK6	68-102	70	2		3320-375
FBH100	VBK6	100-152		2.9		3320-376
FBH150	VBK6	150-202		4.2		3320-377



FBH Finish Boring Head

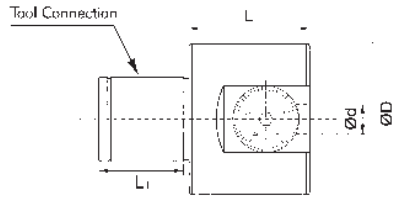
Boring diameter from Ø3 - Ø40mm



BORING CAPACITY
 CBI4 Ø8 - Ø20 m/m
 CBI5 Ø12 - Ø40 m/m
 CBI6 Ø8 - Ø40/m/m

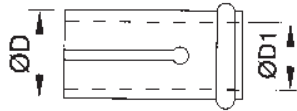
FEATURES:

- Available are three different styles enabling small diameter boring from Ø8mm to Ø40mm. Boring range can be within Ø3mm to Ø10mm if small diameter solid carbide boring bar has been employed.
- The dial has been graduated into 50 divisions, each of which is 0.01mm on diameter. Available is a subdial for finer adjustment.
- High precision internal lead screw with inner lubrication is free from the effects of chip, featuring high durability.
- Cartridge unit is housed in a square structure with two face support, proving high stability and rigidity.



ORDER NO.	Tool Connection	Ød Internal Diameter	ØD External Diameter	L length	L1	mm feed	Weight (kg)	CODE NO.
CBI4	VBK4	10	39	32	Ø22x24L	0-2	0.4	3320-390
CBI5	VBK5	12	50	40	Ø28x30L	0-3.5	0.8	3320-391
CBI6	VBK6	16	64	50	Ø36x40L	0-5	1.4	3320-392

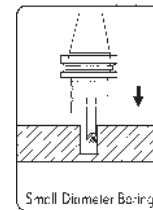
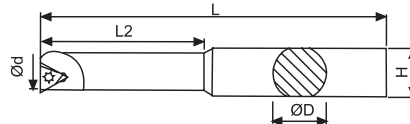
BORING BAR SLEEVE FOR CBI6



ORDER NO.	D mm	D1 mm	Applicable Carbide Tool Holder	CODE NO.
EC1608	16	8	ST08-W5	3320-393
EC1610	16	10	ST10-W6	3320-394
EC1612	16	12	ST12-W6	3320-395



Small Diameter Boring Head CBI4



FOR CBI4 BORING CAPACITY FROM Ø8 - Ø20MM

ORDER NO.	ØD mm	Ød mm	L mm	L2 mm	H mm	Insert	Clamp Screw	Wrench	CODE NO.
BJ1008-32	10	8	64	32	9	TBGT060104 KYOCERA	M2	T6	3320-400
BJ1010-40		10	72	40					3320-401
BJ1012-45		12	77	27		TPGB090204 KYOCERA	M2.5	T8	3320-402
BJ1016-45		16	77	27					3320-403
BJ1020-45		20	77	27		TPGB090204 KYOCERA	M2.5	T8	3320-404
※BJ10-5PCS/SET	BJ1008-32 BJ1010-40 BJ1012-45 BJ1016-45 BJ1020-45								3320-405

FOR CBI6 BORING CAPACITY FROM Ø8 - Ø40MM

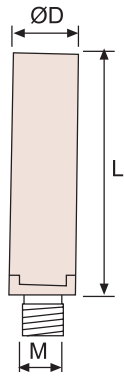
ORDER NO.	ØD mm	Ød mm	L mm	L2 mm	H mm	Insert	Clamp Screw	Wrench	CODE NO.
BJ1608-32	16	8	74	32	15	TBGT060104 KYOCERA	M2	T6	3320-406
BJ1610-40		10	75	40					3320-407
BJ1612-53		12	85	53		TPGB090204 KYOCERA	M2.5	T8	3320-408
BJ1616-68		16	100	68					3320-409
BJ1620-83		20	115	83		TPGB090204 KYOCERA	M2.5	T8	3320-410
BJ1625-90		25	122	90					3320-411
BJ1630-90		30	122	90					3320-412
BJ1640-90		40	122	90					3320-413
※BJ16-8PCS/SET	BJ1608-32 BJ1610-40 BJ1612-53 BJ1616-68 BJ1620-83 BJ1625-90 BJ1630-90 BJ1640-90								3320-414



Carbide Tool Holder

Small Diameter Modular Boring Bar

Boring diameter from
Ø8 - Ø16mm

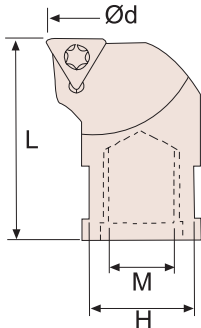


ORDER NO.	L mm	D mm	M mm	Applicable Insert Holder	Applicable Bushing	CODE NO.
ST08-W5-100	100	8	M5	BE09A, BE10.5A	EC1608	3320-420
ST10-W6-110	110	10	M6	BE12A	EC1610	3320-421
ST12-W6-120	120	12		BE14A, BE16A	EC1612	3320-424
ST16-W10-160	160	16	M10x1.25P	BE18A, BE20A, BE22A, BE24A, BE26A, BE28A, BE30A, BE32A, BE34A, BE36A, BE38A, BE40A	---	3320-426



Insert Holder For Carbide Tool Holder

Boring diameter from Ø9 - Ø40mm

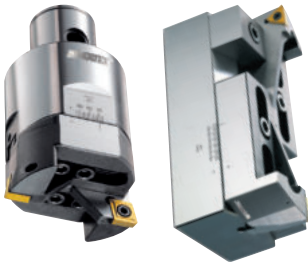


ORDER NO.	d(mm)	H(mm)	L(mm)	M(mm)	Insert	Clamping Screw	Wrench	CODE NO.
BE09A	9	7	18	M5	TPGT080204L SUMITOMO	Ø3.2xM2	T6	3320-430
BE10.5A	10.5	7	23	M6				3320-431
BE12A	12	8						3320-432
BE14A	14	10						3320-433
BE16A	16	10						3320-434
BE18A	18	14	27	M10x1.25P				3320-435
BE20A	20	14						3320-436
BE22A	22	14						3320-437
BE24A	24	14						3320-438
BE26A	26	14						3320-439
BE28A	28	14						3320-440
BE30A	30	14						3320-441
BE32A	32	14						3320-442
BE34A	34	14						3320-443
BE36A	36	14						3320-444
BE38A	38	14	3320-445					
BE40A	40	14	3320-446					



RBH Indexable Twin-bit Rough Boring Head

Boring diameter from Ø25 - Ø500mm



- The head is suitable for single bit boring, twin-bit boring and step boring with working diameter from Ø25mm to Ø350mm on diameter.
- New cartridge style with built-up rib. The pressure imposed on both cartridges counteracts producing highest rigidity and cutting efficiency, most suitable for a variety of borings.
- Boring head can be easily adjusted to different boring needs for machining on demand. Boring depth can be extended by tool connection.
- Clear side division provides a convenient adjustment without using a tool pre-setter.
- Most suitable for boring on various machine centers or boring mills. Universal design accepts inserts of any brands, which will reduce tool grinding and greatly improve boring performance.
- Patented step boring design; suitable for both level boring and step boring.



Indexable Twin-bit Rough Boring Head RBH-LA

Boring diameter from Ø25 - Ø204mm



- Thickened cartridge with higher rigidity.
- Coolant nozzle easily cools the insert elongating its working life.
- Completed with chip pocket, improving chip flow of deep boring.
- Clamp plate solidifies cartridges and head, upgrading cutting rigidity.
- Patented step boring design; suitable for both level boring and step boring.



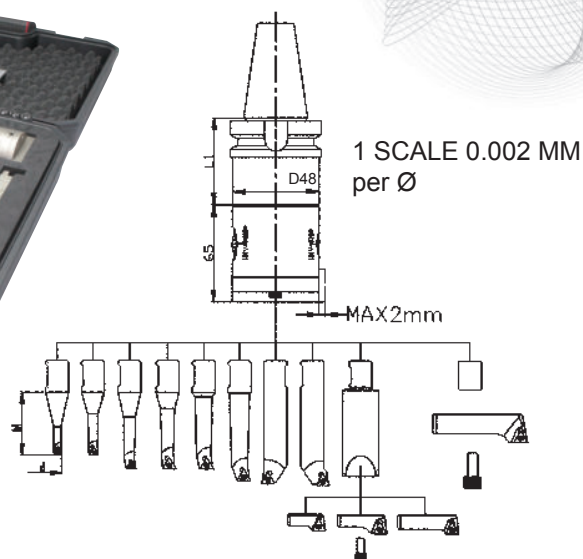
Large Diameter Modular Rough Boring Head With Diameter Over Ø200mm

Boring diameter from Ø200 - Ø2000mm



- This type is suitable for large diameter boring with ranges from 200mm to 810mm.
- The structure includes common flange and extension slide for both rough and finish boring heads. Adjustment range is within 110mm on diameter.
- Options of various inserts for rough boring of different materials and boring styles.
- Available is the horizontal slide made of Aluminum alloy to reduce total weight.
- Options of external boring kit with boring range from Ø20mm to Ø300mm.

NEW



- Processing range $\varnothing d$ 6-90mm.
- This slim set allows customer to process boring work in the narrow space with high precision.
- Precisely ground and hardened shank integrating with boring head for routing and smooth operation.
- Please keep boring head clean and lubricate constantly.

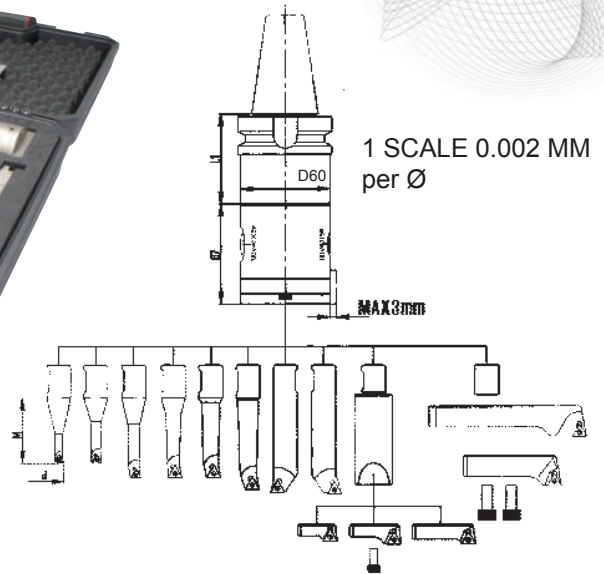
SET TYPE

ORDER NO.	Boring Range \varnothing	Shank	L1	Head Dia. $\varnothing D$	PCS/SET	CODE NO.
VBHD-BT-30	6-90	BT30-VCK4-45	45	48	14 PCS/SET	3320-450
VBHD-BT-40		BT40-VCK4-60	60			3320-451
VBHD-BT-50		BT50-VCK4-75	75			3320-452
VBHD-SK-40		SK40-VCK4-65	65			3320-453
VBHD-SK-50		SK50-VCK4-75	75			3320-454
VBHD-NT-40		NT40-40-VCK4-60	60			3320-455
VBHD-NT-50		NT50-50-VCK4-60	60			3320-456
VBHD-HSK63A		HSK63A-VCK4-75	75			3320-457
VBHD-HSK100A		HSK100A-VCK4-75	75			3320-458

ACCESSORIES: BORING BAR SIZE FOR SET TYPE

Boring Bar	Range d	Depth m	Insert	Screw	Wrench	Feed $mm/REV.$
BR-1606-20	6-9	20	WBGT060102L	TS2	T6	0.05-0.1
BR-1608-28	8-11	28	TBGT060102L			0.05-0.1
BR-1610-36	10-13	36	TBGT060104L			0.07-0.15
BR-1612-42	12-15	42	TPGT090202L	TS25	T8	0.05-0.1
BR-1614-50	14-17	50				
BR-1616-60	16-20	60	TPGT090204L			0.07-0.15
BR-1620-63	20-24	63				
BR-1624-64	24-28	64				
BM5		60+SRTP2838/SRTP3652/SRTP4470		M5 X15 CAP	4	0.05-0.1
SRTP2838	28-38	+10	TPGT090202L	TS25	T8	
SRTP3652	36-52	+12				
SRTP4470	44-70	+12	TPGT090204L			
BM8				M5 X 15 CAP	6	0.07-0.15
SRTP58-90	58-90	+20	TPGT090204L	TS25	T8	

NEW



- Processing range Ød 6-150mm.
- This slim set allows customer to process boring work in the narrow space with high precision.
- Please keep boring head clean and lubricate constantly.
- Precisely ground and hardened shank integrating with boring head for routing and smooth operation.

SET TYPE

ORDER NO.	Boring Range Ø	Shank	L1	Head Dia. ØD	PCS/SET	CODE NO.
VBHE-BT-40	6-150	BT40-VCK5-60	60	60	15 PCS/SET	3320-460
VBHE-BT-50		BT50-VCK5-75	75			3320-461
VBHE-SK-40		SK40-VCK5-65	65			3320-462
VBHE-SK-50		SK50-VCK5-75	75			3320-463
VBHE-NT-40		NT40-40-VCK5-60	60			3320-464
VBHE-NT-50		NT50-50-VCK5-75	75			3320-465
VBHE-HSK63A		HSK63A-VCK5-75	75			3320-466
VBHE-HSK100A		HSK100A-VCK5-75	75			3320-467

ACCESSORIES: BORING BAR SIZE FOR SET TYPE

Boring Bar	Range d	Depth m	Insert	Screw	Wrench	Feed mm/REV.
BR-1606-20	6-9	20	WBG060102L	TS2	T6	0.05-0.1
BR-1608-28	8-11	28	TBGT060102L			0.05-0.1
BR-1610-36	10-13	36	TBGT060104L			0.07-0.15
BR-1612-42	12-15	42	TPGT090202L	TS25	T8	0.05-0.1
BR-1614-50	14-17	50				
BR-1616-60	16-20	60	TPGT090204L			0.07-0.15
BR-1620-63	20-24	63				
BR-1624-64	24-28	64				
BM5		60+SRTP2838/SRTP3652/SRTP4470		M5 X15 CAP	4	0.05-0.1
SRTP2838	28-38	+10	TPGT090202L	TS25	T8	
SRTP3652	36-52	+12				
SRTP4470	44-70	+12	TPGT090204L			0.07-0.15
BM8				M5 X 15 CAP	6	0.05-0.1
SRTP70110	70-110	+20	TPGT090202L	TS25	T8	
SRTP110150	110-150	+20	TPGT090204L			



Micro Boring Head Set

I Scale 0.002 mm Boring diameter from Ø6 - Ø154mm



NEW



- Processing range Ø6-154mm.
- Precisely ground and hardened shank integrating with boring head for routing and smooth operation.
- Please keep boring head clean and lubricated constantly.
- Easy & Simple operation.
- Complete set.
- Fine adjustment.
- Luxury box.
- Material : tool steel

SET TYPE

ORDER NO.	Boring Range Ø	Shank	L	Pcs/SET	Weight (kgs)	CODE NO.
VBH55-BT40	6-154	BT40-VBK5-75	75	18		3320-470
VBH55-BT50		BT50-VBK5-105	105	18		3320-471

INCLUDING ACCESSORIES : BORING BAR SIZE FOR SET TYPE

Boring Bar		Range	Insert	Screw	Wrench
BR1606A-21		Ø6 - Ø9	WBG060102	Ø3 x M2	T6
BR1608A-28		Ø8 - Ø11	TBGT060102	Ø2.7 x M2	T6
BR1610A-35		Ø10 - Ø13			
BR1612A-42		Ø12 - Ø15	TPGT090204	M2.5	T8
BR1614A-50		Ø14 - Ø17			
BR1616A-60		Ø16 - Ø20			
BR1620A-65		Ø20 - Ø24			
BR1624A-68		Ø24 - Ø28			
C16-BRM-SP27		Ø27 - Ø40			
C16-BRM-SP35		Ø35 - Ø50			
C16-BRM-SP45		Ø45 - Ø68			
CB-M10-SP55		Ø55 - Ø80			
CB-M10-SP68		Ø68 - Ø104			
CB-M10-SP100		Ø100 - Ø154			



Micro Boring Head Set

I Scale 0.002 mm Boring diameter from Ø6 - Ø204mm



NEW



- Processing range Ø6-204mm.
- Precisely ground and hardened shank integrating with boring head for routing and smooth operation.
- Please keep boring head clean and lubricated constantly.
- Easy & Simple operation.
- Complete set.
- Fine adjustment.
- Luxury box.
- Material : tool steel

SET TYPE

ORDER NO.	Boring Range Ø	Shank	L	Pcs/SET	Weight (kgs)	CODE NO.
VBH68-BT40	6-204	BT40-VBK6-65	65	19		3320-476
VBH68-BT50		BT50-VBK6-95	95	19		3320-477

INCLUDING ACCESSORIES : BORING BAR SIZE FOR SET TYPE

Boring Bar		Range	Insert	Screw	Wrench
BR1606A-21		Ø6 - Ø9	WBGT060102	Ø3 x M2	T6
BR1608A-28		Ø8 - Ø11	TBGT060102	Ø2.7 x M2	T6
BR1610A-35		Ø10 - Ø13			
BR1612A-42		Ø12 - Ø15	TPGT090204	M2.5	T8
BR1614A-50		Ø14 - Ø17			
BR1616A-60		Ø16 - Ø20			
BR1620A-65		Ø20 - Ø24			
BR1624A-68		Ø24 - Ø28			
C16-BRM-SP27		Ø27 - Ø40			
C16-BRM-SP35		Ø35 - Ø50			
C16-BRM-SP45		Ø45 - Ø68			
CB-M10-SP68		Ø68 - Ø104			
CB-M10-SP100		Ø100 - Ø154			
CB150-RCM100-SP100		Ø150 - Ø204			

High Precision Boring Head Set



NEW

1 SCALE 0.005mm
0.01mm per Ø
BORING CAPACITY Ø8-Ø46



VBH 620

- Good for high speed, high precision boring work.
- Made of tool steel, high rigidity, no deformation.
- Each dividing scale is 0.005 mm, total stroke: 6mm.
For Ø diameter is 0.01mm
- Can choose any taper (BT40, BT50, SK40, SK50) shank.
- Include 8 boring bars, range Ø8 ~ Ø46 mm.
 - Boring bar size = Ø16 x 8 pcs
 - Insert locking screw 8 x 3 = 24 pcs
 - Wrench x 6 pcs
 - 4 mm T wrench x 1 pcs

SET TYPE

ORDER NO.	SHANK TYPE	DRAWBAR	THREAD	Weight (kgs)	CODE NO.
		S.A.E	METRIC		
VBH620-NT40	NT-40	5/8"-11W	M16X2.0P	6.5	3320-480
VBH620-NT50	NT-50	1"-8W	M24X3.0P	7.8	3320-481
VBH620-BT40	BT-40		M16X2.0P	6.5	3320-482
VBH620-BT50	BT-50		M24X3.0P	8	3320-483
VBH620-SK40	SK-40		M16X2.0P	6.5	3320-484
VBH620-SK50	SK-50		M24X3.0P	7.8	3320-485

BORING BAR FOR BORING HEAD

BORING BAR	RANGE d	DEPTH m	SHANK L	INSERT	SCREW	WRENCH
1608-32	8-11	32	80	TBGT060102L	SB-1STR-M2	T6
1610-40	10-13	40	87			
1612-53	12-15	53	98			
1616-68	16-21	68	110			
1620-83	20-26	83	124	TPGH110304L	SB-3STR-M3	T10
1625-90	25-31	90	128			
1630-90	30-36	90	128			
1640-90	40-46	90	128			



High Precision Boring Head Set



NEW

1 SCALE 0.005mm

0.01mm per Ø

BORING CAPACITY Ø8-Ø280



VBH 2084

- Good for high speed, high precision boring work.
- Made of tool steel, high rigidity, no deformation.
- Each dividing scale is 0.005 mm, total stroke: 27mm.
For Ø diameter is 0.01mm
- Can choose any taper (BT40, BT50, SK40, SK50) shank.
- Include 8 boring bars, range Ø8 ~ Ø280 mm.
 - Boring bar size = Ø20 x 8 pcs
 - Insert locking screw 8 x 3 = 24 pcs
 - Wrench x 6 pcs
 - Hexa 6 wrench x 1 pcs

SET TYPE

ORDER NO.	SHANK TYPE	DRAWBAR	THREAD	Weight (kgs)	CODE NO.
		S.A.E	METRIC		
VBH2084-R8	R-8	7/16"-20UNF	n/a	6.6	3320-491
VBH2084-NT30	NT-30	1/2"-12W	M12X1.75P	6.6	3320-492
VBH2084-NT40	NT-40	5/8"-11W	M16X2.0P	7	3320-493
VBH2084-NT50	NT-50	1"-8W	M24X3.0P	9	3320-494
VBH2084-BT40	BT-40		M16X2.0P	8	3320-495
VBH2084-BT50	BT-50		M24X3.0P	10.4	3320-496
VBH2084-SK40	SK-40		M16X2.0P	8	3320-497
VBH2084-MT3	MT-3		M12X1.5P	6.6	3320-498
VBH2084-MT4	MT-4		M16X2.0P	7	3320-499
VBH2084-MT5	MT-5		M24X3.0P	8	3320-500

BORING BAR FOR BORING HEAD

BORING BAR	RANGE d	DEPTH m	SHANK L	INSERT	SCREW	WRENCH
2008-32	8-11	32	75	TBGT060102L	SB-1STR-M2	T6
2010-40	10-13	40	75			
2012-53	12-17	53	85	TPGH090204L	SB-2STR-M2.5	T8
2016-68	16-21	68	100			
2020-83	20-130	83	115	TPGH110304L	SB-3STR-M3	T10
2025-95	25-135	95	128			
2030-115	30-140	115	147			
2020-L	120-280	85+BT	98			



Universal Boring And Facing Master Head



BORING CAPACITY Ø5-Ø250

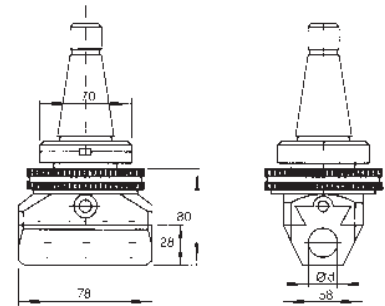
1 SCALE 0.01mm per Ø



VBHU



ORDER NO.	SHANK TYPE	DRAWBAR THREAD		Weight (kg)	CODE NO.
		S.A.E	METRIC		
VBHU-202	MT-3	1/2"-12W	M12X1.5P	6	3401-001
VBHU-203	MT-4	5/8"-11W	M16X2.0P	6.3	3401-002
VBHU-204	MT-5	1"-8W	M24X3.0P	7	3401-003
VBHU-205	R-8	7/16"-20UNF	n/a	6.2	3401-004
VBHU-206	NT-30	1/2"-12W	M12X1.75P	6	3401-005
VBHU-207	NT-40	5/8"-11W	M16X2.0P	6.2	3401-006
VBHU-208	NT-50	1"-8W	M24X3.0P	8.5	3401-007
VBHU-209	BT-40		M16X2.0P	6.9	3401-008
VBHU-210	C-25			4.5	3401-009
VBHU-211	SK-40		M16X2.0P	5.6	3401-010
VBHU-212	SK-50		M24X3.0P	8.3	3401-011
VBHU-213	BT-50		M24X3.0P	9.7	3401-012

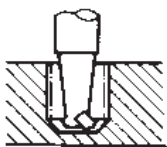


SPECIFICATION VBHU

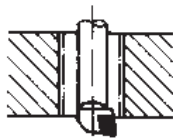
Unit:mm

ACTUAL SIZE	OVERING BAR HOLE SIZE	BORING BAR HOLE SIZE	CENTER DIST BETWEEN HOLES.	CROSS HOLE DIA	OFFSET
78	100	18	23	18	15

It is construction with precision parts, freedom of selection feeding quantity, auto feed and stop. Processing range from 5mm to 250mm.



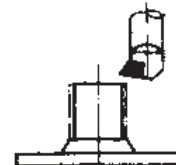
Boring with several different bits from 5Ø -250mm



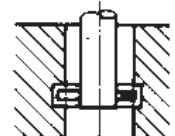
From inside outward



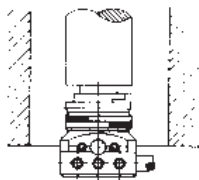
From inside inward



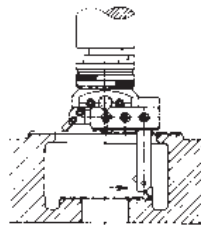
Outside turning



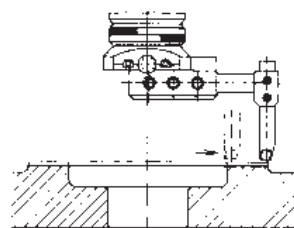
Recessing



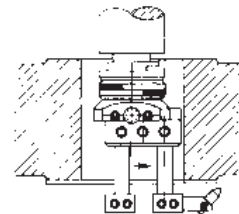
Because of the small construction of the facing and boring heads deep bores can be made. In this case the boring bit is fixed directly in the side.



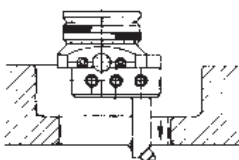
Facing in two areas with one boringbar and boringbar holder



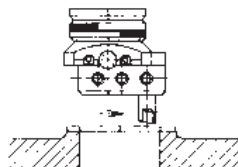
Facing of large Ø with long boringbar holden reinforced by rings and draw in screw



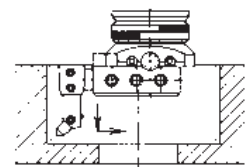
Facing of the reverse side by using boringbar holders contained in attachment.



Boring with long boringbar

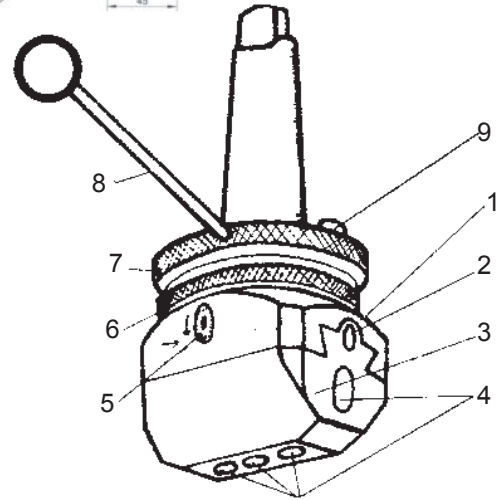
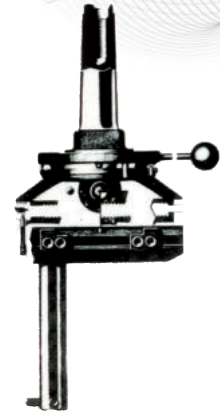
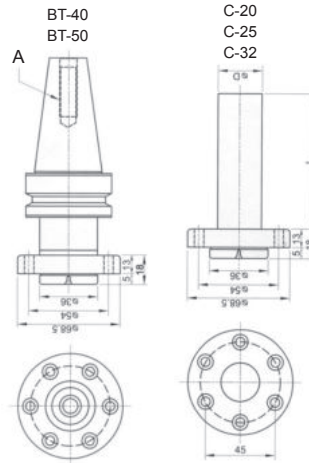
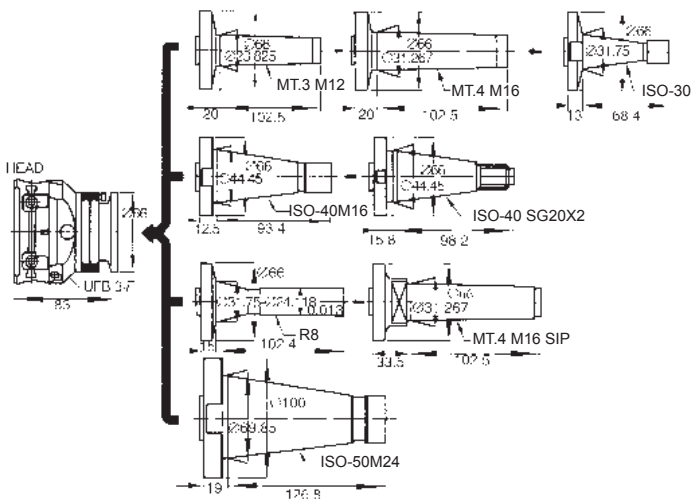


Facing with bit fixed directly in slide



Boring and facing with short boringbar holder and a boringbar

SHANK



Main part of the universal boring heads is the body(1), in which the tool slide (3) moves on dovetail guideways. The tool slide is provided with holes for accommodation of tools and tool holders(4). In boring holes or turning external cylindrical surfaces, the tool is adjusted with the aid of the graduated dial for fine setting of tool slide(5), one division of which means a change in diameter of bored hole by .0005".

On the types rapid adjustment of the tool slide(3) can be produced by rotating the graduated dial for quick adjustment of the tool slide(2).

During recessing, turning of front or rear facings or similar jobs calling for automatic transverse feed movement to the tool slide, the preselected feed movement to the tool slide is engaged with the aid of the engagement ring (6). After setting of tool, the automatic transverse feed movement to the tool slide is started by braking of the brake ring(7), by means of the handle(8).

The clutch(9) provides for tripping of the automatic feed movement when cutting resistance increases or when the trip dog is approached.

Mechanism of the boring heads has a lubrication circuit delivering oil from two lubricators to all friction surfaces.

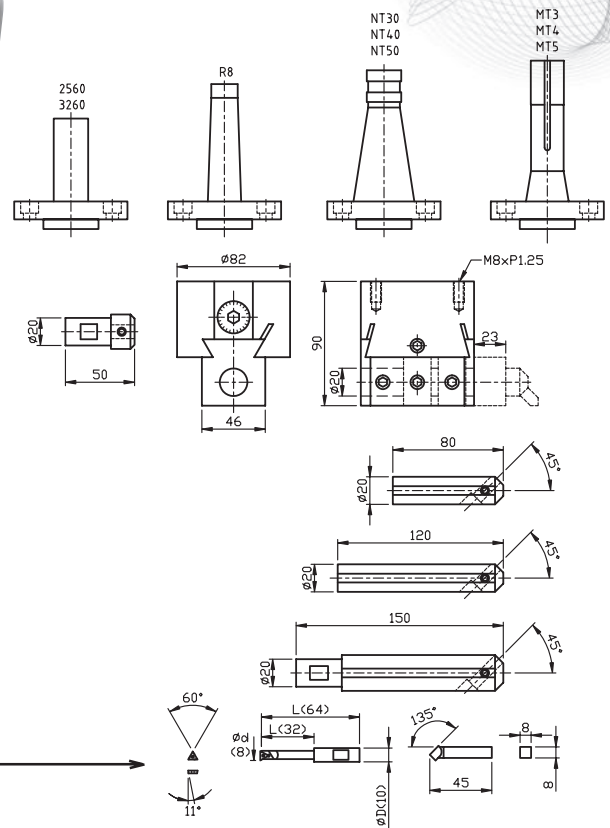
All parts are hardened and working surfaces are ground.

SHANK FOR VBHU-

MT-3	MT-4	MT-5
NT-30	NT-40	NT-50
R-8		
C-20	C25	C-32
	BT-40	BT-50

<p>Stop Rod</p> <p>BP-17</p>	<p>Square Bit (HSS)</p> <p>BP-18</p>	<p>Clamping Sleeve</p> <table border="1"> <tr> <th>metric</th> <th>D</th> </tr> <tr> <td>BP7</td> <td>10ø</td> </tr> <tr> <td>BP8</td> <td>12ø</td> </tr> </table>	metric	D	BP7	10ø	BP8	12ø												
metric	D																			
BP7	10ø																			
BP8	12ø																			
<p>Allen Key</p> <table border="1"> <tr> <th>A</th> <th>hex.</th> </tr> <tr> <td>BP14</td> <td>4</td> </tr> <tr> <td>BP15</td> <td>5</td> </tr> <tr> <td>BP16</td> <td>6</td> </tr> </table>	A	hex.	BP14	4	BP15	5	BP16	6	<p>Boring Bar</p> <table border="1"> <tr> <th>metric</th> <th>L</th> </tr> <tr> <td>BP-3</td> <td>120</td> </tr> </table>	metric	L	BP-3	120	<p>Boring Bar</p> <table border="1"> <tr> <th>metric</th> <th>L</th> </tr> <tr> <td>BP-1</td> <td>90</td> </tr> <tr> <td>BP-2</td> <td>120</td> </tr> </table>	metric	L	BP-1	90	BP-2	120
A	hex.																			
BP14	4																			
BP15	5																			
BP16	6																			
metric	L																			
BP-3	120																			
metric	L																			
BP-1	90																			
BP-2	120																			
<p>Boring Bar</p> <table border="1"> <tr> <th>Metric</th> <th>ØxL</th> </tr> <tr> <td>BP-9</td> <td>18Øx90</td> </tr> <tr> <td>BP-10</td> <td>10Øx80</td> </tr> <tr> <td>BP-11</td> <td>10Øx70</td> </tr> <tr> <td>BP-12</td> <td>10Øx60</td> </tr> </table>	Metric	ØxL	BP-9	18Øx90	BP-10	10Øx80	BP-11	10Øx70	BP-12	10Øx60	<p>Boring Bar</p> <p>BP-21</p>									
Metric	ØxL																			
BP-9	18Øx90																			
BP-10	10Øx80																			
BP-11	10Øx70																			
BP-12	10Øx60																			

STANDARD TYPE



INSERT NO.
 TBGT060102L-W-T1200A FOR STEEL
 TBGT060102L-W-G11 FOR CASTING
 "SUMITOMO" BRAND

1 SCALE 0.01mm, 0.02mm per Ø Processing Range $\varnothing 10 \sim \varnothing 240\text{mm}$

Simple, extremely rigid construction, Finest materials and craftsmanship are employed to combine strength, flexibility and accuracy in a tool of unique design. 2 vertical boring tool holes: one centered and one offset. One cross hole for greater versatility and capacity. Dependable adjustment --- far spread graduation for closer reading. Perfectly balanced for high speed operation. Precision ground & hardened shank are integrating with the head for routing and smoother operation.

FULL SET

ORDER NO.	SHANK TYPE	DRAWBAR THREAD		Weight (kgs)	CODE NO.
		S.A.E	METRIC		
VBH-102	MT-3		M12X1.75P	5.9	3401-101
VBH-103	MT-4		M16X2.0P	6.1	3401-102
VBH-104	MT-5		M20X3.0P	7	3401-103
VBH-105	R-8	7/16" ~20UNF		5.9	3401-104
VBH-106	NT-30	1/2"-12W or 1/2"-13W	M12X1.75P	5.8	3401-105
VBH-107	NT-40	5/8"-11W	M16X2.0P	6	3401-106
VBH-108	NT-50	1"-8W	M24X3.0P	8.9	3401-107
VBH-109	BT-40	-	M16X2.0P	7.1	3401-108
VBH-110	SK-40	-	M16X2.0P	6.8	3401-109
VBH-111	C-25	-	-	5.9	3401-110
VBH-112	BT-50		M24X3.0P		3401-111



SHANK FOR BORING HEAD

ORDER NO.	VBH-MT3	VBH-MT4	VBH-MT5	VBH-R8
WEIGHT (KG)	0.6	1.2	2.1	1
CODE NO.	3401-120	3401-121	3401-122	3401-123

ORDER NO.	VBH-NT30	VBH-NT40	VBH-NT50	VBH-BT40
WEIGHT (KG)	1.1	1.2	3.9	1.9
CODE NO.	3401-124	3401-125	3401-126	3401-127

ORDER NO.	VBH-SK40	VBH-C25	VBH-BT50	
WEIGHT (KG)	1.9	1.5	3.1	
CODE NO.	3401-128	3401-129	3401-130	

Boring Head Set C-Type



1 SCALE 0.01mm
0.02mm per Ø

Here is a sturdy unit of extended boring range, capable of peeling off heavy roughing cuts as well as a tool of extreme sensitivity. The use of a wide base bar holder, resting securely on the body, eliminates the need for a separate side plate. You will note this has now become an integral part of the body. The direct reading adjusting screw is ground after hardening and a plainly marked dial face in nonreflecting satin chrome allows easy reading and adjustments of 0.01 or less. All Criterion Boring Heads have threaded backs for use with a variety of shanks. This model takes a 1-1/2"-18 threaded shank. SHANK SIZE: NT-30,40,50, MT-3,4,5,R8



VBHC-BC2 SET TYPE

MAX. BORING DEPTH 50mm



VBHC-BC3 SET TYPE



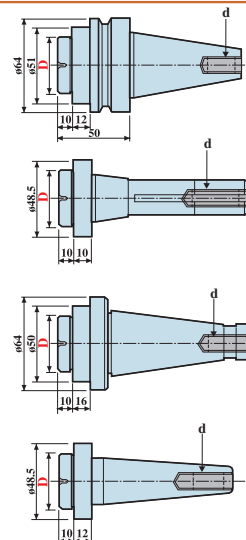
BORING CAPACITY Ø10~Ø110

ORDER NO.	WEIGHT (kgs)	CODE NO.
VBHC-R-8-BC-2	2	3401-150
VBHC-MT-3-BC-2	1.9	3401-151
VBHC-MT-4-BC-2	2.1	3401-152
VBHC-NT-30-BC-2	2.2	3401-153
VBHC-NT-40-BC-2	2.8	3401-154
VBHC-BT-30-BC2		3401-155
VBHC-BT-40-BC2	2.65	3401-156
VBHC-BT-50-BC2	5.65	3401-157
VBHC-C-20-BC2	1.75	3401-158

BORING CAPACITY Ø10~Ø220

ORDER NO.	WEIGHT (kgs)	CODE NO.
VBHC-R-8-BC-3	4.2	3401-160
VBHC-MT-3-BC-3	4	3401-161
VBHC-MT-4-BC-3	4.3	3401-162
VBHC-NT-30-BC-3	4.1	3401-163
VBHC-NT-40-BC-3	4.7	3401-164
VBHC-NT-50-BC-3	6.9	3401-165
VBHC-BT-30-BC-3		3401-166
VBHC-BT-40-BC-3	4.7	3401-167
VBHC-BT-50-BC-3	7.7	3401-168
VBHC-C-20-BC-3	4	3401-169

Boring Head Shank C-Type



BT-40, 50

R-8

NT-30 M12x1.75P
1/2"-12UNC

NT-40 M16x2.0P
5/8"-11UNC

NT-50 M24x3.0P
1"-8UNC

MT-3 M12x1.75P
3/8"-16UNC

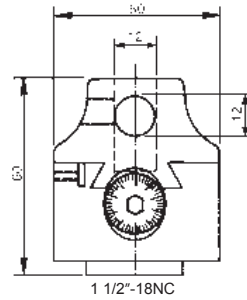
MT-4 M16x2.0P
5/8"-11UNC

MT-5 M24x3.0P
1"-8UNC

D: 1 1/2"-18UNC

The shanks are made for for C-type boring head use. Also it can be replaced from time to time.

ORDER NO.	VBC-R8	VBC-NT30	VBC-NT40	VBC-MT3	VBC-MT4	VBC-MT5	VBC-BT40	VBC-BT50	VBC-C20
WEIGHT (KG)	0.4	0.7	1.3	0.6	0.9	1.6	1.4	3.97	0.4
CODE NO.	3401-210	3401-211	340-212	3401-213	3401-214	3401-215	3401-216	3401-217	3401-219



1 SCALE 0.01mm
0.02mm per Ø

Here is a small head that will be in constant demand in any shop.

Note the wide base bearing surface that assures maximum rigidity even when the bar holder is in an off-set position. This wide base design is a recent Criterion innovation that increases bearing surfaces by 50% over the older models.

A 1/2" double hole bar holder with a 1/2" cross hole is available.

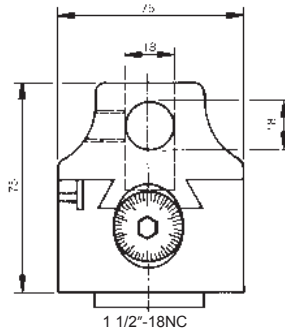
The unit has a 1 1/2"-18NC threaded back and also features a direct reading dial screw.

ORDER NO. VBC-2

SPECIFICATION

BORING CAPACITY Ø10-Ø100

ORDER NO.	ACTUAL SIZE	OVERALL LENGTH	BORING BAR HOLE SIZE	CENTER DIST BETWEEN HOLES.	CROSS HOLE DIA	OFFSET	WEIGHT (kg)	CODE NO.
VBC-2(l)	2" Dia.	2-7/16"	1/2"	5/8"	1/2"	5/8"	0.7	3401-301
VBC-2(m)	50	62	12	15	12	15	0.8	3401-302



1 SCALE 0.01mm
0.02mm per Ø

Here is a sturdy unit of extended boring range, capable of peeling off heavy roughing cuts as well tool of extreme sensitivity. The use of a wide-base bar-holder resting securely on the body, eliminates the need for a separate side plate. You will notice it has now become an integral part of the body.

The direct reading adjusting screw is ground after hardening and a plainly marked dial face in non-reflecting satin chrome allows easy reading and adjustments of .0005 or less.

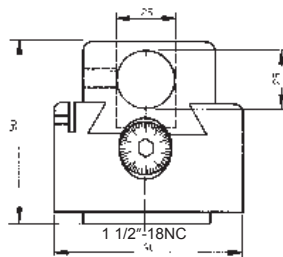
All Criterion Boring Heads have threaded backs for use with a variety of shanks. This model takes a 1-1/2"-18NC threaded shank.

ORDER NO. VBC-3

SPECIFICATION

BORING CAPACITY Ø10-Ø220

ORDER NO.	ACTUAL SIZE	OVERALL LENGTH	BORING BAR HOLE SIZE	CENTER DIST BETWEEN HOLES.	CROSS HOLE DIA	OFFSET	WEIGHT (kg)	CODE NO.
VBC-3(l)	3" Dia.	3.5/32"	3/4"	15/16"	3/4"	1"	2	3401-303
VBC-3(m)	75	80	18	23	18	25	2	3401-304



1 SCALE 0.01mm
0.02mm per Ø

This is a bigger boring head which can be put on large machine to process more as you want. The radius of boring hole can reach on about Ø 400mm long by a boring bar of 160mm. All Criterion Boring Heads have threaded backs for use with a variety of shanks. This model takes a 1-1/2"-18NC threaded shank.

SPECIFICATION

BORING CAPACITY Ø10-Ø250

ORDER NO.	ACTUAL SIZE	OVERALL LENGTH	BORING BAR HOLE SIZE	CENTER DIST BETWEEN HOLES.	CROSS HOLE DIA	OFFSET	WEIGHT (kg)	CODE NO.
VBC-4(l)	4" Dia.	3-1/2"	1"	1-1/4"	1"	1"	4	3401-305
VBC-4(m)	100	90	25	32	25	25	4	3401-306

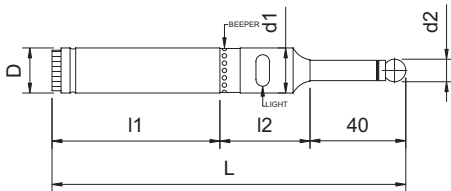
Touch Point Sensor



With beeper



- No need to rotate while measuring.
- The red light was sealed with setting red-gel; it can concentrate the light and resist water.
- The sensor beeps while the red light is on.
- The sensor will beep when the user couldn't see the reverse side or get a clear sight.
- Example. If sensor's light is working, visually you couldn't see inside of the inner hole, while probing the user can be warned by the beeper.
- When probe the deep hole, you can't see the red light, but you can hear the sound from beeper.
- Accuracy: within $\pm 0.005\text{mm}$.



OPTICAL TYPE WITH BEEPER

Unit:mm

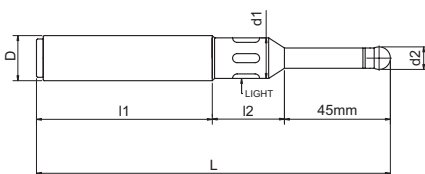
ORDER NO.	D	d1	d2	L	l1	l2	BATTERY TYPE	WEIGHT (kg)	CODE NO.
VPS-20B	Ø20	18	10	157	77	41	UM-5#(SP) x1PCS/12V	0.4	3402-001
VPS-32B	Ø32	18	10	157	74	41		0.7	3402-002

Touch Point Sensor

With Out Beeper Optical Type



- High sensitivity position sensor.
- Red pilot can be seen clearly.
- Whole travel of red pilot is sparkling, detecting also can be done during turning while spindle stops.
- Location of end surface, outer circle dia., inner circle dia. of the work-piece for processing can be detected with full effect.
- Devised with safety line excess, ball supported by spring, so even line excess, it will be separated easily from the base shown as the fig.
- The precision will reach up to micrometer while the ball returns to center position.

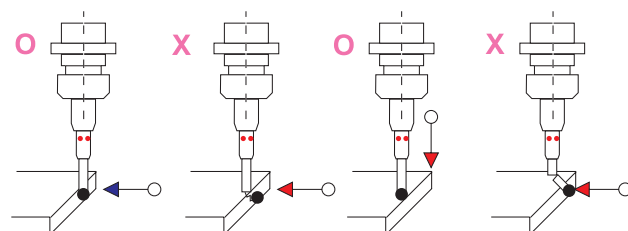
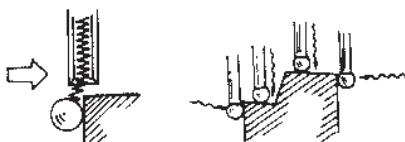


OPTICAL TYPE

Unit:mm

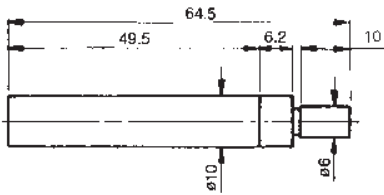
ORDER NO.	D	d1	d2	L	l1	l2	BATTERY TYPE	WEIGHT (kg)	CODE NO.
VPS-20	20	18	10	157	76	33	UM-5#(SP) x2P/R1.1.5V	0.4	3402-003
VPS-32	32	18	10	157	74	41		0.7	3402-004

Fig.





VPS-201



This series is a high precision setting device for positioning the accurate center between tool spindle of machine and reference surface of working at low-cost and saving time.

Accuracy : within ± 0.005 mm

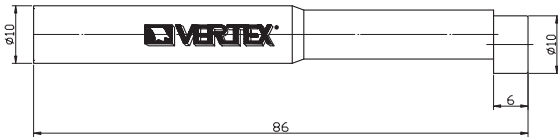
Made of tool steel, hardened and ground.

Suitable rotation speed : VPS-201 450 to 600rpm.

VPS-401 600 to 1,000 rpm

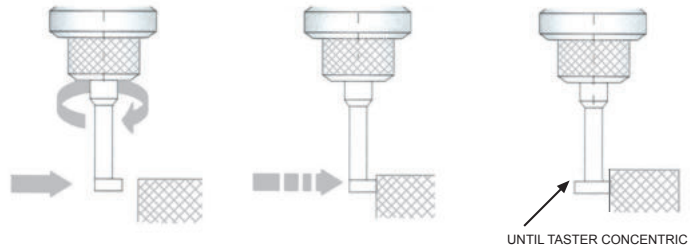


CREAMIC TYPE VPS-201C



MECHANICAL TYPE SIMPLE TYPE

ORDER NO.	VPS-201	VPS-201C
WEIGHT (KG)	0.03	0.06
CODE NO.	3402-005	3402-007



VPS-401



VPS-401C

FEATURES:

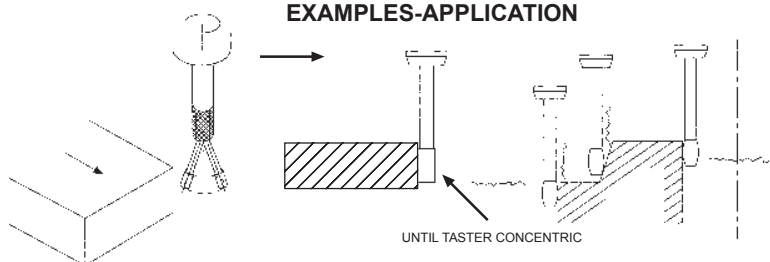
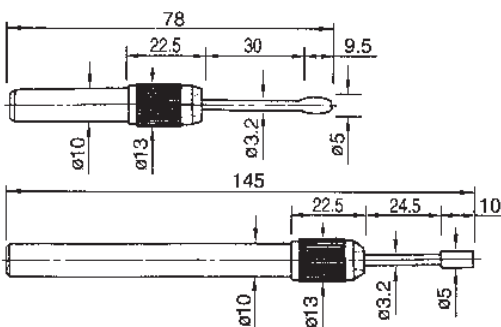
- Material: high-carbon steel.
- Accuracy: within ± 0.003 mm
- Hardness: HRC $58 \pm 1^\circ$
- R.P.M. Within 600-1000
- Suitable for milling machine.
Drill machine and boring machine.

VPS-401 (2 PCS/SET)

VPS-402A(LONG) SINGLE

VPS-402B(SHORT) SINGLE

ORDER NO.	VPS-401	VPS-401C
PCS/SET	2PCS/SET	2PCS/SET
WEIGHT (KG)	0.26	0.26
CODE NO.	3402-006	3402-008



Touch Point Sensor



MECHANICAL TYPE



VPS-301



VPS-302

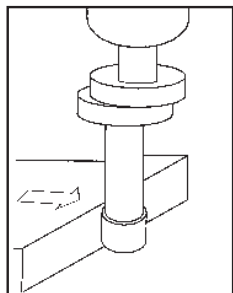
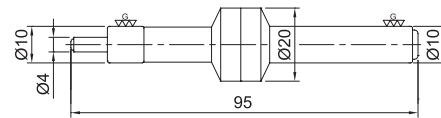
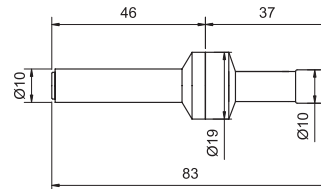
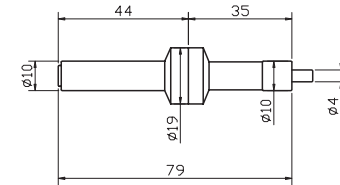
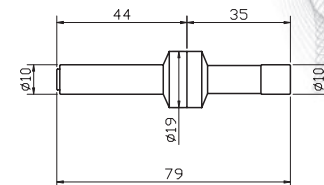


CERAMIC TYPE VPS-301C

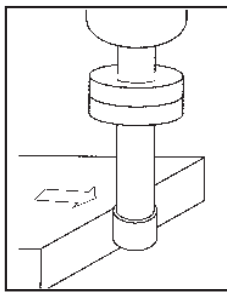
NEW



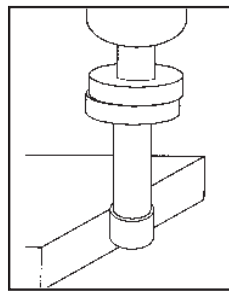
VPS-302C



Spindle runs about 500rpm. move spindle closed to measuring surface.



When measuring probe touches workpiece, it looks in one part.



When the probe and shank are in alignment, probe will slide out of rotating center. Now, the center spindle is located 5mm away from measuring surface

- Accuracy of zero point to point is within $\pm 0.003\text{mm}$
- R.P.M. within 450-600.
- Max. flange can be clear your sight sense.
- MIN.(4mm) can be test mini hole for your workpiece.

ORDER NO.	MATERIAL	HARDNESS	WEIGHT (kg)	CODE NO.
VPS-301	ALLOY STEEL	HRC 56°	0.06	3402-100
VPS-302			0.05	3402-101
VPS-301S	STAINLESS	HRC 60°	0.06	3402-102
VPS-302S			0.06	3402-103
VPS-301C	CERAMIC	HRC 60°	0.06	3402-104
VPS-302C	CERAMIC	HRC 60°	0.06	3402-105

Centering Indicator

ORDER NO.VCI-170 CODE NO.3402-130



(WITH STOP BAR FOR FIXING THE HEAD)

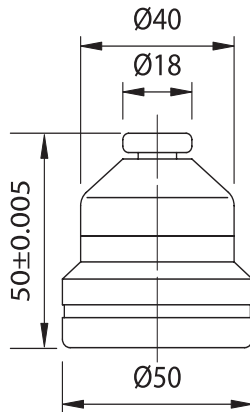
- RPM Within 800.
- Use for Internal or External.
- Use for Vertical or Horizontal.
- While Spindle Rotates, With Stop bar for Fixing The Head The Centering Indicator Always faces the operator.

Shank	ø10	m/m
Length	170	m/m
Internal	ø4~ø108	m/m
External	ø0~ø108	m/m
Min. Indicator	0.01	m/m
Indicator Range	0~6	m/m
Weight	0.8 kgs	

Height Presetter



OPTICAL TYPE



HP-50Z BATTERY
LR4476AG13
1SET/2PCS
HP-50ZM
LR44
1SET/2PCS



MODEL For NEXT

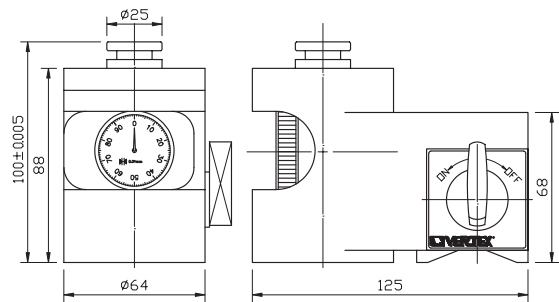
THIS TYPE NEED TO TCHECK STOCK AVAILABLE

- Height 50mm.
- With Magnetic base.
- The red lamp will be lighted up when touched.
- Accuracy 0.005mm.
- Combined vertical and horizontal in a unit.
- Weight:0.7kgs

ORDER NO.	H	STYLE	WEIGHT (kg)	CODE NO.
HP-50Z	50mm	STANDARD TYPE	0.7	3403-001
HP-50ZM	50mm	WITH MAGNETIC BASE	0.7	3403-002

Height Presetter (For Machining Center)

ORDER NO.HP-100 CODE NO.3403-010



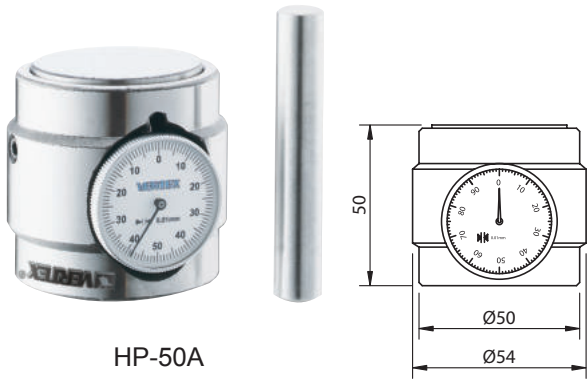
WITH CHECKING GAUGE

- Locate the height presetter on a place suitable for a reference surface of work piece.
- Apply the cutter on the measuring surface and slowly lower the Z-axis. Then, cutter gets near to the measuring position.
- A distance from the reference surface to the tool tip can be measured easily and precisely so that this presetter is most suitable not only for machining centers but for NC lathes and NC milling machines.

* Magnetic base function can be used in vertical position & horizontal position.

* HEIGHT:100mm±0.005 , 1 scale 0.01mm

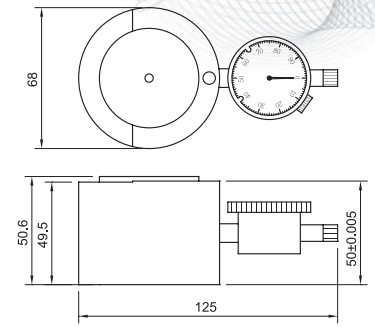
Height from reference surface	WEIGHT(kgs)
100mm	2.6



HP-50A



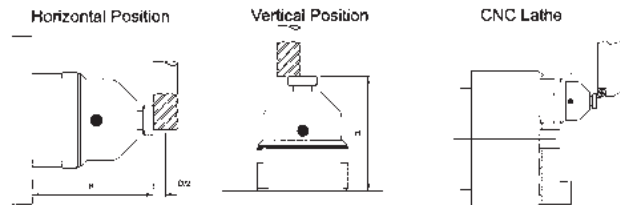
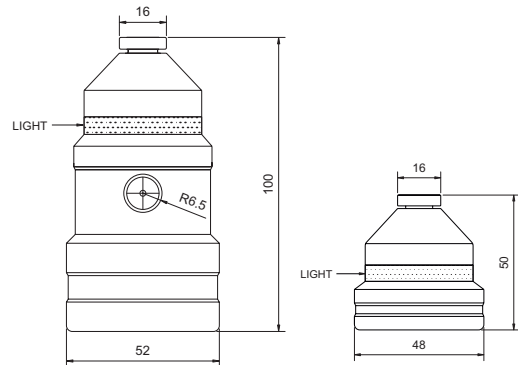
HP-50B



- Have the central measuring part of the zero setter presetter against a plain surface and aligned if with the outer reference surface. Turn the dial gauge for zero setting.
- Have the cutter touched against the z zero setter. Once the indicator position at zero, the distance between the tool tip to workpiece is 50mm, ±0.005.

ORDER NO.	H	STYLE	WEIGHT (kg)	CODE NO.
HP-50A	50mm	STANDARD TYPE	1.1	3403-020
HP-50B			1.7	3403-021
HP-50AM		WITH MAGNETIC BASE	1.2	3403-022
HP-50BM			1.7	3403-023

Electronic Tool Length Setter
STAINLESS STEEL BASE WITH MAGNET



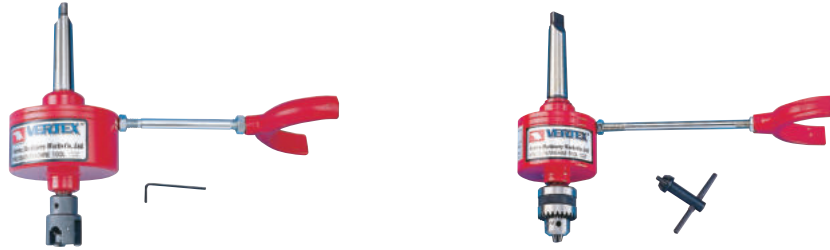
- **HIGH ACCURACY**
- **EASY OPERATION**

- Be sure to remove all chips and all from the sensor plate and the base of the HP-50E as well as from the workpiece and tool.
- To move the tool approaching the sensor plate slowly.
- When touching, the "LED" turns on immediately and "H" is just 50.00 mm.(or2")
- LED will not function if batteries are not set in correctly.
- Designed to be used on ferrous and non-ferrous materials.

ORDER NO.	H	STYLE	WEIGHT (kg)	CODE NO.
HP-50EM	50mm	WITH MAGNETIC BASE	0.3	3403-032
HP-100EM	100mm		1.2	3403-033

Stainless Steel Base With Magnet
TOOL PRE-SETTER FOR MACHINING CENTERS, CNC & STANDARD MILLING MACHINES AND CNC & STANDARD LATHES

Reversible Tapping Attachment for Drilling & Milling Machine



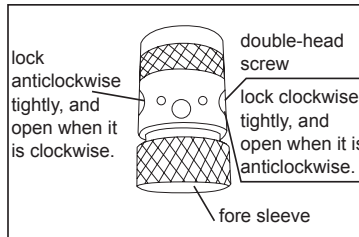
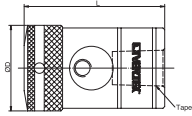
ORDER NO.	TAPPING CAPACITY	SHANK	TO WORK WITH DRILLING MACHINE	WEIGHT (KG)	PACKING mm	SPEED	CODE NO.
K1-1/2	Ø3-8mm	1/2"	DRILLING MACHINE MUST EQUIPPED WITH DRILL CHUCK CAPACITY 13M/M	0.8	90X90X190	1 : 1	3404-001
K1-MT-2	Ø3-8mm	MT-2	DRILLING MACHINE MUST EQUIPPED WITH MT-2 HOLE	1	90X90X240	1 : 1	3404-002
K2-1/2	Ø5-10mm	1/2"	DRILLING MACHINE MUST EQUIPPED WITH DRILL CHUCK CAPACITY 13M/M	1.5	100X100X210	1 : 1	3404-003
K2-MT-2	Ø5-10mm	MT-2	DRILLING MACHINE MUST EQUIPPED WITH MT2 HOLE	1.6	100X100X260	1 : 1	3404-004
K3-MT-3	Ø6-14mm	MT-3	OTHERS LIKE MT-3 SHANK BORING HOLE DRILLING MACHINE N.T. AVAILABLE	3.1	125X125X300	1 : 1	3404-005
K4-MT-3	Ø12-25mm	MT-3	OTHERS LIKE MT-3 SHANK BORING HOLE DRILLING MACHINE N.T. AVAILABLE	5.4	160X160X360	1 : 1	3404-006

K1 TYPE USED CHUCK TO FIX THE TAP

K2, K3, K4 TYPE USED THE SLIDING PLATE OF THE SQUARE SHARP HOLE TO FIX THE TAP.

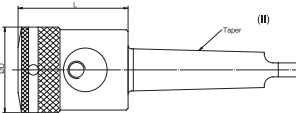
Tap Chuck Series

VTA13-1
JT6



- THE DESIGN CAN PREVENT THE TAPS CHUCK FROM LOOSENING AFTER TAPPING.
- SUIT FOR VARIOUS TAPS. LARGE TAPPING CAPACITY. HIGH POWER TORSION.

VTA16-3
MT2



TAP CHUCK WRENCH



Extra Purchase Welcome.

ORDER NO.	TAPPING CAPABILITY		D	L	Taper	N.W (kg)	CODE NO.	
	mm	inch						
VTA13-1	I		43	72.5	J6	0.55	3404-000	
VTA13-2	I	M3-M12	W1/8"~W1/2"	43	72.5	B16	0.76	3404-007
VTA13-3	II		47	58	MT2	0.76	3404-008	
VTA16-1	I		54	80	J3	1	3404-016	
VTA16-2	I		54	80	B18	1	3404-017	
VTA16-3	II	M3-M16	W1/8"~W5/8"	48.5	60	MT2	0.9	3404-018
VTA16-4	II		48.5	60	MT3	1.1	3404-019	
VTA18-2	II		51	58	MT2	0.924	3404-019A	
VTA18-3	III	M9-M18	W3/8"~W3/4"	51	58	MT3	1.074	3404-019B
VTA18-4	IV		51	58	MT4	1.38	3404-019C	

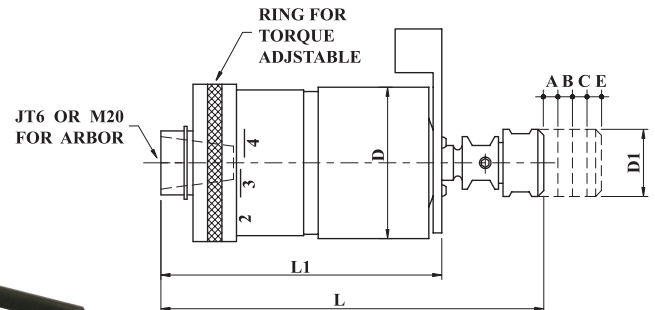
Drill Tapper



Including shank, full set of collets, wrench and case.
(Used for radial drilling, lathe and tapping machines.
1 Main body, 6 Tap Collet, 1 Drill Chuck Holder
Optional in Collets & Tapper Sleeves.)0.6CUFT.

Unit:mm

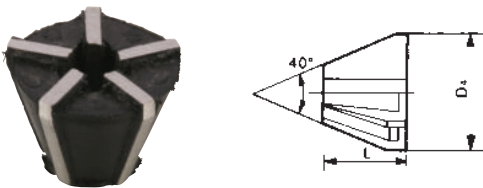
ORDER NO.	STANDARD ASSEMBLY SPECIFICATION				G.W. kg	MEAS. CFT	CODE NO.
	MAIN BODY 1PC/SET	TAP COLLET 6PCS/SET	TAPER SLEEVE 2PCS/SET	DRILL CHUCK HOLDER 1PC/SET			
VDT-33	MT-3	M8, 10, 12, 14, 16, 18, 20, 22, 24, 27, 30, 33(MM)	33-MT1	33-JT6 With 1/2" Drill Chuck	11.9	0.6	3404-010
	MT-4	1, 1-1/8, 1-1/4(INCH)	33-MT2		12		3404-011
	MT-5	PT1/8, 1/4, 3/8, 1/2, 3/4, 1(INCH)	33-MT3 33-MT4		12.8		3404-012



- Radial Float is SELF-CENTERING to compensate for hole center misalignment.
- Unique Double Spring Mechanism produces Automatic Feed and Cushion Drive. There are two springs for the feed and two springs for the reversal. Each set gives you double smoothness for ULTRA accurate tapping applications (not possible with this type of tapping head in the past).
- Pre-set Torque Control Permits easy operation of tap brake torque control
- JACOBS RUBBER FLEX COLLETS are standard accessory.

Reversing Type

ATTACHMENT DESIGNATIONS ORDER NO.	FOR TAPS	SUITABLE ADAPTERS SIZE	REC. MAX SPEED	LENGTH COMPENSATION				D DIA	D1 DIA	L	L1	WEIGHT (kgs)	CODE NO.
				COMP A	EXP. B	EXP. C	EXP. E						
VTA7-JT6	M2-M7	FC-10/FC-11	1500RPM	5	3.5	1.5	7.0	52	23	125.5	94.5	1.3	3404-020
VTA12-JT6	M3-M12	FC-20/FC-21	1000RPM	5	4.5	1.5	8.5	73.5	28	169	122	3.1	3404-021
VTA20-M20	M8-M20	FC-30/FC-31	600RPM	5.5	5	2.0	9.0	91	38	190	128	5.7	3404-022



Rubber Flex Collet For VTA Tapper

ORDER NO.	COLLETS CAPACITY	D4	L	CODE NO.
FC-10	Ø 2.5 - Ø 4.5	16	11	3404-030
FC-11	Ø 4.5 - Ø 6.5	16	11	3404-031
FC-20	Ø 4 - Ø 7	21.5	13	3404-032
FC-21	Ø 7.5 - Ø 10	21.5	13	3404-033
FC-30	Ø 8.0 - Ø 16	26.5	15	3404-034
FC-31	Ø 14 - Ø 19	26.5	15	3404-035

CONNECTING ARBOR FOR VTA20-M20	
MT3-M20	3404-036A
MT4-M20	3404-037A

ARBOR EXAMPLE :



Tap Chuck



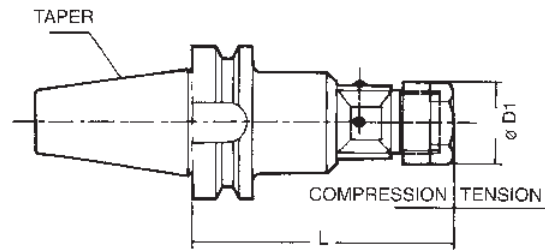
- It's suitable for various taps, so it is much more economic and efficient than other brands of taps chuck.
- The design can prevent the taps chuck from loosening after tapping.

Unit:mm

ORDER NO.	SIZE	TAPPING CAPACITY		Taper Mount NO. DIN or Jacobs	Length (m/m)	Outer Dia. (m/m)	Weight (g)	CODE NO.
		mm	inch					
VTA-13-11	1/2	M3-M12	1/8-1/2	JT6	75	42	850	3404-056A
VTA-13-12	1/2	M4-M12	1/8-1/2	B16	75	42	585	3404-057A

Expansible Tapping Holder

Compression Distance 6mm



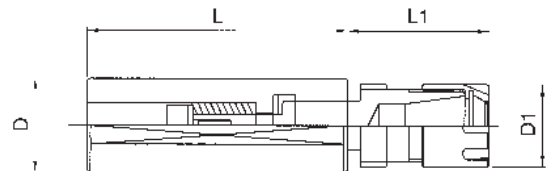
HOLDER-BT-TYPE

Unit:mm

ORDER NO.	COLLET	HOLDER (DXL)	L	D ₁	TAPPING RANGE	WEIGHT (KGS)	CODE NO.
VET-271	ER20	BT40 20X100	100	34	M2-M16	2.2	3404-026
VET-272	ER20	BT50 20X95	95	34		4	3404-027
VET-273	ER32	BT40 32X110	110	50	M3-M25	2.4	3404-028
VET-274	ER32	BT50 32X110	110	50		4.5	3404-029



WITH SPANNER



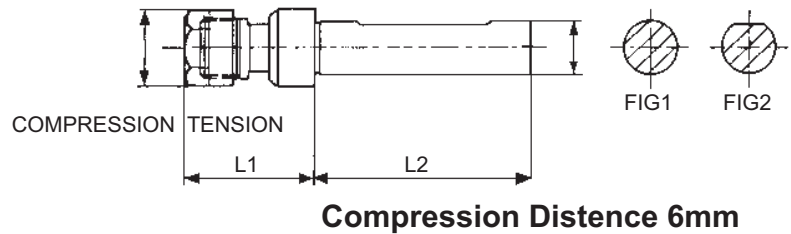
HOLDER-MINI TYPE

Unit:mm

ORDER NO.	COLLET	HOLDER (DXL)	L ₁	D ₁	TAPPING RANGE	WEIGHT (KG)	CODE NO.
VET-260	ER16	ER16M 20X70	35	22	M3-M10 1/8"-3/8"	0.2	3404-036
VET-261	ER16	ER16M 25X70	35	22		0.2	3404-037

- Floating and expansion design will reduce the differential of motor rotary speed and feeding speed so will extend the life of tap.
- Use ER High Spring Collet, you don't need to worry the few size will delay working, so their value is more than any other tapping system.
- Strong Vise clamping function which is controlled by one screw will keep the outlet which have been controlled by ER collet, so it can auto-center and you own the double lock and save in clamping.
- The series. can be fitted with ER20 collet as optional accessory.

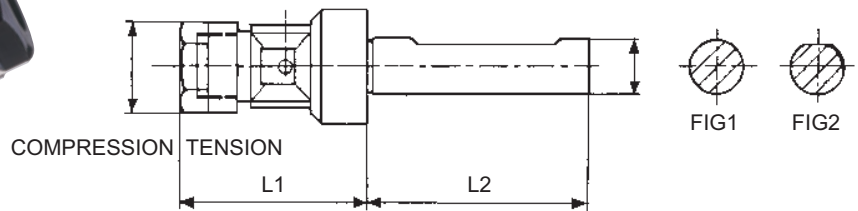
STRAIGHT SHANK



SINGLE HOLDER

Unit:mm

ORDER NO.	COLLET	HOLDER (D ₂ XL ₂)	FIG	L ₁	D ₁	TAPPING RANGE	WEIGHT (KG)	CODE NO.
VET-102	ER16	20X80	2	47	28	(1/8"-3/8")	0.4	3404-041



SINGLE HOLDER

Unit:mm

ORDER NO.	COLLET	HOLDER (D ₂ XL ₂)	FIG	L ₁	D ₁	TAPPING RANGE	WEIGHT (KG)	CODE NO.
VET-202	ER20	20X80	2	70	34	M3-M16	1	3404-043
VET-252	ER20	25X80	2	70	34	(1/8-5/8")	1.2	3404-044
VET-303	ER32	32X100		90	50	(M3-M25) (1/8-1")	2	3404-045



SETS TYPE

Unit:mm

ORDER NO.	COLLET	HOLDER (D ₂ XL ₂)	SET/PCS	WEIGHT (KG)	CODE NO.
VET-105	ER16	20X80	8	1	3404-046
VET-106	ER16	20X80	10	1.1	3404-047
VET-253	ER20	20X80	10	1.6	3404-048
VET-254	ER20	20X80	12	1.7	3404-049

Quick Change Tapping Chuck



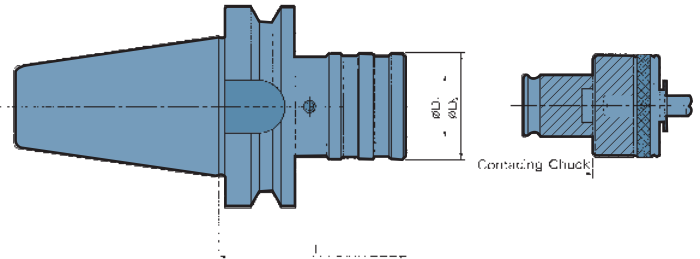
European Type



QUICK CHANGE TAPPING CHUCKS (with length compensation)

MAS-BT shank / DIN69871A SK-40, 50

- Tension and compression feature allows taps to follow their own thread lead.
- With extreme light compensation compression and tension operated by ball cage.



WF-BT30/BT40/SK30/SK40 LENGTH COMPENSATION TYPE

ORDER NO.	Thread Size	L	ØD ₂	ØD ₁	Length Compensation		Collets	WEIGHT (kg)	CODE NO.
					Compression	Tension			
BT30-WF12	M3-M12	70	36	19	7.5	7.5	TC-312 TC-312B	-	3404-050A
BT40-WF12	M3-M12	75	36	19	7.5	7.5	TC-312 TC-312B	1.3	3404-050
SK40-WF12								1.3	3404-051
BT30-WF20	M8-M20	105	53	32	12.5	12.5	TC-820 TC-820B	-	3404-052A
BT40-WF20	M8-M20	95	53	32	12.5	12.5	TC-820 TC-820B	1.8	3404-052
SK40-WF20	M8-M20	95	53	32	12.5	12.5	TC-820 TC-820B	1.8	3404-053
BT40-WF33	M14-M33	160	78	48	20	20	TC-1433 TC-1433B	4	3404-054

WF-BT50/SK50 LENGTH COMPENSATION TYPE

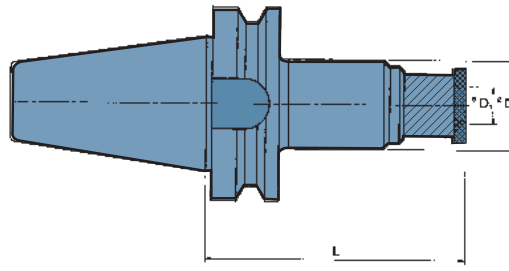
ORDER NO.	Thread Size	L	ØD ₂	ØD ₁	Length Compensation		Collets	WEIGHT (kg)	CODE NO.
					Compression	Tension			
BT50-WF12	M3-M12	85	36	19	7.5	7.5	TC-312 TC-312B	4	3404-060
SK50-WF12								4	3404-061
BT50-WF20	M8-M20	105	53	32	12.5	12.5	TC-820 TC-820B	4.1	3404-062
SK50-WF20								4.1	3404-063
BT50-WF33	M14-M33	160	78	48	20	20	TC-1433 TC-1433B	5.8	3404-064

Quick Change Tapping Chucks



QUICK CHANGE TAPPING CHUCKS (with length compensation) MAS-BT shank / DIN69871A shank

- Tension and compression feature allows taps to follow their own thread lead.



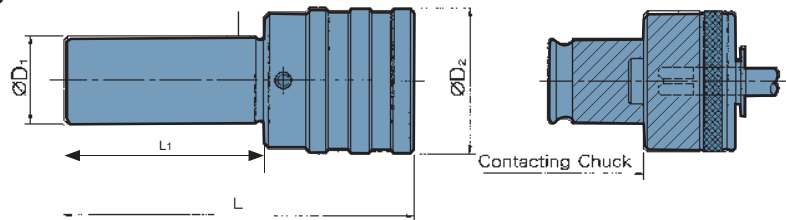
WFE-BT40 LENGTH COMPENSATION TYPE

ORDER NO.	Thread Size	L	ØD ₂	ØD ₁	Length Compensation		Collets	WEIGHT (kg)	CODE NO.
					Compression	Tension			
BT40-WFE12-135	M3-M12	135	38	19	15	20	TC-312 TC-312B	1.5	3404-070
BT40-WFE12-165		165							-

WFE-BT50 LENGTH COMPENSATION TYPE

ORDER NO.	Thread Size	L	ØD ₂	ØD ₁	Length Compensation		Collets	WEIGHT (kg)	CODE NO.
					Compression	Tension			
BT50-WFE12-135	M3-M12	135	38	19	15	20	TC-312 TC-312B	4	3404-080
BT50-WFE12-165		165						-	3404-082
BT50-WFE20-195		195						-	3404-084

QUICK CHANGE TAPPING CHUCKS (with length compensation) STRAIGHT shank

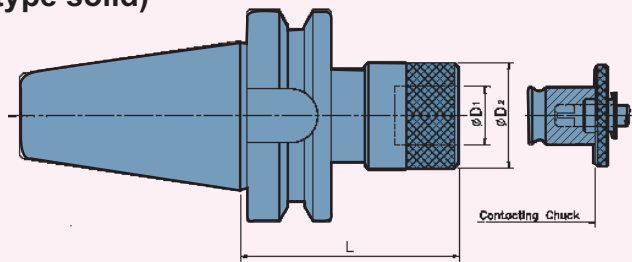


WF-ST LENGTH COMPENSATION TYPE

ORDER NO.	Thread Size	L	L ₁	ØD ₁	ØD ₂	Length Compensation		Collets	WEIGHT (kg)	CODE NO.
						Compression	Tension			
ST20-WF12	M3-M12	113	70	20	36			TC-312 TC-312B	0.4	3404-087
ST32-WF12				32						3404-088
ST20-WF20	M8-M20	135	70	20	53			TC-820 TC-820B	1	3404-089
ST32-WF33	M14-M33	183	80	32	78			TC-1433B		3404-092

QUICK CHANGE TAPPING CHUCKS (type solid) MSA-BT shank & DIN 69871A shank

- No tension or compensation stroke for use in synchronous tapping (rigid tapping) cycle.



SF-BT40 RIGID TAPPING TYPE

ORDER NO.	Thread Size	L	ØD ₂	ØD ₁	Collets	WEIGHT (kg)	CODE NO.
BT40-SF12	M3-M12	60	32	19	TC-312 TC-312B	1	3404-100
BT40-SF20	M8-M20	82	50	32	TC-820 TC-820B	1.4	3404-102
BT40-SF33	M14-M36	115	76	48	TC-1433 TC-1433B	3.5	3404-104

SF-BT50 RIGID TAPPING TYPE

ORDER NO.	Thread Size	L	ØD ₂	ØD ₁	Collets	WEIGHT (kg)	CODE NO.
BT50-SF12	M3-M12	74.5	32	19	TC-312 TC-312B	3.6	3404-110
BT50-SF20	M8-M20	93	50	32	TC-820 TC-820B	4	3404-112

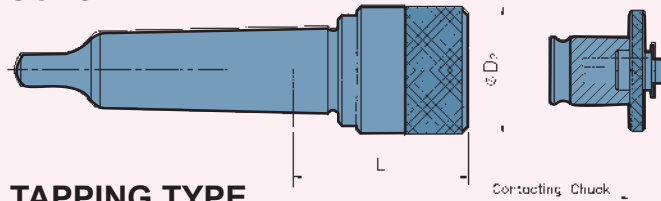


Quick Change Tapping Chucks



QUICK CHANGE TAPPING CHUCKS

MORSE TAPER shank

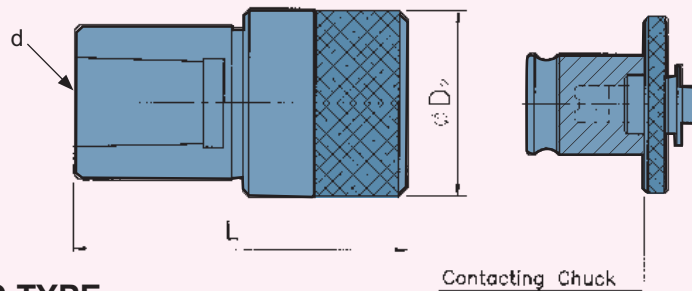


SF-MT TYPE SOLID RIGID TAPPING TYPE

ORDER NO.	Thread Size	L	ØD ₂	Collets	WEIGHT (kg)	CODE NO.
MT2-SF12	M3-M14	39	32	TC-312 TC-312B	0.3	3404-120
MT3-SF12					-	3404-120A
MT4-SF12		34			-	3404-120B
MT2-SF20	M8-M24	59	50	TC-820 TC-820B	-	3404-121A
MT3-SF20					0.8	3404-121
MT4-SF20		55			-	3404-121B
MT3-SF33	M14-M36	104	76	TC-1433 TC-1433B	-	3404-122A
MT4-SF33		105			2.2	3404-122

WF-MT WITH LENGTH COMPENSATION TYPE

ORDER NO.	Thread Size	L	ØD ₂	Collets	WEIGHT (kg)	CODE NO.	
MT2-WF12	M3-M12	47.5	36	TC-312 TC-312B		3404-123	
MT3-WF12							3404-123A
MT4-WF12		49				3404-123B	
MT2-WF20	M8-M20	70	53	TC-820 TC-820B		3404-124	
MT3-WF20							3404-124A
MT4-WF20							3404-124B
MT4-WF33	M14-M33	110	78	TC-1433 TC-1433B		3404-125	

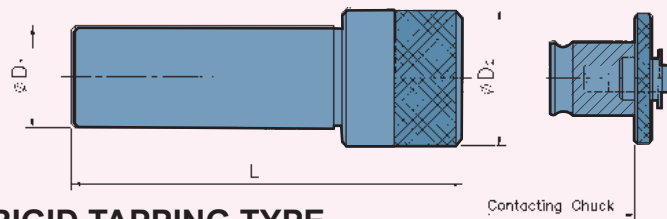


SF-JTA RIGID TAPPING TYPE

ORDER NO.	Thread Size	L	ØD ₂	d	Collets	WEIGHT (kg)	CODE NO.
JTA6-SF12	M3-M12	66	32	JT6	TC-312 TC-312B	0.3	3404-130
B16-SF12				B16			3404-130A



Quick Change Tapping Chucks



SF-ST TYPE SOLID RIGID TAPPING TYPE

ORDER NO.	Thread Size	L	L ₁	ØD ₂	ØD ₁	Collets	WEIGHT (kg)	CODE NO.	
ST20-SF12	M3-M12	104	70	32	20	TC-312 TC-312B	0.3	3404-140	
ST32-SF12		106							32
ST20-SF20	M8-M24	124		50	20	TC-820 TC-820B			3404-141
ST32-SF20									32
ST32-SF33	M14-M36	169		76	32	TC-1433 TC-1433B			3404-142A

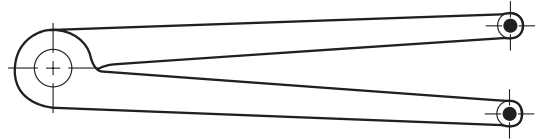
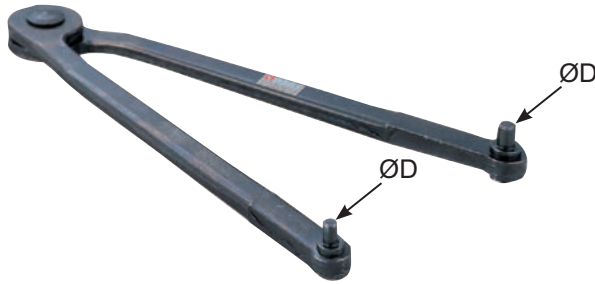
Adjustable Wrenches



For Tapping Collet to Adjust Torque Force

NEW

- Sample tool
- Time Saving



ORDER NO.	SIZE	ØD	COLLETS	WEIGHT (kgs)	CODE NO.
VWR-40	7-40	2.5	TC-312 / TC-820		3404-150
VWR-60	11-60	4	TC1433		3404-151

Quick Change Tapping Chucks Set

European Type

NEW



SET TYPE
SHANK WITH 7 PCS/SET OVERLOAD CLUTCH
TAPPING COLLET DIN, ISO & JIS SYSTEMS:
PLEASE SEE PAGE 105.

Collets Size	
TC-312	M3, M4, M5, M6, M8, M10, M12
TC-820	M8, M10, M12, M14, M16, M18, M20

SETS

ORDER NO.	SHANK Size	Thread Size	L	ØD1	ØD2	Length Compensation		Collets	PCS/ SET	CODE NO.
						Compression	Tension			
VQT-312	BT-30	M3-M12	70	19	36	7.5	7.5	TC-312	7PCS	3404-190
VQT-320	BT-30	M8-M20	105	32	53	12.5	12.5	TC-820	7PCS	3404-191
VQT-412	BT-40	M3-M12	75	19	36	7.5	7.5	TC-312	7PCS	3404-192
VQT-420	BT-40	M8-M20	95	32	53	12.5	12.5	TC-820	7PCS	3404-193
VQT-512	BT-50	M3-M12	85	19	36	7.5	7.5	TC-312	7PCS	3404-194
VQT-520	BT-50	M8-M20	105	32	53	12.5	12.5	TC-820	7PCS	3404-195

Please inform the collet size when ordering.

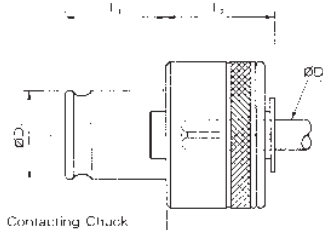
Please use following page as reference for collet size.



Quick Change Tapping Chucks



QUICK CHANGE TAP COLLETS (with overload clutch)



JIS SYSTEM SIZE

1PC ≒ 0.18kg

Size	Thread	Tap Shank		Ø D1	L1	L2	ORDER NO.	CODE NO.
		ØD	□					
TC 312 (#1)	M3	4	3.2	19	22	25	312-01	3404-200
	M4	5	4				312-02	3404-201
	M5	5.5	4.5				312-03	3404-202
	M6	6	4.5				312-04	3404-203
	M7	6.2	5				312-05	3404-204
	M8	6.2	5				312-06	3404-205
	M9	7	5.5				312-07	3404-206
	M10	7	5.5				312-08	3404-207
	M11	8	6				312-09	3404-208
	M12	8.5	6.5				312-10	3404-209
	•M14	10.5	8				•312-11	3404-210
	•M15	10.5	8				•312-12	3404-211
	UNC 1/4	6	4.5				312-13	3404-212
	UNC 5/16	6.1	5				312-14	3404-213
	UNC 3/8	7	5.5				312-15	3404-214
	UNC 7/16	8	6				312-16	3404-215
	UNC 1/2	9	7				312-17	3404-216
	•UNC 9/16	10.5	8				•312-18	3404-217
	PT 1/8	8	6				312-19	3404-218
	PT 1/4	11	9				312-20	3404-219

- Torque is factory-set to protect the tap for which a particular collet is designed. Small adjustments can be made by a trained user to accommodate tap strength and material variations.
- Collet stops driving when set torque is exceeded.
- A collet is necessary for each tap shank diameter.

1PC ≒ 1.8kg

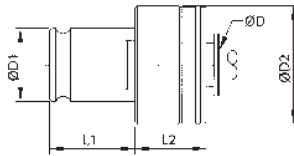
1PC ≒ 0.6kg

Size	Thread	Tap Shank		Ø D1	L1	L2	ORDER NO.	CODE NO.
		ØD	□					
TC 820 (#2)	M7	6.2	5	31	36	30.5	820-01	3404-230
	M8	6.2	5				820-02	3404-231
	M9	7	5.5				820-03	3404-232
	M10	7	5.5				820-04	3404-233
	M11	8	6				820-05	3404-234
	M12	8.5	6.5				820-06	3404-235
	M14	10.5	8				820-07	3404-226
	M15	10.5	8				820-08	3404-237
	M16	12.5	10				820-09	3404-238
	M17	13	10				820-10	3404-239
	M18	14	11				820-11	3404-240
	M20	15	12				820-12	3404-241
	M22	17	13				820-13	3404-242
	UNC 3/8	7	5.5				820-14	3404-243
	UNC 7/16	8	6				820-15	3404-244
	UNC 1/2	9	7				820-16	3404-245
	UNC 9/16	10.5	8				820-17	3404-246
	UNC 5/8	12	9				820-18	3404-247
	UNC 3/4	14	11				820-19	3404-248
	UNC 7/8	17	13				820-20	3404-249
	PT 1/8	8	6				820-21	3404-250
	PT 1/4	11	9				820-22	3404-251
	PT 3/8	14	11				820-23	3404-252
	PT 1/2	18	14				820-24	3404-253
	M24	19	15				820-25	3404-254

Size	Thread	Tap Shank		Ø D1	L1	L2	ORDER NO.	CODE NO.
		ØD	□					
TC 1433 (#3)	M14	10.5	8	48	56	45	1433-01	3404-260
	M15	10.5	8				1433-02	3404-261
	M16	12.5	10				1433-03	3404-262
	M17	13	10				1433-04	3404-263
	M18	14	11				1433-05	3404-264
	M20	15	12				1433-06	3404-265
	M22	17	13				1433-07	3404-266
	M24	19	15				1433-08	3404-267
	M25	19	15				1433-09	3404-268
	M26	20	15				1433-10	3404-269
	M27	20	15				1433-11	3404-270
	M28	21	17				1433-12	3404-271
	M30	23	17				1433-13	3404-272
	M32	24	19				1433-14	3404-273
	M33	25	19				1433-15	3404-274
	M34	26	21				1433-16	3404-275
	M35	26	21				1433-17	3404-276
	M36	28	21				1433-18	3404-277
	UNC 9/16	10.5	8				V433-19	3404-278
	UNC 5/8	12	9				1433-20	3404-279
	UNC 3/4	14	11				1433-21	3404-280
	UNC 7/8	17	13				1433-22	3404-281
	UNC 1	20	15				1433-23	3404-282
	UNC 1 1/8	22	17				1433-24	3404-283
	UNC 1 1/4	24	19				1433-25	3404-284
	UNC 1 3/8	26	21				1433-26	3404-285
	UNC 1/4	11	9				1433-27	3404-286
	PT 3/8	14	11				1433-28	3404-287
	PT 1/2	18	14				1433-29	3404-288
	PT 3/4	23	17				1433-30	3404-289
	PT 1	26	21				1433-31	3404-290



Quick Change Tapping Chucks



- Torque is factory-set to protect the tap for which a particular collet is designed. Small adjustments can be made by a trained user to accommodate tap strength and material variations.
- Collet stops driving when set torque is exceeded.
- A collet is necessary for each tap shank diameter.

DIN 371 Type

ORDER NO.	Size	TC312 DIN 371 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
312-01D	TC 312 DIN 371	M1~M1.8	2.5	2.1	M3~M14	22.5	25	19	32	3404-501
312-02D		M2~M2.5	2.8	2.1						3404-502
312-03D		M3	3.5	2.7						3404-503
312-04D		M3.5	4.0	3.0						3404-504
312-05D		M4	4.5	3.4						3404-505
312-06D		M4.5	6.0	4.9						3404-506
312-07D		M5	6.0	4.9						3404-507
312-08D		M6	6.0	4.9						3404-508
312-09D		M8	8.0	6.2						3404-509
312-10D		M10	10.0	8.0						3404-510

ORDER NO.	Size	TC820 DIN 371 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
820-01D	TC 820 DIN 371	M5	6.0	4.9	M8~M24	35	30.5	31	50	3404-521
820-02D		M6	6.0	4.9						3404-522
820-03D		M8	8.0	6.2						3404-523
820-04D		M10	10.0	8.0						3404-524

*Custom-built products are available on request.

DIN 376 Type

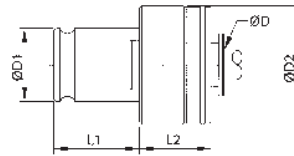
ORDER NO.	Size	TC312 DIN 376 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
312-21D	TC 312 DIN 376	M3.5	2.5	2.1	M3~M14	22.5	25	19	32	3404-531
312-22D		M4	2.8	2.1						3404-532
312-23D		M4.5	3.5	2.7						3404-533
312-24D		M5	3.5	2.7						3404-534
312-25D		M6	4.5	3.4						3404-535
312-26D		M7	5.5	4.3						3404-536
312-27D		M8	6.0	4.9						3404-537
312-28D		M10	7.0	5.5						3404-538
312-29D		M12	9.0	7.0						3404-539
312-30D		M14	11.0	9.0						3404-540

ORDER NO.	Size	TC820 DIN 376 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
820-21D	TC 820 DIN 376	M8	6.0	4.9	M8~M24	35	30.5	31	50	3404-551
820-22D		M10	7.0	5.5						3404-552
820-23D		M12	9.0	7.0						3404-553
820-24D		M14	11.0	9.0						3404-554
820-25D		M16	12.0	9.0						3404-555
820-26D		M18	14.0	11.0						3404-556
820-27D		M20	16.0	12.0						3404-557
820-28D		M22	18.0	14.5						3404-558
820-29D		M24	18.0	14.5						3404-559

ORDER NO.	Size	TC1433 DIN 376 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
1433-01D	TC 1433 DIN 376	M14	11.0	9.0	M14~M36	55.5	45	48	72	3404-571
1433-02D		M16	12.0	9.0						3404-572
1433-03D		M18	14.0	11.0						3404-573
1433-04D		M20	16.0	12.0						3404-574
1433-05D		M22	18.0	14.5						3404-575
1433-06D		M24	18.0	14.5						3404-576
1433-07D		M27	20.0	16.0						3404-577
1433-08D		M30	22.0	18.0						3404-578
1433-09D		M33	25.0	20.0						3404-579
1433-10D		M36	28.0	22.0						3404-580



Quick Change Tapping Chucks



ISO 529 Type

ORDER NO.	Size	TC312 ISO 529 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
312-01I	TC 312 ISO 529	M1~M2	2.5	2.0	M3~M14	22.5	25	19	32	3404-601
312-02I		M2.2~M2.5	2.8	2.24						3404-602
312-03I		M3	3.15	2.5						3404-603
312-04I		M3.5	3.55	2.8						3404-604
312-05I		M4	4.0	3.15						3404-605
312-06I		M4.5	4.5	3.55						3404-606
312-07I		M5	5.0	4.0						3404-607
312-08I		M6	6.3	5.0						3404-608
312-09I		M7	7.1	5.6						3404-609
312-10I		M8	8.0	6.3						3404-610
312-11I		M9	9.0	7.1						3404-611
312-12I		M10	10.0	8.0						3404-612

ORDER NO.	Size	TC820 ISO 529 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
820-01I	TC 820 ISO 529	M6	6.3	5.0	M8~M24	35	30.5	31	50	3404-621
820-02I		M7	7.1	5.6						3404-622
820-03I		M8	8.0	6.3						3404-623
820-04I		M9	9.0	7.1						3404-624
820-05I		M10	10.0	8.0						3404-625

*Custom-built products are available on request.

ISO 529/2283 Type

ORDER NO.	Size	TC312 ISO 529/2283 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
312-21I	TC 312 ISO 529/2283	M3	2.24	1.8	M3~M14	22.5	25	19	32	3404-631
312-22I		M3.5	2.5	2.0						3404-632
312-23I		M4	3.15	2.5						3404-633
312-24I		M4.5	3.55	2.8						3404-634
312-25I		M5	4.0	3.15						3404-635
312-26I		M6	4.5	3.55						3404-636
312-27I		M7	5.6	4.5						3404-637
312-28I		M8	6.3	5.0						3404-638
312-29I		M9	7.1	5.6						3404-639
312-30I		M10	8.0	6.3						3404-640
312-31I		M12	9.0	7.1						3404-641
312-32I		M14	11.2	9.0						3404-642

ORDER NO.	Size	TC820 ISO 529/2283 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
820-21I	TC 820 ISO 529/2283	M8	6.3	5.0	M8~M24	35	30.5	31	50	3404-651
820-22I		M9	7.1	5.6						3404-652
820-23I		M10	8.0	6.3						3404-653
820-24I		M12	9.0	7.1						3404-654
820-25I		M14	11.2	9.0						3404-655
820-26I		M16	12.5	10.0						3404-656
820-27I		M18	14.0	11.2						3404-657
820-29I		M20	14.0	11.2						3404-658
820-30I		M22	16.0	12.5						3404-659
820-31I		M24	18.0	14.0						3404-660

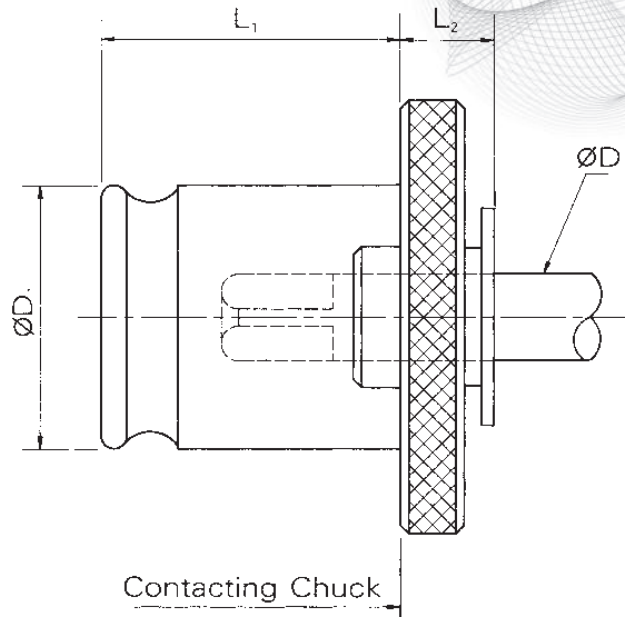
ORDER NO.	Size	TC1433 ISO 529/2283 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
1433-01I	TC 1433 ISO 529/2283	M14	11.2	9.0	M14~M36	55.5	45	48	72	3404-671
1433-02I		M16	12.5	10.0						3404-672
1433-03I		M18	14.0	11.2						3404-673
1433-04I		M20	14.0	11.2						3404-674
1433-05I		M22	16.0	12.5						3404-675
1433-06I		M24	18.0	14.0						3404-676
1433-07I		M27	20.0	16.0						3404-677
1433-08I		M30	20.0	16.0						3404-678
1433-09I		M33	22.4	18.0						3404-679
1433-10I		M36	25.0	20.0						3404-680



Quick Change Tapping Chucks



QUICK CHANGE TAP COLLETS
(without overload clutch)



JIS SYSTEM SIZE

1PC \approx 0.08kg

Size	Thread	Tap Shank		$\varnothing D1$	L_1	L_2	ORDER NO.	CODE NO.
		$\varnothing D$	\square					
TC312B (#1)	M3	4	3.2	19	21.5	7	312B-01	3404-300
	M4	5	4				312B-02	3404-301
	M5	5.5	4.5				312B-03	3404-302
	M6	6	4.5				312B-04	3404-303
	UNC 5/16	6.1	5				312B-05	3404-304
	M7/M8	6.2	5				312B-06	3404-305
	M9/M10	7	5.5				312B-07	3404-306
	M11	8	6				312B-08	3404-307
	M12	8.5	6.5				312B-09	3404-308
	UNC 1/2	9	7				312B-10	3404-309
	M14	10.5	8				312B-11	3404-310
	PT 1/4	11	9				312B-20	3404-311

SIZE CONVERTER

ORDER NO.	TRANSFORMING SIZE	WIGHT	CODE NO.
TC312/TC820-AD	TC820 TO TC312	0.2	3404-461
TC820/TC1433-AD	TC1433 TO TC820	0.6	3404-462

● A collet is necessary for each tap shank diameter.

1PC \approx 0.28kg

Size	Thread	Tap Shank		$\varnothing D1$	L_1	L_2	ORDER NO.	CODE NO.
		$\varnothing D$	\square					
TC820B (#2)	M7/M8	6.2	5	31	35	11	820B-01	3404-330
	M9/M10	7	5.5				820B-02	3404-331
	M11	8	6				820B-03	3404-332
	M12	8.5	6.5				820B-04	3404-333
	UNC 1/2	9	7				820B-05	3404-334
	M14	10.5	8				820B-06	3404-335
	PT 1/4	11	9				820B-07	3404-336
	UNC 5/8	12	9				820B-08	3404-337
	M16	12.5	10				820B-09	3404-338
	M17	13	10				820B-10	3404-339
	M18	14	11				820B-11	3404-340
	M20	15	12				820B-12	3404-341
	M22	17	13				820B-13	3404-342
	PT 1/2	18	14				820B-14	3404-343

1PC \approx 0.8kg

Size	Thread	Tap Shank		$\varnothing D1$	L_1	L_2	ORDER NO.	CODE NO.
		$\varnothing D$	\square					
TC1433B (#3)	M14/M15	10.5	8	48	55.5	14	1433B-01	3404-360
	PT 1/4	11	9				1433B-02	3404-361
	UNC 5/8	12	9				1433B-03	3404-362
	M16	12.5	10				1433B-04	3404-363
	M17	13	10				1433B-05	3404-364
	M18	14	11				1433B-06	3404-365
	M20	15	12				1433B-07	3404-366
	M22	17	13				1433B-08	3404-367
	PT 1/2	18	14				1433B-09	3404-368
	M24/M25	19	15				1433B-10	3404-369
	M26/M27	20	15				1433B-11	3404-370
	M28	21	17				1433B-12	3404-371
	UNC 1 1/8	22	17				1433B-13	3404-372
	M30	23	17				1433B-14	3404-373
	M32	24	19				1433B-15	3404-374
	M33	25	19				1433B-16	3404-375
	M34/M35	26	21				1433B-17	3404-376
	M36/M38	28	21				1433B-18	3404-377

Tap Shank Dimensions



For Tapping Chuck

FOR TAP	JIS		ISO		DIN 371		DIN 376	
Thread	∅d	□	∅d	□	∅d	□	∅d	□
M3	4	3.2	3.15	2.5	3.5	2.7	2.2	-
M4	5	4	4	3.15	4.5	3.4	2.8	2.1
M5	5.5	4.5	5	4	6	4.9	3.5	2.7
M6	6	4.5	6.3	5	6	4.9	4.5	3.4
M8	6.2	5	8	6.3	8	6.2	6	4.9
M10	7	5.5	10	8	10	8	7	5.5
M12	8.5	6.5	9	7.1			9	7
M14	10.5	8	11.2	9			11	9
M16	12.5	10	12.5	10			12	9
M18	14	11	14	11.2			14	11
M20	15	12	14	11.2			16	12
M22	17	13	16	12.5			18	14.5
M24	19	15	18	14			18	14.5
M27	20	15	20	16			20	16
M30	23	17	20	16			22	18
PT 1/8	8	6						
PT 1/4	11	9						
PT 3/8	14	11						
PT 1/2	18	14						
PT 5/8	20	15						
PT 3/4	2	17						

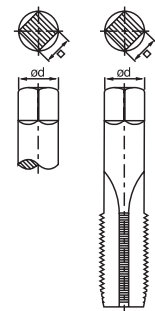
FOR TAP	JIS		ISO		DIN 371		DIN 376	
Thread	∅d	□	∅d	□	∅d	□	∅d	□
W 1/8"	4	3.2						
W 3/16"	5.5	4.5						
W 1/4"	6	4.5						
W 5/16"	6.1	5						
W 3/8"	7	5.5						
W 7/16"	8	6						
W 1/2"	9	7						
W 5/8"	12	9						
W 3/4"	14	11						
W 7/8"	17	13						
W 1"	20	15						

JIS STANDARD

METRIC THREAD	INCH THREAD	∅d	□
M3	W 1/8	4	3.2
M4 M4.5		5	4
M5 M5.5		5.5	4.5
M6	W 1/4	6	4.5
	W 5/16	6.1	5
M8 M7		6.2	5
M10 M9	W 3/8	7	5.5
M11	W 7/16	8	6
M12		8.5	6.5
	W 1/2	9	7
M14 M15	W 9/16	10.5	8
	W 5/8	12	9
M16		12.5	10
M17		13	10
M18	W 3/4	14	11
M20		15	12
M22	W 7/8	17	13
M24 M25		19	15
M27 M26	W1	20	15
M28		21	17
	W 1-1/8	22	17
M30		23	17
M32	W1-1/4	24	19
M33		25	19
M35 M34	W1-3/8	26	21
M36 M38		28	21
M39 M40	W1-1/2	30	23
M42	W1-5/8	32	26
M45	W1-3/4	35	26
M48	W1-7/8	38	29

JIS STANDARD PIPE THREAD

PT	PS	PF	∅d	□
1/8	1/8	1/8	8	6
1/4	1/4	1/4	11	9
3/8	3/8	3/8	14	11
1/2	1/2	1/2	18	14
		5/8	19	15
3/4	3/4	3/4	23	17
		7/8	24	19
1	1	1	26	21
	1 - 1/8	1 - 1/8	28	21
1 - 1/4	1 - 1/4	1 - 1/4	32	26
1 - 3/8	1 - 3/8	1 - 3/8	35	26
1 - 1/2	1 - 1/2	1 - 1/2	38	29



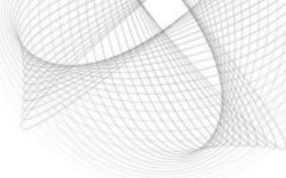


Mini Type Arm Type Air Tapping Unit

HIGH TORQUE HIGH EFFICIENCY EASY OPERATION



VERTEX



ACCESSORIES

- Air tapping spindle
- Parallel arm
- Table mounting column
- Air combination
- Choose any six safety clutch tapping adapters
- Radial jib
- Without stand plate
- Air pressure: 6~8 kgs/cm³
- VAT-08/12 series require: 5HP compressor
- VAT-16/20 series require: 10HP compressor

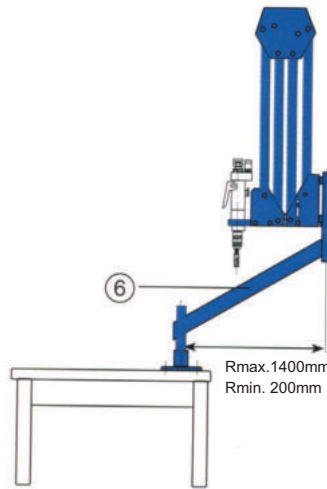
※Base not included

ORDER NO.	VAT-708	VAT-712	VAT-716	VAT-720	VAT-722	VAT-724
For Tap	M3~M8	M5~M12	M8~M16	M10~M20	M12~M22	M14~M24
	TC-312	TC-312	TC-820	TC-820	TC-820	TC-820
Speed (rpm)	630/700	350/400	250	200	200	100
Weight (kgs)	13.2	13.1	17.3	20.6	20.6	22.1
Work Range	Rmax 700mm					
CODE NO.	3404-410	3404-411	3404-412	3404-413	3404-413A	3404-413B



Small Arm Type Air Tapping Unit

HIGH TORQUE HIGH EFFICIENCY EASY OPERATION



※Base not included

ACCESSORIES

- Air tapping spindle
- Parallel arm
- Table mounting column
- Air combination
- Choose any six safety clutch tapping adapters
- Radial jib, increases arm reach by 500mm
- Without stand plate
- Air pressure: 6~8 kgs/cm³
- VAT-08/12 series require: 5HP compressor
- VAT-16/20 series require: 10HP compressor

ORDER NO.	VAT-1408	VAT-1412	VAT-1416	VAT-1420	VAT-1422	VAT-1424
For Tap	M3~M8	M5~M12	M8~M16	M10~M20	M12~M22	M14~M24
	TC-312	TC-312	TC-820	TC-820	TC-820	TC820
Speed (rpm)	700	400	250	200	200	100
Weight (kgs)	18.2	18.2	24.6	25.6	25.6	27.1
Work Range	Rmax 1400mm					
	Rmin 200mm					
CODE NO.	3404-415	3404-416	3404-417	3404-418	3404-418A	3404-418B

※VAT-1424 can be replaced by VAT-1624



Arm Type Air Tapping Unit

HIGH TORQUE HIGH EFFICIENCY EASY OPERATION



VERTEX®

WORK RANGE
1600X500m/m
RMAX. X MIN.



※Base not included

VAT-1608/1612/1616

VAT-1620/1622/1624

To solve all tapping problems

- Rapid positoning and high machining speed increase productivity.
- Lower tap damage rate, high thread accuracy.
- Tap shall never break for tapping through-hole or blind-hole.
- Tapping for heavier workpiece requires neither positioning equipments nor movement or large work area.
- Lower machining cost than that by CNC machine, drilling machine or manual tapping operation.
- Drilling to max: 6mm diameter
- Easy operation, no experience or strength required.
- Without stand plate.
- Air pressure: 6~8 kgs/cm³
- VAT-08/12 series require: 5HP compressor
- VAT-16/20 series require: 10HP compressor

Suggest collet size for standard acces



VAT-□□08 COLLET SIZE TC312-M3,M4,M5,M6*2,M8

VAT-□□12 COLLET SIZE TC312-M5,M6,M8*2,M10,M12

VAT-□□16 COLLET SIZE TC312/TC820

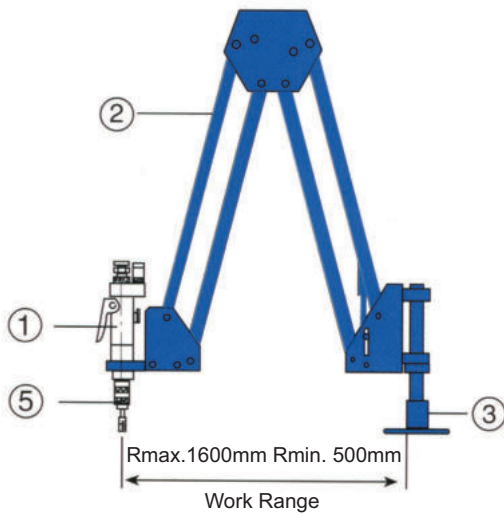
TC312-M8,M10
TC820-M10,M12,M14,M16

VAT-□□20 COLLET SIZE TC820-M10,M12,M14,M16,M18,M20

VAT-□□22 COLLET SIZE TC820-M12,M14,M16,M18,M20,M22

VAT-□□24 COLLET SIZE TC820-M14,M16,M18,M20,M22,M24

JIS & DIN376 Most Populared



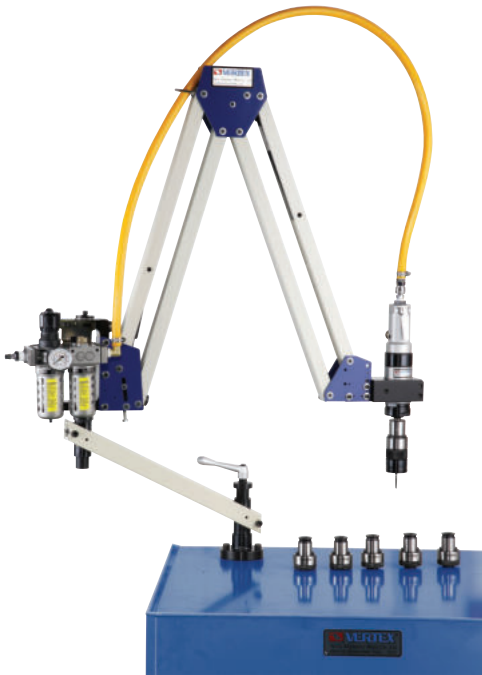
ORDER NO.	VAT-1608	VAT-1612	VAT-1616	VAT-1620	VAT-1622	VAT-1624
For Tap	M3~M8	M5~M12	M8~M16	M10~M20	M12~M22	M14~M24
	TC-312	TC-312	TC-820	TC-820	TC-820	TC-820
Speed (rpm)	700	400	250	200	200	100
Weight (kgs)	16.9	17	21.1	24.6	24.6	26.10
Work Range	Rmax 1600mm					
	Rmin 500mm					
CODE NO.	3404-420	3404-421	3404-422	3404-428	3404-428A	3404-428B

VAT-1608, 1612, 1616, 1620, 1622, 1624

STANDARD ACCESSORIES

- Air tapping spindle
- Parallel arm
- Table mounting column
- Air combination
- Choose any six safety clutch tapping adapters

Air Tapping Unit



※Base not included

STANDARD ACCESSORIES:

- Air tapping spindle
- Parallel arm
- Table mounting column
- Air combination
- Choose any six safety clutch tapping adapters
- Radial jib, increases arm reach by 500mm
- Without stand plate
- Air pressure: 6~8 kgs/cm³
- VAT-08/12 series require: 5HP compressor
- VAT-16/20 series require: 10HP compressor

ORDER NO.	VAT-1908	VAT-1912	VAT-1916	VAT-1920	VAT-1922	VAT-1924
For Tap	M3~M8	M5~M12	M8~M16	M10~M20	M12~M22	M14~M24
	TC-312	TC-312	TC-820	TC-820	TC-820	TC-820
Speed (rpm)	700	400	250	180/200	185/205	90/100
Weight (kgs)	19.7	23.9	23.5	26	28	28
Work Range	Rmax 1900mm					
	Rmin 200mm					
CODE NO.	3404-425	3404-426	3404-427	3404-430	3404-431	3404-431A

※VAT-1924 can be replaced by VAT-1624

Air Tapping Spindle

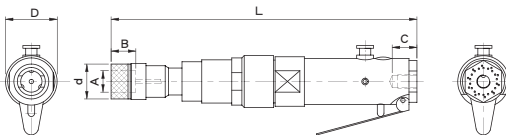


High torque, high efficiency for machining all tapping requirement. Light and handy main shaft design, easy operation.

The required pressure is 6.3kg/cm³=90 PSI.

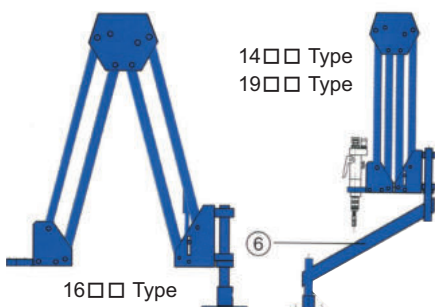
- SP08 & SP12 Required 5 HP compressor and more.
- SP16 & SP20 Required 10 HP compressor and more.
(must keep the air pressure at 6.3kg/cm²)

ORDER NO.	TAPPING CAPACITY	SPEED (rpm)	MOUNTING DIA.	WEIGHT (kgs)	CODE NO.
VAT-SP08	M3-M8	630/700	ø38.5 (1 1/2")	1.5	3404-432
VAT-SP12	M5-M12	350/400	ø38.5 (1 1/2")	1.5	3404-433
VAT-SP16	M8-M16	230/250	ø61.3 (2 13/32")	3.9	3404-434
VAT-SP20	M10-M20	180/200	ø61.3 (2 13/32")	3.9	3404-435
VAT-SP22	M12-M22	185/205	ø61.3 (2 13/32")	3.9	3404-435A
VAT-SP24	M14-M24	90/100	ø61.3 (2 13/32")	4.3	3404-435B



ORDER NO.	A	B	C	D	d	L	CODE NO.
VAT-SP08	19	30	22	46	32	263	3404-432
VAT-SP12	19	30	22	46	32	263	3404-433
VAT-SP16	31	48	27	65	50	360	3404-434
VAT-SP20	31	48	27	65	50	360	3404-435
VAT-SP22	31	48	27	65	50	360	3404-435A
VAT-SP24	31	48	27	65	50	395	3404-435B

Parallel Arm For Air Tapping Unit



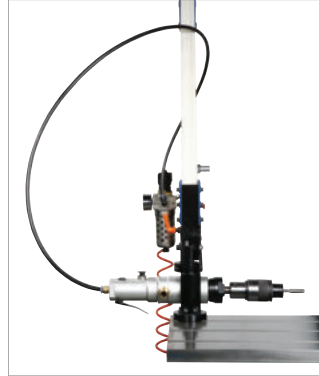
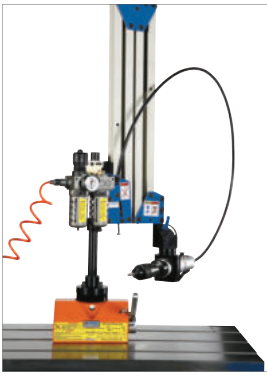
PARALLEL ARM

FOR THE AIR TAPPING UNIT

ORDER NO.	WEIGHT SP-08	WEIGHT SP-12	WEIGHT SP-16	CODE NO.
VAT-ARM700-SP [08, 12, 16]	12kgs	12kgs	14kgs	3404-436
VAT-ARM1400x200-SP [08, 12, 16]	17kgs	17kgs	18kgs	3404-437
VAT-ARM1600x500-SP [08, 12, 16]	17kgs	17kgs	18kgs	3404-438
VAT-ARM1900x200-SP [08, 12, 16]	19kgs	19kgs	20kgs	3404-439

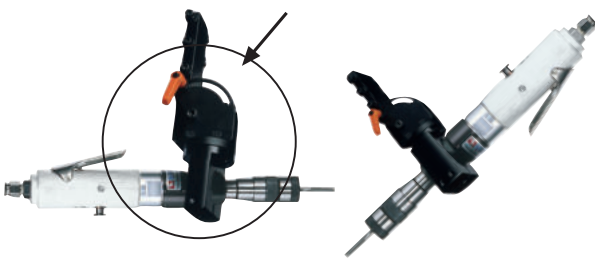


Adjustable Angle Head For Air Tapping Unit

**VERTEX**

ORDER NO.	FOR VAT-TYPE		WEIGHT (kg)	CODE NO.
AT08-90°	VAT-708 VAT-1408	VAT-1608 VAT-1908	1.1	3404-440
AT12-90°	VAT-712 VAT-1412	VAT-1612 VAT-1912	1.1	3404-441

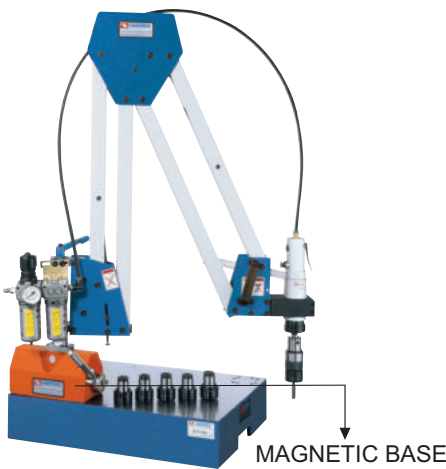
90° and Universal Degree



ORDER NO.	FOR VAT-TYPE		WEIGHT (kg)	CODE NO.
AT16-90°	VAT-716 VAT-1416	VAT-1616 VAT-1916	1.5	3404-442
AT20-90°	VAT-1920		1.5	3404-443
AT22-90°	VAT-1922		1.5	3404-444
AT24-90°	VAT-1924		1.5	3404-446



Magnetic Base For Air Tapping Unit

PORTABLE & MOVEABLE AIR TAPPING ARM

MAGNETIC BASE



ORDER NO.	Magnetic Base		suit For VAT-Type	Weight (kgs)	CODE NO.
	Holding Power	Dimension LXWXH(mm)			
VLM-300A	300kg	155x90x93	VAT-708, 712, 716 VAT-1408, 1412, 1416 VAT-1608, 1612, 1616	9.4	3404-450
VLM-600A	600kg	224x115x120	VAT-1920 VAT-1922	21.9	3404-451



Tapping Collet Adapter



Large Range Type For
Tap M3~M24, TC312,
TC-820, TC1433

This adapter is for transforming

This adapter allows the vat-tapping spindle to use smaller size.

Transforming the big tapping size to smaller one.

large range type for tap M3~M24, TC312, TC820, TC1433 COST SAVING! TIME SAVING!

SIZE CONVERTER

ORDER NO.	TRANSFORMING SIZE	WIGHT	CODE NO.
TC312/TC820-AD	TC820 TO TC312	0.2	3404-461
TC820/TC1433-AD	TC1433 TO TC820	0.6	3404-462



Mist Coolant System For Air Tapping Unit



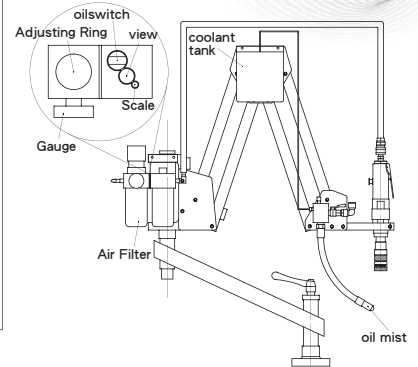
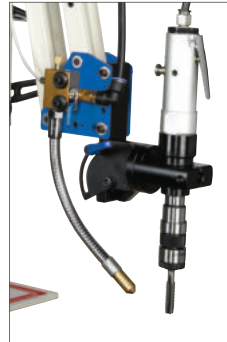
VERTEX

ORDER NO.VAC-08 CODE NO.3404-452

Without Oil



+

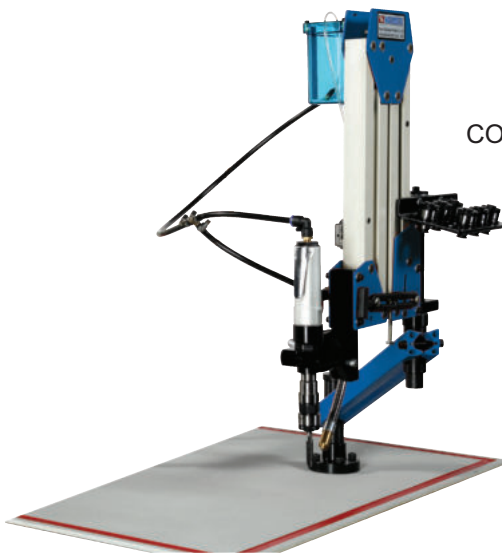


ENLARGE THE TAPPER LIFE 50%



Collet Rack For Air Tapping Unit

ORDER NO.VCR-08 CODE NO.3404-453

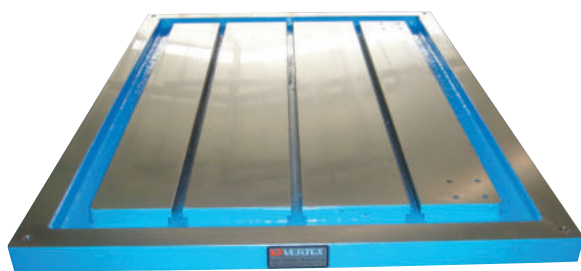


COLLET RACK

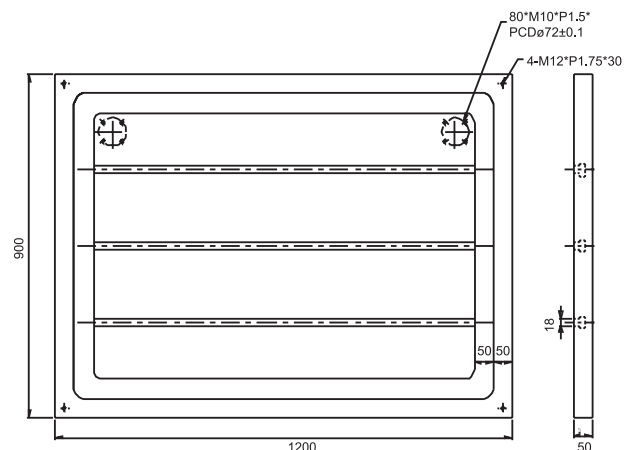


Working Table

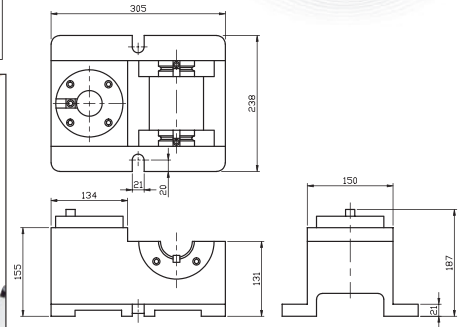
ORDER NO.VAT-912T CODE NO.3404-445



900x1200m/m 340kgs



Deluxe Type Tool Setting Stand



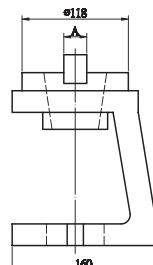
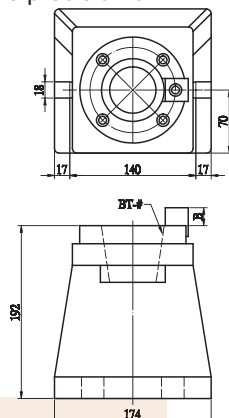
- This tool setting stand is one kind of subsidize tool for helping machine center to work efficiently. To be used fixing the tools on tool holder. It could avoid the method of using draw bar to fix (on machine center). It is safe, and doesn't effect the precision of machine's spindle.
- It's best for using on horizontal or vertical lines, simple & quick operations.
- A multi-function tool, it is changeable, has two kinds of specifications can be used. That is to say, one machine could be used as two sets machines.
- Additional special accessories to make your operating more convenient.
- CAT & SK share same model.

ORDER NO.	SHANK TAPERS		WEIGHT (kgs)	CODE NO.
	TOOL POST	ADAPTER HOLDING		
VTD-1	BT-#40x1	BT-#40x2	22.4	3405-001
VTD-2	BT-#50x1	BT-#50x2	22	3405-002
VTD-3	BT-#50x1	BT-#50x1 BT-#40x1	24	3405-003
VTD-4	BT-#40x1	BT-#50x1 BT-#40x1	24	3405-004
VTD-5	SK-40x1	SK-40x2	26	3405-005
VTD-6	SK-50x1	SK-50x2	24	3405-006
VTD-7	SK-50x1	SK-50x1 SK-40x1	25	3405-007
VTD-8	SK-40x1	SK-50x1 SK-40x1	25	3405-008
VTD-9	BT-30x1	BT-30x2	23	3405-009
VTD-10	SK-30x1	SK-30x2	23	3405-009A

Simple Type Tool Setting Stand

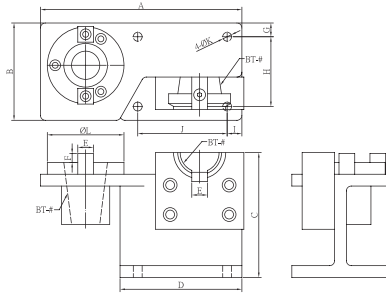


- This tool setting stand is one kind of subsidize tool for helping machine center to work efficiently. To be used fixing the tools on tool holder. It could avoid the method of using draw bar to fix (on machine center). It is safe, and doesn't effect the precision of machine's spindle.
- It is simple structive type. And could fix tooling on the above and hold the pull studs on the below of it. This is the excellent helping tools for simple, rapid and safe.



ORDER NO.	SHANK TAPERS	STD	WEIGHT (kg)	CODE NO.
VTS-BT-30	30	BT ISO NT	11.9	3405-010
VTS-BT-40	40		12.4	3405-011
VTS-BT-50	50		11.9	3405-012
VTS-SK-30	30	CAT DIN 69871A	13	3405-013
VTS-SK-40	40		12.4	3405-014
VTS-SK-50	50		12	3405-015

Tool Holder Locking Device



● BT&SK base size are the same.

ORDER NO.	STD	WEIGHT (KGS)	CODE NO.
VTG-BT30	ISO BT	4.1	3405-020
VTG-BT40		4.2	3405-021
VTG-BT50		11.8	3405-022
VTG-SK30	CAT SK DIN69871A	3.7	3405-023
VTG-SK40		4	3405-024
VTG-SK50		12.3	3405-025

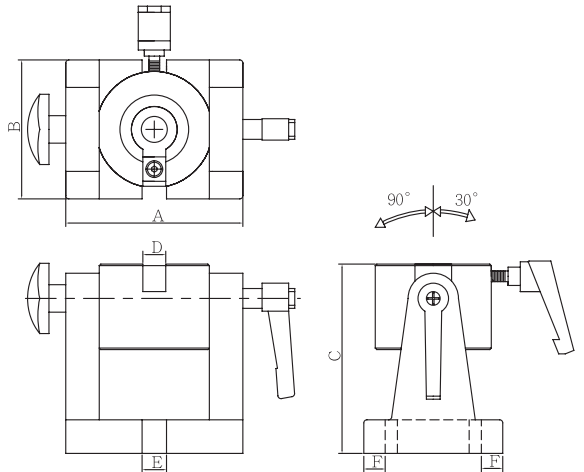
ORDER NO.	A	B	C	D	E	F	G	H	I	J	K	L	CODE NO.
VTG-BT30	205	99	127	124	15	10	16	71	15	91	9	78	3405-020
VTG-BT40	205	99	127	124	16	9	14	71	15	91	9	78	3405-021
VTG-BT50	282	152	203	162	25	16	22	108	25	115	9	115	3405-022

Tool Holder Locking Device

TILTING TYPE



Example Shank Not Included



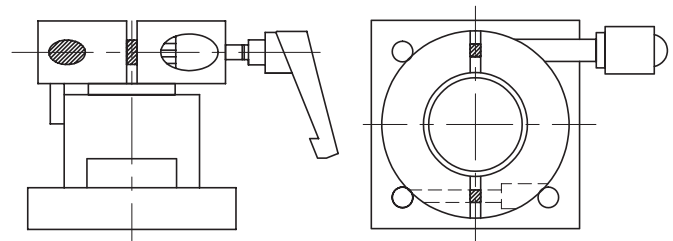
● BT&NT&SK base size are the same.

ORDER NO.	STD	WEIGHT (KGS)	CODE NO.
VTL-BT30	ISO BT	4.2	3405-030
VTL-BT40		4.3	3405-031
VTL-BT50		9.8	3405-032
VTL-SK30	DIN69871A	4	3405-033
VTL-SK40		4	3405-034
VTL-SK50		8	3405-035
VTL-NT30	NT	4.2	3405-036
VTL-NT40		4.3	3405-037
VTL-NT50		9.8	3405-038

ORDER NO.	A	B	C	D	E	F	CODE NO.
VTL-BT30	116	91	126	16	15	14	3405-030
VTL-BT40	117	91	136	16	15	14	3405-031
VTL-BT50	149	121	189	25	15	15	3405-032

Tool Holder Locking Fixtures

HSK TYPE



ORDER NO.	STD	WEIGHT (KGS)	CODE NO.
VTL-HSK40	DIN69893 HSK	2.5	3405-046
VTL-HSK50		3.5	3405-047
VTL-HSK63		4.5	3405-048



End Mill Sheath Rack

ORDER NO.VMS-2 CODE NO.3405-050



Material:ABS
with 62 sheaths.

Unit:mm

CAPACITY RANGE	SIZE	WEIGHT (kg)
Ø6~Ø42	205x205x80	0.4



End Mill Sheath Rack

ORDER NO.VMS-3 CODE NO.3405-051



Ø1.0~Ø10.0(Ø1.0,1.1~9.9,10.0)EACH0.1^{MM}
ONE POSITION
Ø10.5, 10.9, 11.0, 11.5, 11.9, 12.0, 12.5, 12.9,
13.0 TOTAL 100 POSITION FOR DRILL &
END MILL

Unit:mm

CAPACITY RANGE	SIZE	WEIGHT (kg)
Ø1.0~Ø13.0	Ø174x90 ^{mm} /m	0.21



Spindle Taper Wiper



- Easily and quickly for cleaning spindle hole.
- Plastic body, the taper wiper is made of special cotton material, will not damage the spindle.
- The BT & DIN of taper are same

ORDER NO.	TAPER NO.	TOTAL LENGTH	WEIGHT (kg)	CODE NO.
VTW-30	#30	168mm	0.07	3405-060
VTW-40	#40	185mm	0.08	3405-061
VTW-50	#50	240mm	0.02	3405-062



Spindle Taper Wiper



- Easily and quickly for cleaning spindle hole.
- Plastic body, the taper wiper is made of special cotton material, will not damage the spindle.
- The BT & DIN of taper are same
- Replaceable Wiper.
- Easy to replace new wipers.
- Included 2 sets x disposable wipers

ORDER NO.	TAPER NO.	TOTAL LENGTH	WEIGHT (kg)	CODE NO.
VTW-30R	#30	162mm	0.08	3405-065
VTW-40R	#40	180mm	0.09	3405-066
VTW-50R	#50	230mm	0.18	3405-067



Spindle Taper Wiper



H Type

ORDER NO.	TAPER NO.	TOTAL LENGTH	WEIGHT (kg)	CODE NO.
VTW-50H	HSK50	159mm	0.2	3405-071
VTW-63H	HSK63	167mm	0.2	3405-072



Tooling Carts

※COLOR MAY VARY

653W x 600D x 1460H mm

Features:

- Equipped with 8 adjustable sheath rack
- Max-load 200kgs
- Front and back 2 sides total allow up to 8 racks.
- Grey color



ORDER NO.	STD	TOOLING SHEATH CAPACITY	RACK	WEIGHT (kgs)	CODE NO.
VTT-1-HSK63	HSK-63	24 PCS/SET (HSK63)	4 adjustable sheath rack	51.45	3405-096
VTT-1-30	BT-30 DIN 69871A	32 PCS/SET (BT-30)		52.27	3405-097
VTT-1-40	BT-40 DIN 69871A	28 PCS/SET (BT-40)		52.22	3405-098
VTT-1-50	BT-50 DIN 69871A	20 PCS/SET (BT-50)		52.29	3405-099
ORDER NO.	STD	TOOLING SHEATH CAPACITY	RACK	WEIGHT (kgs)	CODE NO.
VTT-1-30A	BT-30 DIN 69871A	64 PCS/SET (BT-30)	8 adjustable sheath rack	63.74	3405-097A
VTT-1-40A	BT-40 DIN 69871A	56 PCS/SET (BT-40)		63.64	3405-098A
VTT-1-50A	BT-50 DIN 69871A	40 PCS/SET (BT-50)		63.78	3405-099A
VTT-1-HSK63A	HSK-63	48 PCS/SET (HSK63)		62.69	3405-099B

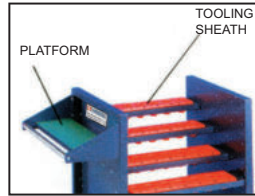


Tooling Trolleys

※ COLOR MAY VARY



ORDER NO.:VTT-2
WEIGHT:51kgs



ORDER NO.	STD	TOOLING SHEATH CAPACITY	CODE NO.
VTT-2-30	BT-30 DIN 69871A	32 PCS/SET	3405-100
VTT-2-40	BT-40 DIN 69871A	28 PCS/SET	3405-101
VTT-2-50	BT-50 DIN 69871A	20 PCS/SET	3405-102
VTT-2-HSK63	HSK63	24 PCS/SET	3405-103

Overall Size : 1002x650x810 mm
Grey color



ORDER NO.:VTT-5
WEIGHT:64kgs
WITH 2 DRAWERS

ORDER NO.	STD	TOOLING SHEATH CAPACITY	CODE NO.
VTT-5-30	BT-30 DIN 69871A	32 PCS/SET	3405-110
VTT-5-40	BT-40 DIN 69871A	28 PCS/SET	3405-111
VTT-5-50	BT-50 DIN 69871A	20 PCS/SET	3405-112
VTT-5-HSK63	HSK63	24 PCS/SET	3405-113

Overall Size : 1002x650x810 mm
Grey color



ORDER NO.:VTT-6
WEIGHT:53kgs
WITH 1 DRAWERS

ORDER NO.	STD	TOOLING SHEATH CAPACITY	CODE NO.
VTT-6-30	BT-30 DIN 69871A	32 PCS/SET	3405-105
VTT-6-40	BT-40 DIN 69871A	28 PCS/SET	3405-106
VTT-6-50	BT-50 DIN 69871A	20 PCS/SET	3405-107
VTT-6-HSK63	HSK63	24 PCS/SET	3405-108

Overall Size : 1002x650x810 mm
Grey color



Tooling Sheath Rack

THE BT & DIN OF TAPER ARE SAME.

※ COLOR MAY VARY



SIZE
595mm(L)
143mm(W)
225mm(H)

ORDER NO.	WEIGHT(kgs)	TOOLING SHEATH CAPACITY	CODE NO.
VTTTR-BT-30	3.8	8 PCS	3405-120
VTTTR-BT-40	3.7	7 PCS	3405-121
VTTTR-BT-50	3.7	5 PCS	3405-122
VTTTR-HSK63	3.7	6PCS	3405-123



Tooling Sheath

※ COLOR MAY VARY



THE BT & DIN OF TAPER ARE SAME.

ORDER NO.: VTTTS-BT-30
WEIGHT:0.077kg

CODE NO. 3405-130
SIZE: 48 X 138 X 65mm

ORDER NO.: VTTTS-BT-40
WEIGHT:0.085kg

CODE NO. 3405-131
SIZE: 63 X 138X 74mm

ORDER NO.: VTTTS-BT-50
WEIGHT:0.123kg

CODE NO. 3405-132
SIZE: 93 X 138X 104mm





Tool Presetter

ORDER NO.TP-3040E CODE NO.3405-400



TP-3040E ECONOMICAL-TYPE TOOL PRESETTER

- Z axis is provided the Square Carriage and treated by special scratch.
- The base of X axis is provided the Dove Tail Slot which is grind and treated by special scratch to ensure the durability of parallelism.
- Spindle sizes can be changed by using different sleeves(BT#50,#40,#30) to inspect different sizes of tools. The tool presetter of standard sleeve is BT-50
- The optional sleeve is O.D. BT-50 x I.D. BT-40 and O.D. BT-50 x I.D. BT-30
- Digimatic Readout is provided to display the measuring size.

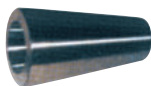
STANDARD ACCESSORIES

- Digimatic Readout (XxZ:200x450m/m)
- Test Arbor BT#50(DxL:50x250mm)
- Dial Gauge (2 sets) 0.01mm
- Protective Dust-Resistance Plastic Cover



OPTIONAL ACCESSORIES

1.SLEEVE



ORDER NO.	SIZE	CODE NO.
S50-40	BT-50XBT-40	3405-410
S50-30	BT-50XBT-30	3405-411

2.TEST ARBOR



ORDER NO.	SIZE	CODE NO.
A50	BT-50	3405-412
A40	BT-40	3405-413
A30	BT-30	3405-414

SPECIFICATIONS

Range of measurement	D:300m, L:400mm
Graduation	Xaxis:0.01 mm
	Zaxis:0.01 mm
Machine Size (LxWxH)	662x222x862 mm
G.W	135kgs



Tool Presetter

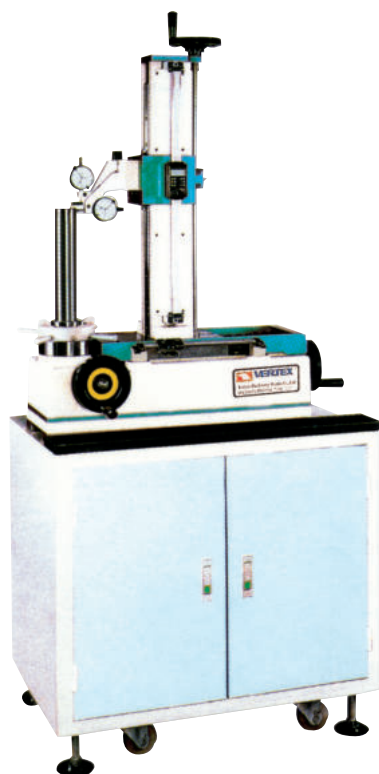
ORDER NO.TP-3040 CODE NO.3405-401

TP-3040 DELUXE-TYPE TOOL PRESETTER

- The Z spindle use Swiss made non-pitch screw pole can quick move and minor adjustment. Move slightly and swiftly.
- The special equipment "Lock Up Setting" is installed around the spindle to reduce the aberration when measuring.
- Spindle sizes can be changed by using different sleeves to inspect different sizes of tools..
- The standard of sleeve is BT-50, the optional is O.D. BT-50 x I.D. BT-40, O.D. BT-50 x I.D. BT-30
- Germany Digimatic Readout is provided on X axis to display the measuring number.
- Ball Screw bearing Unit is provided on X axis to increase the accuracy.
- Tapered Bearing Units is provided on Z axis for making movement more smoothly.
- Precision Linear Guide is provided on Z axis for wear-resistance and long-term accuracy.

STANDARD ACCESSORIES

- Digimatic Readout (XxZ:200x450m/m)
- Test Arbor BT#50(DxL:50x250mm)
- Cabinet
- Dust-Resistance Plastic Cover



SPECIFICATIONS

Range of measurement	D:300m, L:400mm
Graduation	Xaxis:0.01 mm
	Zaxis:0.01 mm
Size(LxWxH)	
Machine	662x222x860 mm
Cabinet	650x500x760 mm
Weight	
Machine	110kgs
G.W	135kgs



Tool Cabinet

ALL THE OVERALL SIZE IS WITH WHEELS HEIGHT.

※ COLOR MAY VARY



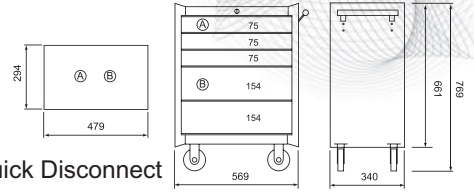
5 Drawers Roll Cabinet

Cuft: 6.9'

Net Weight: 31.3 kgs

Gross Weight: 34 kgs

- Ball bearing slide with Quick Disconnect
- Heavy Duty 4"x1" Caster
- Double wall construction
- Electro - Powder Coating to Resist Scratch & solvent markings
- 10mm Top Mat
- All drawers appended to Drawer Liners
- Grey color



ORDER NO.	CODE NO.
VTC-23	3405-144

570WX345DX650Hmm

	mm		
	W	D	H
DRAWERS	480	292	75
DRAWERS	480	292	154



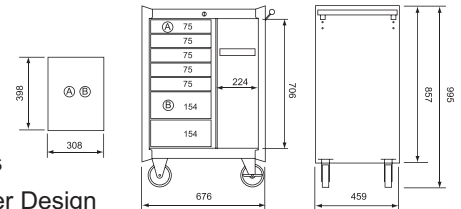
8 Drawers Roll Cabinet

Cuft: 13'

Net Weight: 67.9 kgs

Gross Weight: 77.5 kgs

- Ergonomic Large Drawer Design
- Ball bearing slide with Quick Disconnect
- Heavy Duty 5"x2" Caster
- Double wall construction
- Electro - Powder Coating to Resist Scratch & solvent markings
- 10mm Top Mat
- All drawers appended to Drawer Liners
- Grey color



ORDER NO.	CODE NO.
VTC-25	3405-149

680WX460DX830Hmm

	mm		
	W	D	H
DRAWERS	308	395	75
DRAWERS	308	395	154



Tooling Trolleys

ORDER NO.VTC-100 CODE NO.3405-154

※ COLOR MAY VARY

NEW



WxDxH	873x500x880 mm
Package	1PC/1CTN/2.73CUFT
N.W.	23.91KGS
G.W.	25.90KGS

- Grey color

Workbench



NEW

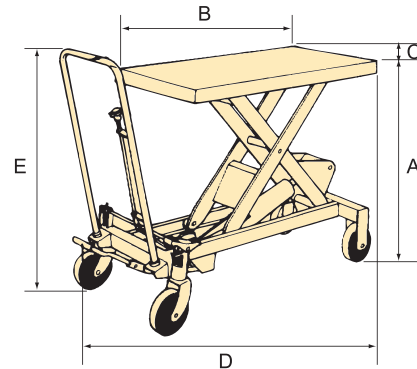


ORDER NO.VWB-1580 CODE NO.3405-158
 SIZE : 1500W x 750D x 800H mm

DESCRIPTION	W	D	H	N.W.	G.W.	CUFT
OVERALL	1500	750	800	69.7	74.04	4.68

Hydro Lift Table

NEW

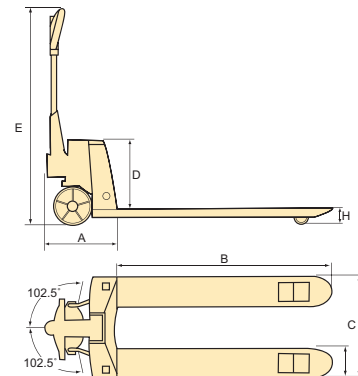


WITHOUT WOODEN CASE

ORDER NO.	A		B	C	D	E		Wheel	Brake Wheel	Load Capacity kgs	Weight	CODE NO.
	MAX. High From The Floor	MIN. Low From The Floor	Worktable Length	Worktable Width	Overall Length	Handle Bar High From The Floor	Overall Width					
VLT-300	900	270	815	500	1020	960	500	127 x 38	1	300	72	3405-170

Hydro Pallet Trolleys

NEW



WITHOUT WOODEN CASE

ORDER NO.	Overall Length	Overall Height	Body (Not Include Fork)	The Fork Surface width	Fork width	Fork Length	Fork Wide	MAX. Fork	MIN. Fork High From The Floor	Load Capacity kgs	Weight Kgs	CODE NO.
HPT-20NS	1300	1200	390	160	520	910	200	200	85	2000		3405-181
HPT-20NM	1460	1200	390	160	520	1070	200	200	85	2000		3405-182
HPT-20WL	1610	1200	390	160	685	1220	365	200	85	2000		3405-183



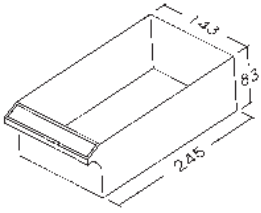
Parts Cabinet

※ COLOR MAY VARY

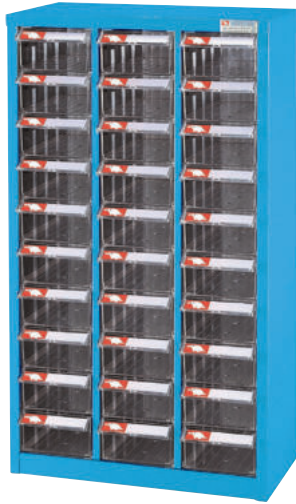


VERTEX®

GREY COLOR

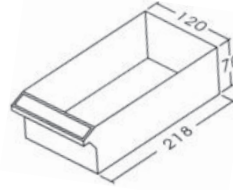


THE SIZE OF DRAWER
245D x 143W x 83H (m/m)



ORDER NO. VA6-212H

ORDER NO. VA6-330H



THE SIZE OF DRAWER
218D x 120W x 70H (m/m)



ORDER NO. VA7-324P



ORDER NO. VA7-448P

ORDER NO.	SIZE (m/m)	METAL	DRAWER NUMBERS	WEIGHT(kgs)	CODE NO.
	W x D x H				
VA6-212H	362 x 265 x 571	STEEL PLATE COVER WITH ZINC. Drawer material: GPS	12PCS	10.8	3405-200
VA6-330H	533 x 264 x 937		30PCS	25.3	3405-201
VA7-324P	440 x 222 x 642		24PCS	15.5	3405-202
VA7-448P	586 x 222 x 937		48PCS	27.5	3405-203
VA1-525	586 x 222 x 350		25PCS	10	3405-204
VA1-575	586 x 222 x 937		75PCS	32.3	3405-205



Tool Box

※ COLOR MAY VARY

● COMES IN DIFFERENT COLOR



ORDER NO. VTB-102

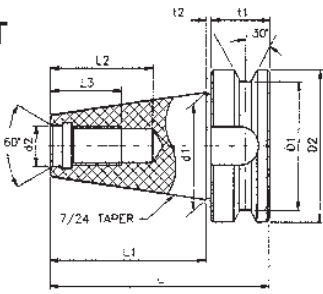


ORDER NO. VTB-901



ORDER NO.	SIZE (m/m)	MATERIAL	WEIGHT(kg)	CODE NO.
	W x D x H			
VTB-102	420 x 235 x 180	ABS	1.9	3405-300
VTB-901	378 x 182 x 144		0.9	3405-301

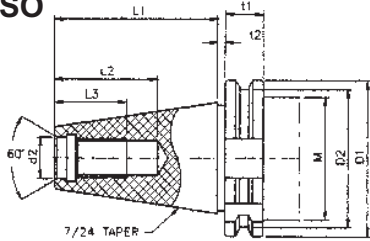
BT



MAS BT SHANK

SPECIFICATION	D1	D2	t1	t2	L1	L2	L3	L	d1	d2	G
BT30	46	38	20	2	48.4	34	24	70.4	31.75	12.5	M12
BT40**	63	53	25	2	65.4	70	30	92.4	44.45	17	M16
BT50**	100	85	35	3	101.8	90	45	139.8	69.85	25	M24

ISO

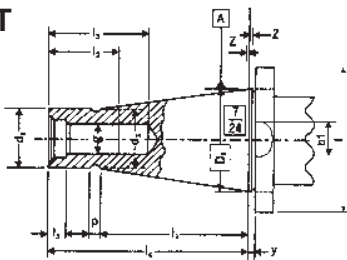


DIN 69871A SHANK

SPECIFICATION	D1	D2	t1	t2	L1	L2	L3	d1	d2	M	P	G
ISO 40	63.55	56.25	15.9	3.2	68.4	42.5	32	44.45	17	44.7	35	M16
ISO 50	97.5	91.25			101.75	61.5	47	69.85	25			70.1

*DRAW BAR DIN 69872 A TYPE

NT

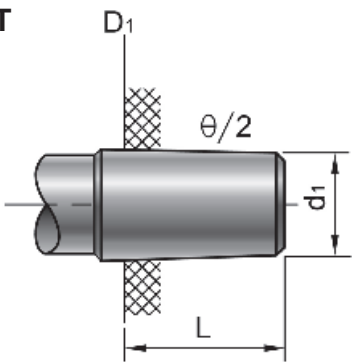


JIS B6101

TYPE	D1	Z	d1	d3	l	l1	p	y	g	l5	b1
NT30	31.750	0.4	17.4	16.5	68.4	48.4	3	1.6	M12, 1/2-12NC	6	16.1
NT40	44.450	0.4	25.3	24	93.4	65.4	5	1.6	M16, 5/8-11NC	8	16.1
NT50	69.850	0.4	39.6	38	126.8	101.8	8	3.2	M24, 1"-8NC	11.5	25.7

Drill Chuck Taper

JT



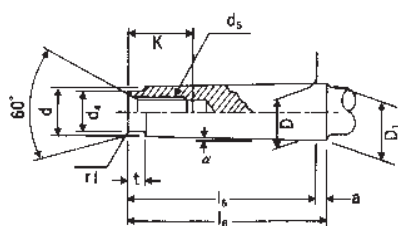
JACOBS TAPER

TYPE	θ /2 TAPER	D1	d1	L
JT0		6.35	5.802	11.12
JT1		9.754	8.469	16.669
JT2	2° 19'52"	14.199	12.386	22.225
JT33	1° 49'01"	15.850	14.237	25.400
JT6	1° 29'88"	17.170	15.852	25.400
JT3	1° 31'26"	20.599	18.951	30.956
JT4	1° 29'59"	28.550	26.346	42.069
JT5	1° 29'05"	35.890	33.422	47.625

DIN 238

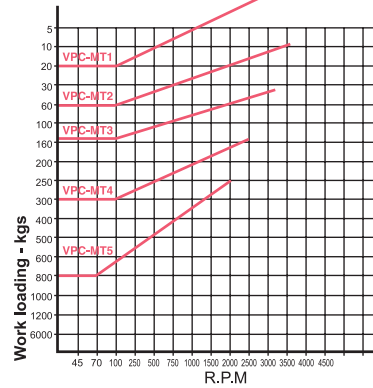
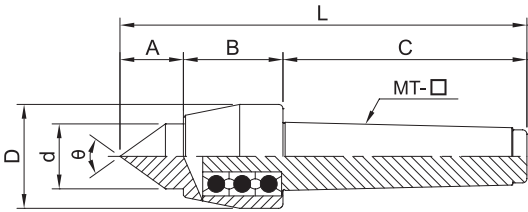
TYPE	θ /2 TAPER	D1	d1	L
B12	1° 25'43"	12.065	11.1	18.5
B16	1° 25'50"	15.733	14.5	24.0
B18	1° 25'50"	17.780	16.2	32.0

Morse Tper Shank MT



TYPE	D	a	D1	d	l5	l6	d4	d5
MT.0	9.045	3	9.2	6.4	50	53	6	-
MT.1	12.065	3.5	12.2	9.4	53.5	57	9	M6, 1/4-20NC
MT.2	17.780	5	18.0	14.6	64	69	14	M10, 3/8-16NC
MT.3	23.825	5	24.1	19.8	81	86	19	M12, 1/2-12NC
MT.4	31.267	6.5	31.6	25.9	102.5	109	25	M16, 5/8-11NC
MT.5	44.399	6.5	44.7	37.6	129.5	136	35.7	M20, 3/4-10NC
MT.6	63.348	8	63.8	53.9	182	190	51	M24, 1"-8NC

Light Duty Live Center



FOR VPC-TYPE

- Center is made of SCM420 alloy steel under heating treatment to provide higher rigidity (HRC60°±2°) and satisfied wear-resistance.
- Center is constituted by ball bearings assembly.
- Applicable to middle-speed & high-speed lathe with light load.

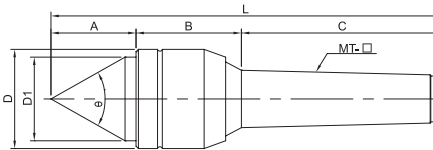
Unit:mm

ORDER NO.	A	B	C	D	D1	L	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VPC-MT1	21	31	56	32	16	108	0.005	3200	60°	0.3	115 x 136 x 38	5001-001
VPC-MT2	26	37	69	40	22	132	0.005	2800	60°	0.5	140 x 45 x 45	5001-002
VPC-MT3	32	46	86	45	26	164	0.005	2000	60°	0.9	170 x 50 x 52	5001-003
VPC-MT4	34	46	108	48	30	188	0.005	1800	60°	1.3	195 x 58 x 56	5001-004
VPC-MT5	50	62	136	68	45	248	0.005	1500	60°	3.2	268 x 86 x 77	5001-005

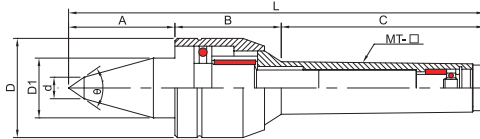
Live Lathe Center



A TYPE



B TYPE

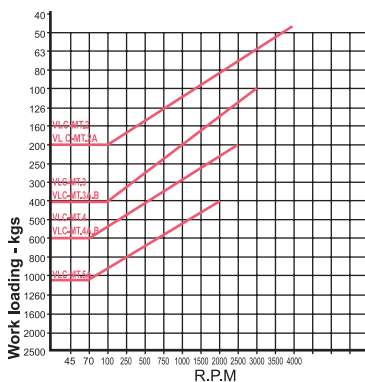


- Center shaft & main body is made of SCM420 alloy steel under heating treatment to provide higher rigidity (HRC60°±2°) and satisfied wear-resistance.
- Center is constituted by thrust ball bearing, needle roller bearings & ball bearings assembly.
- Applicable to middle-speed & high-speed lathe with heavy load.
- ※ B TYPE SUITABLE FOR SMALL -WORKPIECE MACHINING.

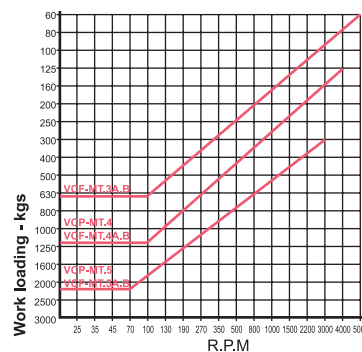
Unit:mm

ORDER NO.	TYPE	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VLC-212	MT2A	28	35	69	32	23	-	132	-	0.005	4000	60°	0.3	173 x 43 x 40	5001-010
VLC-213	MT3A	36	44	86	41	35	-	166	-	0.005	3000	60°	0.9	198 x 67 x 51	5001-011
VLC-214	MT4A	41	51	108	47	40	-	200	12	0.005	2500	60°	1.5	240 x 70 x 61	5001-012
VLC-215	MT5A	54	72	136	65	52	-	262	18	0.005	2000	60°	3.8	290 x 92 x 80	5001-013
VLC-213B	MT3B	46	44	86	41	25	10	176	-	0.005	3000	60°	0.9	198 x 67 x 51	5001-014
VLC-214B	MT4B	55	51	108	47	32	12	214	12	0.005	2500	60°	1.5	240 x 70 x 61	5001-015

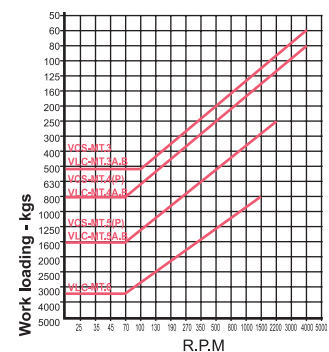
THE CHART FOR LOADING WEIGHT WITH R.P.M.



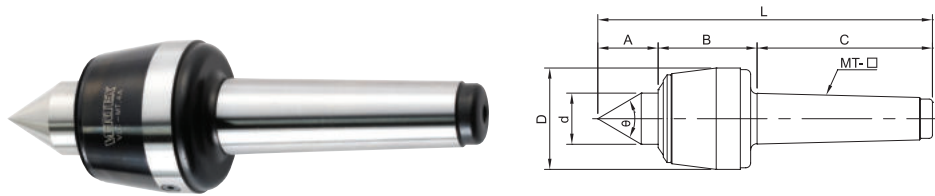
FOR VLC-TYPE



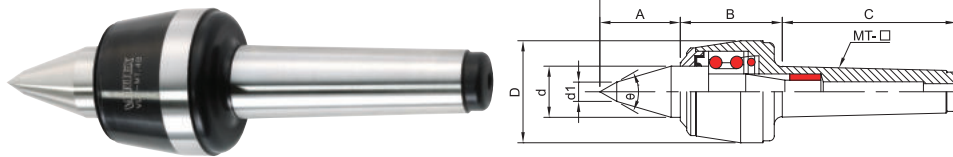
FOR VCF/VCP-TYPE



FOR VCS-TYPE



A TYPE



B TYPE

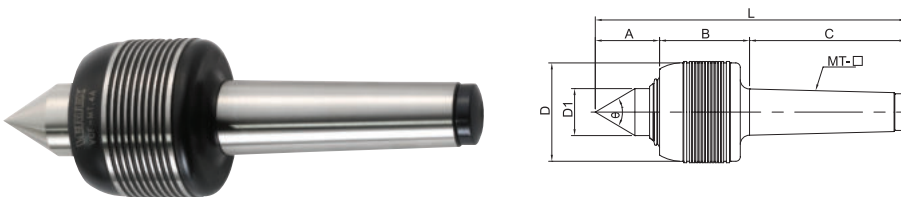
WATER-PROOF TYPE

- Center shaft is made of SUJ2 material under vacuum heating treatment to provide higher rigidity (HRC60°±2°) and satisfied wear-resistance.
- Center is constituted by dual ball bearing. Thrust bearing & needle roller bearing assembly.
- Applicable to high-speed lathe & NC lathe with heavy load water-proof.
- ※ B Type is applicable in the metal workings on small workpieces.

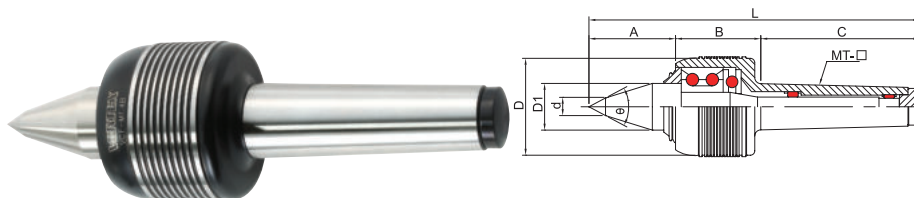
Unit:mm

ORDER NO.	TYPE	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VLC-MT3A	MT3A	39	55	86	53	30	-	180	12	0.005	4000	60°	1.3	240 x 70 x 61	5001-020
VLC-MT4A	MT4A	42	62	108	63	32	-	212	12	0.005	3000	60°	2.2	253 x 92 x 80	5001-021
VLC-MT5A	MT5A	57	71	136	83	40	-	264	18	0.005	2500	60°	4.5	303 x 108 x 101	5001-022
VLC-MT6A	MT6A	80	115	139	128	70	-	384	-	0.008	1500	60°	15.6	410 x 177 x 168	5001-023
VLC-MT3B	MT3B	45	55	86	53	30	10	186	12	0.005	4000	60°	1.4	240 x 70 x 61	5001-024
VLC-MT4B	MT4B	52	62	108	63	32	12	222	12	0.005	3000	60°	2.2	253 x 92 x 80	5001-025
VLC-MT5B	MT5B	67	71	136	83	40	14	274	18	0.005	2500	60°	4.5	303 x 108 x 101	5001-026

High-Load NC Live Center



A TYPE



B TYPE

- Shaft uses material SUJ2: through vacuum heat treatment, it is even more durable, hardness is as high as (HRC60°±2°) and satisfied wear-resistance.
- Front end is constituted by SKF angular contact ball bearing & thrust ball bearing. middle & rear ends are comprised of needle roller bearing assembly.
- These centers are suitable for NC lathe at high-speed & heavy-load operation, water-proof.
- ※ B Type is applicable in the metal workings on small workpieces.

Unit:mm

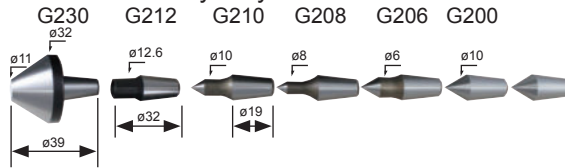
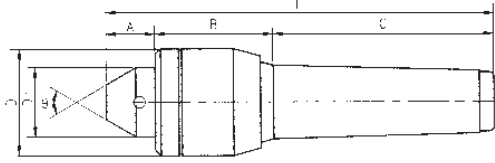
ORDER NO.	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VCF-MT3A	38	50	86	53	30	-	174	12	0.003	5000	60°	1.3	240 x 70 x 61	5001-030
VCF-MT4A	45	60	108	68	32	-	213	12	0.003	4500	60°	2.4	253 x 92 x 80	5001-031
VCF-MT5A	52	70	136	87	40	-	258	18	0.003	3000	60°	5	303 x 108 x 101	5001-032
VCF-MT3B	52	50	86	53	25	10	188	12	0.003	5000	60°	1.3	240 x 70 x 61	5001-033
VCF-MT4B	55	60	108	68	32	12	223	12	0.003	4500	60°	2.4	253 x 92 x 80	5001-034
VCF-MT5B	67	70	136	87	40	14	273	18	0.003	3000	60°	5	303 x 108 x 101	5001-035



Inter-changeable Points Live Center



- Complete set with 7 Interchangeable Points for various processing.
- Packed in plastic case.
- Accurating high accuracy and durability as well as complete rust-proof performance
- Center made of SCM420 special tool steel hardened and ground can be used for heavy duty work.



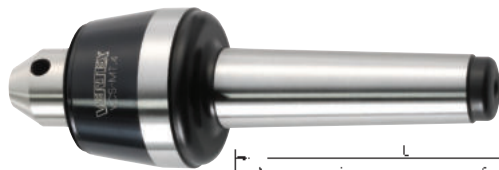
Unit:mm

ORDER NO.	TYPE	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VLC-312	MT2	22	36	69	32	25	-	127	-	0.008	4000	60°	0.9	166 x 105 x 63	5001-040
VLC-313	MT3	23	44	86	41	30	-	153	-	0.008	3000	60°	1.4	255 x 138 x 100	5001-041
VLC-314	MT4	23	51	108	47	32	-	182	-	0.008	2500	60°	2	255 x 138 x 100	5001-042

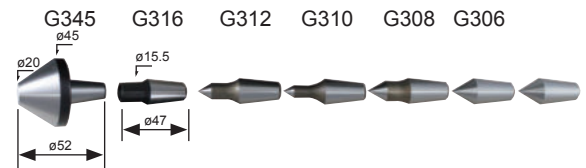
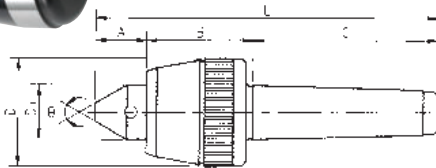


High Speed NC Interchangeable Points Live Center

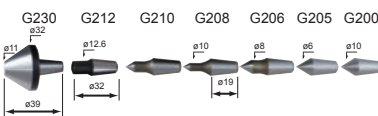
Water-Proof Type



- Center shaft is made of SUJ2 material under vacuum heating treatment to provide higher rigidity (HRC60°±2°) and satisfied wear-resistance.
- Center is constituted by dual ball bearing. Thrust bearing & needle roller bearing assembly.
- Applicable to high-speed lathe & NC leathe with heavy load, water-proof.



VCS-MT3, MT4



VCS-MT4P, MT5P

Unit:mm

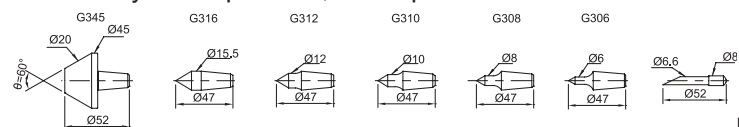
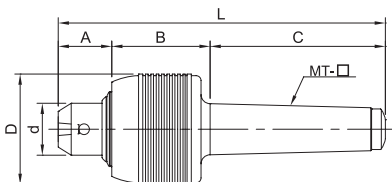
ORDER NO.	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VCS-MT3	28	55	86	53	30	-	167	-	0.008	4000	60°	1.8	255 x 138 x 100	5001-050
VCS-MT4	30	62	108	63	32	-	196	-	0.008	3500	60°	2.5	255 x 138 x 100	5001-051
VCS-MT4P	30	62	108	63	32	-	196	-	0.008	3500	60°	2.7	235 x 130 x 80	5001-052
VCS-MT5P	34	71	136	83	40	-	237	-	0.008	2500	60°	5.1	275 x 147 x 97	5001-053



High Load Interchangeable Points Live Center



- Shaft uses material SUJ2:through vacuum heat treatment, it is even more durable, hardness is as high as (HRC60°±2°) and satisfied wear-resistance.
- Front end is constituted by skf angular contact ball bearing & thrust ball bearing. middle & rear ends are comprised of needle roller bearing assembly.
- These centers are suitable for NC lathe at high-speed & heavy-load operation, water-proof.



Unit:mm

ORDER NO.	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VCP-MT4	35	60	108	68	32	-	203	-	0.005	4500	60°	3	253 x 130 x 80	5001-060
VCP-MT5	37	70	136	87	40	-	243	-	0.005	3000	60°	5.5	275 x 147 x 97	5001-061

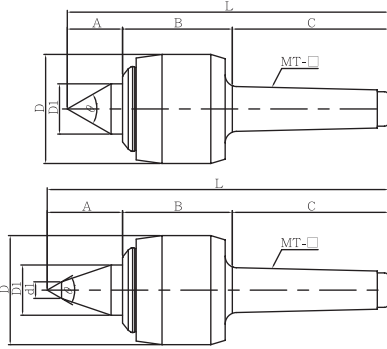
NEW EURO STYLE



A TYPE

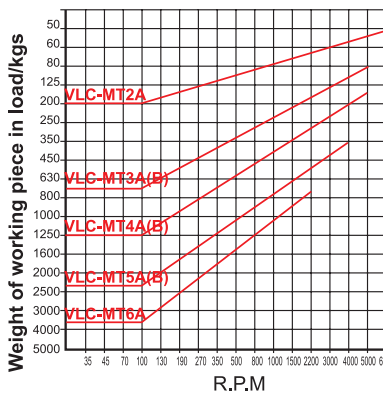


B TYPE



- Applicable to CNC lathes, can be used at high speed turning and with waterproof design.
- The shaft is made of alloy steel and through vacuum heat treatment HRC 60°±2°. It possesses high rigidity and high durability.
- The center uses the combination of roller bearing, thrust ball bearing and ball bearing.
※ B Type is applicable in the metal workings on small workpieces.

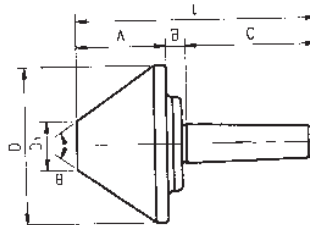
Unit:mm



ORDER NO.	TYPE	A	B	C	D	D1	L	D1	Accuracy	Speed Max. R.P.M	θ	G.W. weight	PACKING L x W x H	CODE NO.
VLC-512	MT2A	20	38	69	32	13	127	-	0.003	6000	60°	0.8	240x70x61	5001-062
VLC-513	MT3A	34	61	86	58	25	181	-	0.003	5200	60°	1.8	253x92x80	5001-063
VLC-514	MT4A	44	72	109	76	35	225	-	0.003	5000	60°	3.2	290x92x80	5001-064
VLC-515	MT5A	60	91	136	95	45	287	-	0.003	3500	60°	5.6	303x108x101	5001-065
VLC-513B	MT3B	45	61	86	58	25	192	10	0.003	5200	60°	1.8	290x92x80	5001-067
VLC-514B	MT4B	55	72	109	76	35	236	12	0.003	5000	60°	3.2	253x92x80	5001-068
VLC-515B	MT5B	70	91	136	95	45	297	14	0.003	3500	60°	6.0	303x108x101	5001-069

Bull Nose Pipe Center

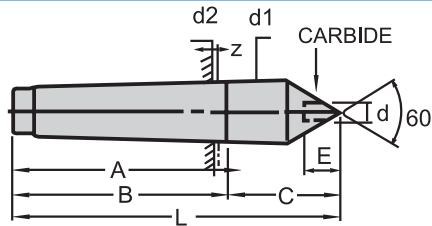
Pipe Center



HARDEN PROCESS : HRC50°
CONCENTRICITY : 0.005mm
ROUNDNESS : 0.005mm
MATERIAL : STEEL

Unit:mm

ORDER NO.	SIZE	A	B	C	D	D1	L	Speed Max. R.P.M.	θ	R.P.M.100 LOAD WEIGHT (KGS)	G.W. weight (KGS)	CODE NO.
VLC-433	MT3x3"	52	18	86	78	15	156	3300	60°	400	1.6	5001-070
VLC-434	MT3x4"	59	16	86	106	25	161	3000	70°	500	2.8	5001-071
VLC-443	MT4x3"	52	18	108	78	15	178	3300	60°	400	1.8	5001-072
VLC-444	MT4x4"	59	16	108	106	25	183	3000	70°	500	3.1	5001-073
VLC-445	MT4x5"	73	12	108	128	40	193	2000	70°	650	4.9	5001-074
VLC-446	MT4x6"	88	12	108	156	45	208	1900	70°	800	7.7	5001-075
VLC-448	MT4x8"	98	12	108	206	81	218	1500	75°	1300	15.4	5001-076
VLC-455	MT5x5"	73	12	136	128	40	221	2000	70°	650	5.8	5001-077
VLC-456	MT5x6"	88	12	136	156	45	236	1900	70°	800	8.6	5001-078
VLC-458	MT5x8"	98	12	136	206	81	246	1500	75°	1600	15.7	5001-079
VLC-468	MT6x8"	103	13	185	206	54	298	1800	75°	3000	15.8	5001-080

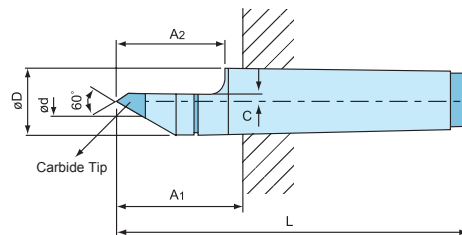


- K20 Carbide tipped-HRC 70°
- Hardened & precision ground.
- Concentricity within .0002" (0.005mm)
- DIN806

Unit:mm

ORDER NO.	SIZE	A	B	C	E	L	d2	d1	d	WEIGHT (KGS)	CODE NO.
VLC-112	MT-2	69	67	31	8	100	17.780	18.0	6	0.2	5001-090
VLC-113	MT-3	89	81	39	10	125	23.825	24.1	8	0.4	5001-091
VLC-114	MT-4	109	102.5	46	14	155	31.267	31.6	10	0.8	5001-092
VLC-115	MT-5	136	129.5	64	18	200	44.399	44.7	14	2.1	5001-093
VLC-116	MT-6	190	182	80	30	270	63.648	63.8	18	5.7	5001-094

NEW



- High precision
- Carbide tip
- DIN 806

ORDER NO.	SIZE	A1	A2	C	ØD	Ød	L	Weight (kgs)	CODE NO
VLC-120	MT3	69	63	4.0	24.1	11	150		5001-097
VLC-121	MT4	78	70	1.5	31.6	14	180		5001-098
VLC-122	MT4	78	70	4.0	31.6	14	180		5001-099

Work-Driving Center



VDK-15



VDK-23



VDK-32

- This Clamp-free center is comprised of excellent mechanical structure, nearly free of breakdown. main body & center shaft are made of SLD material under heating treatment(HRC62°). Driving is required for traditional lathe machining to prevent workpiece from stop. This clamp-free center with 6 T & 8T design on end surface is able to securely support workpiece surface to fulfill easy and rapid machining.

Unit:mm

ORDER NO.	Center Shaft Size	Outer Dia	Working Range	Weight (KGS)	CODE NO.
VDK-15-MT4	6ø	16ø	16ø-25ø	0.6	5001-100
VDK-23-MT4	8ø	23ø	23ø-32ø	0.7	5001-101
VDK-32-MT4	8ø	32ø	32ø-45ø	0.7	5001-102

Work-Driving Center-Changable Tips



SET STYLE



TAPER SLEEVE



STOPPER



CENTER

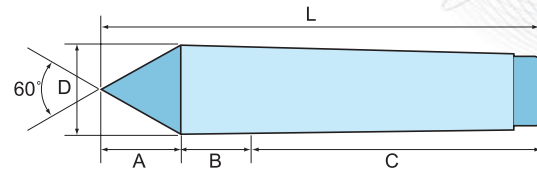
Unit:mm

ORDER NO.	Center Shaft Size	Stopper Outer Dia	Working Range	Weight (KGS)	CODE NO.
VDC-30-MT4	6ø, 8ø, 10ø	16ø, 23ø, 30ø	15ø-45ø	2.63	5001-106

NEW



- Suit for lathe & grinding machine
- Hardened & precision ground
- DIN806



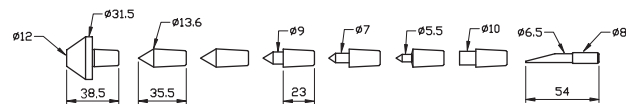
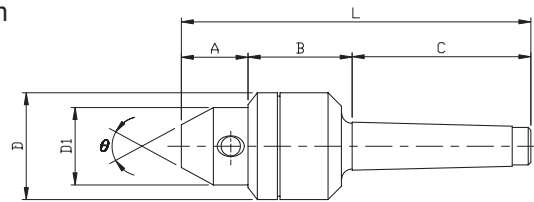
ORDER NO.	SIZE	A	B	C	D	L	Weight (kgs)	CODE NO
VLC-126	MT2	18	7	75	19	100	0.16	5001-111
VLC-127	MT3	24	10	91	25	125	0.34	5001-112
VLC-128	MT4	30	11	114	32	155	0.73	5001-113
VLC-129	MT5	39	16	145	46	200	1.9	5001-114
VLC-130	MT6	54	29	187	64	270	5.12	5001-115

Inter-Changeable Point Rolling Center

Economical Type

NEW

- 7 points / set
- Concentricity : $\pm 0.008\text{mm}$
- With high grade bearing



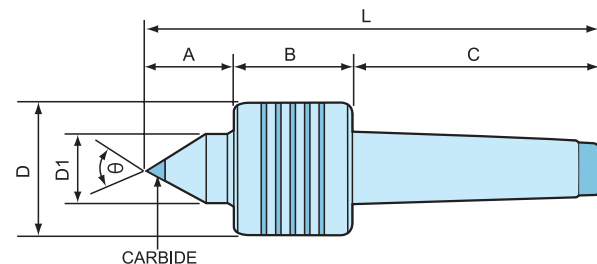
Unit:mm

ORDER NO.	TYPE	A	B	C	D	D1	L	Accuracy	Speed Max R.P.M	θ	G.W. Weight Kgs	CODE NO.
VLC-612	MT2	24	39	69	40	29	132	0.005	1800	60°	0.85	5001-121
VLC-613	MT3	24	43	91	46	30	158	0.005	1600	60°	1.1	5001-122
VLC-614	MT4	24	44	107	48	32	175	0.005	1600	60°	1.4	5001-123
VLC-615	MT5	25	64	138	63.5	35	227	0.005	1000	60°	3.8	5001-124

Live Lathe Center

NEW

- K20 carbide tipped, HRC 70°
- Hardened & precision ground
- Concentricity : $0.0002''$ (0.005mm)

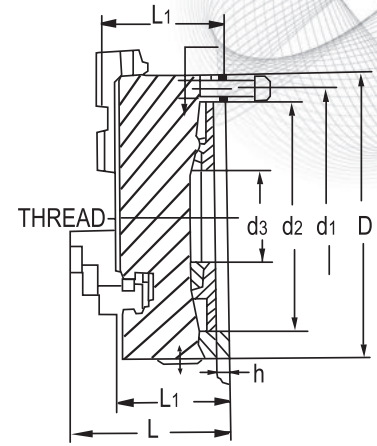
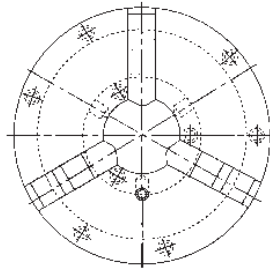
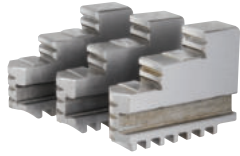


ORDER NO.	TYPE	A	B	C	D	D1	L	θ	G.W. weight kgs	CODE NO
VLC-172	MT2	32	40	72	41	25	144	60°	0.55	5001-131
VLC-173	MT3	34	45	88	45	30	167	60°	0.84	5001-132
VLC-174	MT4	34	45	109	45	30	188	60°	1.15	5001-133
VLC-175	MT5	50	61	134	68	45	245	60°	3.3	5001-134

3 Jaw Self Centering Chuck



2 Set of Solid Jaw. Plain Back



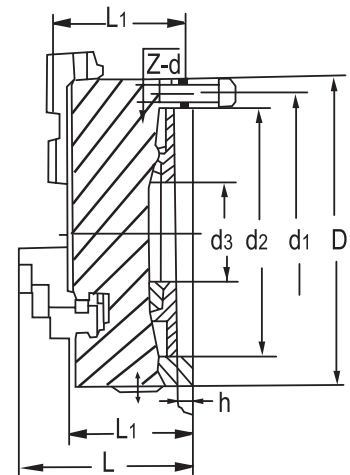
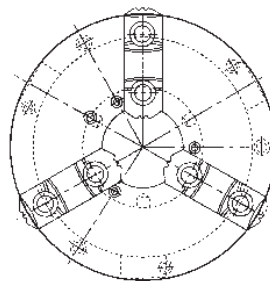
SPECIFICATIONS

Unit:mm

ORDER NO.	D-Size	d1	d2	d3	L	L1	h	THREAD	GRIPPING RANGE		WEIGHT (kgs)	CODE NO.
									O.D. RANGE	I.D. RANGE		
VSC-3A	80mm(3")	66	55	16	66	50	3.5	3-M6	Ø2-Ø70	Ø22-Ø63	2	5002-020A
VSC-4A	100mm(4")	84	72	22	74.5	55	3.5	3-M8	Ø2-Ø90	Ø30-Ø80	3.3	5002-021A
VSC-5A	130mm(5")	115	100	30	78	55	3.5	3-M8	Ø3-Ø130	Ø40-Ø120	5.8	5002-022A
VSC-6A	160mm(6")	142	130	45	95	65	5	3-M8	Ø3-Ø160	Ø55-Ø145	9	5002-023A
VSC-7A	190mm(7 1/2")	172	155	55	105	75	5	3-M10	Ø4-Ø190	Ø65-Ø190	15.1	5002-024A
VSC-8A	200mm(8")	180	165	70	109	75	5	3-M10	Ø4-Ø200	Ø65-Ø200	15.6	5002-025A
VSC-9A	240mm(9 1/2")	215	195	70	122.5	80	10	3-M12	Ø6-Ø250	Ø90-Ø250	26	5002-026A
VSC-10A	250mm(10")	225	206	80	120	80	5	3-M12	Ø6-Ø250	Ø90-Ø250	26.5	5002-027A
VSC-12A	315mm(12")	285	260	100	147.5	90	6	3-M16	Ø10-Ø315	Ø100-Ø315	47	5002-028A
VSC-16A	400mm(16")	368	340	130	173.5	100	6	3-M16	Ø15-Ø400	Ø120-Ø400	73	5002-029A
VSC-20A	500mm(20")	465	440	210	202	115	6	3-M16	Ø25-Ø500	Ø150-Ø500	121	5002-030A
VSC-25A	630mm(25")	595	560	260	194	130	7	3-M16	Ø50-Ø630	Ø170-Ø630	200	5002-031A

3 Jaw Powerful Self Centering Chuck

Reversible Top Jaws. Plain Back



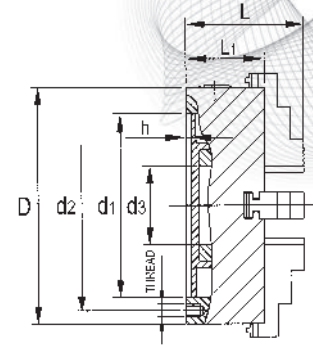
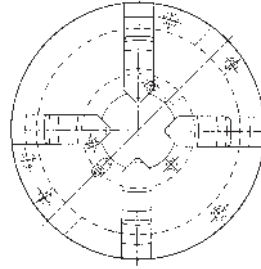
3 JAW SELF CENTERING CHUCK REVERSIBLE TOP JAWS. PLAIN BACK

SPECIFICATIONS

Unit:mm

ORDER NO.	D-Size	d1	d2	d3	L	L1	THREAD	GRIPPING RANGE		WEIGHT (kgs)	CODE NO.
								O.D. RANGE	I.D. RANGE		
VSK-6A	160mm(6")	142	130	45	95	71	3-M8	Ø3-Ø160	Ø55-Ø145	8.3	5002-040A
VSK-8A	200mm(8")	180	165	65	109	78	3-M12	Ø4-Ø200	Ø65-Ø200	16	5002-042A
VSK-10A	250mm(10")	226	206	80	120	84	3-M12	Ø6-Ø250	Ø90-Ø250	21.7	5002-043A
VSK-12A	315mm(12")	285	260	100	156.5	102.5	3-M16	Ø10-Ø315	Ø100-Ø315	41	5002-043B
VSK-13A	325mm(13")	296	272	100	154.5	102.5	3-M16	Ø11.5-Ø350	Ø110-Ø340	45.8	5002-044A
VSK-16A	400mm(16")	368	340	130	181.5	129.5	3-M16	Ø15-Ø400	Ø120-Ø400	75.5	5002-046A

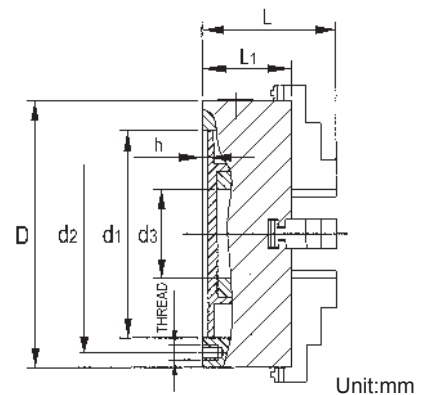
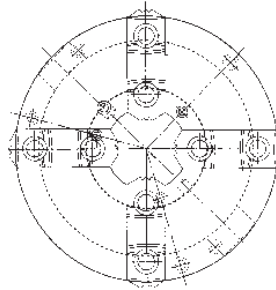
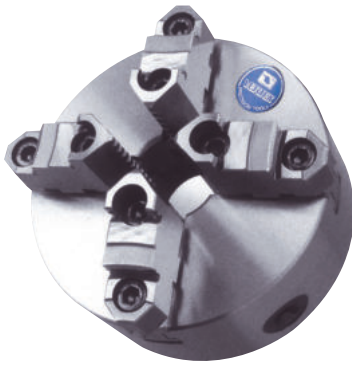
4 Jaw Self Centering Chucks



SPECIFICATIONS

ORDER NO.	D	d1	d2	d3	L	L1	h	THREAD	GRIPPING RANGE		WEIGHT (kgs)	CODE NO.
									O.D. RANGE	I.D. RANGE		
VPS-6A	165	130	145	45	94	65	5	3-M8	Ø4-Ø165	Ø55-Ø150	9.3	5002-050
VPS-7A	190	155	172	55	105	75	5	3-M10	Ø4-Ø190	Ø65-Ø190	13.8	5002-051
VPS-8A	200	165	180	65	109	75	5	3-M10	Ø4-Ø200	Ø65-Ø200	16.6	5002-052
VPS-10A	250	206	226	80	120	80	5	3-M12	Ø6-Ø250	Ø90-Ø250	28	5002-053
VPS-12A	315	260	285	100	147.5	90	6	3-M16	Ø10-Ø315	Ø100-Ø315	54	5002-054

4 Jaw Self Centering Chucks (2-Pieces Jaw)



SPECIFICATIONS

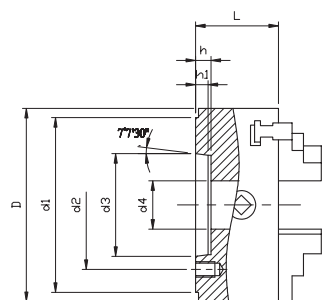
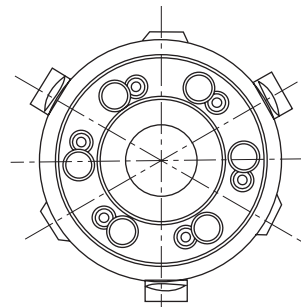
ORDER NO.	D	d1	d2	d3	L	L1	h	THREAD	GRIPPING RANGE		WEIGHT (kgs)	CODE NO.
									O.D. RANGE	I.D. RANGE		
VPS-6AK	165	130	145	45	109	65	5	3-M8	Ø4-Ø165	Ø55-Ø150	9.5	5002-055
VPS-8AK	200	165	180	65	122	75	5	3-M10	Ø4-Ø200	Ø65-Ø200	14.8	5002-057
VPS-10AK	250	206	226	80	136	80	5	3-M12	Ø6-Ø250	Ø90-Ø250	24.7	5002-058
VPS-12AK	315	260	285	100	156.5	90	6	3-M16	Ø10-Ø315	Ø100-Ø315	45.7	5002-059

3 Jaw Powerful Camlock Type Self-Centering Chuck

NEW



Ød2	
D1-4	143.06
D1-5	104.8
D1-6	133.4
D1-8	171.4
D1-11	235.0



ORDER NO.	D	MOUNTING TYPE	d1	d2	d3	d4	L	H1	h	THREAD	WEIGHT (kgs)	CODE NO.
VSKC-6A	160	D5	40	104.8	146	82.563	12	73	15	6-M12x1.0P	10	5002-111
VSKC-8A	200	D6	50	133.4	181	106.375	13	86	16	6-M16x1.5P	17	5002-112
VSKC-10A	250	D6	70	133.4	181	106.375	13	98	16	6-M16x1.5P	32	5002-113
VSKC-12A	315	D6	100	133.4	181	106.375	13	103.5	16	6-M16x1.5P	49	5002-114

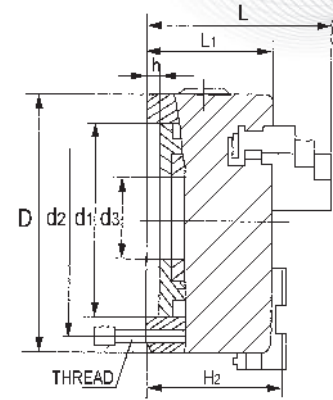
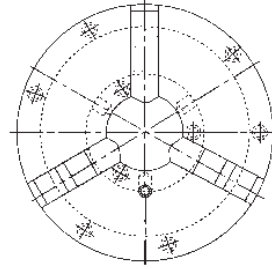
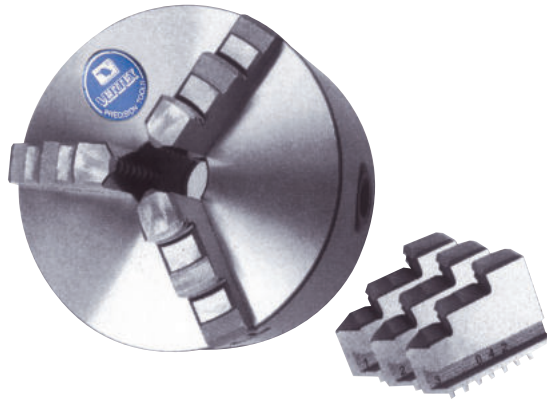


DIN-Type 3-Jaw Self-Centering Chucks



VERTEX

DIN 6350 Standard



It have front mounting type as well.

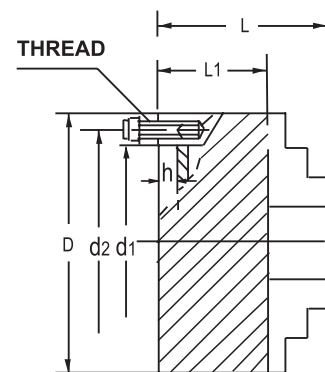
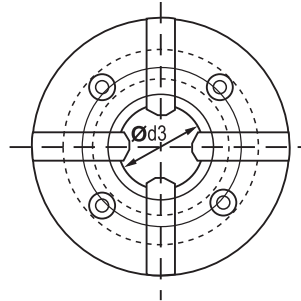
SPECIFICATIONS

Unit:mm

ORDER NO.	D	d1	d2	d3	L	L1	h	THREAD	R.P.M. MAX SPEED	GRIPPING RANGE		WEIGHT (kgs)	CODE NO.
										O.D. RANGE	I.D. RANGE		
VSC-3D	80	56	67	16	66.5	50	4	3-M6	4000	Ø2-Ø70	Ø22-Ø63	1.9	5002-215
VSC-4D	100	70	83	22	74.5	55	3	3-M8	3500	Ø2-Ø90	Ø30-Ø80	3.3	5002-216
VSC-5D	125	95	108	30	84.5	58	4	3-M8	3000	Ø2.5-Ø125	Ø38-Ø110	5.2	5002-217
VSC-6D	160	125	140	45	94	65	5	6-M10	2500	Ø3-Ø160	Ø55-Ø145	9.1	5002-218
VSC-8D	200	160	176	65	109	75	5	6-M10	2500	Ø4-Ø200	Ø65-Ø200	16	5002-219
VSC-10D	250	200	224	80	120	80	5	6-M12	1600	Ø6-Ø250	Ø90-Ø250	27.5	5002-219A



4-Jaw Independent Chuck Plain Back

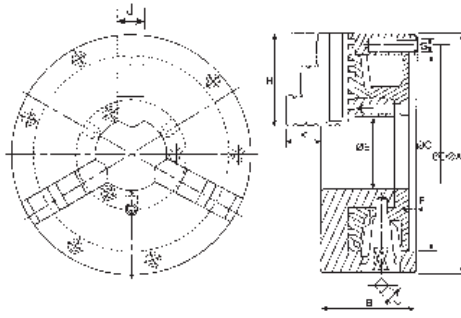


SPECIFICATIONS

Unit:mm

ORDER NO.	D-size	d1	d2	d3	L	L1	h	THREAD	R.P.M. MAX SPEED	GRIPPING RANGE		WEIGHT (kgs)	CODE NO.
										O.D. RANGE	I.D. RANGE		
VKC-4	100mm(4")	72	84	25	74	54	4.5	4-M8	2300	Ø6-Ø45	Ø40-Ø100	4	5002-220
VKC-5	125mm(5")	95	108	30	78	56			1900	Ø7-Ø57	Ø48-Ø125	5.1	5002-221
VKC-6	160mm(6")	65	95	45	93	65	5	4-M10	1500	Ø8-Ø80	Ø50-Ø160	8.3	5002-222
VKC-8	200mm(8")	75		56	107	75			1350	Ø10-Ø100	Ø63-Ø200	15.9	5002-223
VKC-10	250mm(10")	110	130	65	120	80	6	4-M12	1100	Ø15-Ø130	Ø80-Ø250	21.8	5002-224
VKC-12B	320mm(12")	140	165	95	134	90			850	Ø20-Ø176	Ø100-Ø315	43.8	5002-226
VKC-14	350mm(14")	130	168	125	143	95	8	4-M16	550	Ø20-Ø206	Ø100-Ø350	53.6	5002-227
VKC-16	400mm(16")	160	185						125	143	95	550	Ø25-Ø250
VKC-20	500mm(21")	200	236	160	161	106	8	4-M20	350	Ø35-Ø300	Ø125-Ø500	105	5002-229
VKC-25	630mm(25")	220	258	180	175	118			280	Ø50-Ø400	Ø160-Ø630	175	5002-230
VKC-32	800mm(32")	250	300	210	202	132	12	8-M20	200	Ø70-Ø540	Ø200-Ø800	300	5002-231
VKC-40	1000mm(40")	320	370	260	241	150			150	Ø100-680	Ø250-1000	536	5002-232
VKC-50	1250mm(50")	400	500	305	256	165	15	8-M20	150	Ø170-900	Ø250-1250	905	5002-233

3-Jaw Scroll Chuck

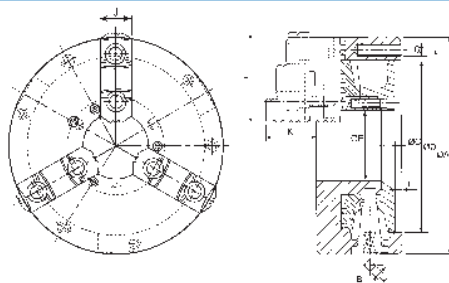


- Interchangeable utilization of internal and external hard jaws.
- VSC types feature economical and durable, suitable for mass production.
- Gripping accuracy of 0.03mm (0.012inch) T.I.R..
- The body is made of MEEHANITE. It is suitably used for high speed revolution and 3 times more durable than regular chucks.

SPECIFICATIONS

ORDER NO.	Dim											Allowable Handle Torque (kgf.m)	Gripping Force (kgf)	I (kgf.m)	Weight (kgs)	Max. Speed (r.p.m.)	Gripping Range		CODE NO.
	A	B	C	D	E	F	G	H	J	K	L						O.D. Range	I.D. Range	
VSC-3	85	46	60	73	16	4	3-M6	36	11	15	7	3.0	900	-	1.9	2500	Ø2-Ø70	Ø24-Ø64	5002-001
VSC-4	112	59	80	95	24	4.5	3-M8	42	14	17	8	4.5	1200	-	3.9	2500	Ø3-Ø90	Ø32-Ø84	5002-002
VSC-5	132	60	100	115	32	4.5	3-M8	50	16	20	8	6.5	1500	0.01	3.9	2500	Ø3-Ø110	Ø35-Ø100	5002-003
VSC-6	165	67	130	147	45	5	3-M10	63	19	23	10	9.0	3300	0.03	9.6	2000	Ø3-Ø160	Ø48-Ø150	5002-004
VSC-7	192	76.5	155	172	58	5	3-M10	77	21.5	28	11	11.0	3600	0.06	14.2	2000	Ø4-Ø180	Ø56-Ø170	5002-005
VSC-8	200	76.5	160	176	58	5	3-M10	77	21.5	28	11	11.0	3600	0.07	15.2	2000	Ø4-Ø180	Ø56-Ø170	5002-006
VSC-9	232	84	190	210	70	6	3-M12	87	24	34.5	12	15.0	3900	0.15	22.8	2000	Ø5-Ø220	Ø62-Ø210	5002-007
VSC-10	273	87	230	250	87	8.5	3-M12	98	28	39	12	19.5	4800	0.25	30.8	1800	Ø6-Ø260	Ø70-Ø250	5002-008
VSC-12	310	96	260	285	105	7	3-M12	110	30	45	14	21.0	5700	0.58	44.6	1800	Ø10-Ø300	Ø86-Ø290	5002-009
VSC-14	355	112	300	328	127	7	6-M12	132	35	50	15	23.0	4500	-	57.2	1500	Ø12-Ø350	Ø96-Ø230	5002-009A
VSC-16	405	122	345	375	145	8.5	3-M14	146	42	56	15	23.0	4500	1.75	102	1500	Ø14-Ø400	Ø100-Ø380	5002-010

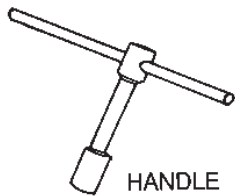
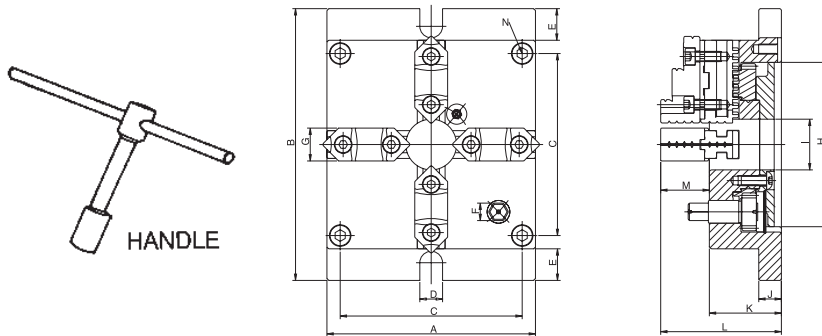
3-Jaw Powerful Scroll Chuck



- VSK types chucks have wider utilization range; hard jaws suitable for heavy cutting; optional soft jaws suitable for light and precision cutting.
- Hard jaws could be used as internal jaws and external jaws.
- Gripping accuracy of 0.03mm(0.012inch) T.I.R.
- The body is made of MEEHANITE. It is suitably used for high speed revolution and 3 times more durable than regular chucks.

SPECIFICATIONS

ORDER NO.	Dim											Allowable Handle Torque (kgf.m)	Gripping Force (kgf)	I (kgf.m)	Weight (kgs)	Max. Speed (r.p.m.)	Gripping Range		CODE NO.
	A	B	C	D	E	F	G	H	J	K	L						O.D. Range	I.D. Range	
VSK-4	112	58	80	95	24	4.5	3-M8	47	19	31.5	8	4.5	1200	-	3.45	2500	Ø3-Ø100	Ø35-Ø93	5002-028
VSK-5	132	60	100	115	32	4.5	3-M8	57	24	36	8	6.5	1500	-	5	2500	Ø3-Ø123	Ø43-Ø122	5002-029
VSK-6	165	67	130	147	45	5	3-M10	72	26	39	10	9.0	3300	0.03	9.5	2000	Ø8-Ø160	Ø55-Ø150	5002-030
VSK-7	192	76.5	155	172	58	5	3-M10	82	28	43	11	11.0	3600	0.06	13.8	2000	Ø8-Ø180	Ø62-Ø170	5002-031
VSK-8	200	76.5	160	176	58	5	3-M10	82	28	43	11	11.0	3600	0.07	14.7	2000	Ø8-Ø180	Ø62-Ø170	5002-032
VSK-9	232	84	190	210	70	6	3-M12	96	32	50	12	15.0	3900	0.16	22.1	2000	Ø11-Ø220	Ø70-Ø210	5002-033
VSK-10	273	87	230	250	87	8.5	3-M12	100	35	54.5	12	19.5	4800	0.26	29.5	1800	Ø12-Ø260	Ø80-Ø250	5002-034
VSK-12	310	96	260	285	105	7	3-M12	114	40	56	14	21.0	5700	0.58	41.8	1800	Ø15-Ø300	Ø90-Ø290	5002-035
VSK-14	355	112	300	328	127	7	6-M12	139	45	70.5	15	23.0	4500	-	60.7	1500	Ø25-Ø350	Ø110-Ø230	5002-035A
VSK-16	405	122	345	375	145	8.5	6-M14	150	50	75	15	23.0	4500	1.72	98	1500	Ø30-Ø470	Ø110-Ø380	5002-037



- Works are gripped firmly by the formed jaws, ensuring high precision. (Deviation: within 0.03mm)
* Use forming rings (jaw locks) to form the soft-jaws.
- Large workpieces can be held tight with the low profile vise body.
- Able to grip square works by using this chuck as a two-way jaw unit
* The fixed jaw(optional)is necessary. Longitudinal works can also be gripped by using the bore of this chuck.
- A dust cover is provided and this keeps the shavings from entering the machine.
- The handle is set on the face and does not interfere with the table. A number of chucks can be used together.

SPECIFICATIONS

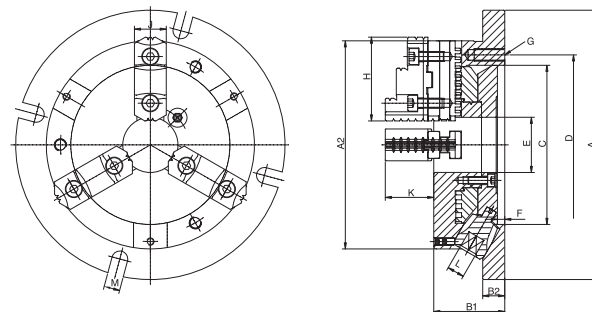
Unit:mm

ORDER NO.	A	B	C	D	E	G	H	I	J	K	L	M	N	MAX. GRIPPING DIAMETER		WEIGHT (kgs)	CODE NO.
														CLAMPING DIA	PROPING DIA		
VMJ-6	165	215	144	18	25	26	130	40	18	57	96	39	4-M10	Ø4-Ø128	Ø55-Ø128	13.5	5002-240
VMJ-8	200	250	174	18	25	28	160	55	20	65	108	43	4-M12	Ø5-Ø162	Ø62-Ø162	21.5	5002-241
VMJ-10	250	310	218	18	30	32	200	70	22	72	122	50	4-M14	Ø6-Ø200	Ø72-Ø200	36.1	5002-242
VMJ-12	310	380	274	22	35	40	260	100	25	85	141	56	4-M16	Ø10-Ø265	Ø90-Ø265	62.8	5002-243

Super Thin Chucks



- The angle between "HANDLE" AND "BASE OF CHUCK" is 30° degree, There Fore, it is much more convenient for "HANDLE" rotation.
- This "POWER SUPER THIN" design of chuck may increase the "allowable length" of machining operation.
- The flanged type design make it easily for loading and unloading operation.
- "POWERFUL TYPE" design, may be used with hard jaws or soft jaws alternatively.



SPECIFICATIONS

Unit:mm

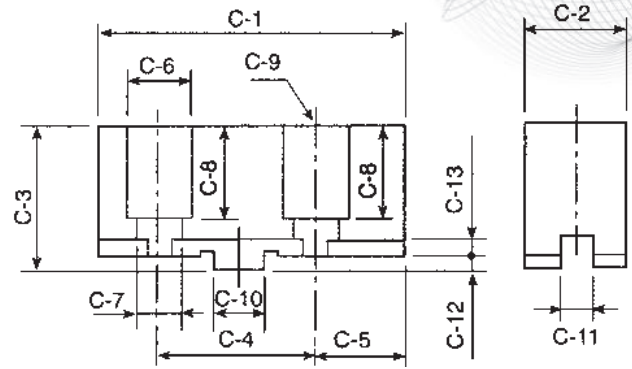
ORDER NO.	Dim														Weight (kgs)	Gripping Range		CODE NO.
	A1	A2	B1	B2	C	D	E	F	G	H	J	K	L	M		O.D. Range	I.D. Range	
VNBK-6	220	170	58	18	130	147	45	6	3-M10	68	26	40	10	13	12.4	Ø8-160	Ø48-150	5002-070
VNBK-8	270	210	65	20	155	172	60	6	3-M10	82	28	43	11	13	20.2	Ø11-200	Ø62-190	5002-071
VNBK-10	315	255	73	20	190	210	80	6	3-M12	93	32	52	12	16	30.5	Ø12-250	Ø72-240	5002-072
VNBK-12	370	305	80	22	250	285	105	5	3-M12	118	40	59	14	18	46.8	Ø15-300	Ø86-290	5002-073



Soft Jaw For SK-Type Chuck



1. Soft jaw for SK-type chuck.
2. Manufactured in specification
3. Can for Japanese brand 3 jaw chuck KITAGAWA, HOWA, VICTOR



Unit:mm

Dim ORDER NO.	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	Weight (kgs)	CODE NO.
VSJ-4	52	19	30	24	14	11	7	21	M6	9.53	7.94	2.5	3	0.45	5002-298
VSJ-5	62	24	35	32	15	14	9	24	M8	12.68	7.94	3	3.5	0.9	5002-299
VSJ-6	75	26	38	38.1	18	14	8.5	27	M8	12.68	7.94	3	3.5	1.3	5002-300
VSJ-7	95	31	48	44.45	25	17	11	35	M10	12.68	7.94	3	3.5	3.4	5002-301
VSJ-8	95	31	48	44.45	25	17	11	35	M10	12.68	7.94	3	3.5	2.7	5002-302
VSJ-9	110	37	50	53.98	28	19	13	36	M12	19.03	12.7	3	3.5	3.7	5002-303
VSJ-10	110	37	50	53.98	28	19	13	36	M12	19.03	12.7	3	3.5	3.7	5002-304
VSJ-12	125	40	54	63.5	32	19	13	40.5	M12	19.03	12.7	3	3.5	5.3	5002-305
VSJ-16	160	50	70	76.2	42	25	17	48	M16	19.03	12.7	6	5.5	10.6	5002-306

THE SPECIAL OF HEIGHT (C-3) FOR VSJ-TYPE IS AVAILABLE

ORDER NO.	MODEL	HEIGHT	CODE NO.
VSJ-6-5	VSJ-6	50H	5002-3005
VSJ-6-6	VSJ-6	60H	5002-3006
VSJ-6-7	VSJ-6	70H	5002-3007
VSJ-6-8	VSJ-6	80H	5002-3008
VSJ-8-5	VSJ-7 VSJ-8	50H	5002-3025
VSJ-8-6	VSJ-7 VSJ-8	60H	5002-3026
VSJ-8-7	VSJ-7 VSJ-8	70H	5002-3027
VSJ-8-8	VSJ-7 VSJ-8	80H	5002-3028
VSJ-9-5	VSJ-9	50H	5002-3035
VSJ-9-6	VSJ-9	60H	5002-3036
VSJ-9-7	VSJ-9	70H	5002-3037
VSJ-9-8	VSJ-9	80H	5002-3038
VSJ-9-9	VSJ-9	90H	5002-3039

ORDER NO.	MODEL	HEIGHT	CODE NO.
VSJ-9-10	VSJ-9	100H	5002-30310
VSJ-10-5	VSJ-10	50H	5002-3045
VSJ-10-6	VSJ-10	60H	5002-3046
VSJ-10-7	VSJ-10	70H	5002-3047
VSJ-10-8	VSJ-10	80H	5002-3048
VSJ-10-9	VSJ-10	90H	5002-3049
VSJ-10-10	VSJ-10	100H	5002-30410
VSJ-12-6	VSJ-12	60H	5002-3056
VSJ-12-7	VSJ-12	70H	5002-3057
VSJ-12-8	VSJ-12	80H	5002-3058
VSJ-12-9	VSJ-12	90H	5002-3059
VSJ-12-10	VSJ-12	100H	5002-30510



Soft Jaw Hydraulic Power Chucks

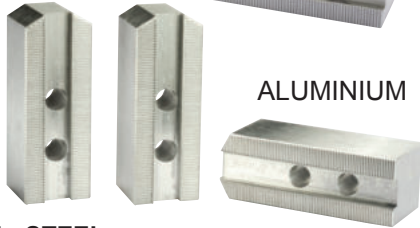


1. Soft jaw for CNC lathe.

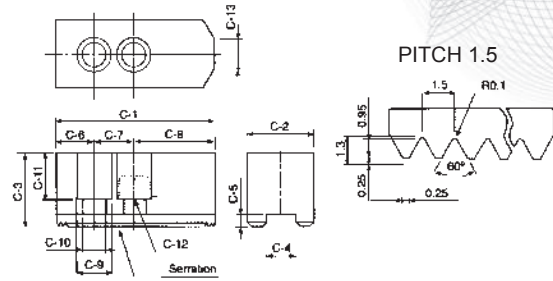
2. Can for Japanese brand 3 jaw chuck KITAGAWA, HOWA, VICTOR



STANDARD
3 PCS/SET



ALUMINIUM



MATERIAL: ALUMINIUM

ORDER NO.	SIZE	CODE NO.
VHC-8A	SAME VHC-8	5002-250
VHC-10A	SAME VHC-10	5002-251

MATERIAL: STEEL

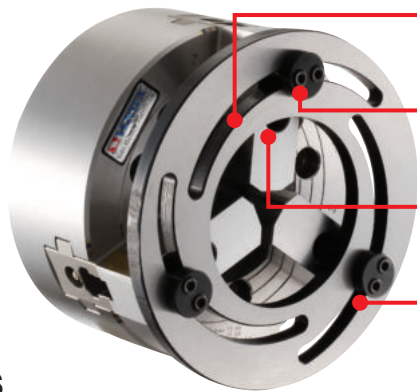
Unit: mm

Dim ORDER NO.	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	Weight (kgs)	CODE NO.
VHC-05	62	25	30	10	5	9	14	39	13.5	9	21	M8	5	0.9	5002-330
VHC-06	73	31	36	12	5	15	20	38	17	11	23	M10	14	1.6	5002-331
VHC-08	95	35	37	14	5	24	25	46	19	13	22	M12	16	2.4	5002-332
VHC-10	110	40	42	16	5	30	30	50	19	13	27	M12	18	3.7	5002-333
VHC-12	130	50	50	21	5	39	30	61	25	17	30	M16	23	6.4	5002-334
VHC-15	165	62	62	22	8	37	43	85	32	21	38	M20	-	12.7	5002-335
VHC-12-1	130	50	50	18	5	39	30	61	23	15	30	M14	23	6.25	5002-336
VHC-15-1	165	62	62	25.5	5	37	43	85	32	21	38	M20	-	13	5002-337
VHC-24	180	64	70	25	9	40	60	80	32	21	45	M20	-	17	5002-338

THE SPECIAL OF HEIGHT (C-3) FOR VHC-TYPE IS AVAILABLE

ORDER NO.	MODEL	HEIGHT	CODE NO.
VHC-05-5	VHC-05	50H	5002-3305
VHC-05-6	VHC-05	60H	5002-3306
VHC-05-7	VHC-05	70H	5002-3307
VHC-05-8	VHC-05	80H	5002-3308
VHC-06-5	VHC-06	50H	5002-3315
VHC-06-6	VHC-06	60H	5002-3316
VHC-06-7	VHC-06	70H	5002-3317
VHC-06-8	VHC-06	80H	5002-3318
VHC-08-5	VHC-08	50H	5002-3325
VHC-08-6	VHC-08	60H	5002-3326
VHC-08-7	VHC-08	70H	5002-3327
VHC-08-8	VHC-08	80H	5002-3328
VHC-10-5	VHC-10	50H	5002-3335
VHC-10-6	VHC-10	60H	5002-3336
VHC-10-7	VHC-10	70H	5002-3337
VHC-10-8	VHC-10	80H	5002-3338

ORDER NO.	MODEL	HEIGHT	CODE NO.
VHC-10-9	VHC-10	90H	5002-3339
VHC-10-10	VHC-10	100H	5002-33310
VHC-12-6A	VHC-12 18SLOT	60H	5002-33366
VHC-12-7A	VHC-12 18SLOT	70H	5002-33367
VHC-12-8A	VHC-12 18SLOT	80H	5002-33368
VHC-12-9A	VHC-12 18SLOT	90H	5002-33369
VHC-12-10A	VHC-12 18SLOT	100H	5002-333610
VHC-12-6	VHC-12 21SLOT	60H	5002-33346
VHC-12-7	VHC-12 21SLOT	70H	5002-33347
VHC-12-8	VHC-12 21SLOT	80H	5002-33348
VHC-12-9	VHC-12 21SLOT	90H	5002-33349
VHC-12-10	VHC-12 21SLOT	100H	5002-333410
VHC-15-7	VHC-15	70H	5002-33357
VHC-15-8	VHC-15	80H	5002-33358
VHC-15-9	VHC-15	90H	5002-33359
VHC-15-10	VHC-15	100H	5002-333510



- The size can be adjusted against the helical slot.
- Bias pin can be rotated 180 degree for different size to extend a clamping range.
- Don't need to drill new hole. The hole on the soft jaws can be used directly for bias pin.
- The material, which is hardened and ground, can last for a long time.

FAETURES

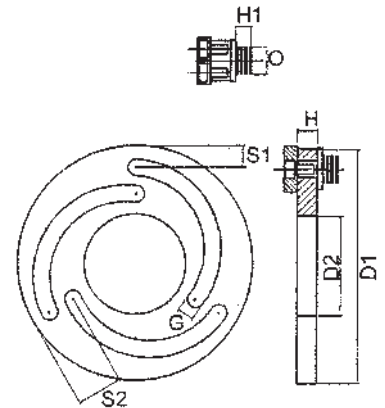
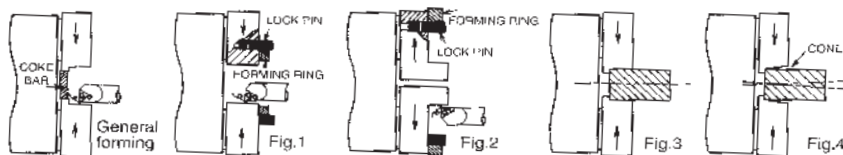
- Forming ring is available for 5", 6", 8", 10" & 12" power chuck.
- The clamping force is increasing. the roundness and vibration caused by eccentricity can be improved. The cutting accuracy is much better because of no taper hole (as fig.3) and less vibration.
- Both Clamping (as fig.1) and extension (as fig. 2) are available. Meanwhile, the size adjusting is at will, the operation is easy and enduring.
- More improvement for used chuck to have high accuracy & strong clamping force .

THE CHUCK NOT INCLUDING

INSTRUCTION

Because the forming ring is used for cutting soft jaws by clamping and with extending. through-hole could increase the accuracy of clamping work piece. (please refer to fig.1.2&3)

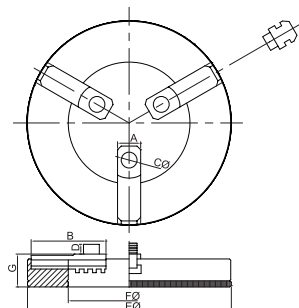
As fig.4, the soft jaw is made without forming ring. So that the cone has created, moreover, the Bad accuracy, run-out, vibration occur when clamping force is not stable.



ORDER NO.	SUIT TO SK-CHUCK SIZE	H	D1	D2	S1	S2	G	H1	O	KGS	CODE NO.
VFR-05	5"	12	140	60	12	28	10	9	13.5	1	5002-360
VFR-06	6"	12	168	80	12	32	10	9	16.5	1.5	5002-361
VFR-08	8"	12	218	115	17	36	10	9	18.5	2.4	5002-362
VFR-10	10"	12	258	150	15	40	10	9	18.5	3	5002-363
VFR-12	12"	15	316	188	21	50	10	9	21.5	5	5002-364
VFR-15	15"	20	380	230	23	52	12	16	31	10.1	5002-365

Soft Jaw Forming Unit

NEW



FAETURES

- Suit for CNC lathe
- Soft jaws can be made smaller sizes by this unit easily. With only some simple process, soft jaws can be bored.
- This type with a continuous micro adjustment is to provide accurate position to reduce the abrasion of soft jaws.
- With counterclockwise clock, the machining field can be easily expended.

The operation process as following:

1. Set the jaw for correct position.
2. Adjust the Jaw Boring Fixtures to fit the bolt holes, and turn opposite direction of the chuck clamping force.
3. Lock the chuck to clamp the Jaw forming unit.

4. Machining the required size.

5. Unicok chuck, and remove the Jaw forming Fictures.

6. If these steps are operated correctly, the part will be accurated & better T.I.R.

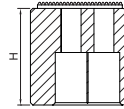
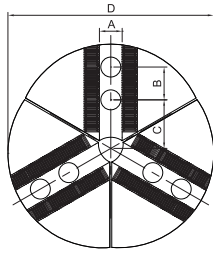
Unit:mm

ORDER NO.	SUIT FOR CHUCK	A-B	CØ	D	EØ	FØ	G	JAW STROKE EACH	MAX.GRIPPING FORCE kgs	MAX.SPEED R.P.M.	KGS	CODE NO.
VFR-06-S	5" 6" 8" 130,160,180	19-61	13	7	170	100	26	7.4	1500	800	2.7	5002-370
VFR-08-S	6" 8" 10" 160,200,250	19-61	16.3	8	200	125	26	7.4	1500	700	3.5	5002-371
VFR-10-S	8" 10" 12" 200,250,300	24-80	18.3	8	248	160	31	8.5	1750	600	5.6	5002-372

Soft Jaw Forming Disc



NEW



MATERIAL : STEEL S45C

FAETURES

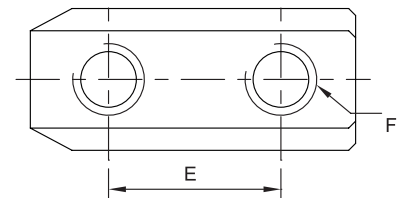
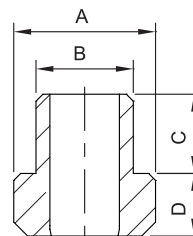
- This type of soft jaw can cover the outerdie of workpiece to decrease deformation and in crease the accuracy.
- For example : Type of FW08 can hold parts with outer die of 200 mm.
- Pie Jaw are suitable for extra bigger outer dia.(thin wall)
- To suit kitagawa and other famous chucks.

Unit:mm

ORDER NO.	D	A	B	C	H	THREAD	THRU HOLE	SERRATION PITCH	WEIGHT (kg)	CODE NO.
VFRD-5	135	10	14	43.5	32	M8	25	1.5x60°	3.34	5002-380
VFRD-6	169	12	20	49.5	40	M10			6.12	5002-381
VFRD-8	200	14	25	51	40	M12			9.64	5002-382
VFRD-9	200	14	25	51	50	M12			13.2	5002-383
VFRD-10	250	16	30	65	50	M12			18.1	5002-384
VFRD-12	300	21	30	81	50	M16			25.8	5002-385

T Nut For Hydraulic Chuck

NEW



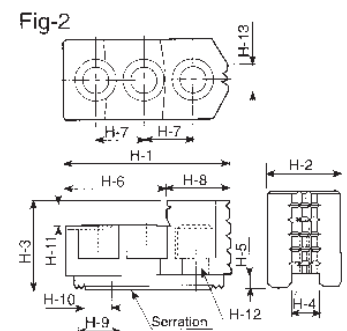
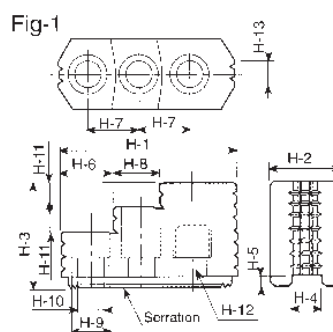
- For connect power chuck and soft jaws, suit for JAPANESE & TAIWANNES brands chuck.

For Kitagawa B-200 Series & Taiwannes Power Chuck

ORDER NO.	CHUCK SIZE	A	B	C	D	E	F	WEIGHT (kg)	CODE NO.
B-205T	5"	14	10	9.5	5	14	M8	0.1	5002-390
B-206T	6"	17.5	12	11	7.5	20	M10	0.1	5002-391
B-208T	8"	20.5	14	12	8.5	25	M12	0.2	5002-392
B-210T	10"	22.5	16	13	8.5	30	M12	0.3	5002-393
B-212T	12"	28	21	16.5	11.5	30	M16	0.6	5002-394

Hard Jaws For Hydraulic Power Chucks

1.Hard jaw for hydraulic power chucks. 2.Hard jaw for CNC lathe



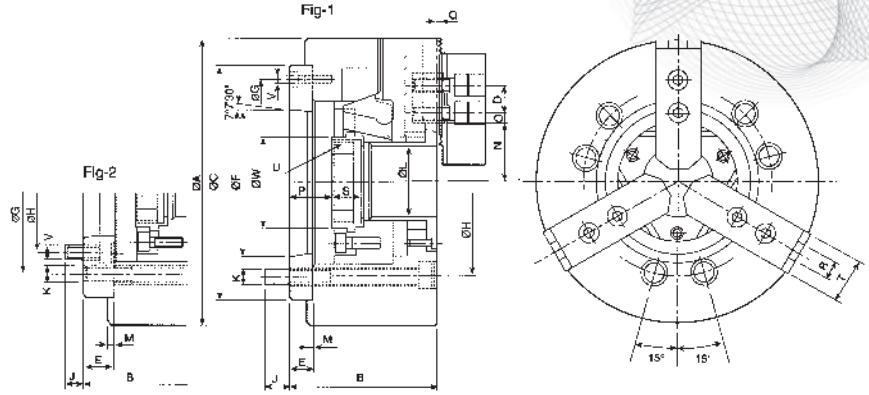
DIMENSIONS

Unit:mm

ORDER NO.	Dim	H-1	H-2	H-3	H-4	H-5	H-6	H-7	H-8	H-9	H-10	H-11	H-12	H-13	Serration Pitch	Matching Chuck	3-Jaw Weight (kgs)	CODE NO.	
HJ05		53	23	27.5	10	4	30.5	14	22.5	13.5	8.5	10	M8	6	1.5x60°	Fig-2	N-205	0.4	5002-401
HJ06		67.5	31	35	12	5	13	20	46	17	11	12	M10	16	1.5x60°	Fig-2	N-206.V-206	1.0	5002-402
HJ08		86	35	51	14	5	31	25	18	19	13	12	M12	12	1.5x60°	Fig-1	N-208.V-208	1.9	5002-403
HJ10		99.5	40	54	16	5	43	30	17	19	13	13	M12	15	1.5x60°	Fig-1	N-210.V-210	2.9	5002-404
HJ12		103	50	52	21	4	62.5	30	40.5	25	17	17	M16	30	1.5x60°	Fig-2	N-212	2.65	5002-405
HJ12-1		103	50	52	18	5	62.5	30	40.5	22	15	17	M14	30	1.5x60°	Fig-2	V-212	2.7	5002-406
HJ15		149	62	86	22	8	63	43	34	32	21	20	M20	40	1.5x60°	Fig-1	N-215	9.6	5002-407
HJ15-1		149	62	86	25.5	5	63	43	34	32	21	20	M20	40	1.5x60°	Fig-1	V-215	9.5	5002-408



3-Jaw Wedge Type Through-hole Power Chuck (Without Adaptor)



- More large bore:
Having the largest bore in wedge type power operated chucks.
- 20% large bore:
Approximately 20% higher speed, higher gripping force and larger bore compared with usual chucks.
- Model N-200A chucks are assembled with adaptor for ASA B5.9 type A spindles.
- Model N-200A chucks are manufactured from high grade alloy steel, All sliding surfaces are hardened and ground for accurate actual running and long service repeatability.

SPECIFICATIONS

Unit:mm

Dim	ORDER NO.	N-205A4	N-206A5	N-208A5	N-208A6	N-210A6	N-210A8	N-212A8	N-215A8	N-215A11
Through-Hole (mm)		ø33	ø45	ø52	ø52	ø75	ø75	ø91	ø117.5	ø117.5
Plunger Stroke (mm)		10	12	16	16	19	19	23	23	23
Jaw Stroke (mm)		5.4	5.5	7.4	7.4	8.8	8.8	10.6	10.6	10.6
Max. Draw Bar Pull Force (kgf)		1700	2200	3400	3400	4300	4300	5500	7240	7240
Max. Gripping Force (kgf)		3600	5700	8800	8800	11000	11000	14300	18355	18355
Max. Operating Pressure (kgf/cm ²)		29.6	28.5	26.5	26.5	27.5	27.5	27.5	23.5	23.5
Max. Speed (r.p.m.)		7000	6000	4900	4900	4200	4200	3300	2500	2500
Weight (kgs)		6.9	14.2	25.8	24.05	40.9	37.4	63.2	134	127
Matching Cylinder		M1036	M1246	M1552	M1552	M1875	M1875	M2091	M2511	M2511
Matching Soft Jaw		VHC05	VHC06	VHC08	VHC08	VHC10	VHC10	VHC12	VHC15	VHC15
Matching Hard Jaw		HJ05	HJ06	HJ08	HJ08	HJ10	HJ10	HJ12	HJ15	HJ15
CODE NO.		5002-080	5002-081	5002-082	5002-083	5002-084	5002-085	5002-086	5002-087	5002-088

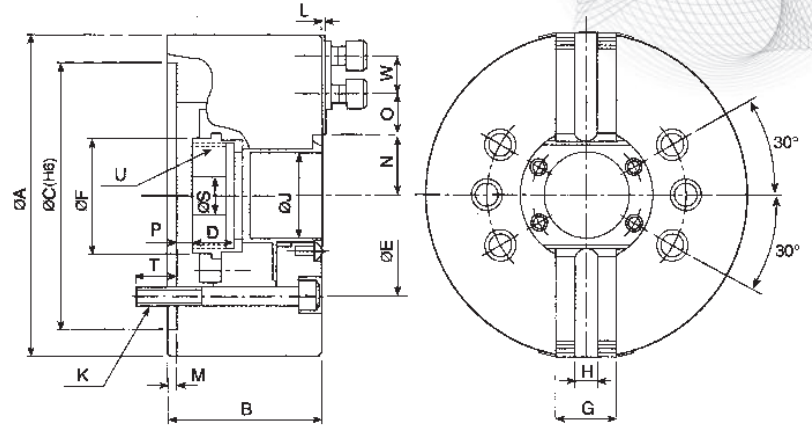
DIMENSIONS

Unit:mm

Dim	ORDER NO.	N-205A4	N-206A5	N-208A5	N-208A6	N-210A6	N-210A8	N-212A8	N-215A8	N-215A11
A		135	169	210	201	254	254	304	381	381
B		71	91	109	103	120	113	122	160	149
G		96	116	133.35	150	171.45	190	190	235	260
D		14	20	25	25	30	30	30	43	43
E		15	15	23	17	25	18	18	33	22
F		65.513	82.563	82.563	106.375	106.375	139.719	139.719	139.719	196.869
C		110	140	170	170	220	220	220	300	300
H		82.55	104.78	104.78	133.35	133.35	171.45	171.45	171.45	235
J		15.5	16	13	18	18	24	25	24	28
K		3xM10	6xM10	6xM12	6xM12	6xM16	6xM16	6xM16	6xM20	6xM20
L		33	45	52	52	75	75	91	117.5	117.5
M		4	5	5	5	5	5	6	6	6
N max.		26.5	32	38.7	38.7	51	51	61.3	82	82
N min.		23.8	29.25	35	35	46.6	46.6	56	76.7	76.7
O max.		19.75	22.75	29.75	29.75	33.75	33.75	45.75	46.75	46.75
O min.		7.75	9.25	14.75	14.75	14.25	14.25	15.75	13.75	13.75
P max.		16	26	37.5	31.5	33.5	26.5	26	40	29
P min.		6	14	21.5	15.5	14.5	7.5	3	17	6
Q		2	2	2	2	2	2	2	5	5
R		10	12	14	14	16	16	21	24	24
S		20	19	20.5	20.5	25	25	28	43	43
T		23	32	37	37	42	42	52	62	62
U max.		M40x1.5	M55x2.0	M60x2.0	M60x2.0	M85x2.0	M85x2.0	M100x2.0	M130x2.0	M130x2.0
V		3xM6	3xM6	6xM10	3xM6	6xM12	6xM8	6xM8	6xM16	3xM10
W		45	60	66	66	94	94	108	139	139
REFER FIG.		Fig-1	Fig-1	Fig-2	Fig-1	Fig-2	Fig-1	Fig-1	Fig-2	Fig-1



2-Jaw Wedge Type Through-hole Power Chuck (Without Adaptor)



- All sliding surfaces are hardened and ground for accurate actual running and long service repeatability. Lubrication nipple in each base jaw.
- Base jaw: 1.5mmx60° serrition.
- Mounting: Adaptor mounting to fit with DIN,ISO,BS,ASA B5.9 type A spindles.

SPECIFICATIONS

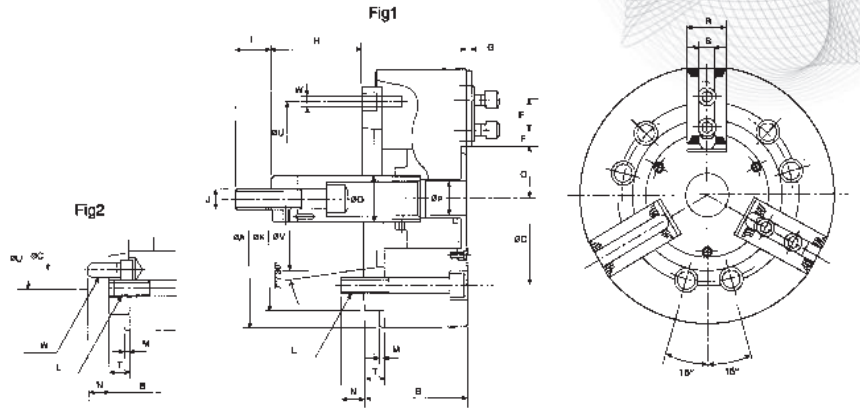
Unit:mm

Dim	ORDER NO.	NT205	NT206	NT208	NT210	NT212	NT215
Through-Hole (mm)		Ø33	Ø45	Ø52	Ø75	Ø91	Ø117.5
Plunger Stroke (mm)		10	12	16	19	23	23
Jaw Stroke (mm)		5.4	5.5	7.4	8.8	10.6	10.6
Max. Draw Bar Pull Force (kgf)		1189	1479	2294	2906	3739	4793
Max. Gripping Force (kgf)		2447	3875	5710	7546	9789	12236
Max. Speed (r.p.m.)		7000	6000	4800	4200	3300	2500
Weight (kgs)		5.9	13	22.1	33.2	61.9	115
Matching Cylinder		M1036	M1246	M1552	M1875	M2091	M2511
Max. Operating Pressure (kg/cm ²)		19.5	18.9	17.3	18.4	18.4	15.3
Matching Soft Jaw		VHC05	VHC06	VHC08	VHC10	VHC12	VHC15
Matching Hard Jaw		HJ05	HJ06	HJ08	HJ10	HJ12	HJ15
CODE NO.		5002-250	5002-251	5002-252	5002-253	5002-254	5002-255

DIMENSIONS

Unit:mm

Dim	ORDER NO.	NT205	NT206	NT208	NT210	NT212	NT215
A		135	169	210	254	304	381
B		60	81	91	100	110	133
C (H6)		110	140	170	220	220	300
D		20	19	20.5	25	28	43
E		82.55	104.78	133.35	171.45	171.45	235
M		4	5	5	5	6	6
G		23	32	37	42	52	62
H		10	12	14	16	21	24
J		33	45	52	75	91	117.5
K		3-M10	6-M10	6-M12	6-M16	6-M16	6-M20
L		2	2	2	2	2	5
F		45	60	66	94	108	139
N max.		26.5	32	38.7	51	61.3	82
N min.		23.8	29.25	35	46.6	56	76.7
O max.		19.75	22.75	29.75	33.75	45.75	46.75
O min.		7.75	9.25	14.75	14.25	15.75	13.75
P max.		1	11	14.5	8.5	8	7
P min.		-9	-1	-1.5	-10.5	-15	-16
S		12	20	30	45	50	60
T		15.5	16	20	22	23	30
U max.		M40x1.5	M55x2	M60x2	M85x2	M100x2	M130x2
W		14	20	25	30	30	43



- Direct mounting: Direct mount for VA series chucks onto short taper spindle of ASA and JIS standards.
- High performance: Similar high performance to V series.
- Chuck mounting screws: Metric or UNC socket head cap screws are supplied for bolting the chuck to the spindle.
- Alternative spindle adaptors: ASA or DIN adaptors can be supplied to fit machine spindle.

SPECIFICATIONS

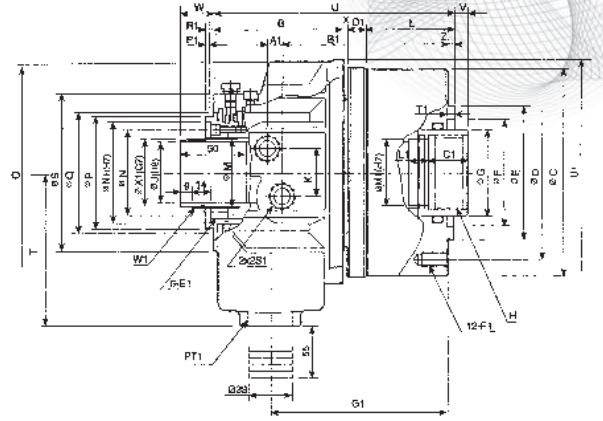
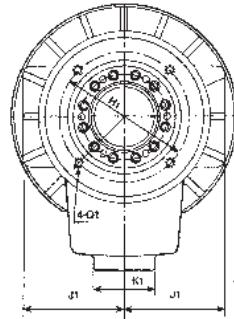
Unit:mm

Dim	ORDER NO.	V-206A5	V-208A6	V-210A6	V-210A8	V-212A8	V-215A8	V-215A11
Jaw Stroke (mm)		9.2	9.7	8.8	8.8	10.5	16	16
Plunger Stroke (mm)		20	21	25	25	30	35	35
Max. Pull Force (kgf)		1835	2549	2957	2957	4181	8362	8362
Max. Gripping Force (kgf)		5253	7548	10013	10013	15807	25391	25391
Max. Operating Pressure (kgf/cm ²)		25.5	24.5	28.6	28.6	27.5	30.6	30.6
Max. Speed (r.p.m.)		5000	4000	3500	3500	3000	2800	2800
Weight (kgs)		12.5	24.4	40.65	37.15	61.75	105	103
Moment of Inertia I (kgf.m ²)		0.045	0.317	0.3	0.3	0.725	1.8	1.8
Matching Cylinder		MS105 MH100	MS125 MH125	MS125 MH125	MS125 MH125	MS150 MH150	MS150 MH150	MS200 MH200
Matching Soft Jaw		VHC06	VHC08	VHC10	VHC10	VHC12-1	VHC15-1	VHC15-1
Matching Hard Jaw		HJ06	HJ08	HJ10	HJ10	HJ12-1	HJ15-1	HJ15-1
CODE NO.		5002-090	5002-091	5002-092	5002-093	5002-094	5002-095	5002-096

DIMENSIONS

Unit:mm

Dim	ORDER NO.	V-206A5	V-208A5	V-208A6	V-210A6	V-210A8	V-212A8	V-215A8	V-215A11
A		165	210	210	254	254	304	381	381
B		84	103	97	109	102	118	141	130
C		104.78	104.78	133.35	133.35	171.45	171.45	171.45	235
F		20	25	25	30	30	30	43	43
K		140	170	170	220	220	220	300	300
L		6-M10	6-M12	6-M12	6-M16	6-M16	6-M16	6-M16	6-M20
M		5	5	5	5	5	6	6	6
N		14	13	18	18	25	25	24	32
P		21	21	25	34	34	34	-	-
T		15	23	17	25	18	18	33	22
V		82.563	82.563	106.375	106.375	139.719	139.719	139.719	196.869
U		116	133.35	150	171.45	190	190	235	260
E max.		15.25	22.25	22.25	30.75	30.75	48.75	50.25	50.25
E min.		9.25	11.75	11.75	11.25	11.25	12.75	23.25	23.25
G		4	5	5	5	5	5	2	2
H max.		89.6	109	115	133	140	145	71	82
H min.		69.6	88	94	108	115	115	36	47
I		36	36	36	36	36	36	55	55
J		M16x2.0	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M30x3.5	M30x3.5
O		34	38	38	45	45	50	60	60
Q max.		38.7	46.75	46.3	51.1	51.1	61	77.5	77.5
Q min.		34.1	41.9	41.9	46.7	46.7	55.75	69.5	69.5
R		31	35	35	40	40	50	50	50
S		12	14	14	16	16	18	25.5	25.5
W		3-M6	6-M10	3-M6	6-M12	6-M8	6-M8	6-M16	3-M10
REFER FIG.		Fig-1	Fig-2	Fig-1	Fig-2	Fig-1	Fig-1	Fig-2	Fig-1



- Small-sized light weight:
Comparing with the traditional product, it is small-sized (reduced to MAX 95mm) and a light weight (weighted MAX 4.5kgs). Make its capacity more stable to reduce the burden of the machinery at high speed turning.
- The most largest bore:
Comparing with the old product, it has about 20% more bore full diameter for utilizing the capacity of machinery.
- The safety mechanism:
It can retain the gripping force with a check valve.

SPECIFICATIONS

ORDER NO.	Dim Piston Dia. (mm)	Piston Area		Piston Stroke (mm)	Max. Draw Bar Pull Force		Max. Operating Pressure (kgf/cm ²)	Max. Speed (r.p.m.)	Moment Inertia (kgf.m ²)	Weight (kgs)	Total Leakage (l/min)	CODE NO.
		Push Side (cm ²)	Pull Side (cm ²)		Push Side KN (kgs)	Pull Side KN (kgs)						
M1036	105	71	68.5	15	24.8(2529)	24(2447)	40.8	8000	0.011	8.6	3.0	5003-001
M1236	125	100	89	15	38(3875)	33(3365)	40.8	7000	0.019	13.0	3.0	5003-002
M1246	125	100	89	15	38(3875)	33(3365)	40.8	7000	0.019	12.0	3.0	5003-003
M1546	155	161	150	22	60(6118)	56(5710)	40.8	6200	0.052	18	3.9	5003-004
M1552	155	161	150	22	60(6118)	56(5710)	40.8	6200	0.052	16.8	3.9	5003-005
M1868	180	198	183	25	75(7546)	69(7036)	40.8	4700	0.095	28.0	4.2	5003-006
M1875	180	198	183	25	75(7546)	69(7036)	40.8	4700	0.095	26.0	4.2	5003-007
M2091	205	252	234	30	94(9585)	88(8973)	40.8	3800	0.15	37.0	4.5	5003-008
M2511	250	348	336	23	124(12644)	120(12236)	40.8	2800	0.45	57	7.0	5003-009

DIMENSIONS

ORDER NO.	Dim																				
	C1	E1	F1	G1	H1	J1	K1	L1	M1	N1	O1	P1	Q1	R1	S1	T1	U1	W1	X1	B	C
M1036	25	M5x0.8	M10x1.5	126	88	68	53	15	38	64	14	4	M5x0.8	4	PT3/8"	6	136	M44x1.5	42	101	136
M1236	30	M6x1.0	M10x1.5	135	98	76	47	15	38	76	14	4	M5x0.8	6	PT1/2"	6	169	M52x1.5	50	99	154.5
M1246	30	M6x1.0	M10x1.5	135	98	76	47	15	50	76	14	4	M5x0.8	6	PT1/2"	6	169	M52x1.5	50	99	154.5
M1546	30	M6x1.0	M10x1.5	145	110	86	47	15	50	85	14	4	M6x1.0	7	PT1/2"	6	187.5	M58x1.5	56	103	190
M1552	30	M6x1.0	M10x1.5	145	110	86	47	15	55	85	14	4	M6x1.0	7	PT1/2"	6	187.5	M58x1.5	56	103	190
M1868	35	M6x1.0	M10x1.5	166.5	155	101	47	15	70	108	16	4	M6x1.0	7	PT1/2"	6	220	M84x2	81	126	215
M1875	35	M6x1.0	M10x1.5	166.5	155	101	47	15	80	108	16	4	M6x1.0	7	PT1/2"	6	220	M84x2	81	126	215
M2091	35	M6x1.0	M12x1.75	183	165	110	47	15	95	120	16	4	M6x1.0	7	PT1/2"	6	267	M99x2	96	141	240
M2511	45	M6x1.0	M16x2.0	197	206	129	55	20	123	160	18	4	M6x1.0	7	PT1/2"	6	294		134.6	186	310

ORDER NO.	Dim																							
	D	E	F	G	H	J	K	L	M	N	O	P	Q	S	T	U	V max	V mix	W max	W mix	X	Z	A1	B1
M1036	115	100	65	48	M42x1.5	36	32	62	44.6	54	126	73	80	104	115	179.5	10	-5	39	24	2.5	5	11	120.5
M1236	130	100	80	65	M42x1.5	36	36	67	52.6	64	166	85	90	118	114	184	10	-5	40	25	4	5	11	126.5
M1246	130	100	80	65	M55x2	46	36	67	52.6	64	166	85	90	118	114	184	10	-5	40	25	4	5	11	126.5
M1546	170	130	85	70	M55x2	46	36	75	59.6	73	184	96	102	137	130	196	17	-5	47	25	4	5	11	136
M1552	170	130	85	70	M60x2	52	36	75	59.6	73	184	96	102	137	130	196	17	-5	47	25	4	5	11	136
M1868	190	160	120	95	M75x2	68	36	84	84.6	98	215	121	131	166	160	230	20	-5	50	25	4	5	17.5	153.5
M1875	190	160	120	95	M85x2	75	36	84	84.6	98	215	121	131	166	160	230	20	-5	50	25	4	5	17.5	153.5
M2091	215	180	140	110	M100x2	91	36	93	99.6	108	264	138	148	182	185	253	25	-5	55	25	3	5	21	168
M2511	275	230	166	140	M130x2	117.5	36	89	134.6	148	362	178		232	215	296	18	-5	38	15	3	6	27	184.5

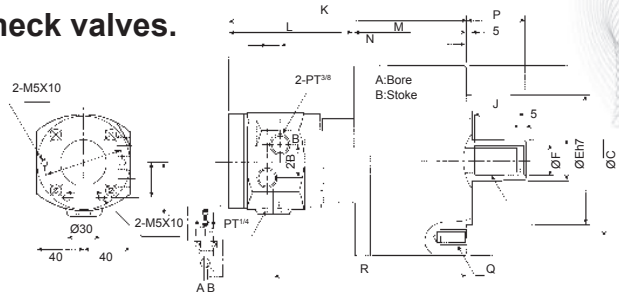


Non Through Hole Rotary Hydraulic Cylinder (With Valves)



VERTEX

- Built-in safety check valves.



DIMENSIONS

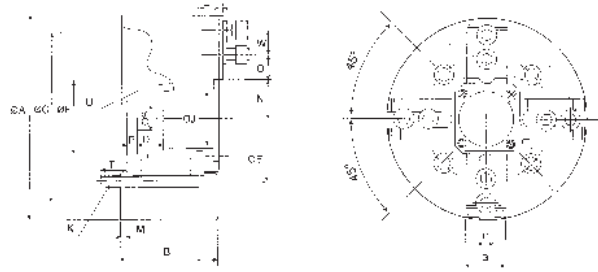
ORDER NO.	Dim																	CODE NO.
	A	B	C	D	E	F	G	H	J	K	L	M	N	P Max.	P Min.	Q	R	
MS105	105	20	135	100	80	30	21	M20x2.5	35	197	108	89	152	45	25	6-M10x20	158	5003-030
MS125	125	25	160	130	110	35	25	M24x3.0	44	205	108	97	160	51	26	6-M12x24	166	5003-031
MS150	150	30	190	130	110	45	31	M30x3.5	45	214	108	106	169	56	26	12-M12x24	175	5003-032
MS200	200	35	245	145	120	55	37	M36x4.0	60	228	108	122	183	69	34	12-M16x30	189	5003-033

SPECIFICATIONS

ORDER NO.	Dim	Piston Area		Max. Draw Bar Pull Pull Side KN (kgf)	Piston Stroke (mm)	Max. Speed (r.p.m.)	Max. Operating Pressure (kgf/cm ²)	Total Leakage (l/min)	Moment Inertia I (kgf.m ²)	Weight (kgs)
		Push Side (cm ²)	Pull Side (cm ²)							
MS105		86	79	29(2957)	20	6000	4.0(40.8)	0.8	0.0125	7.1
MS125		122	113	42(4283)	25	6000	4.0(40.8)	0.8	0.0225	10
MS150		176	160	60(6118)	30	5500	4.0(40.8)	0.8	0.0475	13.5
MS200		314	290	108(11013)	35	5500	4.0(40.8)	0.8	0.0975	22



4-Jaw Wedge Type Trough Hole Power Chuck (Without Adaptor)



DIMENSIONS

ORDER NO.	A	B	C (H6)	D	E	M	G	H	J	K	L	F	N Max.	N Min.	O Max.	O Min.	P Max.	P Min.	S	T	U	W
VNIT-208	210	91	170	20.5	133.35	5	37	14	52	4-M12	2	66	38.7	35	29.75	14.75	14.5	1.5	30	20	M60x2	25
VNIT-210	254	100	220	25	171.45	5	42	16	75	4-M16	2	94	51	46.6	33.75	14.75	8.5	-10.5	45	22	M85x2	30
VNIT-212	304	110	220	28	171.45	6	52	21	91	4-M16	2	108	61.3	56	45.75	15.75	8	-15	50	23	M100x2	30
VNIT-215	381	133	300	43	235	6	62	24	117.5	4-M20	5	139	82	76.7	46.75	13.75	7	-16	60	30	M130x2	43

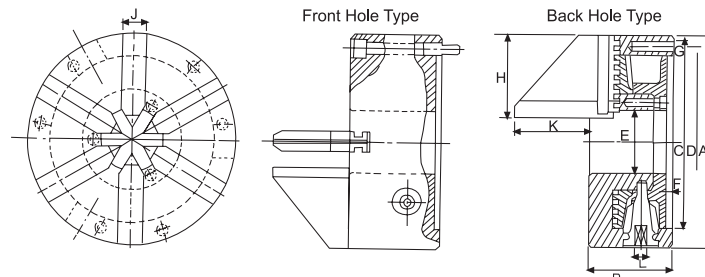
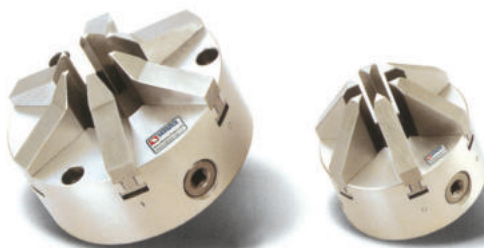
SPECIFICATIONS

ORDER NO.	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (mm)	Max. Draw Bar Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Speed (r.p.m.)	Weight (kgs)	Matching Cylinder	Max. Operating Pressure (kgf/cm ²)	CODE NO.
VNIT-208	Ø52	16	7.4	2294	5716	4900	24	M1552	17.3	5003-050
VNIT-210	Ø75	19	8.8	2906	7546	4200	36	M1875	18.4	5003-051
VNIT-212	Ø91	23	10.6	3739	9789	3300	58.5	M2091	18.4	5003-052
VNIT-215	Ø117.5	23	10.6	6828	12236	2500	114	M2511	15.3	5003-053



6-Jaw Awl Type Chucks

Scroll Chucks Series



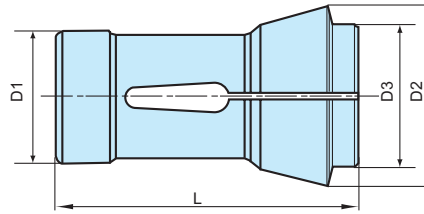
SPECIFICATIONS

ORDER NO.	A	B	C	D	E	F	G	H	J	K	L	Gross Weight (kgs)	Max. Speed (r.p.m.)	Max. Gripping Diameter		CODE NO.
														O.D. Clamping		
VAS-4	112	58	80	95	32	4.5	3-M8	45	14	46	8	4.2	1200	Ø2-32		5005-011
VAS-6	167	65	130	147	60	5	3-M10	66	19	43	10	9.2	1200	Ø3-60		5005-012

Unit:mm



DIN6343






DIN6343

COLLET TYPE	STANDARD NO.	D1 (mm)	D2 (mm)	D3 (mm)	L (mm)	KONUSWINKEL SPINDLE CONE ANGLE	COLLET RANGE(mm)		
							○	⬡	□
C-26	163E	32	45	34	75	15°	Ø3-Ø26	Ø6-Ø22	Ø5-Ø18
C-36	171E	42	55	42	94	15°	Ø36	Ø32	Ø26
C-42	173E	48	60	50	94	15°	Ø3-Ø42	Ø6-Ø36	Ø5-Ø30
C-52	177E	58	70	60	94	15°	Ø52	Ø45	Ø36
C-60	185E	66	84	73	110	15°	Ø3-Ø60	Ø6-Ø50	Ø5-Ø40
C-80	193E	90	107	92	130	15°	Ø3-Ø80	Ø6-Ø70	Ø5-Ø57

C80: Hex./Square shape order to make.

CONE SIZE




ROUND SHAPE / METRIC		METRIC SIZE					
C26-DØ		C42-DØ		C60-DØ		C80-DØ	
ORDER NO.	CODE NO.	ORDER NO.	CODE NO.	ORDER NO.	CODE NO.	ORDER NO.	CODE NO.
C26-D6	5003-101	C42-D6	5003-131	C60-D8	5003-171	C80-D18	5003-211
C26-D8	5003-102	C42-D8	5003-132	C60-D9	5003-172	C80-D20	5003-212
C26-D9	5003-103	C42-D9	5003-133	C60-D10	5003-173	C80-D25	5003-213
C26-D10	5003-104	C42-D10	5003-134	C60-D11	5003-174	C80-D28	5003-214
C26-D11	5003-105	C42-D11	5003-135	C60-D12	5003-175	C80-D30	5003-215
C26-D12	5003-106	C42-D12	5003-136	C60-D13	5003-176	C80-D32	5003-216
C26-D13	5003-107	C42-D13	5003-137	C60-D14	5003-177	C80-D35	5003-217
C26-D14	5003-108	C42-D14	5003-138	C60-D15	5003-178	C80-D38	5003-218
C26-D15	5003-109	C42-D15	5003-139	C60-D16	5003-179	C80-D40	5003-219
C26-D16	5003-110	C42-D16	5003-140	C60-D17	5003-180	C80-D42	5003-220
C26-D17	5003-111	C42-D17	5003-141	C60-D18	5003-181	C80-D45	5003-221
C26-D18	5003-112	C42-D18	5003-142	C60-D19	5003-182	C80-D48	5003-222
C26-D19	5003-113	C42-D19	5003-143	C60-D20	5003-183	C80-D50	5003-223
C26-D20	5003-114	C42-D20	5003-144	C60-D21	5003-184	C80-D52	5003-224
C26-D21	5003-115	C42-D21	5003-145	C60-D22	5003-185		
C26-D22	5003-116	C42-D22	5003-146	C60-D23	5003-186		
C26-D23	5003-117	C42-D23	5003-147	C60-D24	5003-187		
C26-D24	5003-118	C42-D24	5003-148	C60-D25	5003-188		
C26-D25	5003-119	C42-D25	5003-149	C60-D27	5003-189		
		C42-D27	5003-150	C60-D28	5003-190		
		C42-D28	5003-151	C60-D30	5003-191		
		C42-D30	5003-152	C60-D32	5003-192		
		C42-D32	5003-153	C60-D34	5003-193		
		C42-D34	5003-154	C60-D36	5003-194		
		C42-D36	5003-155	C60-D38	5003-195		
		C42-D38	5003-156	C60-D40	5003-196		
		C42-D40	5003-157	C60-D42	5003-197		
		C42-D42	5003-158	C60-D45	5003-198		
				C60-D47	5003-199		
				C60-D48	5003-200		
				C60-D50	5003-201		

HEX. SHAPE / METRIC		METRIC SIZE			
C26-H 		C42-H 		C60-H 	
ORDER NO.	CODE NO.	ORDER NO.	CODE NO.	ORDER NO.	CODE NO.
C26-H8	5003-241	C42-H8	5003-261	C60-H8	5003-281
C26-H10	5003-242	C42-H10	5003-262	C60-H10	5003-282
C26-H12	5003-243	C42-H12	5003-263	C60-H12	5003-283
C26-H13	5003-244	C42-H13	5003-264	C60-H13	5003-284
C26-H15	5003-245	C42-H15	5003-265	C60-H15	5003-285
C26-H16	5003-246	C42-H16	5003-266	C60-H16	5003-286
C26-H17	5003-247	C42-H17	5003-267	C60-H17	5003-287
C26-H19	5003-248	C42-H19	5003-268	C60-H19	5003-288
C26-H20	5003-249	C42-H20	5003-269	C60-H20	5003-289
C26-H21	5003-250	C42-H21	5003-270	C60-H21	5003-290
		C42-H22	5003-271	C60-H22	5003-291
		C42-H24	5003-272	C60-H24	5003-292
		C42-H25	5003-273	C60-H25	5003-293
		C42-H27	5003-274	C60-H27	5003-294
		C42-H30	5003-275	C60-H30	5003-295




DIN6343

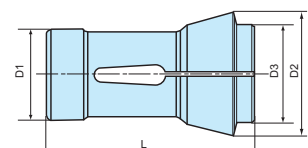
COLLET TYPE	STANDARD NO.
C-26	163E
C-42	173E
C-60	185E
C-80	193E

ROUND SHAPE / INCH		INCH SIZE					
C26-DØ		C42-DØ		C60-DØ		C80-Ø	
ORDER NO.	CODE NO.	ORDER NO.	CODE NO.	ORDER NO.	CODE NO.	ORDER NO.	CODE NO.
C26-D ¹ / ₄ "	5003-301	C42-D ¹ / ₄ "	5003-321	C60-D ³ / ₈ "	5003-351	C80-D ³ / ₄ "	5003-381
C26-D ³ / ₈ "	5003-302	C42-D ³ / ₈ "	5003-322	C60-D ¹ / ₂ "	5003-352	C80-D ⁷ / ₈ "	5003-382
C26-D ¹ / ₂ "	5003-303	C42-D ¹ / ₂ "	5003-323	C60-D ⁵ / ₈ "	5003-353	C80-D1"	5003-383
C26-D ⁵ / ₈ "	5003-304	C42-D ⁵ / ₈ "	5003-324	C60-D ³ / ₄ "	5003-354	C80-D ¹ / ₈ "	5003-384
C26-D ³ / ₄ "	5003-305	C42-D ³ / ₄ "	5003-325	C60-D ⁷ / ₈ "	5003-355	C80-D ¹ / ₄ "	5003-385
C26-D ⁷ / ₈ "	5003-306	C42-D ⁷ / ₈ "	5003-326	C60-D1"	5003-356	C80-D ¹ / ₈ "	5003-386
C26-D1"	5003-307	C42-D1"	5003-327	C60-D ¹ / ₈ "	5003-357	C80-D ¹ / ₂ "	5003-387
		C42-D ¹ / ₈ "	5003-328	C60-D ¹ / ₄ "	5003-358	C80-D ¹ / ₈ "	5003-388
		C42-D ¹ / ₄ "	5003-329	C60-D ³ / ₈ "	5003-359	C80-D ¹ / ₄ "	5003-389
		C42-D ³ / ₈ "	5003-330	C60-D ¹ / ₂ "	5003-360	C80-D ¹ / ₈ "	5003-390
		C42-D ¹ / ₂ "	5003-331	C60-D ⁵ / ₈ "	5003-361	C80-D2"	5003-391
		C42-D ¹ / ₂ "	5003-332	C60-D ¹ / ₄ "	5003-362	C80-D ² / ₈ "	5003-392
				C60-D ¹ / ₈ "	5003-363	C80-D ² / ₄ "	5003-393
				C60-D2"	5003-364	C80-D ² / ₈ "	5003-394
						C80-D ² / ₂ "	5003-395
						C80-D ² / ₈ "	5003-396
						C80-D ² / ₈ "	5003-397
						C80-D3"	5003-398

HEX. SHAPE / INCH		INCH SIZE			
C26-H 		C42-H 		C60-H 	
ORDER NO.	CODE NO.	ORDER NO.	CODE NO.	ORDER NO.	CODE NO.
C26-H ¹ / ₄ "	5003-411	C42-H ³ / ₈ "	5003-431	C60-H ³ / ₈ "	5003-451
C26-H ³ / ₈ "	5003-412	C42-H ¹ / ₂ "	5003-432	C60-H ¹ / ₂ "	5003-452
C26-H ¹ / ₂ "	5003-413	C42-H ⁵ / ₈ "	5003-433	C60-H ⁵ / ₈ "	5003-453
C26-H ⁵ / ₈ "	5003-414	C42-H ³ / ₄ "	5003-434	C60-H ³ / ₄ "	5003-454
C26-H ³ / ₄ "	5003-415	C42-H ⁷ / ₈ "	5003-435	C60-H ⁷ / ₈ "	5003-455
C26-H ⁷ / ₈ "	5003-416	C42-H1"	5003-436	C60-H1"	5003-456
		C42-H ¹ / ₈ "	5003-437	C60-H ¹ / ₈ "	5003-457
		C42-H ¹ / ₄ "	5003-438	C60-H ¹ / ₄ "	5003-458
				C60-H ¹ / ₈ "	5003-459

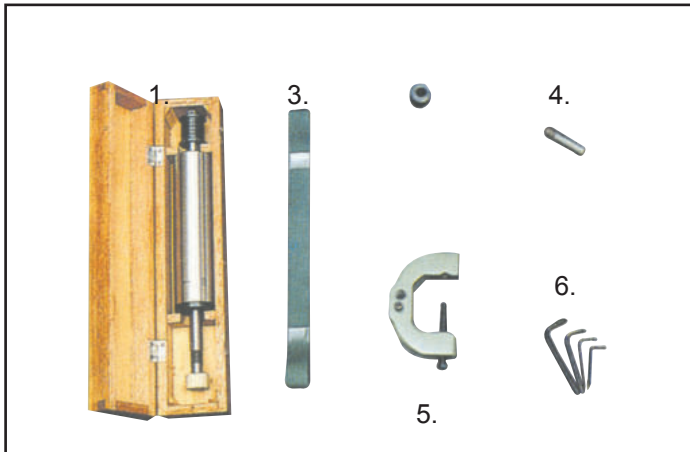
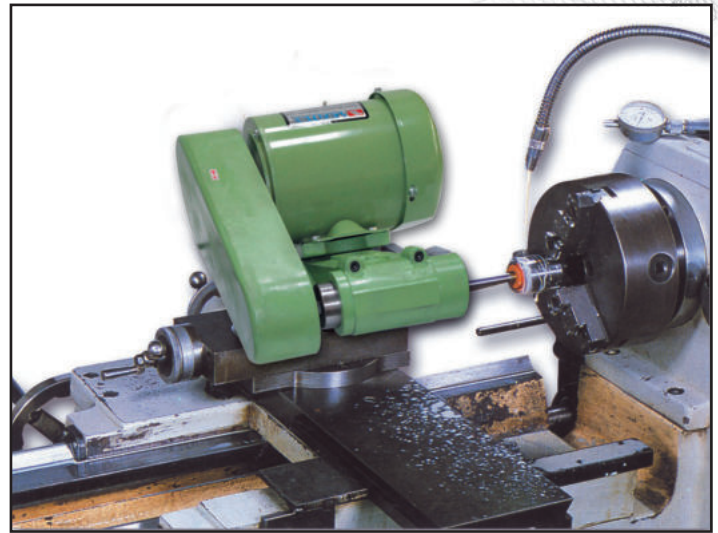


SQUARE SHAPE / INCH		INCH SIZE			
C26-S 		C42-S 		C60-S 	
ORDER NO.	CODE NO.	ORDER NO.	CODE NO.	ORDER NO.	CODE NO.
C26-S ¹ / ₄ "	5003-471	C42-S ³ / ₈ "	5003-491	C60-S ³ / ₈ "	5003-501
C26-S ³ / ₈ "	5003-472	C42-S ¹ / ₂ "	5003-492	C60-S ¹ / ₂ "	5003-502
C26-S ¹ / ₂ "	5003-473	C42-S ⁵ / ₈ "	5003-493	C60-S ⁵ / ₈ "	5003-503
C26-S ⁵ / ₈ "	5003-474	C42-S ³ / ₄ "	5003-494	C60-S ³ / ₄ "	5003-504
		C42-S ⁷ / ₈ "	5003-495	C60-S ⁷ / ₈ "	5003-505
				C60-S1"	5003-506
				C60-S ¹ / ₈ "	5003-507





For Internal Grinding



Standard Accessories

1.Internal Spindle	1
2.Pulley for Internal Grinding	2
3.Flat Belt	1
4.Diamond tool	1
5.Holder for Diamond Tool	1
6.key Folds (8, 5, 3, 2mm)	4

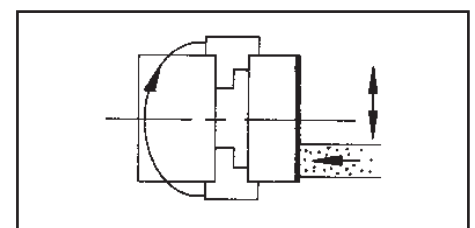
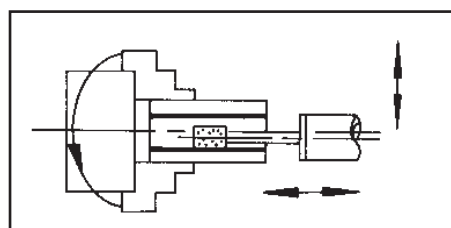
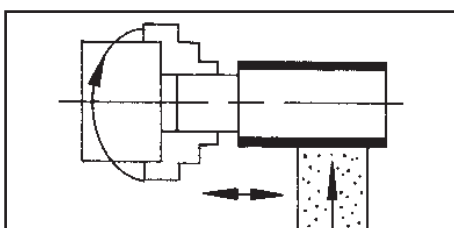
※VGR-175,VGR-185 WITHOUT INTERNAL SPINDLE
 ※ECOMICAL TYPE FOR LIGHT DUTY ONLY

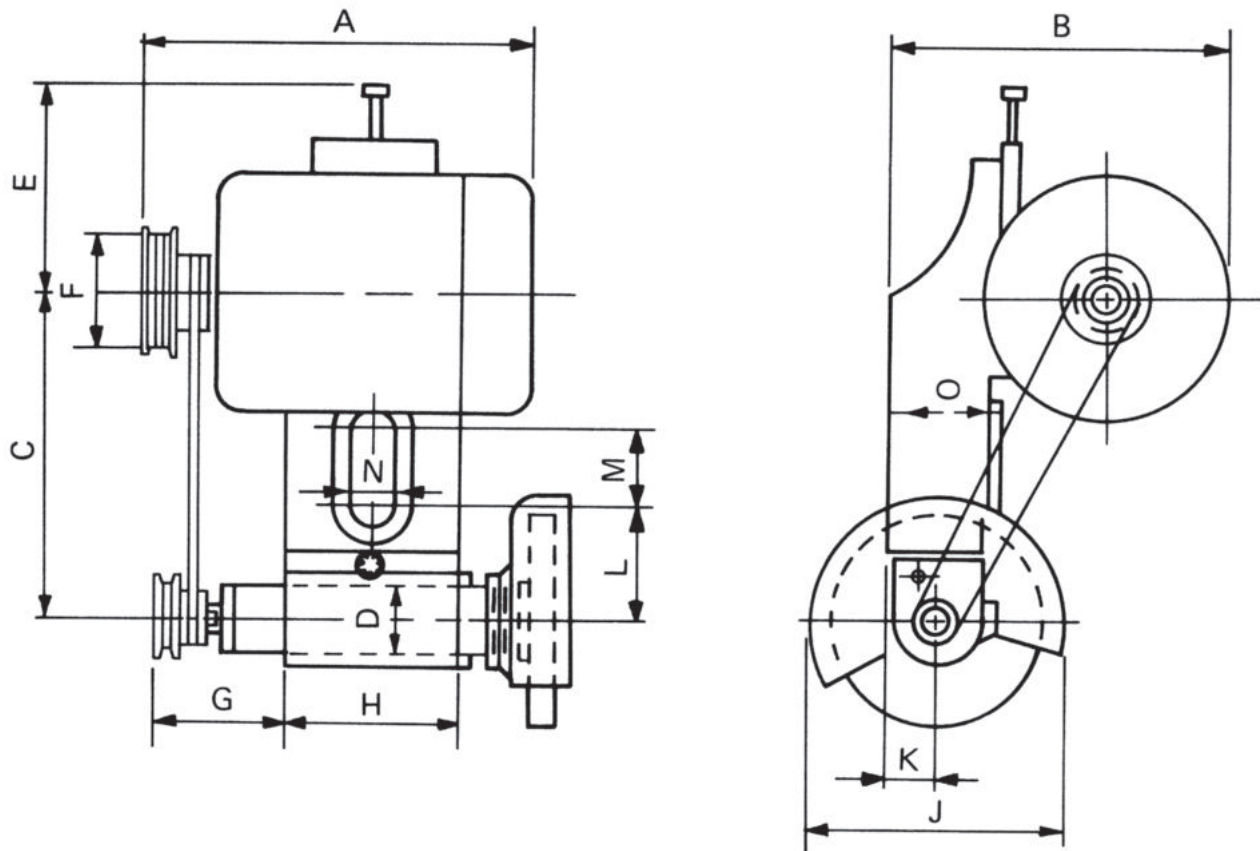
Characteristic Features

- Both the main shafts have been specially designed, and the world-wide precision bearing is used to fit the main shafts which are made of alloy steel heat-treated for high wear resistance, precision, as well as maintaining to the lowest temperature for durability and stability.
- The motor base and the spindle bushing are adjustable.
- The motor is well designed with a special and nice appearance, The R.P.M. of this motor varied depending on the size of the workpiece.
- This grinder is capable of grinding the work piece to a minimum of 3 mm in outer diameter and from 2mm up in inner diameter (bore) with the accuracy within 0.003mm and a well finished surface. (supplied with special attachments).
- The spindle bushing is made of cast iron, and supported by three surfaces. Therefore, it is durable and elastic.
- Materials such as steel, iron, copper (brass), aluminum, cast iron, plastics, procelain, marble, regardless of being heat treated or not, can be ground on this machine which functions lie a cylindrical grinder. So it may lower the cost of the production.

We assure you of high quality products.

※ Types of Grinding For Work Pieces





ORDER NO.	Main Dimension. (mm)														Net Weight (kgs)	Packing Size (mm)
	A	B	C	D	E	F	G	H	J	K	L	M	N	O		
VGR-185	352	350	300-340	80	180	138	85	190	330	45-70	140	40	32	120	80	700x500x520
VGR-175	315	300	260-320	60	170	138	120	104	280	45-70	135	40	30	92	75	650x460x460
VGR-165	280	275	260-310	50	160	110	65	102	230	40-65	105	40	30	85	48	520x430x350
VGR-150	280	275	250-300	48	160	110	65	102	150	40-65	105	40	30	85	38	520x430x350
VGR-125	270	230	230-280	48	-	110	65	92	150	34-58	90	15	25	75	35	520x430x350
VGR-100	235	200	170	40	-	110	50	80	150	28	45	10	25	64	24	450x320x340

ORDER NO.	HP	External Spindle		Internal Spindle				Grinder on Lather (Length of Bed of Lather) Ft.	Swing m/m	CODE NO.		
		Size of Wheel dia x width-hole	(R.P.M.) Non-load Speed	Diameter to be ground	Size of Wheel dia x width x hole	(R.P.M.) Non-load Speed	Grinding Depth (mm)					
VGR-185	3	12"x1"x1"	60 cycle 1930	50 cycle 1600	-	External only	-	-	-	over 12	800-1800	5004-001
VGR-175	2	10"x1"x1"	2300	1930	-	External only	-	-	-	10-12	700-1700	5004-002
VGR-165	1	8"x3/4"x3/4"	3000 3700	2490 3070	25-50	1"x3/8"x1/4"	20000 13500	16800 11500	70	8-10	650-1600	5004-003
VGR-150	1	5"x5/8"x5/8"	4500 6000	3750 5000	19-40	1"x3/8"x1/4"	20000 13500	16800 11500	70	6-8	550-900	5004-004
VGR-125	1/2	5"x5/8"x5/8"	4500 6000	3750 5000	19-40	1"x3/8"x1/4"	20000 13500	16800 11500	70	4-6	430-850	5004-005
VGR-100	1/4	5"x5/8"x5/8"	4500 6000	3750 5000	19-40	1"x3/8"x1/4"	20000 13500	16800 11500	50	under 4	320-400	5004-006



VDI Tool Holders

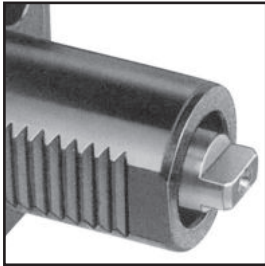
Coupling Type System



VERTEX®

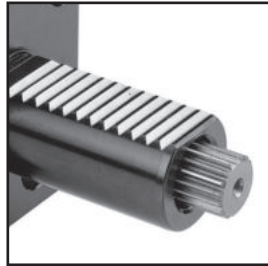
DIN69880

A DIN 1809 (For DUPLOMATIC)



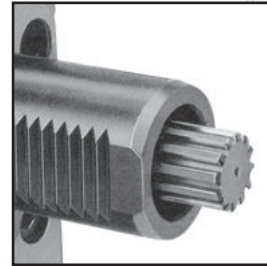
Coupling to DIN 1809

B DIN 5480 (For SAUTER/DUPLOMATIC)



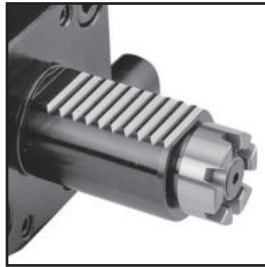
Coupling to DIN 5480

C DIN 5482 (For SAUTER/DUPLOMATIC)



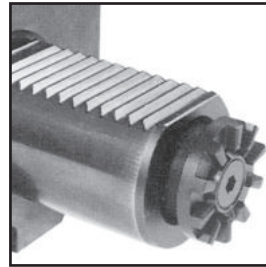
Coupling to DIN 5482

D MT (For BARUFFALDI)



Spur Coupling

E IT (For DUPLOMATIC)



Spur Coupling



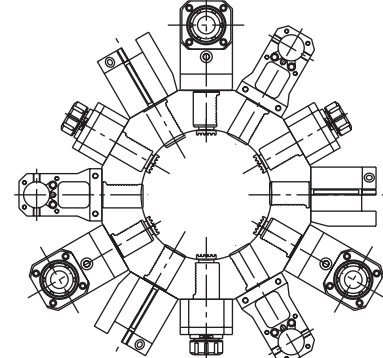
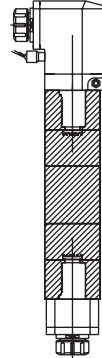
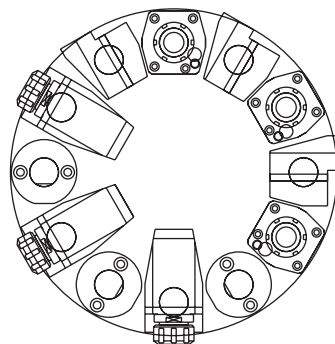
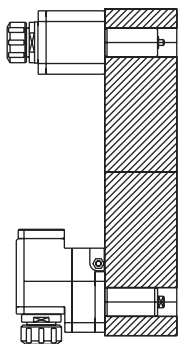
VDI Tool Holders

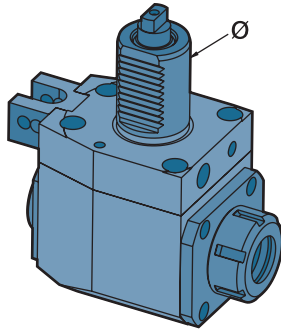
Tool Holders Direction System

DIN69880

A: Axial Direction

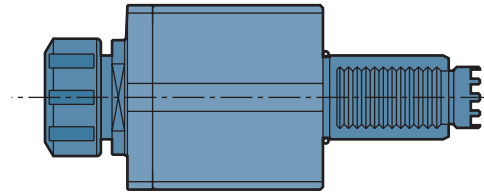
B: Radial Direction (Star Turret)





DA

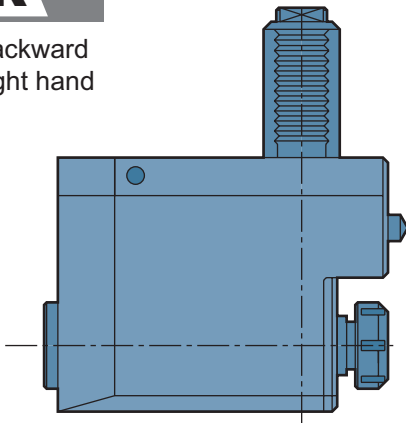
Stright Direct Drive



	VDI 20	VDI 30	VDI 40	VDI 50
SHAFT DIA.	20	30	40	50

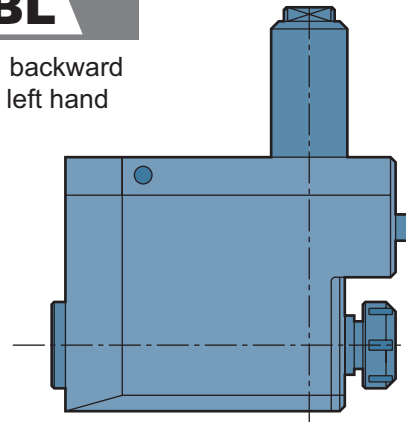
BR

B: backward
R: right hand



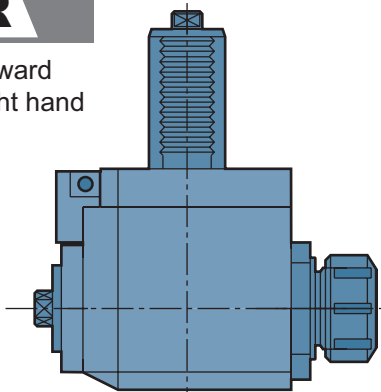
BL

B: backward
L: left hand



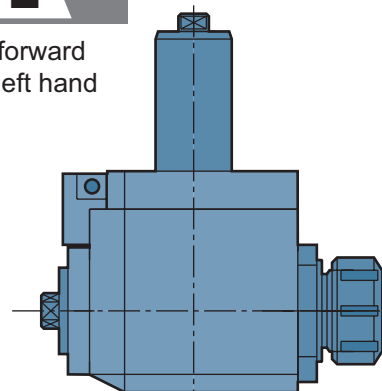
FR

F: forward
R: right hand



FL

F: forward
L: left hand

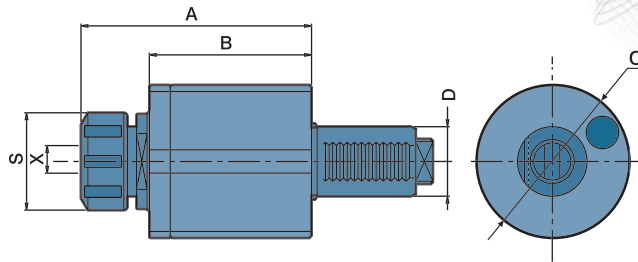
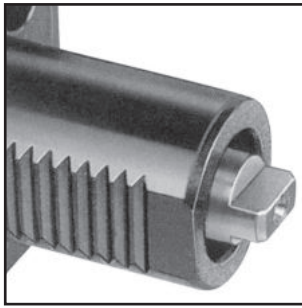


TXX

T: Tapping

EX:

- BR4018093290 it's VDI 40, right hand, coupling type 1809, backward come with ER 32 nut. P.C.D. is 90mm
- FL3054822555 it's VDI 30 left hand coupling type 5482 (B15x12) forward, come with ER 25 nut. P.C.D. is 55mm



Power Transmission According To DIN 1809

- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	CODE NO.
DA20180916	20	1-10 ER16	32	6000	1 : 1	77	49	58	5006-001
DA30180925	30	1-16 ER25	42	6000	1 : 1	101	70	68	5006-002
DA40180932	40	2-20 ER32	50	6000	1 : 1	111	73.5	86	5006-003
DA50180940	50	3-26 ER40	63	6000	1 : 1	120	81.5	96	5006-004
DA60180950	60	10-34 ER50	78	6000	1 : 1	140	88.5	116	5006-005

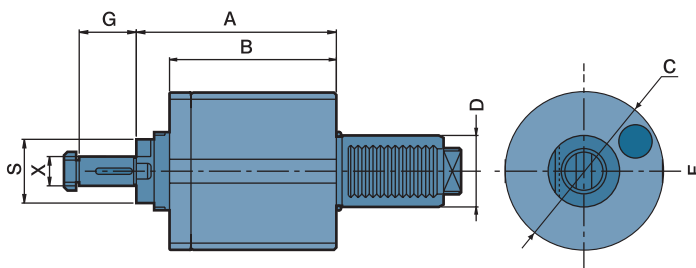
AXIAL TAPPING HEADS

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	CODE NO.
TDA30180916	30	1-10 ER16	30	3000	1 : 1	108	71.5	68	5006-006
TDA40180920	40	1-13 ER20	35	3000	1 : 1	95.5	55	86	5006-007
TDA50180925	50	1-16 ER25	42	3000	1 : 1	123	81.5	96	5006-008
TDA60180932	60	2-20 ER32	50	3000	1 : 1	158.5	88.5	116	5006-009

AXIAL MILLING HEADS

DIN 1809



- External coolant and intermediate rings supply
- To be used for cutter arbor according to DIN 6358

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	G	CODE NO.
DA30180916C	30	16	32	3000	1 : 1	91.5	70	68	27	5006-010
DA40180922C	40	22	40	3000	1 : 1	86.5	73.5	86	31	5006-012
DA50180922C	50	22	40	3000	1 : 1	117	81.5	96	31	5006-013
DA50180927C	50	27	40	3000	1 : 1	117	81.5	96	33	5006-014



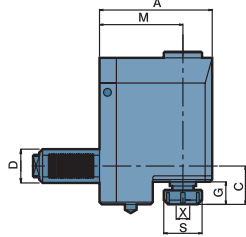
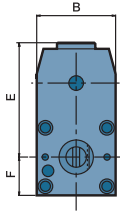
Radial Drilling And Milling Heads-Back Ward Type



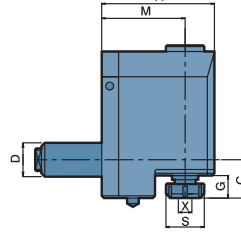
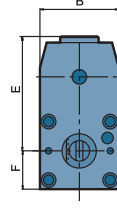
VERTEX

DIN 1809

MODE: BL
LEFT-HAND



MODE: BR
RIGHT-HAND



- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	CODE NO.
BR2018091660 BL2018091660	20	1-10 ER16	30	5000	1 : 1	83	50	35	70	27	27	60	5006-015A
BR3018092572 BL3018092572	30	1-16 ER25	42	5000	1 : 1	95	60	41.5	75.5	31.5	29	72	5006-016A
BR4018093290 BL4018093290	40	2-20 ER32	50	5000	1 : 1	124	80	44	110	42	34	90	5006-017
BR5018094090 BL5018094090	50	3-26 ER40	63	5000	1 : 1	129	86	49	112	45	39	90	5006-018
BR60180950106 BL60180950106	60	10-34 ER50	78	5000	1 : 1	154	104	74.5	123	54	52	106	5006-019A

Radial Tapping Heads-Back Ward Type

DIN 1809

DIMENSIONS

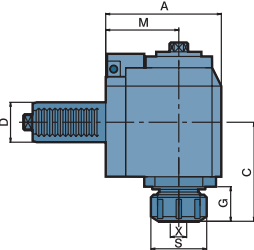
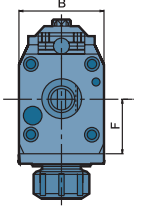
ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	CODE NO.
TBR3018091672 TBL3018091672	30	1-10 ER16	30	3000	1 : 1	95	60	44	75.5	31.5	32	72	5006-020A
TBR4018092090 TBL4018092090	40	1-13 ER20	35	3000	1 : 1	124	80	59.5	110	42	49.5	90	5006-021
TBR5018092590 TBL5018092590	50	1-16 ER25	42	3000	1 : 1	129	86	54	112	45	36	90	5006-022
TBR60180932106 TBL60180932106	60	2-20 ER32	50	3000	1 : 1	154	104	105	123	54	82.5	106	5006-023A



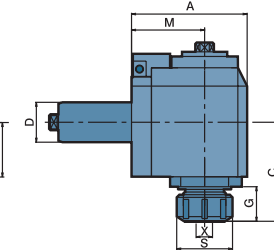
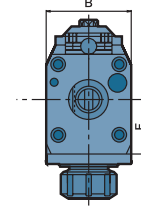
Radial Drilling And Milling Heads

DIN 1809

MODE: FL
LEFT-HAND



MODE: FR
RIGHT-HAND



- To be used for collet DIN 6499
- Collet is not included
- External coolant supply

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	F	G	M	CODE NO.
FR3018092555 FL3018092555	30	1-16 ER25	42	5000	1 : 1	87	64	74.5	34	26	55	5006-024
FR4018093265 FL4018093265	40	2-20 ER32	50	5000	1 : 1	99	80	71	40	23	65	5006-025
FR5018094075 FL5018094075	50	3-26 ER40	63	5000	1 : 1	115	88	101	56	34	75	5006-026

Radial Tapping Heads

DIN 1809

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	F	G	M	CODE NO.
TFR3018091655 TFL3018091655	30	1-10 ER16	30	3000	1 : 1	87	64	75	41	30	55	5006-027
TFR4018092065 TFL4018092065	40	1-13 ER20	35	3000	1 : 1	99	80	93.5	40	46	65	5006-028
TFR5018092575 TFL5018092575	50	1-16 ER25	42	3000	1 : 1	115	88	103	56	42	75	5006-029



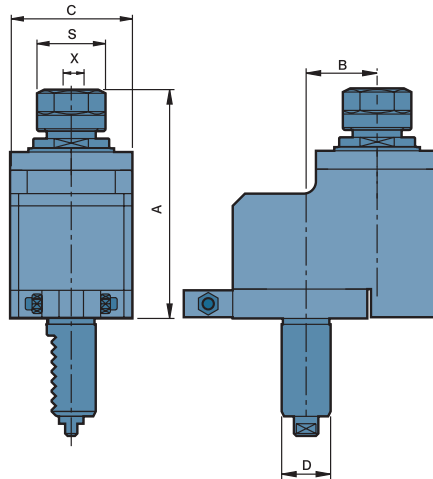
Axial Drilling And Milling Heads



VERTEX

OFFSET

DIN 1809



- Collet is not included
- To be used for collet DIN 6499
- External coolant supply

DIMENSIONS

i is speed ratio example:1:2. It's 2 times of speed

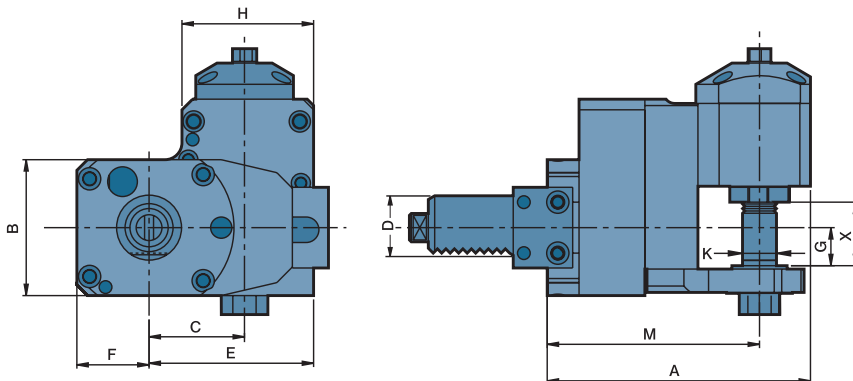
ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	CODE NO.
DA2018091629	20	1-10 ER16	30	4000	1 : 1	93.5	29	50	5006-030
DA3018092529	30	1-16 ER25	42	4000	1 : 1	100	29	60	5006-031
DA3018092529/1	※30	1-16 ER25	42	8000	1 : 2	100	29	60	5006-032
DA4018093250	40	2-20 ER32	50	4000	1 : 1	125.5	50	75	5006-033
DA5018094065	50	3-26 ER40	63	3000	1 : 1	124	65	86	5006-034



Radial Milling Heads

DISK CUTTER UNITS

DIN 1809



- External coolant supply

DIMENSIONS

i;(3:1),It's 3 times of speed decrease

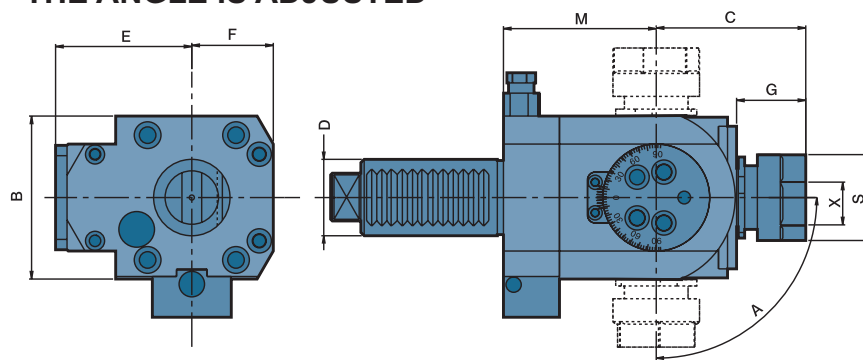
ORDER NO.	D DIN 69880	X Capacity	Maximum R.P.M.	i	A	B	C	E	F	G	H	K	M	CODE NO.
BR30180916C/3 BL30180916C/3	30	16	3000	3 : 1	133	64	45	77.5	49	5	65	16	107.5	5006-035



Angular Heads

THE ANGLE IS ADJUSTED

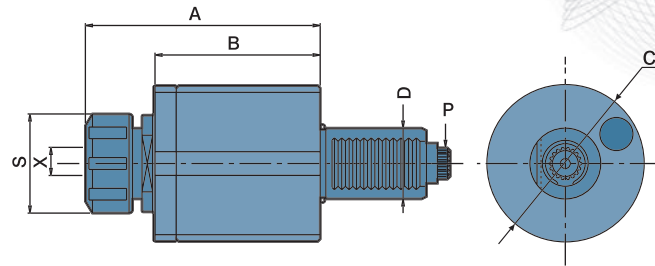
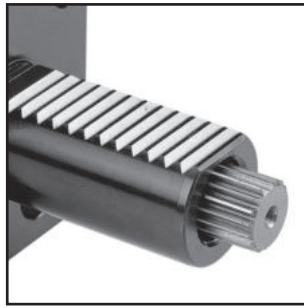
DIN 1809



- To be used for collet DIN 6499
- External coolant supply
- Collet is not included

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	CODE NO.
DA30180920B	30	1-13 ER20	35	4000	1 : 1	±90°	64	59	54	32	27	60	5006-036A



Power Transmission According To DIN 5480

- External coolant supply
- To be used for collet DIN 6499
- Collet is not included

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	P DIN 5480	CODE NO.
DA30548025	30	1-16 ER25	42	6000	1 : 1	101	70	68	W16X0.8	5006-037
DA40548032	40	2-20 ER32	50	6000	1 : 1	110	55	86	W20X0.8	5006-038

AXIAL TAPPING HEADS

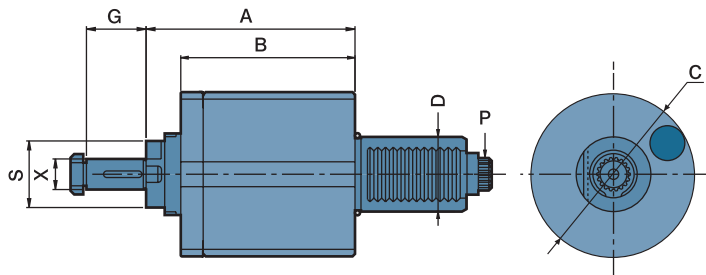
DIN 5480

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	P DIN 5480	CODE NO.
TDA30548016	30	1-10 ER16	30	3000	1 : 1	108	71.5	68	W16X0.8	5006-039A
TDA40548020	40	1-13 ER20	35	3000	1 : 1	95.5	55	86	W20X0.8	5006-040A

AXIAL MILLING HEADS

DIN 5480



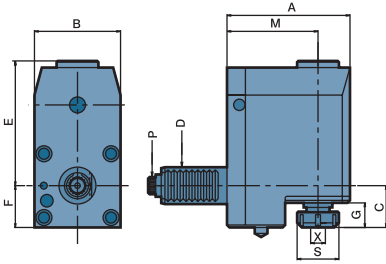
- To be used for cutter arbor according to DIN 6358
- External coolant and intermediate rings supply

DIMENSIONS

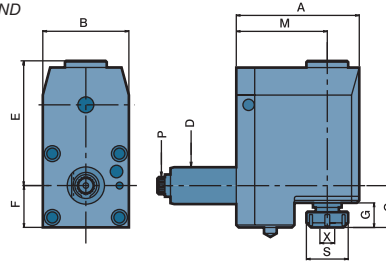
ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	G	P DIN 5480	CODE NO.
DA30548016C	30	16	32	3000	1 : 1	91.5	70	68	27	W16X0.8	5006-041
DA40548016C	40	16	32	3000	1 : 1	68.5	55	86	27	W20X0.8	5006-042
DA40548022C	40	22	32	3000	1 : 1	68.5	55	86	31	W20X0.8	5006-043



MODE: BL
LEFT-HAND



MODE: BR
RIGHT-HAND



- To be used for collet DIN 6499
- Collet is not included
- External coolant supply

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	P DIN 5480	CODE NO.
BR3054802572 BL3054802572	30	1-16 ER25	42	5000	1 : 1	95	60	41.5	75.5	31.5	28.5	72	W16X0.8	5006-044A
BR4054803290 BL4054803290	40	2-20 ER32	50	5000	1 : 1	124	80	44	110	42	34	90	W20X0.8	5006-045

Radial Tapping Heads-Set Back

DIN 5480

DIMENSIONS

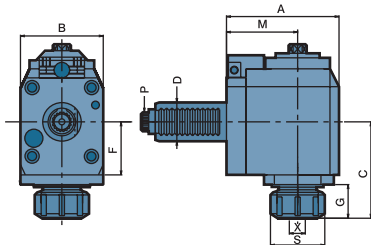
ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	P DIN 5480	CODE NO.
TBR3054801672 TBL3054801672	30	1-10 ER16	30	3000	1 : 1	95	60	44	75.5	31.5	32	72	W16X0.8	5006-046A
TBR4054802090 TBL4054802090	40	1-13 ER20	35	3000	1 : 1	124	80	59.5	110	42	49.5	90	W20X0.8	5006-047



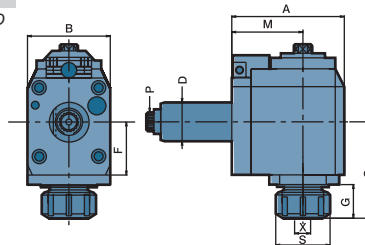
Radial Drilling And Milling Heads

DIN 5480

MODE: FL
LEFT-HAND



MODE: FR
RIGHT-HAND



- To be used for collet DIN 6499
- Collet is not included
- External coolant supply

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	F	G	M	P DIN 5480	CODE NO.
FR3054802555 FL3054802555	30	1-16 ER25	42	5000	1 : 1	97	64	74.5	41	26	55	W16X0.8	5006-048
FR3054802585 FL3054802585	30	1-16 ER25	42	5000	1 : 1	117	64	74.5	41	26	85	W16X0.8	5006-049
FR4054803265 FL4054803265	40	2-20 ER32	50	5000	1 : 1	99	80	71	40	23	65	W20X0.8	5006-050
FR4054803285 FL4054803285	40	2-20 ER32	50	5000	1 : 1	119	80	71	40	23	85	W20X0.8	5006-051
FR40548032100 FL40548032100	40	2-20 ER32	50	5000	1 : 1	134	80	71	40	23	100	W20X0.8	5006-052

Radial Tapping Heads

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	F	G	M	P DIN 5480	CODE NO.
TFR3054801655 TFL3054801655	30	1-10 ER16	30	3000	1 : 1	97	64	75	41	30	55	W16X0.8	5006-053A
TFR3054801685 TFL3054801685	30	1-10 ER16	30	3000	1 : 1	117	64	75	41	30	85	W16X0.8	5006-054
TFR4054802065 TFL4054802065	40	1-13 ER20	35	3000	1 : 1	99	80	70	40	25	65	W20X0.8	5006-055
TFR4054802085 TFL4054802085	40	1-13 ER20	35	3000	1 : 1	119	80	70	40	25	85	W20X0.8	5006-056

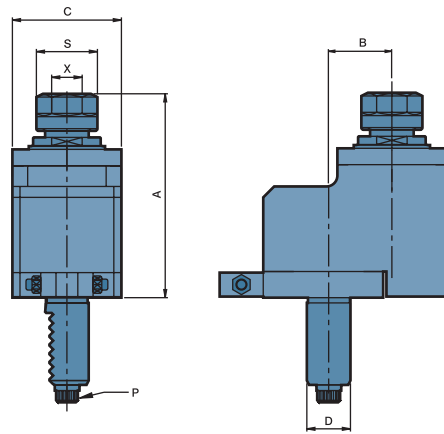


Axial Drilling And Milling Heads-Offset



OFFSET

DIN 5480



- Collet is not included
- To be used for collet DIN 6499
- External coolant supply

DIMENSIONS

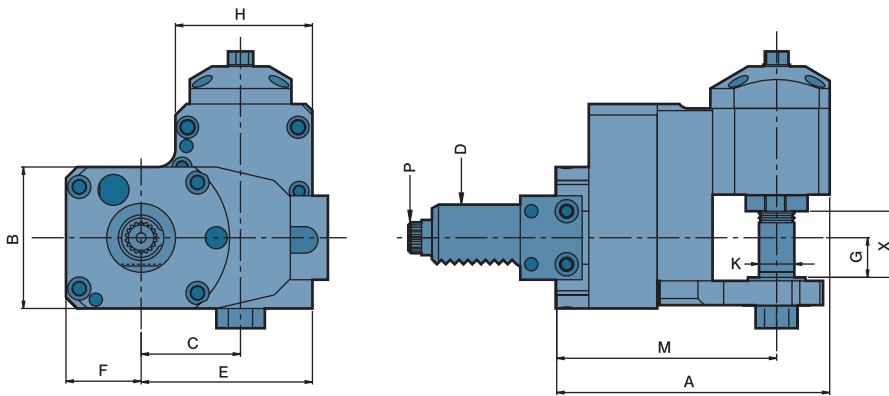
ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	P DIN 5480	CODE NO.
DA3054802529	30	1-16 ER25	42	4000	1 : 1	100	29	60	W16X0.8	5006-057
DA3054802529/1	※ 30	1-16 ER25	42	8000	1 : 2	100	29	60	W16X0.8	5006-058
DA4054803250	40	2-20 ER32	50	4000	1 : 1	125	65	86	W20X0.8	5006-059



Radial Drilling And Milling Heads

DISK CUTTER UNITS

DIN 5480



- External coolant supply

DIMENSIONS

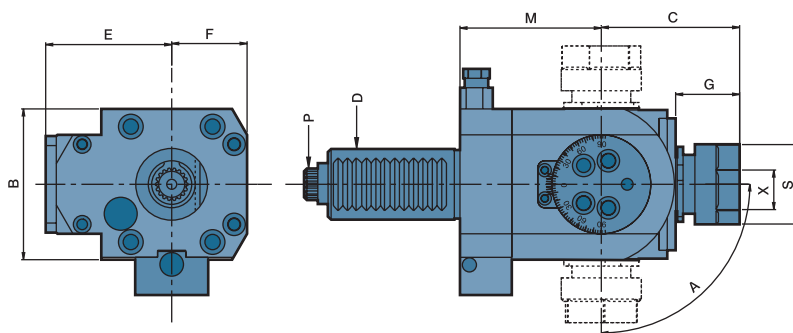
ORDER NO.	D DIN 69880	X Capacity	Maximum R.P.M.	i	A	B	C	E	F	G	H	K	M	P DIN 5480	CODE NO.
BR30548016C/3 BL30548016C/3	30	16	3000	3 : 1	133	64	45	77.5	49	5	65	16	108.5	W16X0.8	5006-060



Angular Heads

ANGLE IS ADJUSTED

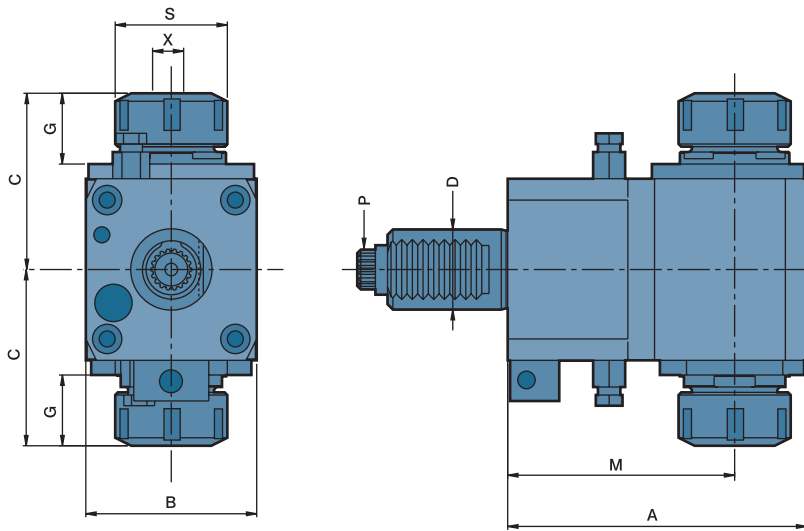
DIN 5480



- Collet is not included
- To be used for collet DIN 6499
- External coolant supply

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	P DIN 5480	CODE NO.
DA30548020B	30	1-13 ER20	35	4000	1 : 1	±90°	64	59	54	32	27	67	W16X0.8	5006-061A



- Collet is not included
- External coolant supply
- To be used for collet DIN 6499

DIMENSIONS

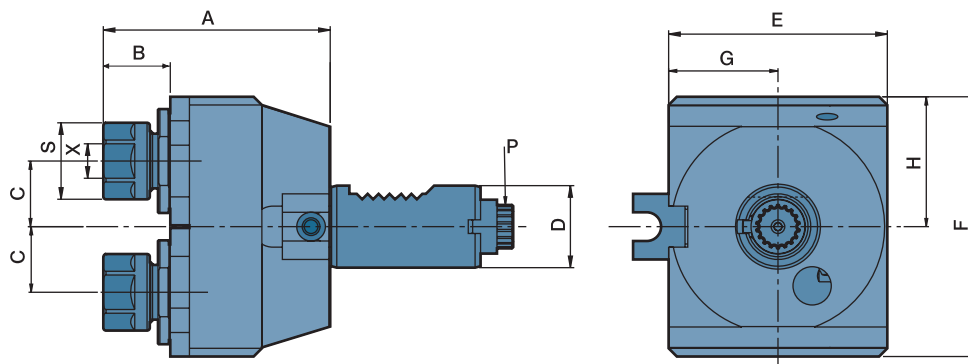
ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	G	M	P DIN 5480	CODE NO.
DF3054802585D	30	1-16 ER25	42	4000	1 : 1	112	64	66	26.5	85	W16X0.8	5006-062
DF4054803285D	40	2-20 ER32	50	4000	1 : 1	119	80	82	28	85	W20X0.8	5006-063
DF40548032100D	40	2-20 ER32	50	4000	1 : 1	134	80	82	28	100	W20X0.8	5006-064



Axial Double Drilling And Milling Heads

DOUBLE COLLETS, Y OFFSET

DIN 5480



- Collet is not included
- External coolant supply
- To be used for collet DIN 6499

DIMENSIONS

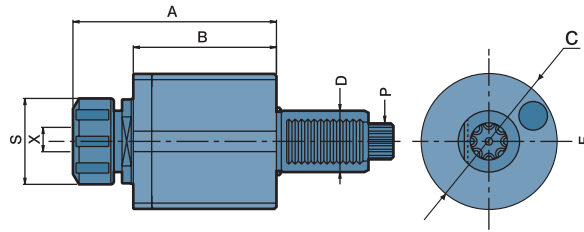
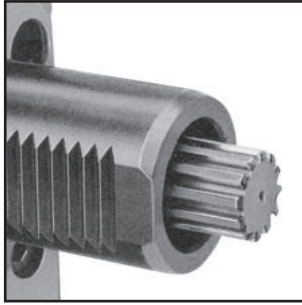
ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	H	P DIN 5480	CODE NO.
DA30548016DY	30	1-10 ER16	30	4000	1 : 1	83	24.5	24	80	95	40	48	W16X0.8	5006-065



Axial Drilling And Milling Heads

FOR DIN 5482 MACHINE USING

DIN 5482



Power Transmission According To DIN 5482

- External coolant supply
- To be used for collet DIN 6499
- Collet is not included

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	P DIN 5482	CODE NO.
DA30548225	30	1-16 ER25	42	6000	1 : 1	101	70	68	B15X12	5006-066
DA40548232	40	2-20 ER32	50	6000	1 : 1	110	73.5	86	B17X14	5006-067
DA50548240	50	3-26 ER40	63	6000	1 : 1	120	81.5	96	B20X17	5006-068
DA60548250	60	10-34 ER50	78	6000	1 : 1	140	88.5	116	B25X22	5006-069

Axial Tapping Heads

DIN 5482

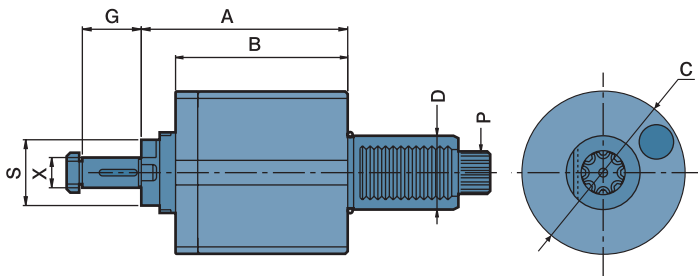
DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	P DIN 5482	CODE NO.
TDA30548216	30	1-10 ER16	30	3000	1 : 1	108	71.5	68	B15X12	5006-070
TDA40548220	40	1-13 ER20	35	3000	1 : 1	95.5	55	86	B17X14	5006-071
TDA50548225	50	1-16 ER25	42	3000	1 : 1	123	81.5	96	B20X17	5006-072
TDA60548232	60	2-20 ER32	50	3000	1 : 1	158.5	88.5	116	B25X22	5006-073



Axial Milling Heads

DIN 5480



- External coolant and intermediate rings supply
- To be used for cutter arbor according to DIN 6358

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	G	P DIN 5482	CODE NO.
DA30548216C	30	16	32	3000	1 : 1	91.5	70	68	27	B15X12	5006-074
DA40548216C	40	16	32	3000	1 : 1	68.5	55	86	27	B17X14	5006-075
DA40548222C	40	22	32	3000	1 : 1	68.5	55	86	31	B17X14	5006-076
DA50548222C	50	22	40	3000	1 : 1	117	81.5	96	31	B20X17	5006-077
DA50548227C	50	27	40	3000	1 : 1	117	88.5	96	33	B20X17	5006-078



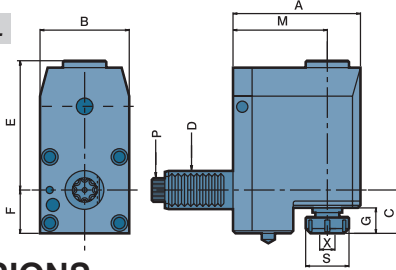
Radial Drilling And Milling Heads



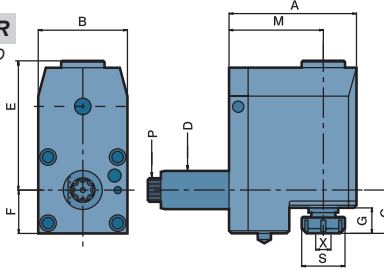
BACKWARDS

DIN 5482

MODE: BL
LEFT-HAND



MODE: BR
RIGHT-HAND



- To be used for collet DIN 6499
- Collet is not included
- External coolant supply

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	P DIN 5482	CODE NO.
BR3054822572 BL3054822572	30	1-16 ER25	42	5000	1 : 1	95	60	42	75.5	31.5	28.5	72	B15X12	5006-079A
BR4054823290 BL4054823290	40	2-20 ER32	50	5000	1 : 1	124	80	44	110	42	34	90	B17X14	5006-080
BR5054824090 BL5054824090	50	3-26 ER40	63	5000	1 : 1	129	86	49	112	45	39	90	B20X17	5006-081
BR60548250106 BL60548250106	60	10-34 ER50	78	5000	1 : 1	147	104	83	118	54	42	106	B25X22	5006-082A

Radial Tapping Heads-Backwards

DIMENSIONS

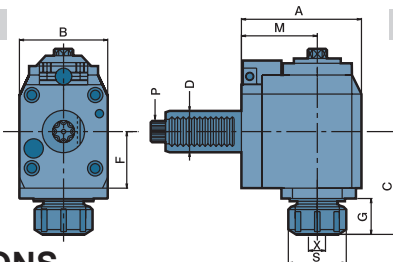
ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	P DIN 5482	CODE NO.
TBR3054821672 TBL3054821672	30	1-10 ER16	30	3000	1 : 1	95	60	44	75.5	31.5	32	69	B15X12	5006-083A
TBR4054822090 TBL4054822090	40	1-13 ER20	35	3000	1 : 1	24	80	50	110	42	34	90	B17X14	5006-084
TBR5054822590 TBL5054822590	50	2-16 ER25	42	3000	1 : 1	129	86	54	112	45	36	90	B20X17	5006-085
TBR60548232106 TBL60548232106	60	2-20 ER32	50	3000	1 : 1	147	104	87	118	54	40	106	B25X22	5006-086A



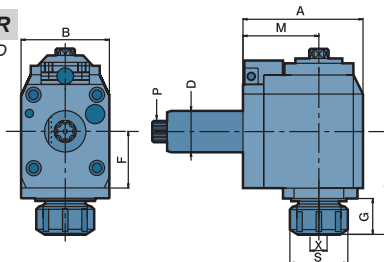
Radial Drilling And Milling Heads

DIN 5482

MODE: FL
LEFT-HAND



MODE: FR
RIGHT-HAND



- To be used for collet DIN 6499
- Collet is not included
- External coolant supply

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	F	G	M	P DIN 5482	CODE NO.
FR3054822565 FL3054822565	30	1-16 ER25	42	5000	1 : 1	97	64	74.5	41	26	65	B15X12	5006-087
FR3054822585 FL3054822585	30	1-16 ER25	42	5000	1 : 1	117	64	74.5	41	26	85	B15X12	5006-088
FR4054823265 FL4054823265	40	2-20 ER32	50	5000	1 : 1	99	80	71	40	23	65	B17X14	5006-089
FR4054823285 FL4054823285	40	2-20 ER32	50	5000	1 : 1	119	80	71	40	23	85	B17X14	5006-090
FR5054824075 FL5054824075	50	3-26 ER40	63	5000	1 : 1	115	88	103	56	40	75	B20X17	5006-091

Radial Tapping Heads

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	F	G	M	P DIN 5482	CODE NO.
TFR3054821665 TFL3054821665	30	1-10 ER16	30	3000	1 : 1	97	64	75	41	30	65	B15X12	5006-092
TFR3054821685 TFL3054821685	30	1-10 ER16	30	3000	1 : 1	117	64	75	41	30	85	B15X12	5006-093
TFR4054822065 TFL4054822065	40	1-13 ER20	35	3000	1 : 1	99	80	70	40	25	65	B17X14	5006-094
TFR4054822085 TFL4054822085	40	1-13 ER20	35	3000	1 : 1	119	80	70	40	25	85	B17X14	5006-095

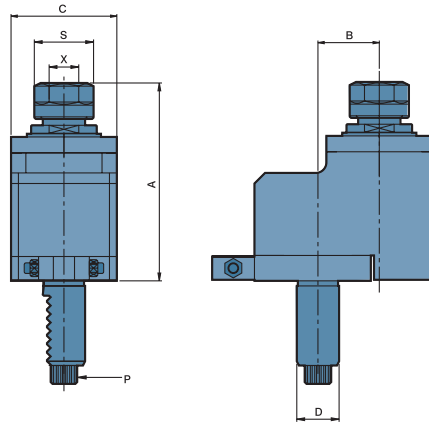


Axial Drilling And Milling Heads



OFFSET TYPE

DIN 5482



- To be used for collet DIN 6499
- Collet is not included
- External coolant supply

DIMENSIONS

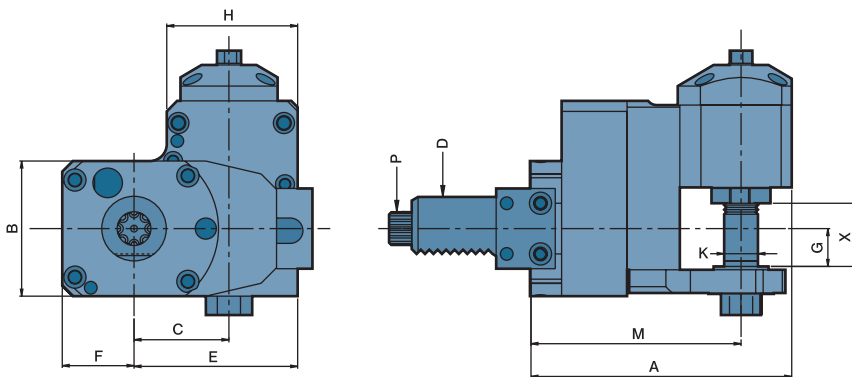
ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	P DIN 5482	CODE NO.
DA3054822529	30	1-16 ER25	42	4000	1 : 1	100	29	60	B15X12	5006-097
DA3054822529/1	※ 30	1-16 ER25	42	8000	1 : 2	100	29	60	B15X12	5006-098
DA4054823250	40	2-20 ER32	50	4000	1 : 1	125	50	75	B17X14	5006-099
DA5054824065	50	3-26 ER40	63	3000	1 : 1	124	65	86	B20X17	5006-100



Radial Milling Heads

DISK CUTTER UNITS

DIN 5482



- External coolant supply

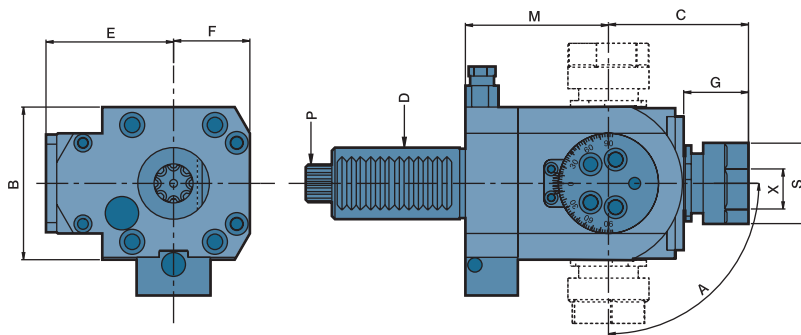
DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	Maximum R.P.M.	i	A	B	C	E	F	G	H	K	M	P DIN 5482	CODE NO.
BR30548216C/3 BL30548216C/3	30	16	3000	3 : 1	133	64	45	77.5	49	5	65	16	107.5	B15X12	5006-101



Angular Heads

DIN 5482



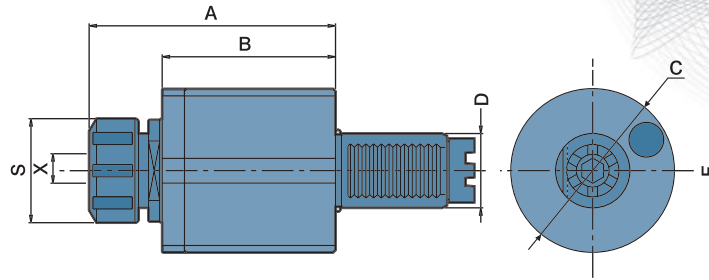
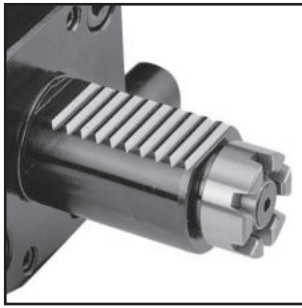
- To be used for collet DIN 6499
- Collet is not included
- External coolant supply

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	P DIN 5482	CODE NO.
DA30548220B	30	1-13 ER20	35	4000	1 : 1	±90°	64	59	54	32	27	67	B15X12	5006-102A



SPUR COUPLING-MT TYPE



- Power Transmission According To "BARUFFALDI"
- MT: Frontal Transmission Coupling Gear is Fixed Version
- To be used for collet DIN 6499
- External coolant supply
- Collet is not included

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	CODE NO.
DA20MT16	20	1-10 ER16	30	6000	1 : 1	76	48	58	5006-103
DA30MT25	30	1-16 ER25	42	6000	1 : 1	86	55	68	5006-104
DA40MT32	40	2-20 ER32	50	6000	1 : 1	112	55	86	5006-105
DA50MT40	50	3-26 ER40	63	6000	1 : 1	118	81.5	96	5006-106

Axial Tapping Heads

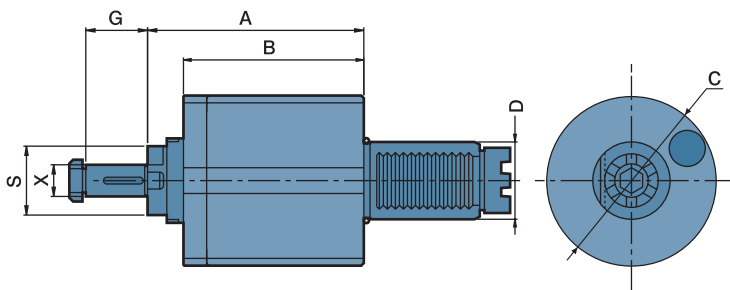
DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	CODE NO.
TDA30MT16	30	1-10 ER16	30	3000	1 : 1	108	71.5	68	5006-107
TDA40MT20	40	1-13 ER20	35	3000	1 : 1	95.5	55	86	5006-108
TDA50MT25	50	1-16 ER25	42	3000	1 : 1	123	81.5	96	5006-109



Axial Milling Heads

SPUR COUPLING-MT TYPE



- External coolant and intermediate rings supply
- To be used for cutter arbor according to DIN 6358

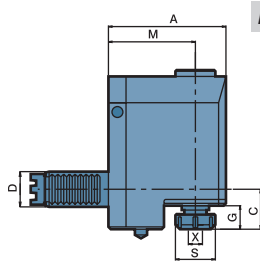
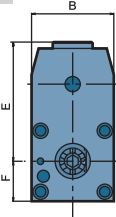
DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	G	CODE NO.
DA30MT16C	30	16	32	3000	1 : 1	91.5	55	68	27	5006-110
DA40MT16C	40	16	32	3000	1 : 1	68.5	55	86	27	5006-111
DA40MT22C	40	22	32	3000	1 : 1	68.5	55	86	31	5006-112
DA50MT22C	50	22	40	3000	1 : 1	117	81.5	96	31	5006-113
DA50MT27C	50	27	40	3000	1 : 1	117	81.5	96	33	5006-114

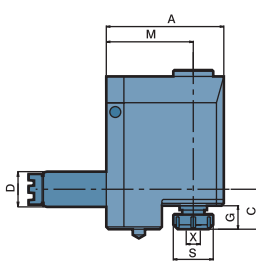
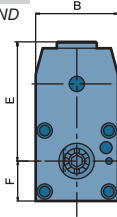


SPUR COUPLING-MT TYPE

MODE: BL
LEFT-HAND



MODE: BR
RIGHT-HAND



- External coolant supply
- To be used for collet DIN 6499
- Collet is not included

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	CODE NO.
BR20MT1660 BL20MT1660	20	1-10 ER16	30	5000	1 : 1	83	50	35	70	27	27	60	5006-115A
BR30MT2572 BL30MT2572	30	1-16 ER25	42	5000	1 : 1	95	60	42	76	32	29	72	5006-116A
BR40MT3290 BL40MT3290	40	2-20 ER32	50	5000	1 : 1	124	80	44	110	42	34	90	5006-117
BR50MT4090 BL50MT4090	50	3-26 ER40	63	5000	1 : 1	129	86	49	112	45	39	90	5006-118

Radial Tapping Heads-Backwards

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	CODE NO.
TBR30MT1672 TBL30MT1672	30	1-10 ER16	30	3000	1 : 1	95	60	44	76	32	32	72	5006-119A
TBR40MT2090 TBL40MT2090	40	1-13 ER20	35	3000	1 : 1	124	80	50	110	42	34	90	5006-120
TBR50MT2590 TBL50MT2590	50	1-16 ER25	42	3000	1 : 1	129	86	54	112	45	36	90	5006-121

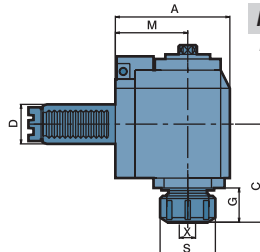
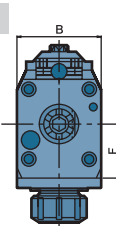


Radial Drilling And Milling Heads

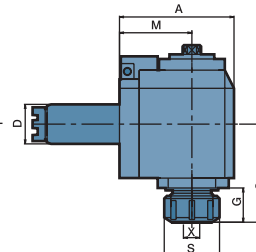
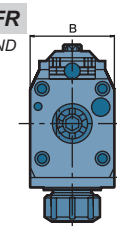
SET BACK

SPUR COUPLING-MT TYPE

MODE: FL
LEFT-HAND



MODE: FR
RIGHT-HAND



- External coolant supply
- To be used for collet DIN 6499
- Collet is not included

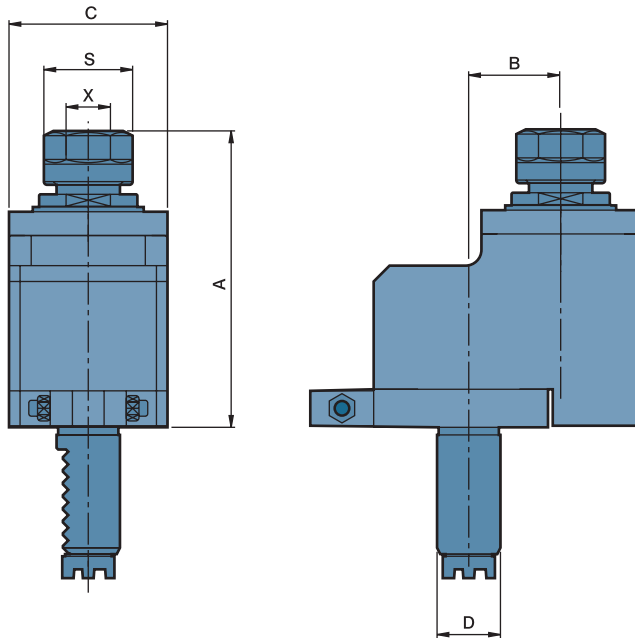
DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	F	G	M	CODE NO.
FR30MT2565 FL30MT2565	30	1-16 ER25	42	5000	1 : 1	97	64	74.5	41	26	65	5006-122
FR30MT2585 FL30MT2585	30	1-16 ER25	42	5000	1 : 1	117	64	74.5	41	26	85	5006-123
FR40MT3265 FL40MT3265	40	2-20 ER32	50	5000	1 : 1	99	80	71	40	23	65	5006-124
FR40MT3285 FL40MT3285	40	2-20 ER32	50	5000	1 : 1	119	80	71	40	23	85	5006-125
FR40MT32100 FL40MT32100	40	2-20 ER32	50	5000	1 : 1	134	80	71	40	23	100	5006-126

Radial Tapping Heads

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	F	G	M	CODE NO.
TFR30MT1665 TFL30MT1665	30	1-10 ER16	30	3000	1 : 1	97	64	75	41	30	65	5006-128
TFR30MT1685 TFL30MT1685	30	1-10 ER16	30	3000	1 : 1	117	64	75	41	30	85	5006-129
TFR40MT2065 TFL40MT2065	40	1-13 ER20	35	3000	1 : 1	99	80	70	40	25	65	5006-130
TFR40MT2085 TFL40MT2085	40	1-13 ER20	35	3000	1 : 1	119	80	70	40	25	85	5006-131
TFR50MT2575 TFL50MT2575	50	1-16 ER25	42	3000	1 : 1	115	88	103	56	42	75	5006-132



- Collet is not included
- External coolant supply
- To be used for collet DIN 6499

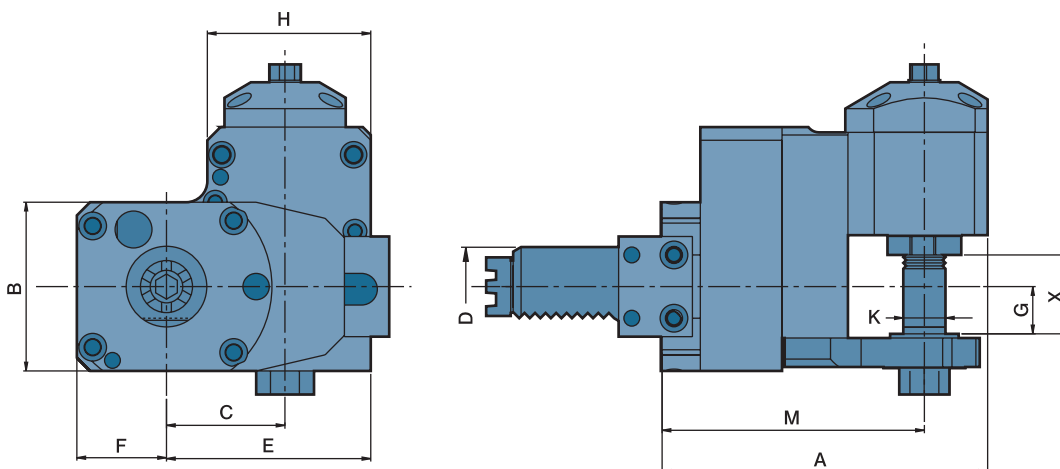
DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	CODE NO.
DA20MT1629	20	1-10 ER16	30	4000	1 : 1	93.5	29	50	5006-133
DA30MT2529	30	1-16 ER25	42	4000	1 : 1	100	29	60	5006-134
DA30MT2529/1	※ 30	2-20 ER32	42	8000	1 : 2	100	29	60	5006-135
DA40MT3250	40	2-20 ER32	50	4000	1 : 1	125	50	75	5006-136
DA50MT4065	50	3-26 ER40	63	3000	1 : 1	124	65	86	5006-137



Radial Milling Heads

SPUR COUPLING-MT TYPE

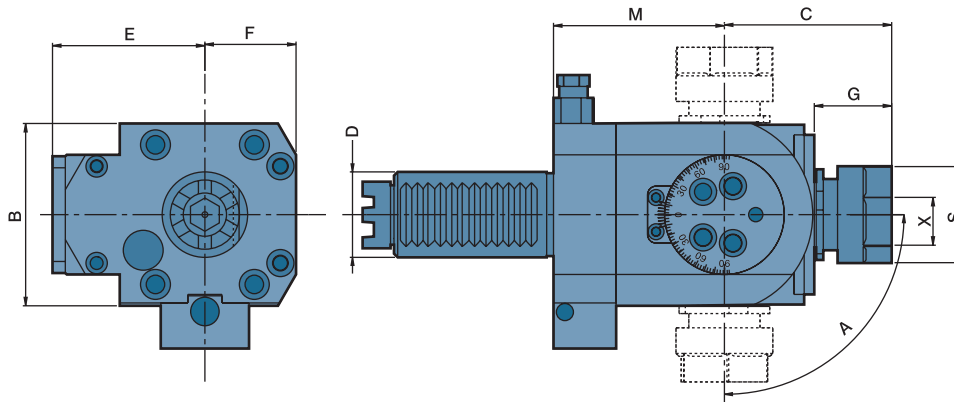


- External coolant supply

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	Maximum R.P.M.	i	A	B	C	E	F	G	H	K	M	CODE NO.
BR30MT16C/3 BL30MT16C/3	30	16	3000	3 : 1	133	64	45	77.5	49	5	65	16	107.5	5006-138

SPUR COUPLING-MT TYPE



- To be used for collet DIN 6499
- External coolant supply
- Collet is not included

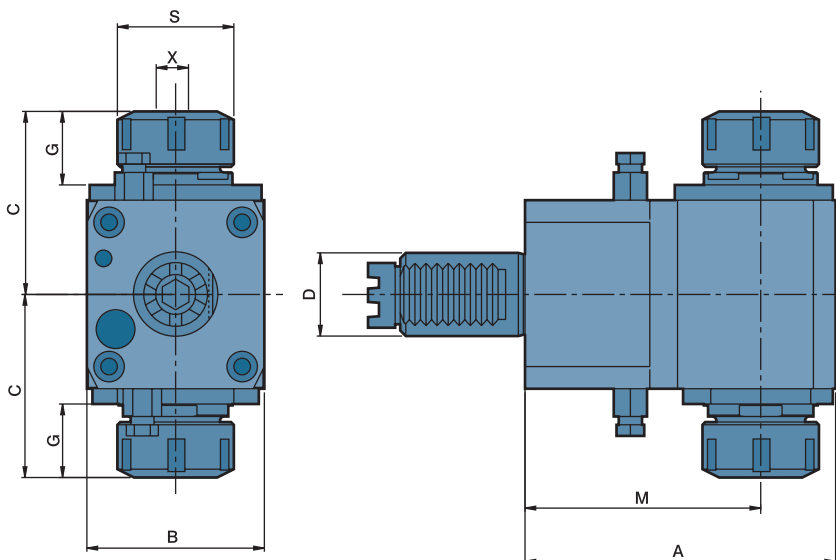
DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	CODE NO.
DA30MT20B	30	1-13 ER20	35	4000	1 : 1	±90°	64	59	54	32	27	67	5006-139A

Radial Drilling And Milling Heads

DOUBLE HEAD TYPE

SPUR COUPLING-MT TYPE



- To be used for collet DIN 6499
- External coolant supply
- Collet is not included

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	G	M	CODE NO.
DF30MT2585D	30	1-16 ER25	42	4000	1 : 1	112	64	66	27	85	5006-140
DF40MT3285D	40	2-20 ER32	50	4000	1 : 1	119	80	82	28	85	5006-141
DF40MT32100D	40	2-20 ER32	50	4000	1 : 1	134	80	82	28	100	5006-142

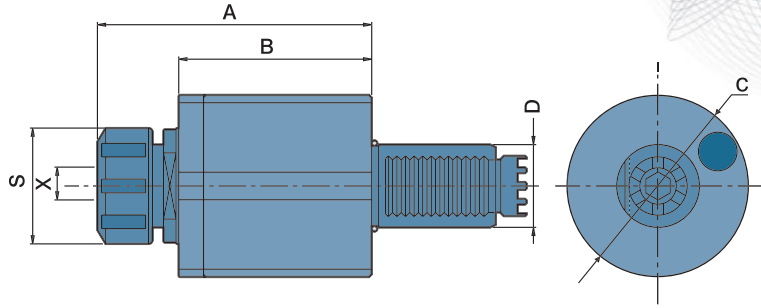
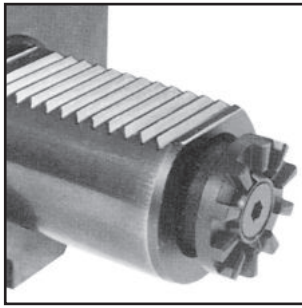


Axial Drilling And Milling Heads-For "Diplomatic" Type



VERTEX®

SPUR COUPLING-IT TYPE



- Power Transmission According To "DIPLOMATIC"
- IT: Fron-side Coupling is Elastic Stroke

- External coolant supply
- To be used for collet DIN 6499
- Collet is not included

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	CODE NO.
DA30IT25	30	1-16 ER25	42	6000	1 : 1	86	55	68	5006-143

Axial Tapping Heads

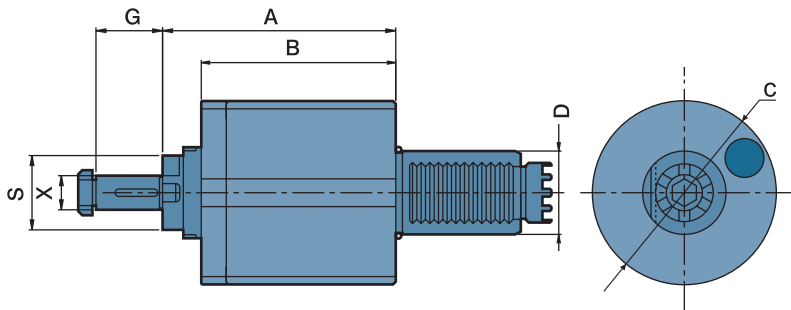
DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	CODE NO.
TDA30IT16	30	1-10 ER16	30	3000	1 : 1	85	55	68	5006-146
TDA40IT20	40	1-13 ER20	35	3000	1 : 1	102	55	86	5006-147



Axial Milling Heads

SPUR COUPLING-IT TYPE



- To be used for cutter arbor according to DIN 6358
- External coolant and intermediate rings supply

DIMENSIONS

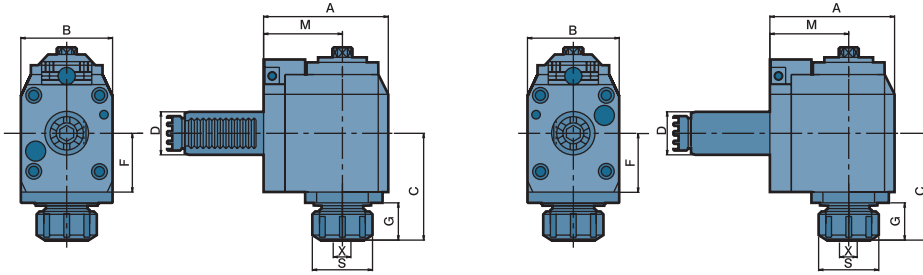
ORDER NO.	D DIN 69880	X DIN 6358	S	Maximum R.P.M.	i	A	B	C	G	CODE NO.
DA30IT16C	30	16	32	3000	1 : 1	91.5	55	68	27	5006-149
DA40IT16C	40	16	32	3000	1 : 1	68.5	55	86	27	5006-150
DA40IT22C	40	22	32	3000	1 : 1	68.5	55	86	31	5006-151



Radial Drilling And Milling Heads

**VERTEX®**

SPUR COUPLING-IT TYPE

MODE: FL
LEFT-HAND**MODE: FR**
RIGHT-HAND

- External coolant supply
- To be used for collet DIN 6499
- Collet is not included

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	F	G	M	CODE NO.
FL30IT2565	30	1-16 ER25	42	5000	1 : 1	97	64	74.5	41	26	65	5006-154
FR30IT2585 FL30IT2585	30	1-16 ER25	42	5000	1 : 1	117	64	74.5	41	26	85	5006-155
FL40IT3265	40	2-20 ER32	50	5000	1 : 1	99	80	71	40	23	65	5006-156
FL40IT32100	40	2-20 ER32	50	5000	1 : 1	134	80	71	40	23	100	5006-158



Radial Tapping Heads

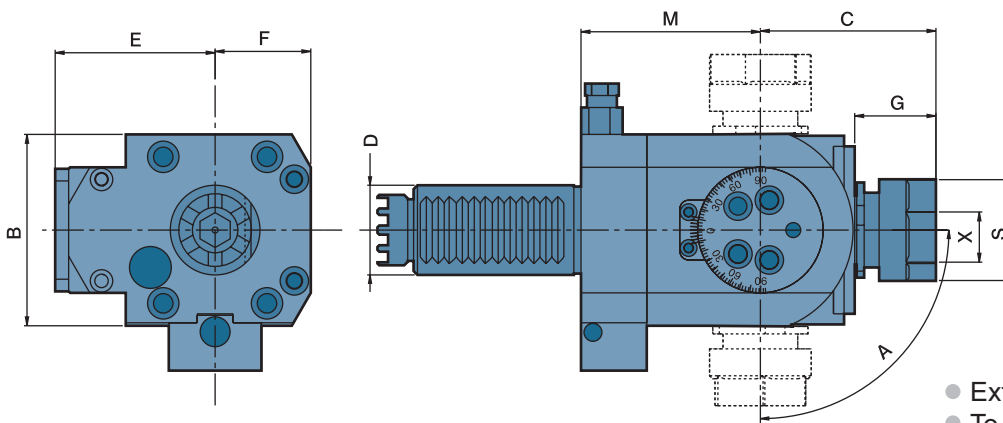
DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	F	G	M	CODE NO.
TFR30IT1665 TFL30IT1665	30	1-10 ER16	32	3000	1 : 1	97	64	75	41	30	65	5006-160
TFR30IT1685 TFL30IT1685	30	1-10 ER16	32	3000	1 : 1	117	64	75	41	30	85	5006-161
TFR40IT2065	40	1-13 ER20	35	3000	1 : 1	99	80	70	40	25	65	5006-162
TFR40IT2085 TFL40IT2085	40	1-13 ER20	35	3000	1 : 1	119	80	70	40	25	85	5006-163



Angular Heads

SPUR COUPLING-IT TYPE



- External coolant supply
- To be used for collet DIN 6499
- Collet is not included

DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	E	F	G	M	CODE NO.
DA30IT20B	30	1-13 ER20	35	4000	1 : 1	±90°	64	59	54	32	27	67	5006-165A

Other shank dimensions under development

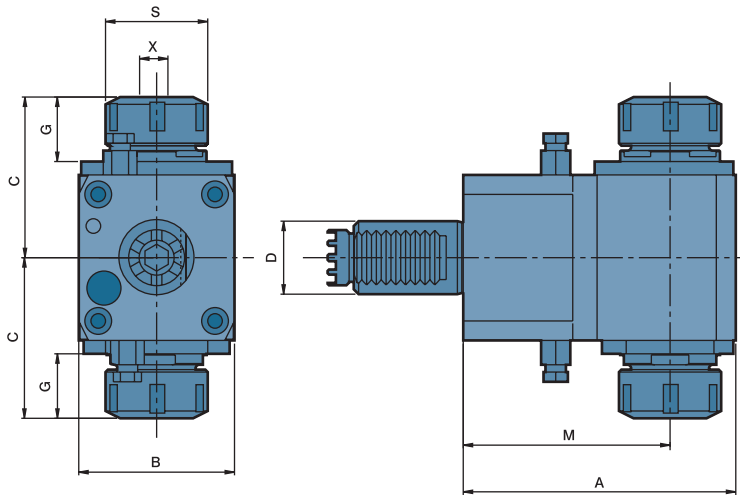


Radial Drilling And Milling Heads



DOUBLE COLLETS

SPUR COUPLING-IT TYPE



- Collet is not included
- External coolant supply
- To be used for collet DIN 6499

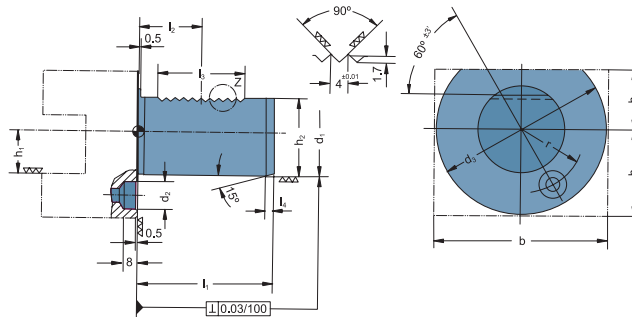
DIMENSIONS

ORDER NO.	D DIN 69880	X Capacity	S	Maximum R.P.M.	i	A	B	C	G	M	CODE NO.
DF30IT2585D	30	1-16 ER25	42	4000	1 : 1	112	64	66	26.5	85	5006-166
DF40IT3285D	40	2-20 ER32	50	4000	1 : 1	119	80	82	28	85	5006-167
DF40IT32100D	40	2-20 ER32	50	4000	1 : 1	134	80	82	28	100	5006-168

Other shank dimensions under development

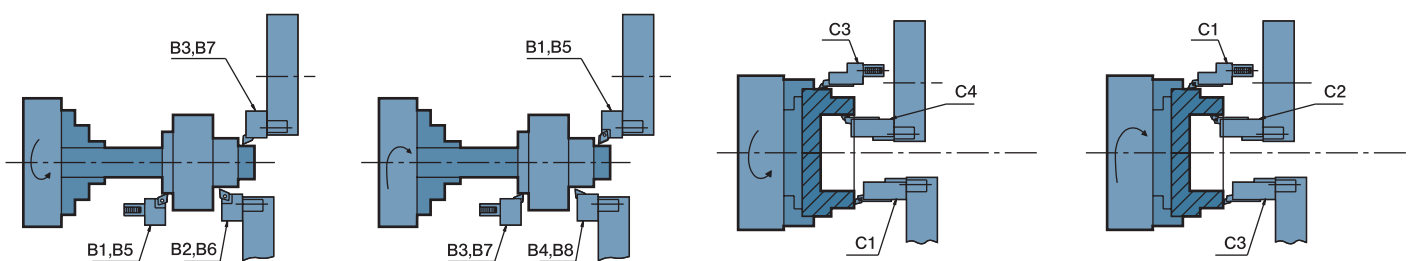


VDI Dimensional Specification of Shank DIN 69880



DIMENSIONS

d1 h6	l1 ±0.3	d2		d3	h1 max	h2 ±0.1	l2 ±0.05	l3 min	l4 +1	r4 ±0.02
20	40	10	H6	50	16	18	21.7	24	2	18
30	55	14	H9	68	20	27	29.7	40	2	25
40	63	14	H9	83	25	36	29.7	40	3	32
50	78	16	H9	98	32	45	35.7	48	3	37
60	94	16	H9	123	32	55	43.7	56	4	48





Radial Static Holders

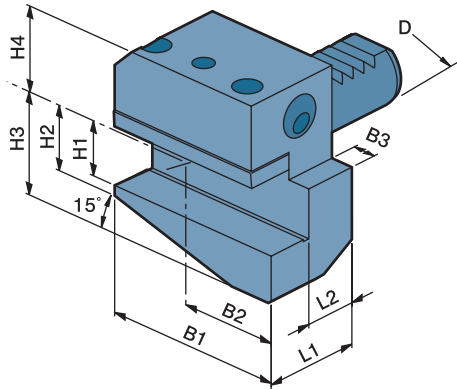


B1 B2 TYPE

DIN 69880

B1

- Short
- External Coolant Supply
- Right-hand

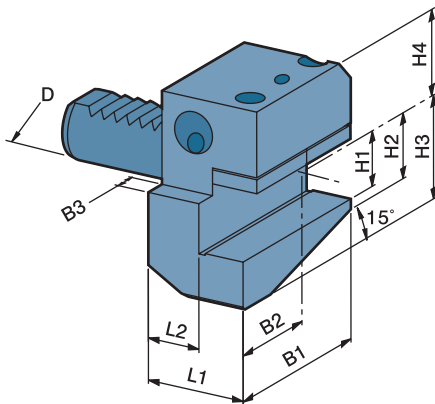


DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
B1-20x16	20	55	30	7	16	19	30	25	30	16	5006-180
B1-30x20	30	70	35	10	20	26	38	28	40	22	5006-181
B1-40x25	40	85	42.5	12.5	25	35	48	32.5	44	22	5006-182
B1-50x32	50	100	50	16	32	42	60	35	55	30	5006-183
B1-60x32	60	125	62.5	16	32	46	62.5	42.5	60	30	5006-184

B2

- Left-hand
- External Coolant Supply
- Short



DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
B2-20x16	20	55	30	7	16	19	30	25	30	16	5006-185
B2-30x20	30	70	35	10	20	26	38	28	40	22	5006-186
B2-40x25	40	85	42.5	12.5	25	35	48	32.5	44	22	5006-187
B2-50x32	50	100	50	16	32	42	60	35	55	30	5006-188
B2-60x32	60	125	62.5	16	32	46	62.5	42.5	60	30	5006-189



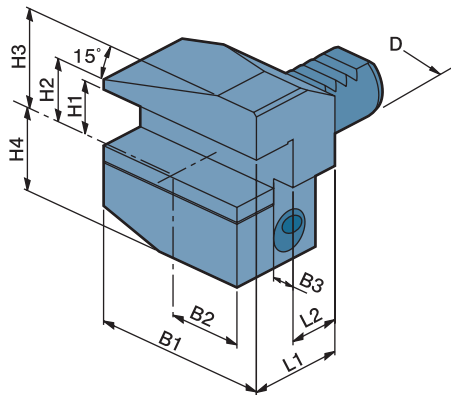
Radial Static Holders

B3 B4 TYPE

DIN 69880

B3

- Short
- External Coolant Supply
- Right-hand

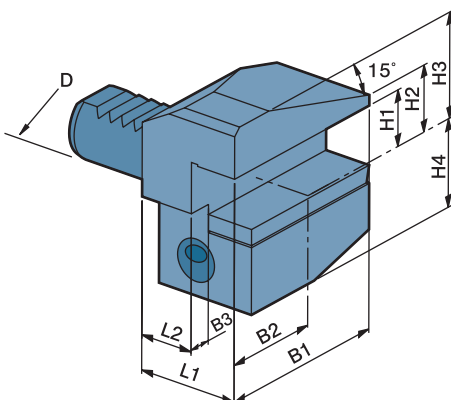


DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
B3-20x16	20	55	30	7	16	19	30	25	30	16	5006-190
B3-30x20	30	70	35	10	20	22	38	35	40	22	5006-191
B3-40x25	40	85	42.5	12.5	25	30	48	42.5	44	22	5006-192
B3-50x32	50	100	50	16	32	35	60	50	55	30	5006-193
B3-60x32	60	125	62.5	16	32	42.5	62.5	42.5	60	30	5006-194

B4

- Left-hand
- External Coolant Supply
- Short



DIMENSIONS

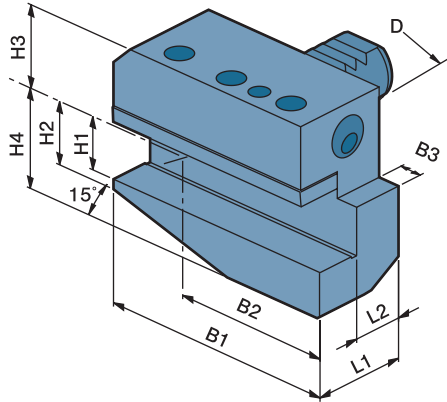
ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
B4-20x16	20	55	30	7	16	19	30	25	30	16	5006-195
B4-30x20	30	70	35	10	20	22	38	35	40	22	5006-196
B4-40x25	40	85	42.5	12.5	25	30	48	42.5	44	22	5006-197
B4-50x32	50	100	50	16	32	35	60	50	55	30	5006-198
B4-60x32	60	125	62.5	16	32	42.5	62.5	42.5	60	30	5006-199

B5 B6 TYPE

DIN 69880

B5

- External Coolant Supply
- Right-hand
- Long

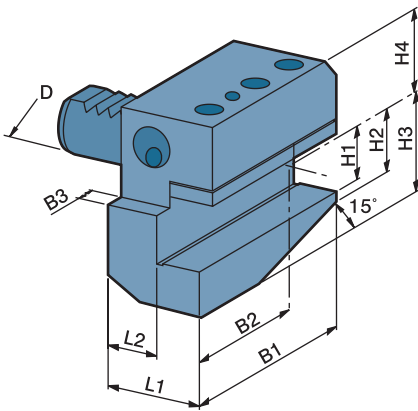


DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
B5-20x16	20	75	50	7	16	19	30	25	30	16	5006-200
B5-30x20	30	100	65	10	20	26	38	28	40	22	5006-201
B5-40x25	40	118	76	12.5	25	35	48	32.5	44	22	5006-202
B5-50x32	50	130	80	16	32	42	60	35	55	30	5006-203
B5-60x32	60	145	83	16	32	46	62.5	42.5	60	30	5006-204

B6

- Left-hand
- External Coolant Supply
- Long



DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
B6-20x16	20	75	50	7	16	19	30	25	30	16	5006-205
B6-30x20	30	100	65	10	20	26	38	28	40	22	5006-206
B6-40x25	40	118	76	12.5	25	35	48	32.5	44	22	5006-207
B6-50x32	50	130	80	16	32	42	60	35	55	30	5006-208
B6-60x32	60	145	83	16	32	46	62.5	42.5	60	30	5006-209

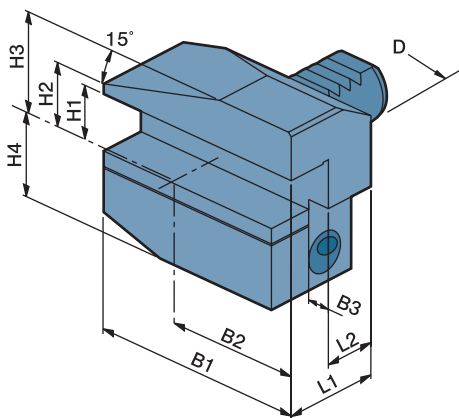
Radial Static Holders

B7 B8 TYPE

DIN 69880

B7

- External Coolant Supply
- Right-hand
- Long

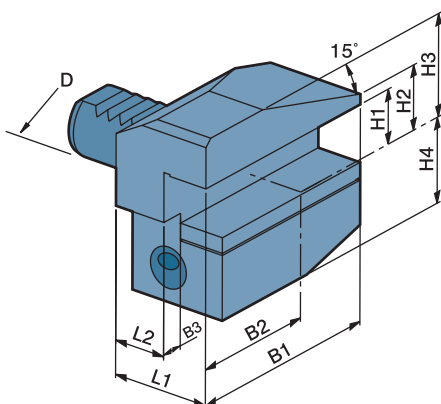


DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
B7-20x16	20	75	50	7	16	19	30	25	30	16	5006-210
B7-30x20	30	100	65	10	20	22	38	35	40	22	5006-211
B7-40x25	40	118	75.5	12.5	25	30	48	42.5	44	22	5006-212
B7-50x32	50	130	80	16	32	35	60	50	55	30	5006-213
B7-60x32	60	145	82.5	16	32	42.5	62.5	42.5	60	30	5006-214

B8

- Left-hand
- External Coolant Supply
- Long



DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
B8-20x16	20	75	50	7	16	19	30	25	30	16	5006-215
B8-30x20	30	100	65	10	20	22	38	35	40	22	5006-216
B8-40x25	40	118	75.5	12.5	25	30	48	42.5	44	22	5006-217
B8-50x32	50	130	80	16	32	35	60	50	55	30	5006-218
B8-60x32	60	145	82.5	16	32	42.5	62.5	42.5	60	30	5006-219

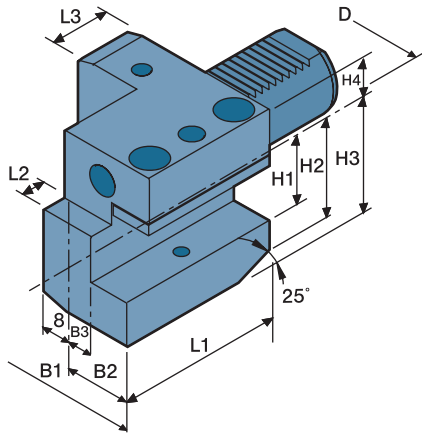


Axial Static Holders



C1 C2 TYPE

DIN 69880

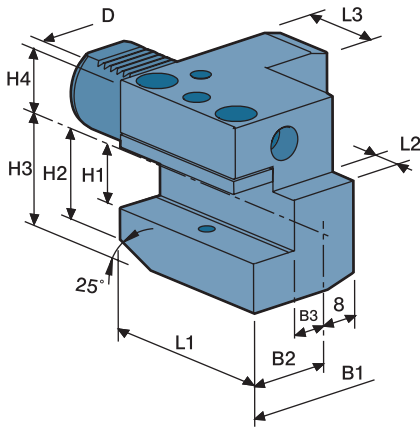


C1

- Right-hand
- External Coolant Supply

DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	L3	CODE NO.
C1-20x16	20	65	40	26	16	23	30	25	50	7	30	5006-220
C1-30x20	30	70	35	17	20	28	38	28	70	10	30	5006-221
C1-40x25	40	85	42.5	21	25	-	48	32.5	85	12.5	30	5006-222
C1-50x32	50	100	50	26	32	-	60	35	100	16	40	5006-223
C1-60x32	60	125	62.5	33	32	-	62.5	42.5	125	16	40	5006-224



C2

- External Coolant Supply
- Left-hand

DIMENSIONS

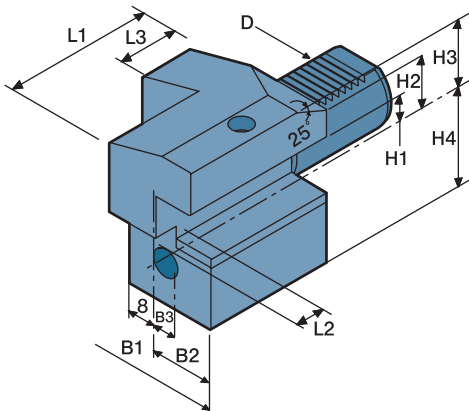
ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	L3	CODE NO.
C2-20x16	20	65	40	26	16	23	30	25	50	7	30	5006-225
C2-30x20	30	76	41	23	20	28	38	28	70	10	30	5006-226
C2-40x25	40	90	47.5	25.5	25	-	48	32.5	85	12.5	30	5006-227
C2-50x32	50	105	55	30.5	32	-	60	35	100	16	40	5006-228
C2-60x32	60	125	62.5	33	32	-	62.5	42.5	125	16	40	5006-229



Axial Static Holders

C3 C4 TYPE

DIN 69880

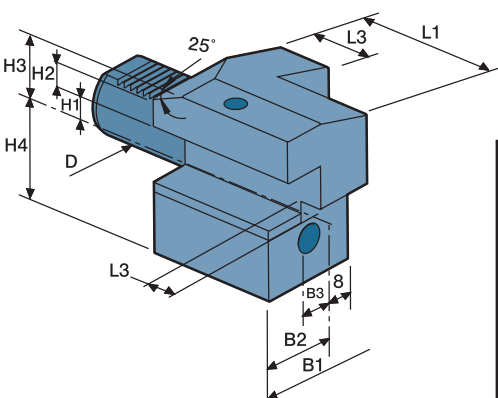


C3

- Right-hand
- External Coolant Supply

DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	L3	CODE NO.
C3-20x16	20	65	40	26	16	23	30	25	50	7	30	5006-230
C3-30x20	30	70	35	17	20	28	38	35	70	10	30	5006-231
C3-40x25	40	85	42.5	21	25	-	48	42.5	85	12.5	30	5006-232
C3-50x32	50	100	50	26	32	-	60	50	100	16	40	5006-233
C3-60x32	60	125	62.5	33	32	-	62.5	62.5	125	16	40	5006-234



C4

- External Coolant Supply
- Left-hand

DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	L3	CODE NO.
C4-20x16	20	65	40	26	16	23	30	25	50	7	30	5006-235
C4-30x20	30	76	41	23	20	28	38	35	70	10	30	5006-236
C4-40x25	40	90	47.5	25.5	25	-	48	42.5	85	12.5	30	5006-237
C4-50x32	50	105	55	30.5	32	-	60	50	100	16	40	5006-238
C4-60x32	60	125	62.5	33	32	-	62.5	62.5	125	16	40	5006-239



Combined Static Holders

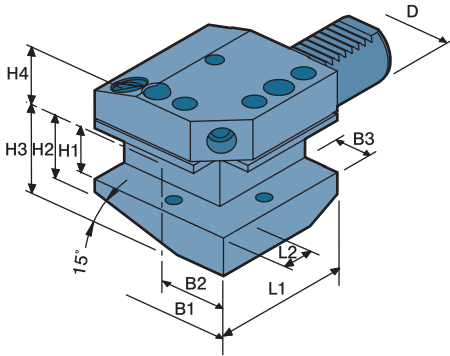


CB1 CB2 TYPE

DIN 69880

CB1

- External Coolant Supply
- Right-hand

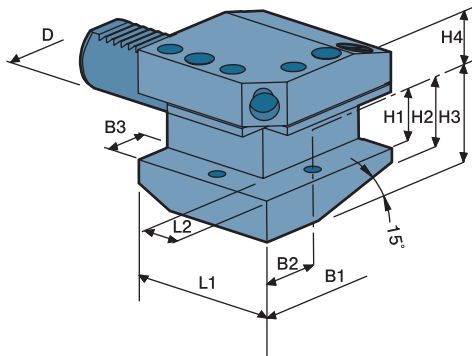


DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
CB1-20x16	20	65	40	14	16	19	30	25	50	14	5006-240
CB1-30x20	30	74	40	18	20	26	38	28	70	18	5006-241
CB1-40x25	40	85	45	22	25	35	48	32.5	100	22	5006-242
CB1-50x32	50	105	55	25	32	42	60	35	120	25	5006-243
CB1-60x32	60	125	62.5	30	32	46	62.5	42.5	135	30	5006-244

CB2

- Left-hand
- External Coolant Supply



DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
CB2-20x16	20	65	40	14	16	19	30	25	50	14	5006-245
CB2-30x20	30	74	40	18	20	26	38	28	70	18	5006-246
CB2-40x25	40	85	47	22	25	35	48	32.5	100	22	5006-247
CB2-50x32	50	105	55	25	32	42	60	35	120	25	5006-248
CB2-60x32	60	125	62.5	30	32	46	62.5	42.5	135	30	5006-249



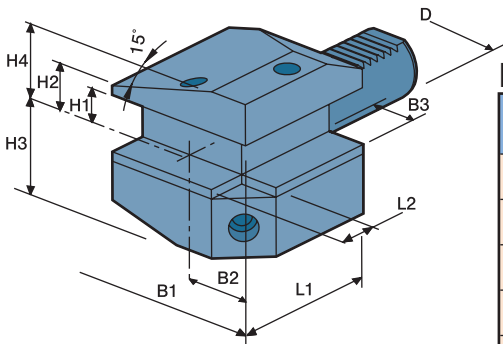
Combined Static Holders

CB3 CB4 TYPE

DIN 69880

CB3

- External Coolant Supply
- Right-hand

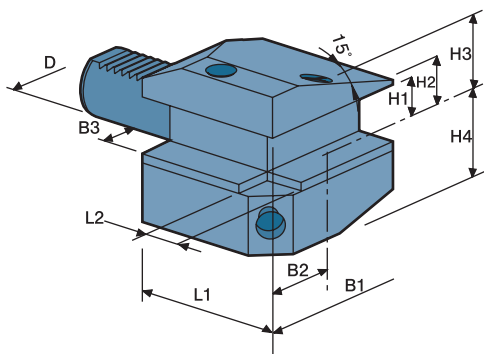


DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
CB3-20x16	20	65	40	14	16	19	25	30	50	14	5006-250
CB3-30x20	30	74	40	18	20	22	38	28	70	18	5006-251
CB3-40x25	40	85	45	22	25	30	48	32.5	100	22	5006-252
CB3-50x32	50	105	55	25	32	35	50	60	120	25	5006-253
CB3-60x32	60	125	62.5	30	32	42.5	62.5	62.5	135	30	5006-254

CB4

- Left-hand
- External Coolant Supply



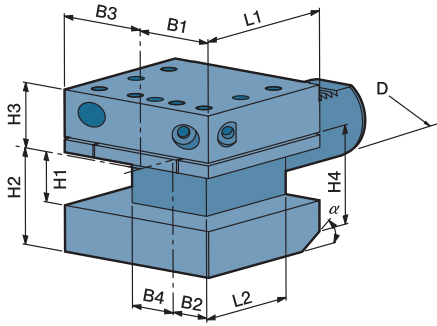
DIMENSIONS

ORDER NO.	D	B1	B2	B3	H1	H2	H3	H4	L1	L2	CODE NO.
CB4-20x16	20	65	40	14	16	19	30	25	50	14	5006-255
CB4-30x20	30	74	40	18	20	22	28	38	70	18	5006-256
CB4-40x25	40	85	47	22	25	30	32.5	48	100	22	5006-257
CB4-50x32	50	105	55	25	32	35	60	50	120	25	5006-258
CB4-60x32	60	125	62.5	30	32	42.5	62.5	62.5	135	30	5006-259



D1

- Right-hand
- External Coolant Supply

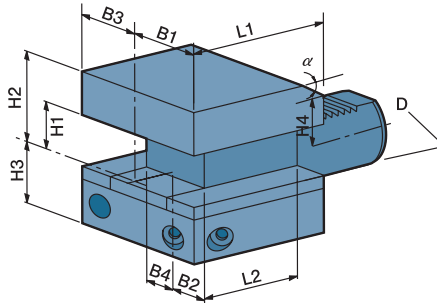


DIMENSIONS

ORDER NO.	D	B1	B2	B3	B4	H1	H2	H3	H4	L1	L2	α	CODE NO.
D1-30x20	30	35	17	41	23	20	38	35	30	60	42	25°	5006-260
D1-40x25	40	42.5	21	47.5	25.5	25	48	42.5	40	72	50	25°	5006-261
D1-50x32	50	50	26	55	30.5	32	60	50	-	85	60	-	5006-262
D1-60x32	60	57.5	33	57.5	33	32	62.5	62.5	-	110	85	-	5006-263

D2

- Left-hand
- External Coolant Supply

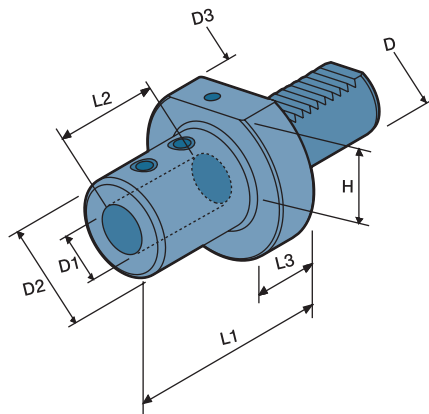


DIMENSIONS

ORDER NO.	D	B1	B2	B3	B4	H1	H2	H3	H4	L1	L2	α	CODE NO.
D2-30x20	30	35	17	41	23	20	38	35	30	60	42	25°	5006-264
D2-40x25	40	42.5	21	47.5	25.5	25	48	42.5	40	72	50	25°	5006-265
D2-50x32	50	50	26	55	30.5	32	60	50	-	85	60	-	5006-266
D2-60x32	60	57.5	33	57.5	33	32	62.5	62.5	-	110	85	-	5006-267



Static Holders

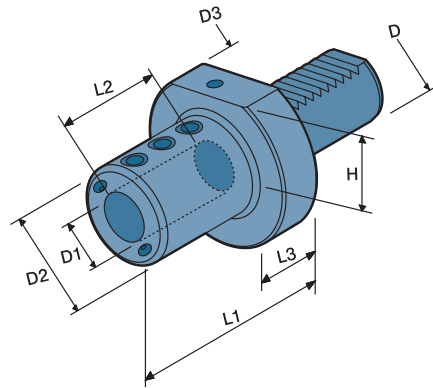


E1

- Internal Coolant Supply
- U Drills

DIMENSIONS

ORDER NO.	D	D1	D2	D3	H	L1	L2	L3	CODE NO.
E1-20x20	20	20	40	50	-	67	57	18	5006-268
E1-20x25	20	25	45	50	-	71	59	18	5006-269
E1-30x20	30	20	40	68	28	67	54	22	5006-270
E1-30x25	30	25	45	68	28	71	59	22	5006-271
E1-30x32	30	32	52	68	28	75	63	22	5006-272
E1-40x20	40	20	40	83	32.5	67	54	22	5006-273
E1-40x25	40	25	45	83	32.5	75	59	22	5006-274
E1-40x32	40	32	52	83	32.5	75	63	22	5006-275
E1-40x40	40	40	60	83	32.5	90	73	22	5006-276
E1-50x20	50	20	40	98	35	67	54	30	5006-277
E1-50x25	50	25	45	98	35	80	59	30	5006-278
E1-50x32	50	32	52	98	35	80	63	30	5006-279
E1-50x40	50	40	60	98	35	90	73	30	5006-280
E1-50x50	50	50	70	98	35	100	83	30	5006-281

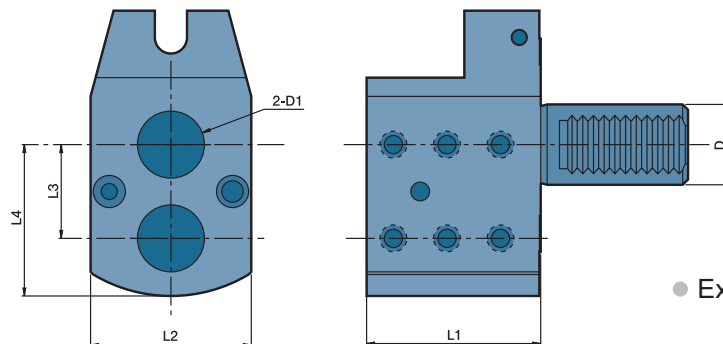


E2

- Boring Bar Holder
- External Coolant Supply

DIMENSIONS

ORDER NO.	D	D1	D2	D3	H	L1	L2	L3	CODE NO.
E2-20x8	20	8	40	50	-	50	41	18	5006-282
E2-20x10	20	10	40	50	-	50	41	18	5006-283
E2-20x12	20	12	40	50	-	50	41	18	5006-284
E2-20x16	20	16	40	50	-	50	41	18	5006-285
E2-20x20	20	20	50	50	-	50	41	-	5006-286
E2-20x25	20	25	50	50	-	60	41	-	5006-287
E2-30x8	30	8	50	68	28	60	51	22	5006-288
E2-30x10	30	10	50	68	28	60	51	22	5006-289
E2-30x12	30	12	50	68	28	60	51	22	5006-290
E2-30x16	30	16	55	68	28	60	51	22	5006-291
E2-30x20	30	20	58	68	28	60	51	22	5006-292
E2-30x25	30	25	62	68	28	60	51	22	5006-293
E2-30x32	30	32	68	68	28	75	61	-	5006-294
E2-40x10	40	10	50	83	32.5	75	61	22	5006-295
E2-40x12	40	12	50	83	32.5	75	61	22	5006-296
E2-40x16	40	16	56	83	32.5	75	61	22	5006-297
E2-40x20	40	20	56	83	32.5	75	61	22	5006-298
E2-40x25	40	25	62	83	32.5	75	61	22	5006-299
E2-40x32	40	32	72	83	32.5	75	61	22	5006-300
E2-40x40	40	40	83	83	32.5	85	76	-	5006-301
E2-50x10	50	10	50	98	35	90	76	30	5006-302
E2-50x12	50	12	56	98	35	90	76	30	5006-303
E2-50x16	50	16	56	98	35	90	76	30	5006-304
E2-50x20	50	20	62	98	35	90	76	30	5006-305
E2-50x25	50	25	72	98	35	90	76	30	5006-306
E2-50x32	50	32	72	98	35	90	76	30	5006-307
E2-50x40	50	40	80	98	35	90	76	30	5006-308
E2-50x50	50	50	90	98	35	95	86	30	5006-309
E2-60x10	60	10	68	123	42.5	90	76	35	5006-310
E2-60x12	60	12	68	123	42.5	90	76	35	5006-311
E2-60x16	60	16	68	123	42.5	90	76	35	5006-312
E2-60x20	60	20	68	123	42.5	90	76	35	5006-313
E2-60x25	60	25	68	123	42.5	90	76	35	5006-314
E2-60x32	60	32	68	123	42.5	90	76	35	5006-315
E2-60x40	60	40	98	123	42.5	90	76	35	5006-316
E2-60x50	60	50	98	123	42.5	95	86	35	5006-317



- External, internal coolant supply

DIMENSIONS

ORDER NO.	D DIN 69880	D1	L1	L2	L3	L4	CODE NO.
E2-30-2X25-35	30	25	65	60	35	56.5	5006-318
E2-40-2X40-65	40	40	85	80	65	91.5	5006-319



Static Holders

E3 E4 TYPE

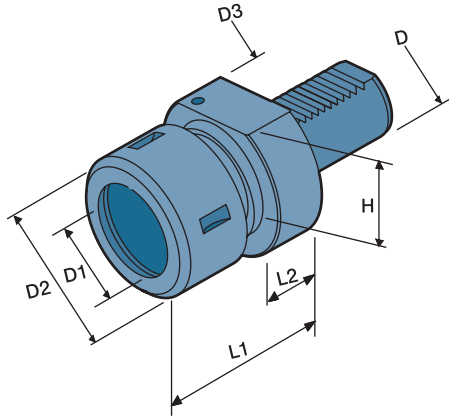


VERTEX®

DIN 69880

E3

- For Collet DIN 6388
- External Coolant Supply

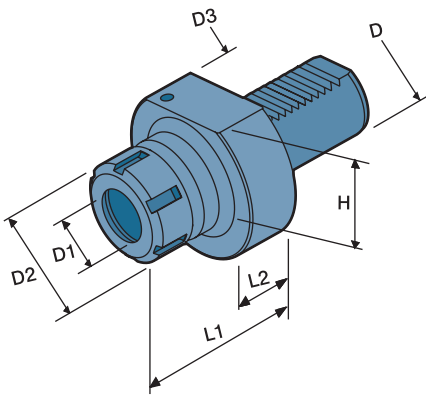


DIMENSIONS

ORDER NO.	D	D1	D2	D3	H	L1	L2	CODE NO.
E3-30-OZ25	30	2-25	60	68	28	75	22	5006-320
E3-40-OZ25	40	2-25	60	83	32.5	75	22	5006-321
E3-40-OZ32	40	4-32	78	83	32.5	90	22	5006-322
E3-50-OZ25	50	2-25	60	98	35	75	30	5006-323
E3-50-OZ32	50	4-32	78	98	35	90	30	5006-324

E4

- External Coolant Supply
- For Collet DIN 6499



DIMENSIONS

ORDER NO.	D	D1	D2	D3	H	L1	L2	CODE NO.
E4-20-ER25	20	1-16	42	50	-	50	18	5006-325
E4-30-ER25	30	1-16	42	68	28	53	22	5006-326
E4-30-ER32	30	2-20	50	68	28	57	22	5006-327
E4-40-ER32	40	2-20	50	83	32.5	62	22	5006-328
E4-40-ER40	40	3-26	63	83	32.5	75	22	5006-329
E4-50-ER40	50	3-26	63	98	35	75	30	5006-330
E4-60-ER40	60	3-26	63	123	42.5	75	30	5006-331
E4-60-ER50	60	10-34	78	123	42.5	75	30	5006-332



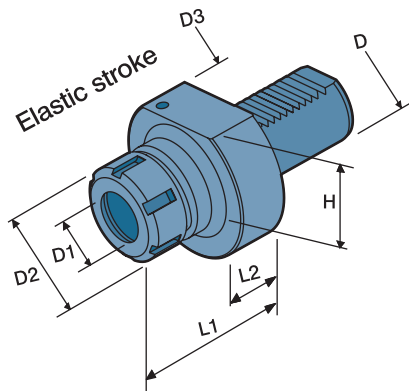
Static Holders

TAPPER, CHUCK TYPE

DIN 69880

TAPPER

- External Coolant Supply
- For Collet DIN 6499

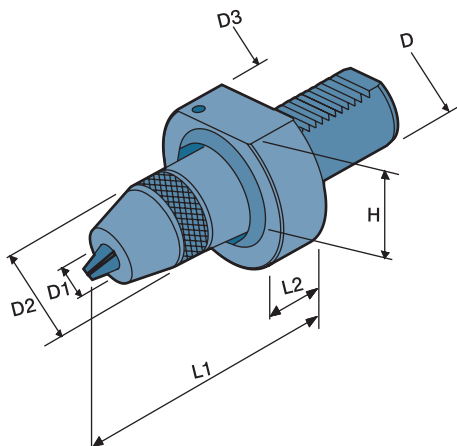


DIMENSIONS

ORDER NO.	D	D1	D2	D3	H	L1	L2	CODE NO.
TAP-20-ER20	20	1-13	34	50	-	60	18	5006-333
TAP-30-ER25	30	1-16	42	68	28	68	22	5006-334
TAP-40-ER25	40	1-16	42	83	32.5	73	22	5006-335
TAP-50-ER32	50	2-20	50	98	35	83	30	5006-336
TAP-60-ER32	60	2-20	50	123	42.5	85	30	5006-337

KEYLESS DRILL CHUCK

- External Coolant Supply



DIMENSIONS

ORDER NO.	D	D1	D2	D3	H	L1	L2	CODE NO.
CHUCK-30-13	30	1-13	51	68	28	85	22	5006-338
CHUCK-40-13	40	1-13	51	83	32.5	85	22	5006-339
CHUCK-40-16	40	3-16	58	83	32.5	90	22	5006-340
CHUCK-50-13	50	1-13	51	98	35	85	30	5006-341
CHUCK-50-16	50	3-16	58	98	35	90	30	5006-342



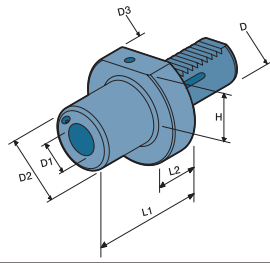
Static Holders

F TYPE

DIN 69880



VERTEX®



- Tool holders with morse taper according DIN 228
- External Coolant Supply

DIMENSIONS

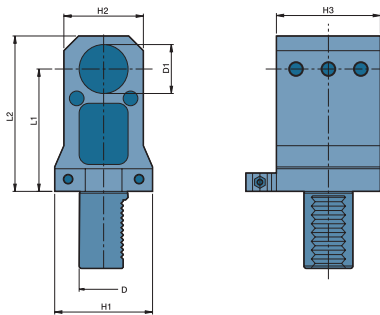
ORDER NO.	D	D1	D2	D3	H	L1	L2	CODE NO.
F20-MT1	20	MT1	-	50	-	23	-	5006-343
F30-MT1	30	MT1	52	68	28	27	22	5006-344
F30-MT2	30	MT2	58	68	28	43	22	5006-345
F30-MT3	30	MT3	64	68	28	66	22	5006-346
F40-MT2	40	MT2	66	83	32.5	43	22	5006-347
F40-MT3	40	MT3	72	83	32.5	58	22	5006-348
F40-MT4	40	MT4	72	83	32.5	78	22	5006-349
F50-MT2	50	MT2	55	98	35	36	30	5006-350
F50-MT3	50	MT3	60	98	35	44	30	5006-351
F50-MT4	50	MT4	70	98	35	71	30	5006-352
F60-MT3	60	MT3	58	123	42.5	36	30	5006-353
F60-MT4	60	MT4	68	123	42.5	50	30	5006-354



Axial Static Holders

T1 TYPE

DIN 69880



- External, internal coolant supply

DIMENSIONS

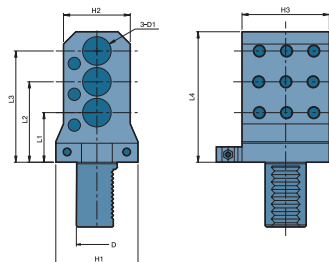
ORDER NO.	D	D1	H1	H2	H3	L1	L2	CODE NO.
T1-30-32-65	30	32	65	52	62	65	90	5006-355
T1-30-32-85	30	32	65	52	62	85	108	5006-356
T1-30-32-100	30	32	65	52	62	100	123	5006-357
T1-30-32-120	30	32	65	52	62	120	143	5006-358
T1-40-32-85	40	32	80	65	85	85	112	5006-359
T1-40-40-85	40	40	80	65	85	85	112	5006-360
T1-40-40-100	40	40	80	65	85	100	127	5006-361



Axial Static Holders

T1-X3 TYPE

DIN 69880



- External coolant supply

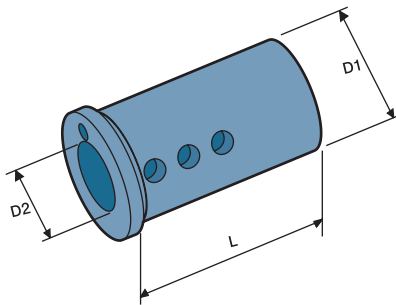
DIMENSIONS

ORDER NO.	D	D1	H1	H2	H3	L1	L2	L3	L4	CODE NO.
T1-30-3X25	30	25	65	65	62	42	85	128	148	5006-362



RS-W

- External Coolant Supply
- For Boring Bar Holder

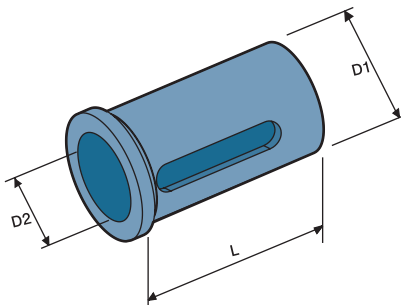


DIMENSIONS

D1	L	ORDER NO. D2	CODE NO.
20	45	E20-6	5006-369
		E20-8	5006-370
		E20-10	5006-371
25	55	E25-6	5006-372
		E25-8	5006-373
		E25-10	5006-374
		E25-12	5006-375
32	60	E32-6	5006-376
		E32-8	5006-377
		E32-10	5006-378
		E32-12	5006-379
40	75	E40-6	5006-381
		E40-8	5006-382
		E40-10	5006-383
		E40-12	5006-384
50	85	E50-8	5006-388
		E50-10	5006-389
		E50-12	5006-390
		E50-16	5006-391
		E50-20	5006-392
		E50-25	5006-393

RS

- For Boring Bar Holder



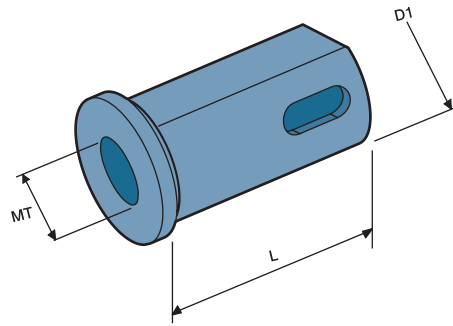
DIMENSIONS

D1	L	ORDER NO. D2	CODE NO.
20	50	E20-12-K	5006-399
		E20-16-K	5006-400
25	50	E25-16-K	5006-401A
		E25-20-K	5006-401
32	60	E32-16-K	5006-402A
		E32-20-K	5006-402B
		E32-25-K	5006-402
40	75	E40-16-K	5006-403A
		E40-20-K	5006-403B
		E40-25-K	5006-403C
		E40-32-K	5006-403
50	85	E50-32-K	5006-404A
		E50-40-K	5006-404



Reducing Sleeves

RS-MT, TE TYPE

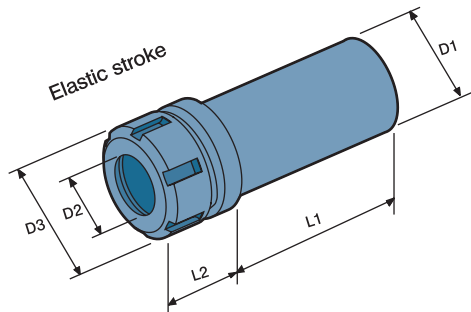


RS-MT

- Tool holders with morse taper according to DIN 228

DIMENSIONS

D1	L	MT				ORDER NO.
		1	2	3	4	
32	60	E32-MT1	E32-MT2	E32-MT3		ORDER NO.
		5006-410	5006-411	5006-412		CODE NO.
40	70	E40-MT1	E40-MT2	E40-MT3	E40-MT4	ORDER NO.
		5006-414	5006-415	5006-416	5006-417	CODE NO.
50	85	E50-MT1	E50-MT2	E50-MT3	E50-MT4	ORDER NO.
		5006-418	5006-419	5006-420	5006-421	CODE NO.



TE

- Auto taper with cylindric shaft
- To be used for collet DIN 6499

DIMENSIONS

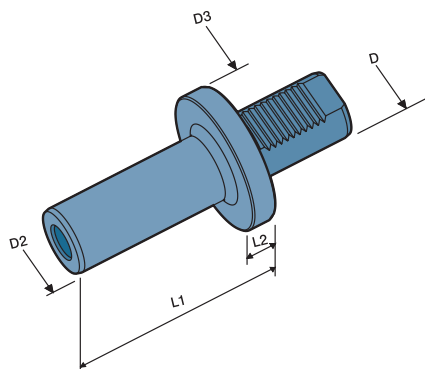
ORDER NO.	D1	D2		D3	L1	L2	CODE NO.
TE25-ER16	25	1-10	M3-M12	ER16 32	70.5	30	5006-430
TE32-ER20	32	2-13	M3-M16	ER20 35	65	40	5006-431
TE40-ER25	40	2-16	M4-M20	ER25 42	75	43	5006-432
TE50-ER32	50	3-20	M6-M24	ER32 50	85	48	5006-433



Test Mandrel

TB1 TYPE

DIN 69880



DIMENSIONS

ORDER NO.	D DIN 69880	D2	D3	L1	L2	CODE NO.
TB1-30	30	30	68	115	15	5006-434
TB1-40	40	40	83	115	15	5006-435
TB1-50	50	50	98	115	15	5006-436



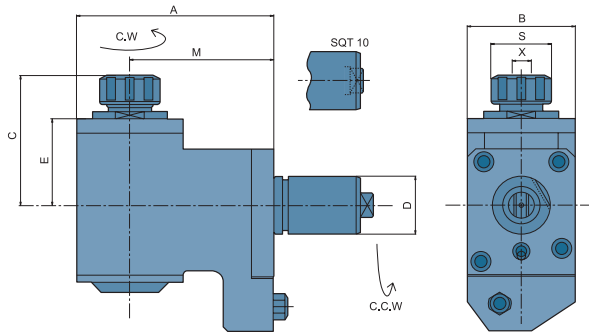
H Type Milling & Drilling Head

MAZAK SUPER QUICK TURN TYPE

FOR 1ST SPINDLE



NEW



- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	M	CODE NO.
SQT 10-HMD25	SQT10M-12D 15M-16D SQT200M-16D 250M-16D	40	1-16 ER25	42	5000	137	75	90	60	100	5006-440
SQT 15/18-HMD25	SQT15M-12D 18M-12D SQT200M-12D 250M-12D	40	1-16 ER25	42	5000	167	80	90	60	130	5006-441
SQT 15/18-HMD32			2-20 ER32	50	5000	167	80	92	60	130	5006-442

H Type Tapping Head

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	M	CODE NO.
SQT 10-HT16	SQT10M-12D 15M-16D SQT200M-16D 250M-16D	40	1-10 ER16	30	3000	137	75	106	60	100	5006-443
SQT 15/18-HT20	SQT15M-12D 18M-12D SQT200M-12D 250M-12D	40	1-13 ER20	35	3000	167	80	108	60	130	5006-444

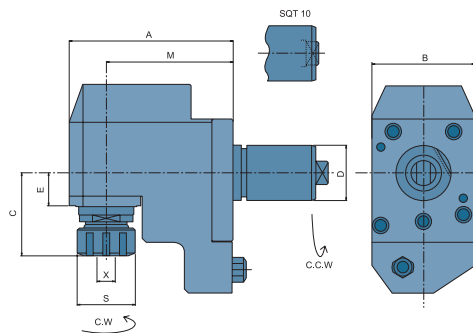


H Type Back Milling & Drilling Head

MAZAK SUPER QUICK TURN TYPE

FOR 2ND SPINDLE

NEW



- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	M	CODE NO.
SQT 10-HBMD25	SQT10M-12D 15M-16D SQT200M-16D 250M-16D	40	1-16 ER25	42	5000	119	75	78	24.5	92	5006-450
SQT 15/18-HBMD25	SQT15M-12D 18M-12D SQT200M-12D 250M-12D	40	1-16 ER25	42	5000	162	80	80	22.5	125	5006-451
SQT 15/18-HBMD32			2-20 ER32	50	5000	162	80	58	22.5	125	5006-452
SQT 15/18-HBMD32-1			2-20 ER32	50	5000	162	80	82.5	22.5	125	5006-453

H Type Tapping Head

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	M	CODE NO.
SQT 10-HBT16	SQT10M-12D 15M-16D SQT200M-16D 250M-16D	40	1-10 ER16	30	3000	119	75	66	24.5	92	5006-454
SQT 15/18-HBT20	SQT15M-12D 18M-12D SQT200M-12D 250M-12D	40	1-13 ER20	30	3000	162	80	65	22.5	125	5006-455



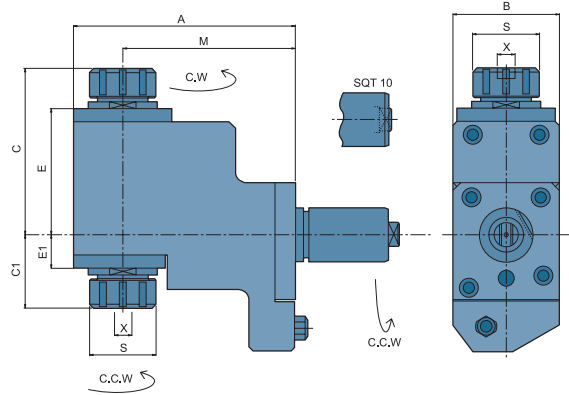
H Type Milling & Drilling Head

MAZAK SUPER QUICK TURN TYPE

FOR 1ST AND 2ND SPINDLE



NEW



- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	C1	E	E1	M	CODE NO.
SQT 10-HMD2025	SQT10M-12D 15M-16D SQT200M-16D 250M-16D	40	1st-ER25 2nd-ER20	42 35	4000	130	75	103	77.5	37	16	100	5006-456
SQT 15/18-HMD232	SQT15M-12D 18M-12D SQT200M-12D 250M-12D	40	2-20 ER32	42	4000	167	80	119	50	89	19	130	5006-457

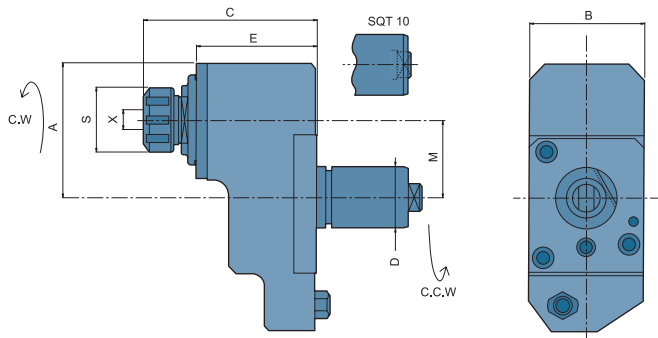


V Type Milling & Drilling Head

MAZAK SUPER QUICK TURN TYPE

OFFSET

NEW



- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

DIMENSIONS

※ 1:2 Speed boost

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	M	CODE NO.
SQT 10-VMD25	SQT10M-12D 15M-16D SQT200M-16D 250M-16D	40	1-16 ER25	42	5000	88	75	113	79	50	5006-460
SQT 15/18-VMD25F	SQT15M-12D 18M-12D SQT200M-12D 250M-12D	40	1-16 ER25	42	5000	89	80	116	81.5	50	5006-461
SQT 15/18-VMD25F-1			1-16 ER25	42	(1:2) 7000	89	75	116	84	50	※ 5006-462
SQT 15/18-VMD32			2-20 ER32	50	5000	89	80	122	81.5	50	5006-463

V Type Tapping Head

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	M	CODE NO.
SQT 10-VT16F	SQT10M-12D 15M-16D SQT200M-16D 250M-16D	40	1-10 ER16	30	4000	88	75	118	79	50	5006-464
SQT 15/18-VT20F	SQT15M-12D 18M-12D SQT200M-12D 250M-12D	40	1-13 ER20	30	4000	89	80	120	81.5	50	5006-465



V Type Milling & Drilling Head

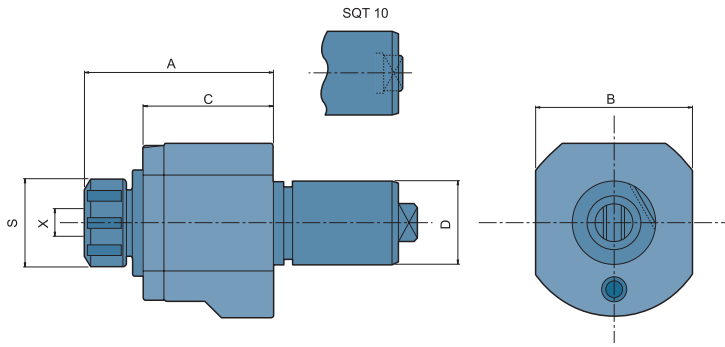
MAZAK SUPER QUICK TURN TYPE



VERTEX®

DA-SERIES

NEW



- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	CODE NO.
SQT 10-VMD25DA	SQT10M-12D 15M-16D SQT200M-16D 250M-16D	40	1-16 ER25	42	6000	91	75	59	5006-466
SQT 15/18-VMD32DA	SQT15M-12D 18M-12D SQT200M-12D 250M-12D	40	2-20 ER32	50	6000	117	80	80	5006-467

V Type Tapping Head

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	CODE NO.
SQT 10-VT16DA	SQT10M-12D 15M-16D SQT200M-16D 250M-16D	40	1-10 ER16	30	4000	97	75	59	5006-468
SQT 15/18-VT20DA	SQT15M-12D 18M-12D SQT200M-12D 250M-12D	40	1-13 ER20	35	4000	120	80	80	5006-469

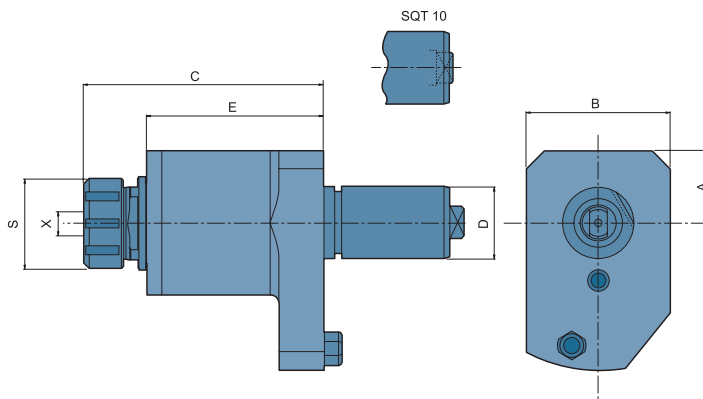


V Type Milling & Drilling Head

MAZAK SUPER QUICK TURN TYPE

DA-SERIES, LONG

NEW



- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	CODE NO.
SQT 15/18-VMD32L	SQT15M-12D 18M-12D SQT200M-12D 250M-12D	40	2-20 ER32	50	6000	40	80	117	82.5	5006-470
						40	80	133.5	98.5	5006-471



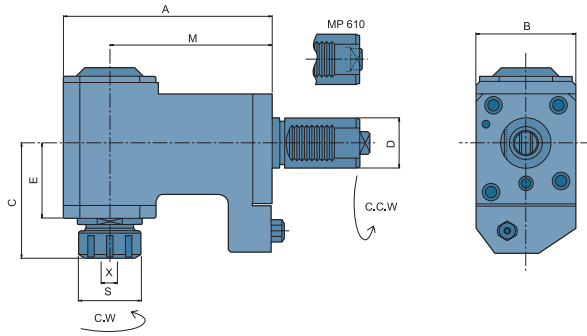
H Type Milling & Drilling Head

MAZAK MULTIPLEX TYPE



VERTEX®

NEW



- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

DIMENSIONS

※ 1:2 Speed boost

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	M	CODE NO.
MP 610-HMD25	MP410N-12D 415N-12D MP610-12D 6200-16D	40	1-16 ER25	42	5000	152	75	90	60	115	5006-475
MP 620-HMD25	MP420N-12D 620N-12D MP620-12D 6200-16D	40	1-16 ER25	42	5000	167	80	90	60	130	5006-476
MP 620-HMD32			2-20 ER32	50	5000	167	80	92	60	130	5006-477
MP 620-HMD32-2			2-20 ER32	50	(1:2) 7000	169	80	101	65.5	130	※ 5006-478

H Type Tapping Head

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	M	CODE NO.
MP 610-HT16	MP410N-12D 415N-12D MP610-12D 6200-16D	40	1-10 ER16	30	3000	152	75	106	60	115	5006-479
MP 620-HT20	MP420N-12D 620N-12D MP620-12D 6200-16D	40	1-13 ER20	30	3000	167	80	108	60	130	5006-480

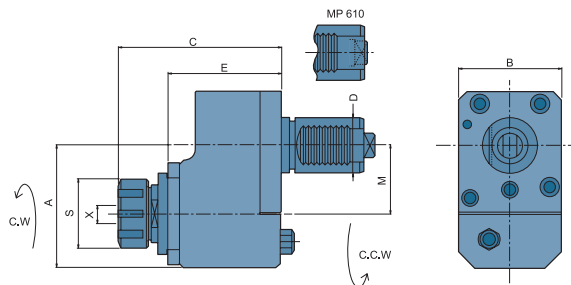


V Type Milling & Drilling Head

MAZAK MULTIPLEX TYPE

OFFSET

NEW



- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	M	CODE NO.
MP 610-VMD25F	MP410N-12D 415N-12D MP610-12D 6200-16D	40	1-16 ER25	42	5000	89	75	118	82.5	50	5006-481
MP 620-VMD16F	MP420N-12D 620N-12D MP620-12D 6200-16D	40	1-16 ER25	42	5000	89	80	116	81.5	50	5006-482
MP 620-VMD32F			2-20 ER32	50	5000	89	80	118	81.5	50	5006-483

V Type Tapping Head

DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	M	CODE NO.
MP 610-VT16F	MP410N-12D 415N-12D MP610-12D 6200-16D	40	1-10 ER16	30	4000	89	75	123	82.5	50	5006-484
MP 620-VT20F	MP420N-12D 620N-12D MP620-12D 6200-16D	40	1-13 ER20	35	4000	89	80	126	81.5	50	5006-485

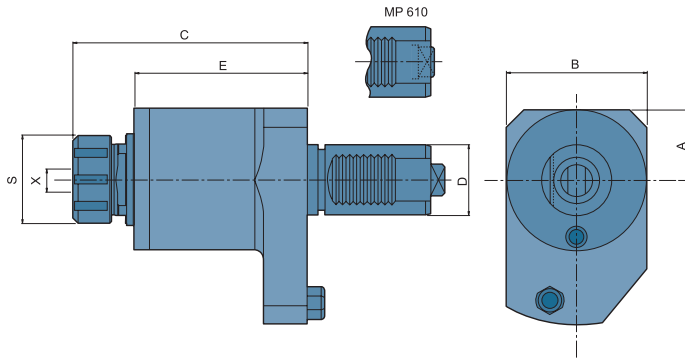
V Type Milling & Drilling Head

MAZAK MULTIPLEX TYPE

DA-SERIES



NEW



- External coolant supply
- Collet is not included
- To be used for collet DIN 6499

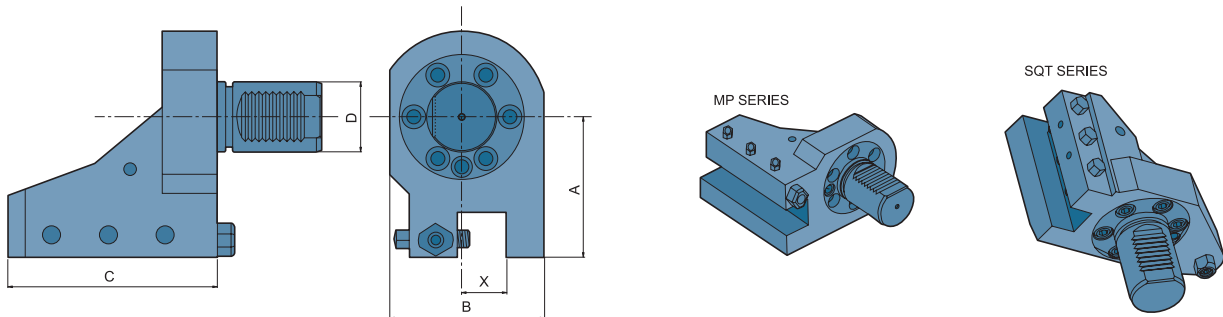
DIMENSIONS

ORDER NO.	Machine Type	D	X Capacity	S	Maximum R.P.M.	A	B	C	E	CODE NO.
MP 610-VMD25DA	MP410N-12D 415N-12D MP610-12D 6200-16D	40	1-16 ER25	42	6000	40	75	105	74	5006-486
MP 620-VMD25DA	MP420N-12D 620N-12D MP620-12D 6200-16D	40	1-16 ER25	42	6000	40	80	105	74	5006-487
MP 620-VMD32DA			2-20 ER32	50	6000	40	80	107	74	5006-488

Forward Turning Holder - RH

MAZAK SUPER QUICK TURN & MULTIPLEX TYPE

NEW



DIMENSIONS

ORDER NO.	Machine Type	D		X	A	B	C	CODE NO.
SQT 10M/15AM-FTRH-M	SQT-10M/15AM	40	mm	20	66	76	100	5006-490
SQT 10M/15AM-FTRH-I			inch	0.75"	2.6"	3"	3.937"	5006-491
SQT 15M/18M-FTRH-M	SQT-15M/18M	40	mm	25	78	84	120	5006-492
SQT 15M/18M-FTRH-I			inch	1"	3.071"	3.307"	4.724"	5006-493
MP 610N/615N-FTRH-M	MP-610N/615N	40	mm	20	85	76	100	5006-496
MP 410N/415N-FTRH-I	MP-410N/415N		inch	0.75"	3.347"	3"	3.937"	5006-497
MP 620N/625N-FTRH-M	MP-620N/625N	40	mm	25	83	84	120	5006-498
MP 420N-FTRH-I	MP-420N		inch	1"	3.268"	3.307"	4.724"	5006-499

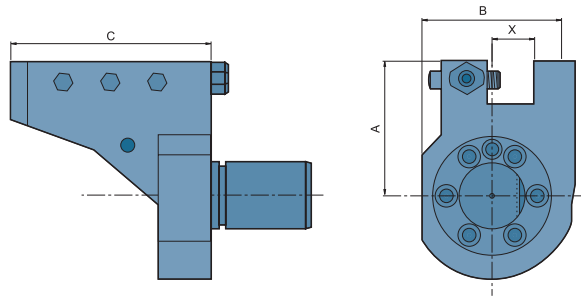


Reverse Turning Holder - LH

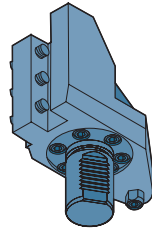
MAZAK SUPER QUICK TURN & MULTIPLEX TYPE



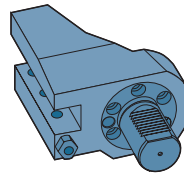
NEW



SQT SERIES



MP SERIES



DIMENSIONS

ORDER NO.	Machine Type	D		X	A	B	C	CODE NO.
SQT 10M/15AM-RTLH-M	SQT-10M/15AM	40	mm	20	66	76	100	5006-502
SQT 10M/15AM-RTLH-I			inch	0.75"	2.6"	3"	3.937"	5006-503
SQT 15M/18M-RTLH-M	SQT-15M/18M	40	mm	25	78	84	120	5006-504
SQT 15M/18M-RTLH-I			inch	1"	3.071"	3.307"	4.724"	5006-505
SQT 28M/30M-RTLH-M	SQT-28M/30M	50	mm	25	-			5006-506
SQT 28M/30M-RTLH-I			inch	1"	-			5006-507
MP 610N/615N-RTLH-M	MP-610N/615N	40	mm	20	85	76	100	5006-508
MP 410N/415N-RTLH-I	MP-410N/415N		inch	0.75"	3.347"	3"	3.937"	5006-509
MP 620N/625N-RTLH-M	MP-620N/625N	40	mm	25	83	84	120	5006-510
MP 420N-RTLH-I	MP-420N		inch	1"	3.268"	3.307"	4.724"	5006-511

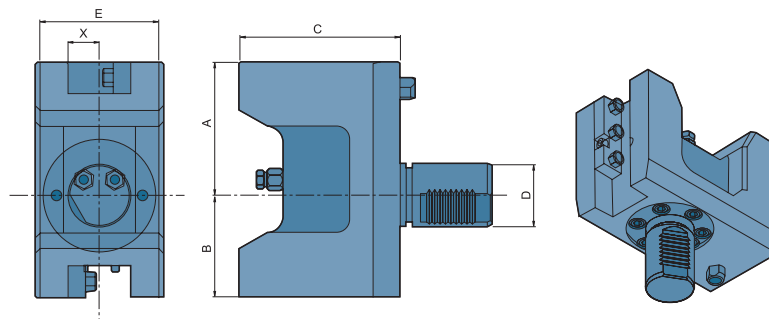
※ ON REQUEST



Double Turning Holder

MAZAK SUPER QUICK TURN TYPE

NEW



DIMENSIONS

ORDER NO.	Machine Type	D		X	A	B	C	E	CODE NO.
SQT 10M/15AM-DT-M	SQT-10M/15AM	40	mm	20	85	65	103	76	5006-514
SQT 10M/15AM-DT-I			inch	0.75"	3.347"	2.559"	4.055"	2.992"	5006-515
SQT 15M/18M-DT-M	SQT-15M/18M	40	mm	25	88	78	136	84	5006-516
SQT 15M/18M-DT-I			inch	1"	3.465"	3.071"	5.354"	3.307"	5006-517

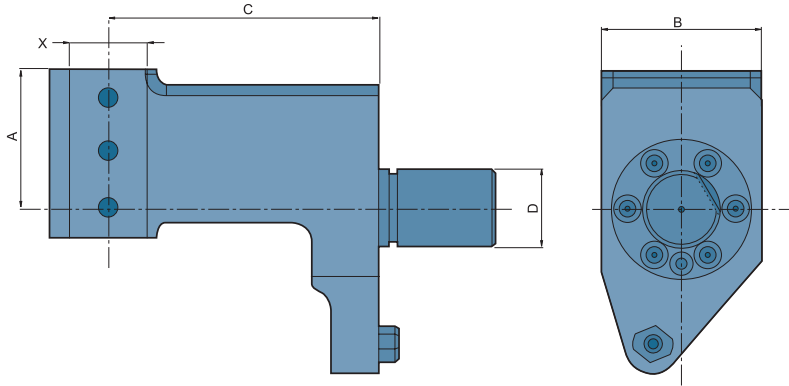


Boring Bar Holder

MAZAK SUPER QUICK TURN TYPE



NEW



DIMENSIONS

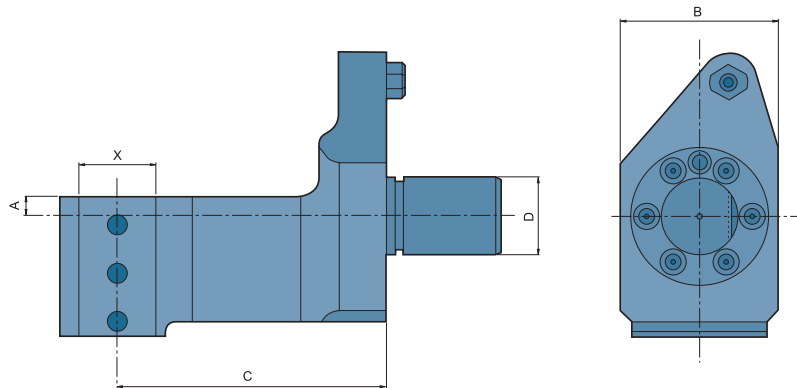
ORDER NO.	Machine Type	D		X	A	B	C	CODE NO.
SQT 10M/15AM-B-M	SQT-10M/15AM	40	mm	32	56	76	110	5006-520
SQT 10M/15AM-B-I			inch	1.25"	2.205"	2.992"	4.331"	5006-521
SQT 15M/18M-B-M	SQT-15M/18M	40	mm	40	71	82	140	5006-522
SQT 15M/18M-B-I			inch	1.5"	2.795"	3.228"	5.512"	5006-523
SQT 28M/30M-B-M	SQT-28M/30M	50	mm	50	65	90	175	5006-524
SQT 28M/30AM-B-I			inch	2"	2.559"	3.543"	6.890"	5006-525



Boring Bar Holder

MAZAK MULTIPLEX TYPE

NEW



DIMENSIONS

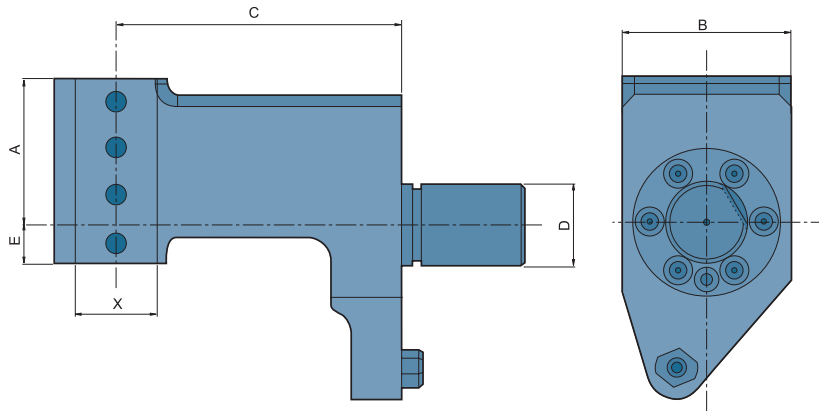
ORDER NO.	Machine Type	D		X	A	B	C	CODE NO.
MP-610N-B-A	MP-610N	40	mm	25	5	76	120	5006-526
MP-610N-B-B			inch	1"	0.197"	2.997"	4.724"	5006-527
MP-610N-B-C			mm	32	10	76	120	5006-528
MP-610N-B-D			inch	1.25"	0.394"	2.997"	4.724"	5006-529
MP-615N-B-A	MP-615N	40	mm	25	10	76	130	5006-530
MP-615N-B-B			inch	1"	0.394"	2.997"	5.118"	5006-531
MP-615N-B-C			mm	32	10	76	130	5006-532
MP-615N-B-D			inch	1.25"	0.394"	2.997"	5.118"	5006-533
MP-620N-B-A	MP-620N	40	mm	25	5	82	140	5006-534
MP-620N-B-B			inch	1"	0.197"	3.228"	5.512"	5006-535
MP-620N-B-C			mm	40	10	82	140	5006-536
MP-620N-B-D			inch	1.5"	0.394"	3.228"	5.512"	5006-537

Double Boring Bar Holder

MAZAK SUPER QUICK TURN TYPE



NEW



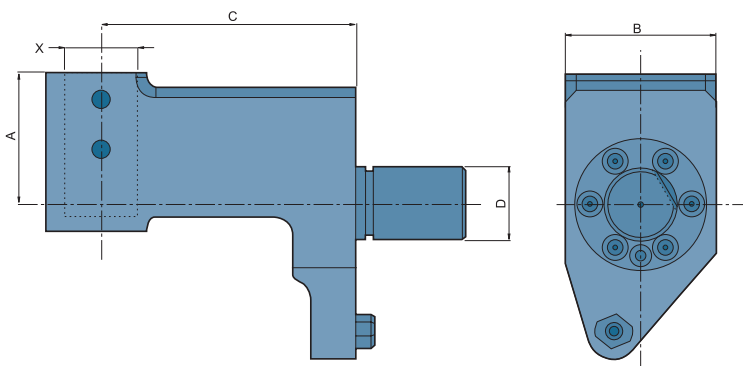
DIMENSIONS

ORDER NO.	Machine Type	D		X	A	B	C	E	CODE NO.
SQT 10M/15AM-DB-M	SQT-10M/15AM	40	mm	20	60	76	110	10	5006-540
SQT 10M/15AM-DB-I			inch	0.75"	2.362"	3"	4.331"	0.394"	5006-541
SQT 15M/18M-DB-M	SQT-15M/18M	40	mm	25	85	84	140	15	5006-542
SQT 15M/18M-DB-I			inch	1"	3.346"	3.307"	5.512"	0.591"	5006-543
SQT 28M/30M-DB-M	SQT-28M/30M	50	mm	32	75	90	180	35	5006-544
SQT 28M/30M-DB-I			inch	1.25"	2.953"	3.543"	7.087"	1.378"	5006-545

U Drill Holder

MAZAK SUPER QUICK TURN TYPE

NEW



● External, internal coolant supply

DIMENSIONS

ORDER NO.	Machine Type	D		X	A	B	C	CODE NO.
SQT 10M/15AM-UD-M	SQT-10M/15AM	40	mm	32	48	76	110	5006-550
SQT 10M/15AM-UD-I			inch	-	1.890"	2.992"	4.331"	5006-551
SQT 15M/18M-UD-M	SQT-15M/18M	40	mm	40	63	82	140	5006-552
SQT 15M/18M-UD-I			inch	-	2.480"	3.228"	5.512"	5006-553



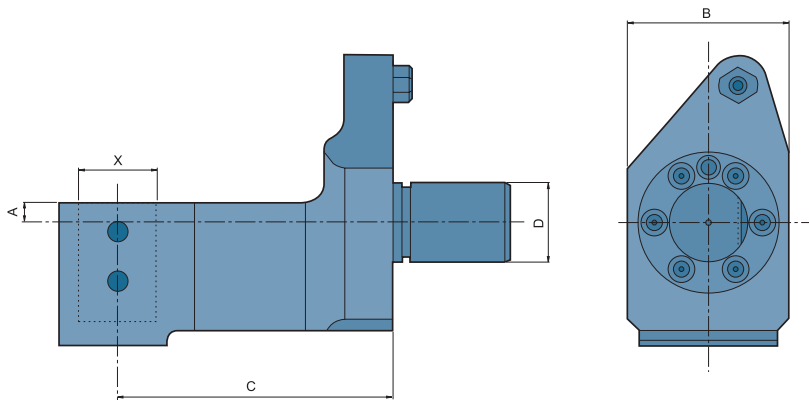
U Drill Holder

MAZAK MULTIPLEX TYPE



VERTEX®

NEW



● External, internal coolant supply

DIMENSIONS

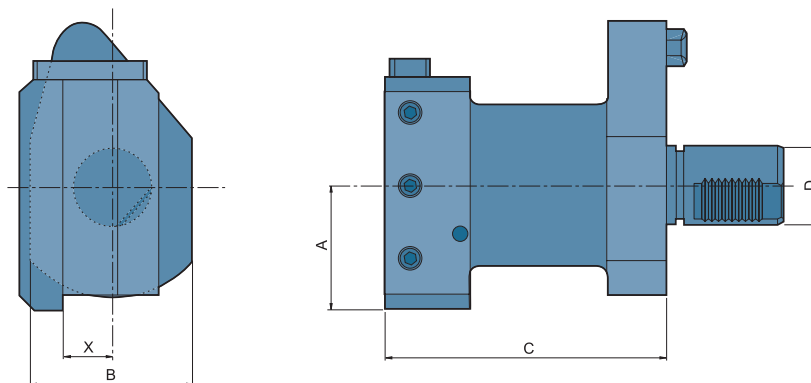
ORDER NO.	Machine Type	D		X	A	B	C	CODE NO.
MP-610-UD-M	MP-610	40	mm	25	10	76	120	5006-560
MP-610-UD-I			inch	-	0.394"	2.992"	4.724"	5006-561
MP-620-UD-M	MP-620	40	mm	40	10	82	140	5006-562
MP-620-UD-I			inch	-	0.394"	3.228"	5.512"	5006-563



Facing Holder - RH

MAZAK SUPER QUICK TURN & MULTIPLEX TYPE

NEW

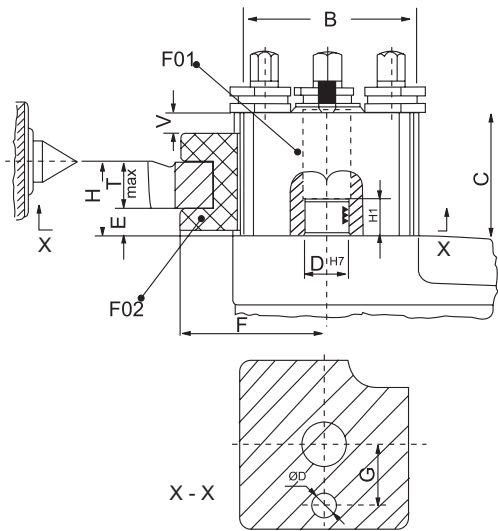


DIMENSIONS

ORDER NO.	Machine Type	D		X	A	B	C	CODE NO.
SQT 10M/15AM-FRH-M	SQT-10M/15AM	40	mm	20	65	76	110	5006-570
SQT 10M/15AM-FRH-I			inch	0.75"	2.559"	2.992"	4.331"	5006-571
SQT 15M/18M-FRH-M	SQT-15M/18M	40	mm	25	60	82	143	5006-572
SQT 15M/18M-FRH-I			inch	1"	2.362"	3.228"	5.630"	5006-573
SQT 28M/30M-FRH-M	SQT-28M/30M	50	mm	25	57	90	163	5006-574
SQT 28M/30M-FRH-I			inch	1"	2.244"	3.543"	6.417"	5006-575
MP 610N/615N-FRH-M	MP-610N/615N	40	mm	20	65	76	110	5006-576
MP 410N/415N-FRH-I	MP-410N/415N		inch	0.75"	2.559"	2.992"	4.331"	5006-577
MP 620N/625N-FRH-M	MP-620N/625N	40	mm	25	55	82	143	5006-578
MP 420N-FRH-I	MP-420N		inch	1"	2.165"	3.228"	5.630"	5006-579



NEW



Italian Style

The main block is assembled with cast-hardened steel, secured rigidly by the latch carriage machine steel bolt. The main block has 4 slide openings for inserting the proper tool-holder; these can be securely fastened by a simple and safe eccentric device, which also adjusts the height for each tool holder. The tool shank is securely held by 4 hardened screws. The simplicity and fast tool changing increase the production of lathe turning. No chatter or vibrations. This style is interchangeable with Rapidue and STM.

Complete set includes:

- 1 pieces Tool post
- 3 pieces of turning holders
- 1 piece of Round shanks
- Standard spanners

MAIN BODY DIMENSIONS

ORDER NO.	Lathe swing	B	D ^{H7}	H		C	E	T _{max}	F	V _{max}	Ø _{max}	Morse NO.	ØD	G	H1		
				Min	Max												
VTP-M	180-250	57.7	18	24	34	45	8	16	56	10	14	1	7	27	18	70	
VTP-AR-AP	250-300	64.5	18	25	41	56	9	16	63	16	16	1	8	30	16	80	
VTP-A	250-350	82.0	24	32	42	60	12	20	75	10	18	2	10	35	20	100	
VTP-BR-BP	300-380	91.6	28	38	53	75	13	25	90	17	20	3	10	40	20	115	
VTP-B	350-500	100.0	30	47	65	85	15	32	100	15	24	3	12	48.2	25	127	
VTP-C	500-650	115.3	38	51	72	94	19	32	108	24	26	4	14	58.2	26	145	

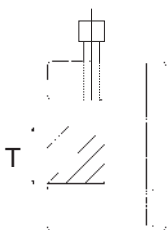
SET TYPE

ORDER NO.	5-PIECE SETS EACH SET INCLUDES	G.W. kgs	CODE NO.
VTP-M	1 x F01-M, 3 x F02-M AND 1 x F03-M	3.1	5006-890
VTP-AR-AP	1 x F01-AR-AP, 3 x F02-AR-AP AND 1 x F03-AR-AP	4.5	5006-891
VTP-A	1 x F01-A, 3 x F02-A AND 1 x F03-A	9.3	5006-892
VTP-BR-BP	1 x F01-BR-BP, 3 x F02-BR-BP AND 1 x F03-BR-BP	13.2	5006-893
VTP-B	1 x F01-B, 3 x F02-B AND 1 x F03-B	17.5	5006-894
VTP-C	1 x F01-C, 3 x F02-C AND 1 x F03-C	23.0	5006-895



Tool Post

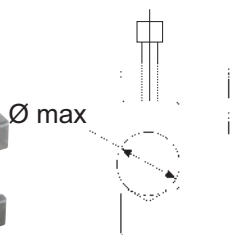
ORDER NO.	Centre Height (mm)	Lathe Swing (mm)	CODE NO.
VTP-F01-M	120	240	5006-900
VTP-F01-AR-AP	140	280	5006-901
VTP-F01-A	170	340	5006-902
VTP-F01-BR-BP	200	400	5006-903
VTP-F01-B	230	460	5006-904
VTP-F01-C	280	560	5006-905



● Turning Holders

Turning Holder

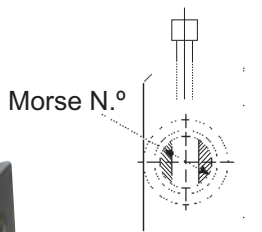
ORDER NO.	Centre Height (mm)	Max. Square & Rectangular Tool (mm)	CODE NO.
VTP-F02-M	120	16	5006-906
VTP-F02-AR-AP	140	16	5006-907
VTP-F02-A	170	20	5006-908
VTP-F02-BR-BP	200	25	5006-909
VTP-F02-B	230	32	5006-910
VTP-F02-C	280	32	5006-911



● Round Shanks

Round Shanks

ORDER NO.	Centre Height (mm)	Max. Holding Dia (mm)	CODE NO.
VTP-F03-M	120	14	5006-912
VTP-F03-AR-AP	140	16	5006-913
VTP-F03-A	170	18	5006-914
VTP-F03-BR-BP	200	20	5006-915
VTP-F03-B	230	24	5006-916
VTP-F03-C	280	26	5006-917



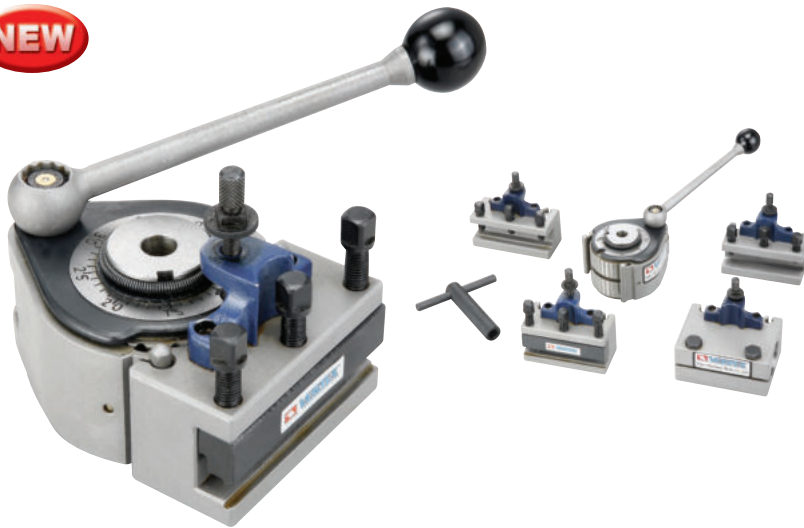
● Morse Holder

Morse Holder

ORDER NO.	Centre Height (mm)	Morse Taper Hole	CODE NO.
VTP-F04-M	120	MT No. 1	5006-918
VTP-F04-AR-AP	140	MT No. 2	5006-919
VTP-F04-A	170	MT No. 2	5006-920
VTP-F04-BR-BP	200	MT No. 3	5006-921
VTP-F04-B	230	MT No. 3	5006-922
VTP-F04-C	280	MT No. 4	5006-923



NEW



European Style

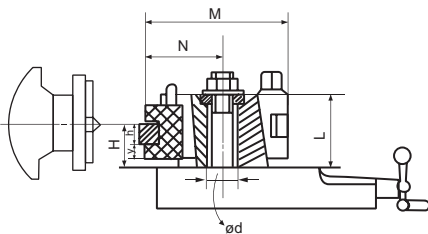
Tool post and tool holders are precisely grounded with 40 tool-bit positions. Easy to operate and can be fitted with many different tool-holders. Locking and loosening of any tool-holders are performed by a simple eccentric clamping. The simplicity and fast tool changing increases the lathe turning production. A height adjustment for tool bits is controlled by a knurled head-screw, without the need for packing plates or shims. This style is interchangeable with Hasse.

Complete set includes:

- 1 Pieces Tool post
- 3 pieces Turning & Facing Holder-"D"
- 1 piece Boring Bar Holder-"B"

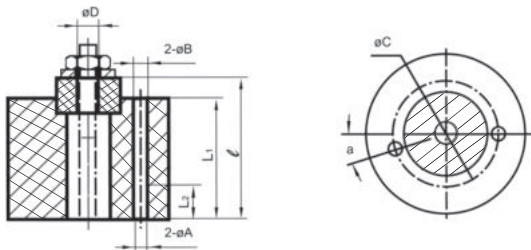
ORDER NO.	5-PIECE SETS EACH SET INCLUDES (5 pcs/set)	G.W. kgs	CODE NO.
VTP-V-A0	1 x tool post F40-0(A0), 2 x F40-010(A0D12x50) and 1 x F40-020(A0B12x50) and 1 x F40-040(A0A2.7x10x50)	1.5	5006-955A
VTP-V-A1	1 x tool post F40-1(A1), 2 x F40-111(A1D16x75) and 1 x F40-140(A1A2.7x10x75) and 1 x F40-121(A1B16x80)	4.0	5006-956A
VTP-V-E5	1 x tool post F40-2(B5), 2 x F40-211(E5D20x100) and 1 x F40-220(E5B30x100) and 1 x F40-240(E5A2.7x10x100)	8.0	5006-957A
VTP-B2	1 x tool post F40-3(B2), 3 x F40-311(B2D25x120) and 1 x F40-320(B2B32x130)	12.3	5006-958
VTP-C3	1 x tool post F40-4(C3), 3 x F40-411(C3D32x150) and 1 x F40-422(C3B40x160)	24.3	5006-959

Set Style For Lathe



ORDER NO.	VTP-F40-0	VTP-F40-1	VTP-F40-2	VTP-F40-3	VTP-F40-4
	D12	D16 D20	D20 D25	D25 D32	D32 D40 D45
Driving Power (kw)	1.2	2	4.5	7	13
Lathe Swing (mm)	120-220	150-300	200-400	300-500	400-700
H min (mm)	18.5	25.5 29.5	32 37	38 46	47.5 55.5 61
H max (mm)	26.5	36.5 40.5	49 52	58 57	87.5 91.5 91
y (mm)	6.5	9.5	12	13 14	15.5 15.5 16
h (mm)	12	16 20	20 25	25 32	32 40 45
M (mm)	6.8	104	132	150	192 201 202
L (mm)	37	55	68	76	107
N (mm)	34	52	66	73	93 102 103
ød (mm)	13	20	20	32	40

40 Position Tool Post Body



ORDER NO.	ØD	L2	L1	ℓ	ØA	ØB	ØC	α
VTP-F40-0	6	-	30	37	-	-	-	-
VTP-F40-1	10	12	45	55.3	5.6	6.8	42	18°
VTP-F40-2	10	14	57	67.3	5.6	6.8	49	15°
VTP-F40-3	14	20	65	75	6.9	9	64	30°
VTP-F40-4	24.5	10	95	107	9.5	11	88	18°

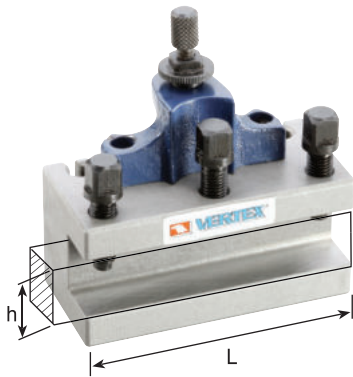
40 Position Tool Post



ORDER NO.	Lathe swing (mm)	For Style NO.	Height of cutting edge range (mm)	CODE NO.
VTP-F40-0	120-220	VTP-A0	D12/18.5~26.5	5006-930
VTP-F40-1	150-300	VTP-A1	D16/25.5~36.5 or D20/29.5~40.5	5006-931
VTP-F40-2	200-400	VTP-E5	D20/32~49 or D25/37~52	5006-932
VTP-F40-3	300-500	VTP-B2	D25/38~58 or D32/46~57	5006-933
VTP-F40-4	400-700	VTP-C3	D32/47.5~87.5 or D40/55.5~91.5 or D45/61~91	5006-934

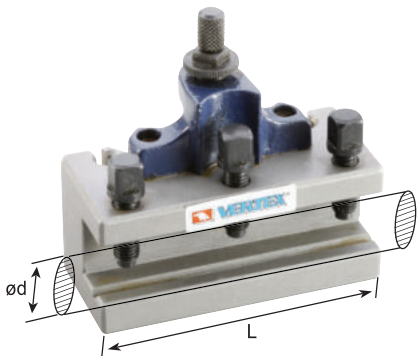


NEW



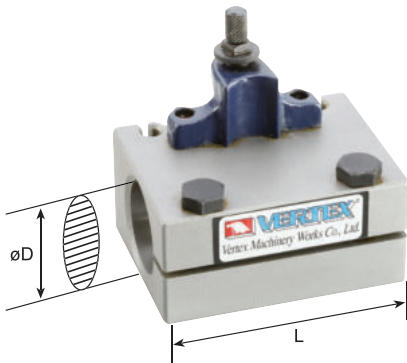
Turning & Facing Holder

ORDER NO.	Series NO.	Max. Height (mm)	Max. Length (mm)	CODE NO.
VTP-F40-010	A0D	12	50	5006-935
VTP-F40-111	A1D	16	75	5006-936
VTP-F40-112	A1D	16	80	5006-937
VTP-F40-113	A1D	16	90	5006-938
VTP-F40-114	A1D	20	75	5006-939
VTP-F40-110	A1D	20	80	5006-940
VTP-F40-115	A1D	20	90	5006-941
VTP-F40-211	E5D	20	100	5006-942
VTP-F40-212	E5D	25	100	5006-943
VTP-F40-311	B2D	25	120	5006-944
VTP-F40-312	B2D	25	140	5006-945
VTP-F40-313	B2D	32	120	5006-946
VTP-F40-314	B2D	32	140	5006-947
VTP-F40-411	C3D	32	150	5006-948
VTP-F40-412	C3D	32	170	5006-949
VTP-F40-413	C3D	40	150	5006-950
VTP-F40-414	C3D	40	170	5006-951
VTP-F40-415	C3D	45	170	5006-952



Boring Bar Holder

ORDER NO.	Series NO.	Max. Dia (mm)	Length (mm)	CODE NO.
VTP-F40-020	A0B	12	50	5006-960
VTP-F40-121	A1B	16	80	5006-961
VTP-F40-120	A1B	18	80	5006-962
VTP-F40-122	A1B	20	90	5006-963
VTP-F40-220	E5B	30	100	5006-964
VTP-F40-320	B2B	32	130	5006-965
VTP-F40-421	C3B	32	160	5006-966
VTP-F40-422	C3B	40	160	5006-967



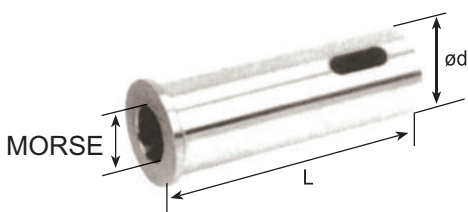
Drilling & Boring Bar Holder

ORDER NO.	Series NO.	Max. Dia (mm)	Length (mm)	CODE NO.
VTP-F40-030	A0S	15	50	5006-968
VTP-F40-130	A1S	30	80	5006-969
VTP-F40-131	A1S	20	90	5006-970
VTP-F40-231	E5S	30	100	5006-971
VTP-F40-232	E5S	40	100	5006-972
VTP-F40-330	B2S	40	120	5006-973
VTP-F40-431	C3S	40	150	5006-974
VTP-F40-432	C3S	50	150	5006-975



Cut-Off Tool Holder

ORDER NO.	Series NO.	Blade- TxW	Length (mm)	CODE NO.
VTP-F40-040	A0A	2.7 x 10	50	5006-976
VTP-F40-140	A1A	2.7 x 10	75	5006-977
VTP-F40-240	E5A	2.7 x 10	100	5006-978
VTP-F40-340	B2A	4 x 16	120	5006-979
VTP-F40-440	C3A	5 x 18.5	150	5006-980



Morse Taper Bushing

ORDER NO.	Series NO.	Diameter (mm)	Length (mm)	Morse Taper	CODE NO.
VTP-F40-151	A1L	30	80	NO.1	5006-981
VTP-F40-152	A1L	30	90	NO.2	5006-982
VTP-F40-251	E5L	30	96	NO.2	5006-983
VTP-F40-252	E5L	40	114	NO.3	5006-984
VTP-F40-350	E5L	40	120	NO.2	5006-985
VTP-F40-351	E5L	40	120	NO.3	5006-986
VTP-F40-451	C3L	40	140	NO.3	5006-987
VTP-F40-452	C3L	40	150	NO.4	5006-988
VTP-F40-453	C3L	50	150	NO.4	5006-989



NEW

- For conventional lathe.
- The height of the post unit can be adjusted to desire position & center line.
- Can choose set type or separated holders.
- Harden & precise positions.



PISTON TYPE SETS VTP-□□□□P TYPE BODY WITH 6 PCS HOLDER

PISTON STYLE TOOL POST SETS

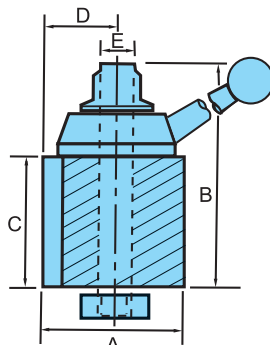
ORDER NO.	LATHE SWING	6-PIECE SETS EACH SET INCLUDES (6PCS/SET)	N. W. KGS	CODE NO.
VTP-0012P	12"	1 xF50-100, 1 xF50-101, 1 xF50-102 1 xF50-104, 1 xF50-107, 1 xF50-110 EACH 1PCS	5.5	5006-1101
VTP-1015P	10"-15"	1 xF50-200, 1 xF50-201, 1 xF50-202 1 xF50-204, 1 xF50-207, 1 xF50-210 EACH 1PCS	8	5006-1102
VTP-1318P	13"-18"	1 xF50-300, 1 xF50-301, 1 xF50-302 1 xF50-304, 1 xF50-307, 1 xF50-310 EACH 1PCS	11.5	5006-1103
VTP-1420P	14"-20"	1 xF50-400, 1 xF50-401, 1 xF50-402 1 xF50-404, 1 xF50-407, 1 xF50-410 EACH 1PCS	21	5006-1104



WEDGE TYPE SETS VTP-□□□□W TYPE BODY WITH 6 PCS HOLDER

WEDGE STYLE TOOL POST SETS

ORDER NO.	LATHE SWING	6-PIECE SETS EACH SET INCLUDES (6PCS/SET)	N. W. KGS	CODE NO.
VTP-0012W	12"	1 xF50-111, 1 xF50-101, 1 xF50-102 1 xF50-104, 1 xF50-107, 1 xF50-110 EACH 1PCS	5.5	5006-1121
VTP-1015W	10"-15"	1 xF50-222, 1 xF50-201, 1 xF50-202 1 xF50-204, 1 xF50-207, 1 xF50-210 EACH 1PCS	8.0	5006-1122
VTP-1318W	13"-18"	1 xF50-333, 1 xF50-301, 1 xF50-302 1 xF50-304, 1 xF50-307, 1 xF50-310 EACH 1PCS	12.8	5006-1123
VTP-1420W	14"-20"	1 xF50-444, 1 xF50-401, 1 xF50-402 1 xF50-404, 1 xF50-407, 1 xF50-410 EACH 1 PCS	21.0	5006-1124
VTP-1748W	17"-48"	1 xF50-555, 1 xF50-501, 1 xF50-502 1 xF50-504, 1 xF50-507, 1 xF50-510 EACH 1 PCS	40.0	5006-1125

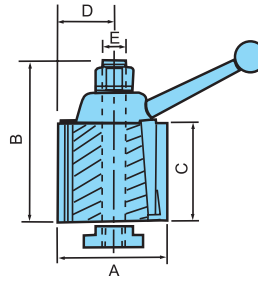


QUICK CHANGE TOOL POST PISTON STYLE-ACCESSORIES

ORDER NO.	SWING FOR LATHE		A		B		C		D		E	CODE NO.
	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC		
VTP-F50-1	12	304	2 1/2	63.5	3 3/4	95.25	2 1/4	57.15	1 7/16	36.512	M14X1.5	5006-1131
VTP-F50-2	10-15	255-380	3	76.2	4 3/8	111.125	2 3/4	69.85	1 5/8	41.275	M16X1.5	5006-1132
VTP-F50-3	13-18	330-455	3 3/8	85.725	4 7/8	123.825	3	76.2	1 7/8	47.625	M20X2	5006-1133
VTP-F50-4	14-20	355-505	4	101.6	6	152.4	3 5/8	92.075	2 1/8	53.975	M20X2	5006-1134

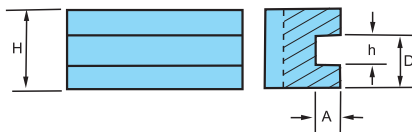


NEW



QUICK CHANGE TOOL POST WEDGE STYLE

ORDER NO.	SWING FOR LATHE		A		B		C		D		E	CODE NO.
	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC		
VTP-F50-11	12	304	2 1/2	63.5	3 3/4	95.25	2 1/4	57.15	1 3/8	34.925	M14X1.5	5006-1141
VTP-F50-22	10-15	255-380	3	76.2	4 3/8	111.125	2 3/4	69.85	1 9/16	39.68	M16X1.5	5006-1142
VTP-F50-33	13-18	330-455	3 1/2	88.9	4 7/8	123.83	3	76.2	1 29/32	48.42	M20X2	5006-1143
VTP-F50-44	14-20	355-505	4	101.6	6	152.4	3 5/8	92.075	2 1/8	53.975	M22X2	5006-1144
VTP-F50-55	17-48	435-1215	5	127	7 3/8	187.32	4 5/8	117.47	2 11/16	68.26	M24X2	5006-1145

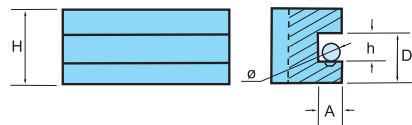


TURNING AND FACING HOLDER



ORDER NO.	A		D		H		h		CODE NO.
	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	
VTP-F50-101	7/16	11.11	15/16	23.81	1 1/2	38.1	1/2	12.7	5006-1151
VTP-F50-201	1/2	12.7	1 1/8	28.57	1 3/4	44.45	5/8	15.87	5006-1152
VTP-F50-301	5/8	15.87	1 7/16	36.51	2 1/8	53.97	3/4	19.05	5006-1153
VTP-F50-401	3/4	19.05	1 11/16	42.86	2 1/2	63.5	1	25.4	5006-1154
VTP-F50-501	1	25.4	3 3/16	55.56	3 1/8	79.37	1 1/4	31.75	5006-1155

Suitable for any size smaller than max. Height h.

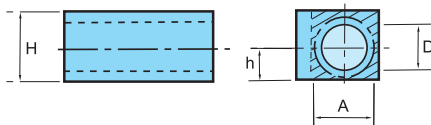


BORING, TURNING AND FACING HOLDER



ORDER NO.	A		D		H		h		Ø		CODE NO.
	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	
VTP-F50-102	7/16	11.11	15/16	23.81	1 1/2	38.1	1/2	12.7	7/16	11.11	5006-1161
VTP-F50-202	1/2	12.7	1 1/8	28.57	1 3/4	44.45	5/8	15.87	1/2	12.7	5006-1162
VTP-F50-302	5/8	15.87	1 7/16	36.51	2 1/8	53.97	3/4	19.05	5/8	15.87	5006-1163
VTP-F50-402	3/4	19.05	1 11/16	42.86	2 1/2	63.5	1	25.4	3/4	19.05	5006-1164
VTP-F50-502	1	25.4	3 3/16	55.56	3 1/8	79.37	1 1/4	31.75	1 1/8	28.57	5006-1165

Suitable for square and round shank & boring bars.

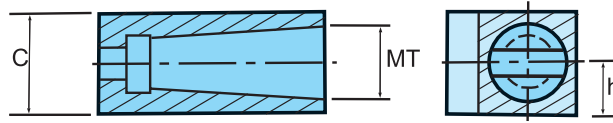


• Split bushing suitable for small boring bars & drill.

HAVEY DUTY BORING BAR HOLDER



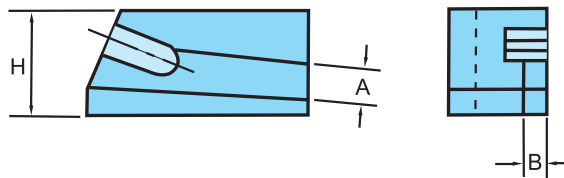
ORDER NO.	A		D		H		h		CODE NO.
	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	
VTP-F50-104	3/4	19.05	5/8	15.87	1 1/2	38.1	3/4	19.05	5006-1171
VTP-F50-204	1	25.4	3/4	19.05	1 3/4	44.45	7/8	22.22	5006-1172
VTP-F50-304	1	25.4	3/4	19.05	2	50.8	1	25.4	5006-1173
VTP-F50-404	1 1/4	31.75	1	25.4	2 1/2	63.5	1 1/4	31.75	5006-1174
VTP-F50-504	1 1/2	38.1	1 1/4	31.75	3 1/8	79.37	1 9/16	39.68	5006-1175
VTP-F50-141	1	25.4	3/4	19.05	1 3/4	44.45	7/8	22.22	5006-1176
VTP-F50-241	1 1/4	31.75	1	25.4	2	50.8	1	25.4	5006-1177
VTP-F50-341	1 1/4	31.75	1	25.4	2 1/4	57.15	1 1/8	28.57	5006-1178
VTP-F50-441	1 1/2	31.75	1 1/4	25.4	2 3/4	57.15	1 3/8	28.75	5006-1179



MORSE TAPER HOLDER FOR DRILLING

ORDER NO.	C		h		M.T	CODE NO.
	INCH	MERTIC	INCH	MERTIC		
VTP-F50-105	1 1/2	38.1	3/4	19.5	2	5006-1191
VTP-F50-205	1 3/4	44.45	7/8	22.225	2	5006-1192
VTP-F50-305	2	50.8	1	25.4	3	5006-1193
VTP-F50-405	2 1/2	63.5	1 1/4	31.75	3	5006-1194
VTP-F50-153	1 1/2	38.1	3/4	19.05	3	5006-1195
VTP-F50-253	1 3/4	44.45	7/8	22.22	3	5006-1196
VTP-F50-353	2 1/8	53.97	1 1/16	26.98	4	5006-1197
VTP-F50-453	2 3/8	60.32	1 3/16	30.16	4	5006-1198

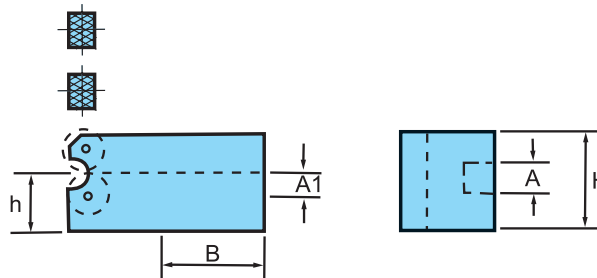
Allows to install a dead center serve as a tail stock.
Suitable for drilling & boring & reaming.



UNIVERSAL PARTING BLADE TOOL HOLDER

ORDER NO.	A		B		H		CODE NO.
	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	
VTP-F50-107	1/2	12.7	3/16	4.76	1 1/2	38.1	5006-1211
VTP-F50-207	11/16	17.46	3/16	4.76	1 3/4	44.45	5006-1212
VTP-F50-307	3/4	19.05	3/16	4.76	2	50.8	5006-1213
VTP-F50-407	7/8	22.23	1/4	6.35	2 1/2	63.5	5006-1214
VTP-F50-507	1 3/16	30.16	1/4	6.35	2 3/4	69.85	5006-1215

Suitable for cutting tool.



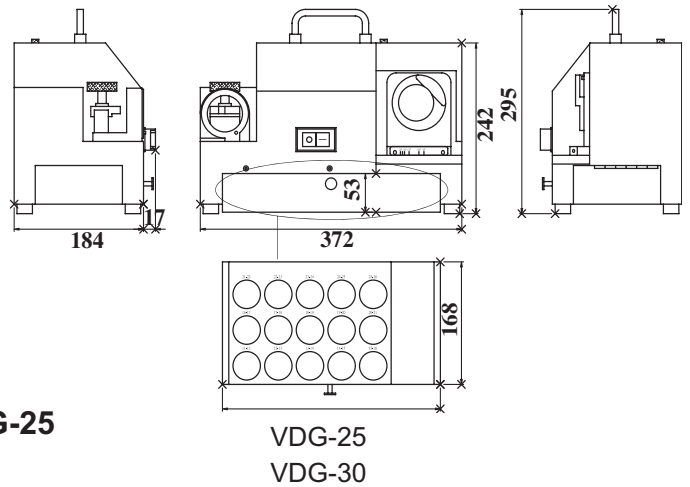
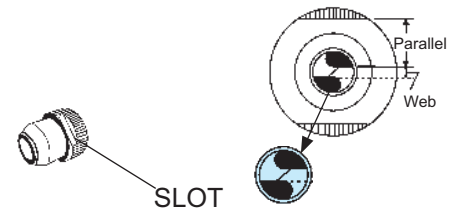
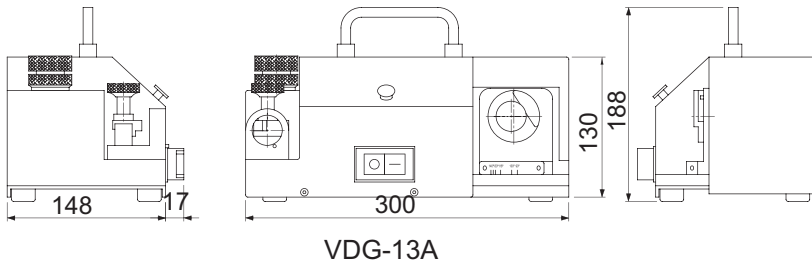
KNURLING, TURNING & FACING HOLDER

ORDER NO.	A		A1		B		H		h		CODE NO.
	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	INCH	MERTIC	
VTP-F50-110	1/2	12.7	3/8	9.53	2 1/2	63.5	1 9/16	39.68	7/8	22.22	5006-1221
VTP-F50-210	5/8	15.87	1/2	12.7	2 5/8	66.67	1 3/4	44.45	1	25.4	5006-1222
VTP-F50-310	3/4	19.05	1/2	12.7	3 1/8	79.37	2	50.8	1 3/16	30.16	5006-1223
VTP-F50-410	1	25.4	3/4	19.05	3 3/4	95.25	2 1/2	63.5	1 7/16	36.51	5006-1224
VTP-F50-510	1 1/4	31.75	1	25.4	4 1/2	114.3	3 1/8	79.37	1 7/8	47.62	5006-1225

Suitable for knurling, facing & boring.

PATENT

NEW



For Drill Re-sharpening
Precision, Efficient, , Fast & Easy Operation,
Short Processing Time, Wide Grinding Range,
Reasonable Price

1. High Efficiency, High Quality Grinding Lip, Good Grinding Results
2. Quality Assurance: $\pm 0.05\text{mm}$
3. Considerable Design, Invisible Tool Box, Delicate & Friendly Use
4. Peerless, Super Function, Durable, Strong Motor Can Work For 2 Hours.
5. Normal Drill, Center Drill, Carbide Nc Spot Drill Could Be Re-sharpen. Suit For The Drill Processs On Steel, Casting Iron, Brass And Aluminum.
6. Grind Wheel Can Be Used For 1500 Times.





VDG-13A

90°~140°
WIDE RANGE



VDG-25

※Suit for factory & home application.

ORDER NO.	VDG-13A	VDG-25	VDG-30
DRILL DIAMETER	Ø2.0~Ø13.0	Ø12~Ø25 (Ø8~Ø30)	Ø8~Ø30
CENTER POINT ANGLE	90°~140°	90°~140°	90°~140°
POWER SUPPLY	AC-110 or 220 1PH	AC-110 or 220 1PH	AC-110 or 220 1PH
R.P.M. OF MOTOR	4500 R.P.M.	4500 R.P.M.	4500 P.R.M.
GRIND WHEEL	CBN #200	CBN #200	CBN #200
NET WEIGHT	AC-110: 9.8kgs AC-220: 9.8kgs	AC-110: 23.8kgs AC-220: 23.8kgs	AC-110 : 26.5 kgs AC-220 : 26.5 kgs
OVERALL DIMENSIONS	W282xD185xH110 m/m	W380xD240xH200 m/m	W380xD240xH200 m/m
STANDARD ACCESSORIES	ALLOY STEEL COLLET ER-20 COLLETx11PCS Ø3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, EACH ONE COLLET HOLDER X 1 UNIT 4mm HEXAGON WRENCH X 1 PCS FOR CHANGE WHEEL Ø3mm EXTENSION X 1 PCS	ALLOY STEEL COLLET ER-40 COLLETx14PCS Ø12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, EACH ONE COLLET HOLDER X 1 UNIT 5mm HEXAGON WRENCH X 1 PCS FOR CHANGE WHEEL	ALLOY STEEL COLLET ER-40 COLLETx23PCS Ø8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, EACH ONE COLLET HOLDER X 1 UNIT 5mm HEXAGON WRENCH X 1 PCS FOR CHANGE WHEEL
OPTIONAL COLLET SPECIAL SIZE	Ø3.5, 4.5, 5.5, 6.5, 7.5, 8.5, 9.5, 10.5, 11.5, 12.5	Ø8, 9, 10, 11, 26, 27, 28, 29, 30	
CODE NO.	8001-012	8001-014	8001-015

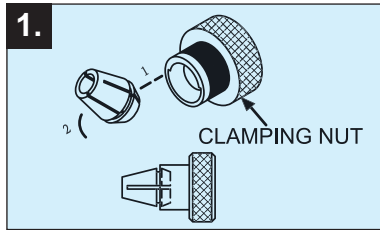
GRIND WHEEL

ORDER NO.	FOR DRILL MATERIAL	WHEEL	CODE NO.
VDG-13B	HSS	CBN200	8001-500
VDG-13D	CARBIDE	SDC200	8001-501
VDG-25B	HSS	CBN200	8001-504
VDG-25D	CARBIDE	SDC200	8001-505
VDG-30B	HSS	CBN200	8001-506
VDG-30D	CARBIDE	SDC200	8001-507

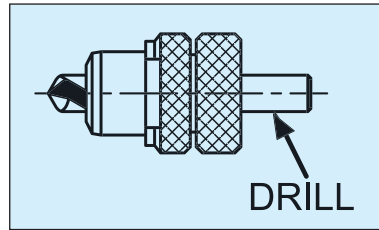
- VDG-25 allows up to size Ø8~Ø30mm, please choose optional collet Ø8, 9, 10, 11, 26, 27, 28, 29, 30mm.



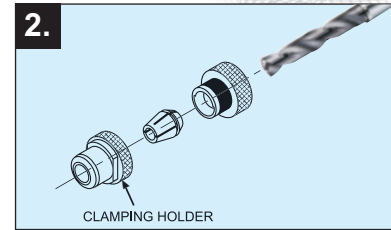
A. HOW TO USE HOLDER UNIT FOR COLLET & DRILL



Please confirm the drill size and pick up proper collet. Assemble collet into clamping nut by 45 degree. (Before insert the drill into the clamping holder.)

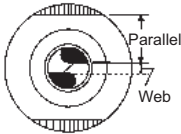
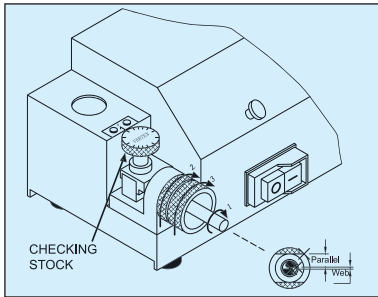


HOLDER UNIT
When drill length is less than 10mm, you need to add 1 scale on indicator.
Ex. when D=9mm, turn indicator to 10mm



Insert the drill, lock the clamping holder but not tightened, allow the drill can still move.

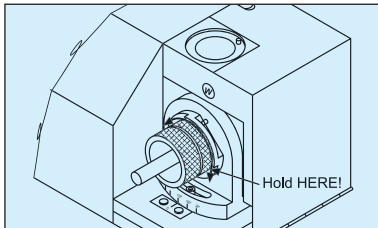
B. HOW TO SET THE HOLDER UNIT AT THE CHECKING STOCK



1. Find the drill diameter. (If the drill D. is 8.2mm) Set the indicator of scale No. as same as drill's diameter. (Please turn the indicator plate and set it between 8mm-8.5mm).
2. Insert the holder unit into the checking stock, The slot of clamping unit will match into the PIN of checking stock. (Make sure the drill is touching the checking stock.)
3. Turn the holder unit and drill to clockwise (Make sure the drill is touching the checking stock). And tighten the holder unit by turning the clamping nut

- CAUTION**
- (1.) Make sure the web blade of drill is parallel to the slot of clamping holder.
 - (2.) If a drill's length is less than 1/2, please add 1-2 scale onto the indicator plate.
 - (3.) If a drill's web blade is vary from normal drill, please check the parallel to slot of the clamping holder first, and then set the indicator.

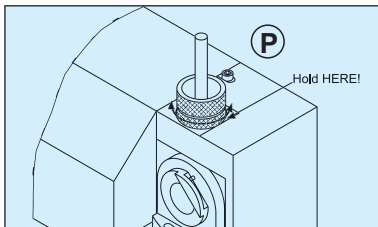
C. HOW TO GRIND THE WEB OF DRILL



1. Turn on the power.
2. Insert the holder unit into the (W) grind stock. The slot will match with the PIN. Let the drill reach diamond wheel smoothly. (Hold the clamping holder when turning.)
3. Grinding the drill by moving right and left. Until the grinding noise is gone.
4. Take out the holder unit. And turn 180°, Insert again like step 3. complete the web sharpening process.

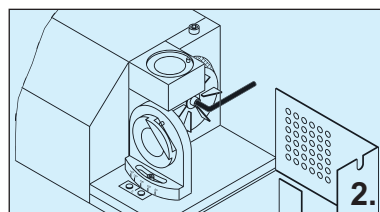
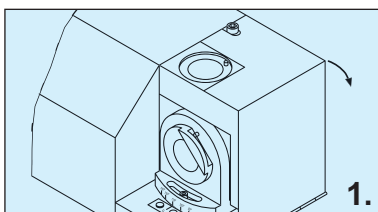
- CAUTION**
- (1.) Hold and turn the clamping holder to avoid mis-grinding. Hold drill or clamping nut when turning may result in un-even surface.
 - (2.) To grind different angle shall adjust angle indicator before insert.

D. HOW TO GRIND CENTER POINT OF DRILL



1. Insert the holder unit into (P) grind stock slot and match with the PIN.
2. Turn the holder unit right and left slowly until the grind noise is off.
3. Take out the holder unit and turn oppsite 180° and repeat step 2.

E. HOW TO CHANGE THE DIAMOND WHEEL



1. Loosen the screw on the wheel cover.
2. Open the cover and loosen the screw which use to lock the grind wheel.
3. Change the wheel, make sure two screws are in place and fixed.

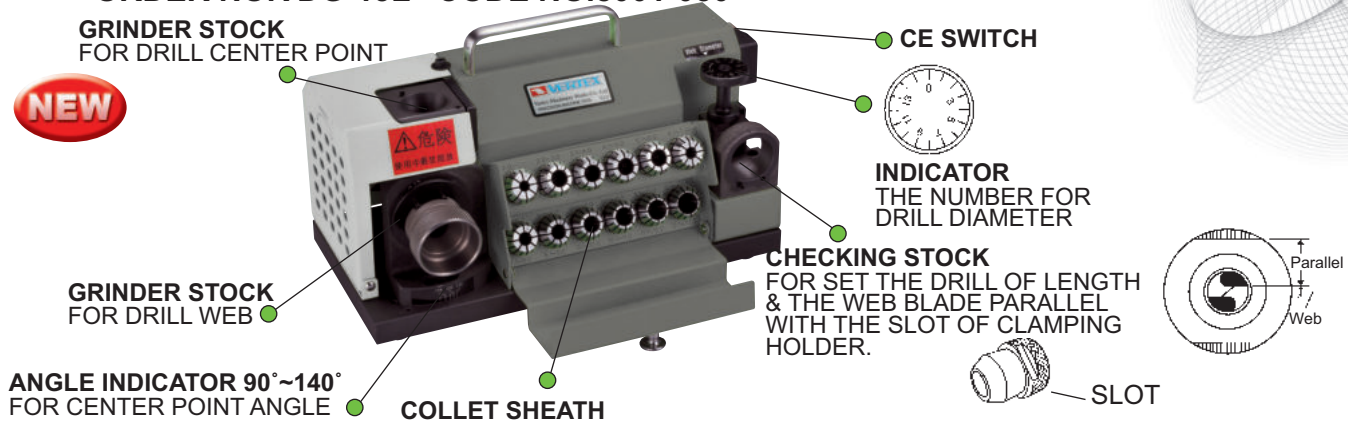
CAUTION Do not plug in the power before the wheel cover is closed.



Left Hand Drill Grinder



ORDER NO. VDG-13L CODE NO. 8001-050



For Drill Re-sharpening

Precision, Efficient, Easy operation, Reasonable price,
Short processing time, Grinding Angle

90-140 Degree, Grinding Diameter from 2-13 mm.

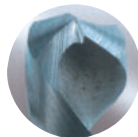
Reasonable Price, Fast & easy operation

1. High Efficiency, High Quality Grinding Lip, Good Grinding Results
2. Quality Assurance: $\pm 0.05\text{mm}$
3. Considerable Design, Invisible Tool Box, Delicate & Friendly Use
4. Peerless, Super Function, Durable, strong Motor can work for 2 hours.
5. Normal drill, center drill, carbide NC spot drill could be resharpened. Suit for the drill process on steel, casting iron, brass and aluminum.

ORDER NO.	VDG-13L
Drill Diameter	$\varnothing 2\sim\varnothing 13$
Point Angle	$118^\circ\sim 135^\circ$
Power Supply	AC110V 50/60Hz, AC220V(Opt.)
R.P.M. of motor	5300 R.P.M.
Grinding Wheel	CBN #200
Weight	N.W.:8kg G.W.:9kg
Machine Size	L:286mm W:133mm H:155mm
Packing Size	L:330mm W:205mm H:225mm
Standard Accessories	ER-20 Collet x 12 pcs Collet Holder x 1 set Metal Shim 0.1mm x 2 pcs / 0.3mm x 1 pcs Hexagon Wrench 3mm x 1 pcs / 4mm x 1 pcs
CODE NO.	8001-050

Optional SD Grinding Wheel for Carbide Drills

For 2mm-13mm Left Hand Twist Drill
Re-sharpening, Angle $118^\circ\sim 135^\circ$



Left hand twist drill bits

Sheet Metal Drill Grinder

ORDER NO. VDG-13S CODE NO. 8001-051



For 3mm-13mm Sheet Metal Drill
Re-sharpening, Angle $165^\circ\sim 180^\circ$

GRIND WHEEL

ORDER NO.	Grind Wheel	CODE NO.
VDG-13S-A	CBN OR SDC $\varnothing 3.0\sim\varnothing 5.9\text{mm}$	8001-056
VDG-13S-B	CBN OR SDC $\varnothing 6.0\sim\varnothing 8.9\text{mm}$	8001-057
VDG-13S-C	CBN OR SDC $\varnothing 9.0\sim\varnothing 13\text{mm}$	8001-058

High Quality Grinding Wheel

Please choose the suitable grinding wheel for different drill diameter

1. $\varnothing 3.0\text{mm}\sim\varnothing 5.9\text{mm}$ Please Use A Grinding Wheel (CBN)
2. $\varnothing 6.0\text{mm}\sim\varnothing 8.9\text{mm}$ Please Use B Grinding Wheel (CBN)
3. $\varnothing 9.0\text{mm}\sim\varnothing 13.0\text{mm}$ Please Use C Grinding Wheel (CBN)

Optional: SDC grinding wheel is available for carbide drills.



Special Design For
Grinding Sheet Metal Drills



ORDER NO.	VDG-13S
Drill Diameter	$\varnothing 3\sim\varnothing 13$
Point Angle	$165^\circ\sim 180^\circ$
Power Supply	AC110V 50/60Hz, AC220V(Opt.)
R.P.M. of motor	5300 R.P.M.
Grinding Wheel	CBN #200
Weight	N.W.:8.5kg G.W.:9.5kg
Machine Size	L:286mm W:133mm H:155mm
Packing Size	L:330mm W:205mm H:225mm
Type of Thinning	Thinning
Standard Accessories	ER-20 Collet x 11 pcs Collet Holder x 1 set Metal Shim 0.1mm x 2 pcs / 0.3mm x 1 pcs Hexagon Wrench 3mm x 1 pcs / 4mm x 1 pcs
CODE NO.	8001-051

Optional SD Grinding Wheel for Carbide Drills

NEW

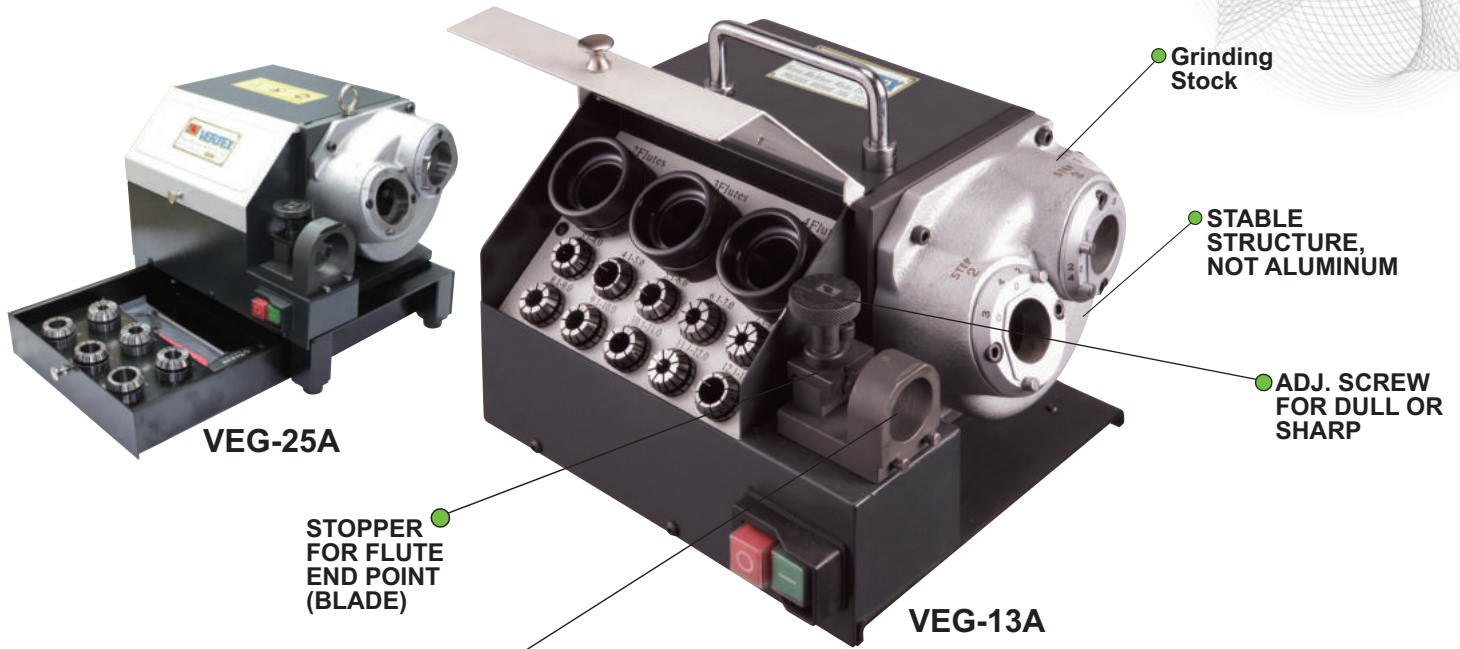
FAST EASY



For End Mill Re-sharpening, 2, 3, 4 Number Flute Precision Efficient, Easy operation, Short processing time, Grinding Diameter from 4-13 mm. Reasonable Price, Fast, Rigid, Simplified Step

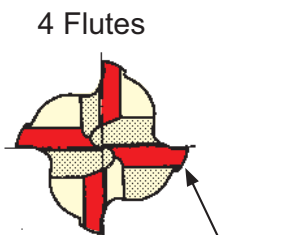
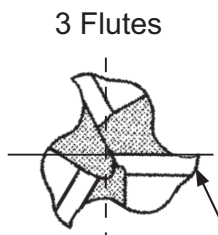
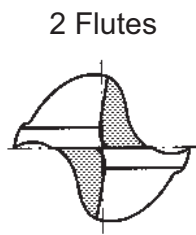
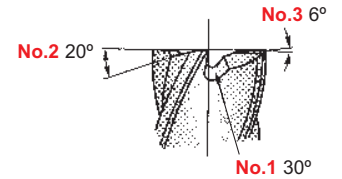
1. High Efficiency, High Quality Grinding Slip, Good Grinding Results
2. Quality Assurance: ±0.02mm, Strong, Reliable, Grinding Stock Won't Bend.
3. Easy Operation, For Urgent Need, Low cost, Save Money

ORDER NO.	VEG-13A	VEG-25A
CAPACITY END MILL DIA.	ø4~ø13mm	ø12~ø25mm
MOTOR	450W	1000W
SPEED	4800rpm	4300rpm
POWER	AC-110 or 220 1PH 50/60HZ	AC-110 or 220 1PH 50/60HZ
AXIAL-ANGLE	NO.1 END MILL FLAT SLOT ANGLE 30° NO.2 SECOND RADIAL ANGLE 20° NO.3 CUTTING ANGLE 6°	NO.1 END MILL FLAT SLOT ANGLE 30° NO.2 SECOND RADIAL ANGLE 20° NO.3 CUTTING ANGLE 6°
STANDARD ACCSSORIES	ALLOY STEEL COLLET ER-20 COLLET: Ø4, 5, 6, 7, 8, 9, 10, 11, 12, 13mm 10 pcs/set WRENCH:1PC SDC 300 x1 For ø4~ø6mm SDC 270 x1 For ø7~ø13mm Square Type For 4 Flutes End Mill x 1 Set Hex. Type For 3 Flutes End Mill x 1 Set Parallel Type For 2 Flutes End Mill x 1 Set Ø4-Ø5, Ø6-Ø8, Ø10-Ø12mm EXTENSION FOR EACH ONE.	ALLOY STEEL COLLET ER-40 COLLET: Ø12, 16, 18, 20, 22, 25mm 6 pcs/set WRENCH:1PC SDC 150 x1 For ø12~ø25mm Square Type For 4 Flutes End Mill x 1 Set Hex. Type For 3 Flutes End Mill x 1 Set Parallel Type For 2 Flutes End Mill x 1 Set
PACKING SIZE	320x260x300mm	365x293x345mm
WEIGHT (kg)	17	31
CODE NO.	8001-510A	8001-520A



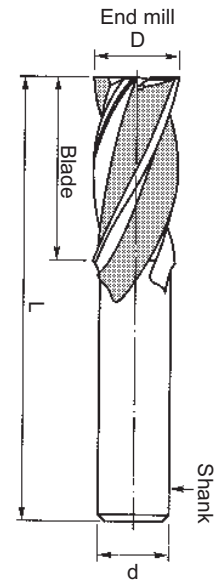
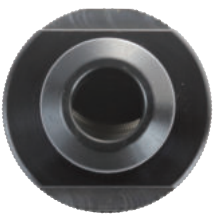
STOPPER FOR FLUTE END POINT (BLADE)

CHECKING STOCK FOR CHECK END MILL PARALLEL WITH HOLDER UNIT



LONG BLADE FOR ORIGINAL POINT CHECKING

LONG BLADE FOR ORIGINAL POINT CHECKING



Optional Accessories

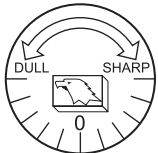
※ Each holder unit has mark 2, 3 and 4 on it.

ORDER NO.	Grind Wheel	FOR END MILL MATERIAL	Weight (kg)	CODE NO.
VEG-13BS	CBN 300 x1 For $\phi 4\sim\phi 6\text{mm}$	H.S.S.	0.35	8001-511A
VEG-13BL	CBN 270 x1 For $\phi 7\sim\phi 13\text{mm}$	H.S.S.	0.35	8001-512A
VEG-13DS	SDC 300 x1 For $\phi 4\sim\phi 6\text{mm}$	CARBIDE	0.35	8001-514
VEG-13DL	SDC 270 x1 For $\phi 7\sim\phi 13\text{mm}$	CARBIDE	0.35	8001-515
VEG-25BSV	CBN 150 x1 For $\phi 12\sim\phi 25\text{mm}$	H.S.S.		8001-516V
VEG-25DSV	SDC 150 x1 For $\phi 12\sim\phi 25\text{mm}$	CARBIDE		8001-517V



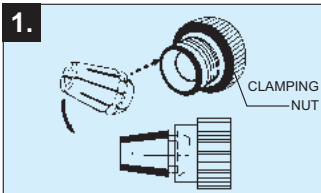
NEW

FAST EASY

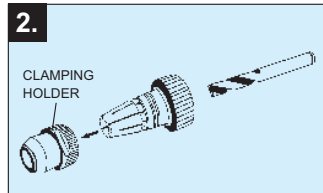


You can adjust the sharpness on the round plate, move toward dull and sharp mark.

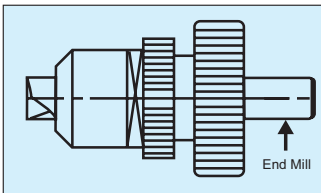
A. HOW TO INSTALL HOLDER UNIT FOR END MILL



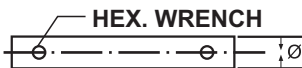
Please confirm the end mill size and pick up proper collet. Assemble collet into clamping nut by 45 degree. (Before insert the end mill into the clamping holder.)



Insert the end mill, lock the clamping holder but not tightened, allow the end mill can still move. Insert the end mill, let the end mill blade length 35mm out, (don't tightened the clamping Holder)



Extension: To attach on the end mill allow you to rotate it when it's length is too short for setting.



Stopper for flute end point (blade)

PLEASE CHOOSE CORRECT WHEEL FOR GRINDING.
SDC300 MARK 4-6 mm
SDC270 MARK 7-13mm



B. HOW TO SET THE HOLDER UNIT AT THE CHECKING STOCK

(For length and angle setting)



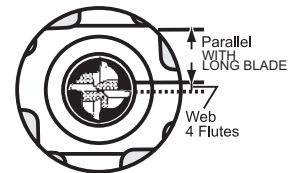
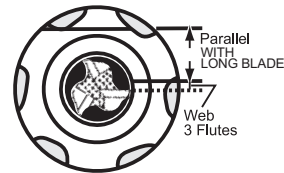
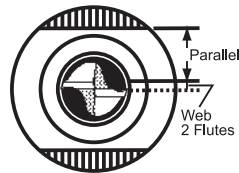
Original Point

- 1) Please make sure the blade of the end mill set in the position like we show below. Hold the end mill but not tight up. Always use 0 to check!
 ※ You can adjust the sharpness on the round plate, move toward dull and sharp mark.
- 2) Aim at 0 mark and insert holder unit into checking stock. Turn clockwise a little bit, make sure the blade is touching the stock, lock the holder now.
 ※ When take out the holder unit, please turn the round plate counter clockwise so you can take out smoothly.

CAUTION: 1 Make sure the web blade of drill is parallel to the slot of clamping holder.

2 When the end mill blade is broken, the first grind job please turn to the dull side. And grind 2 times in order to get perfect result.

3. While setting, please align the end mill long blade to be parallelized with holder unit slot.



C. HOW TO GRIND NO1. END MILL FLUTE SLOT ANGLE 30°



- 1) Aim the original point at hole on No1. to grind end mill Flute Slot Angle 30°
- 2) Insert the holder and touch against the No1. surface, until the grind noise is off.

※ Always begin with 0.

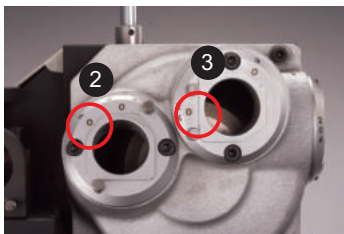
※ While grinding, please turn holder unit right and left a little, against pins.

- 3) (2 Flutes) Please insert and take out turn 180° and repeat step 1~2;
- (3 Flutes) Please insert and take out turn 120° and repeat step 1~2, two times;
- (4 Flutes) Please insert and take out turn 90° and repeat step 1~2, three times.

※ While grinding, holder unit shall touch / match most of the grinding stock and move smoothly.

※ Each holder will match each hole's pin, smart design.

D. HOW TO GRIND END MILL'S NO2. SECOND RIDIAL ANGLE 20° BACK ANGLE



- 1) Insert the Holder unit and aim the original point, touch the No2's surface until the grinding noise is off.

※ Always begin with 0.

※ While grinding, please turn holder unit right and left a little, against pins.

- 2) (2 Flutes) Please insert and take out turn 180° and repeat step 1~2;
- (3 Flutes) Please insert and take out turn 120° and repeat step 1~2, two times;
- (4 Flutes) Please insert and take out turn 90° and repeat step 1~2, three times.

E. HOW TO GRIND END MILL NO3. CUTTING ANGLE 6°



- 1) Place holder unit and aim at hole NO.3, touch the NO.3's surface until the grinding noise is off.

※ Always begin with 0.

※ While grinding, please turn holder unit right and left a little, against pins.

- 2) (2 Flutes) Please insert and take out turn 180° and repeat step 1~2;
- (3 Flutes) Please insert and take out turn 120° and repeat step 1~2, two times;
- (4 Flutes) Please insert and take out turn 90° and repeat step 1~2, three times.

F. HOW TO CHANGE GRIND WHEEL



- 1 Use 4mm Hex. Wrench, take out 4 screws of grinding stock, remove the grinding stock.

- 2 Take out the locking screw of the grind wheel and remove the grind wheel.

- 3 Replace the old one with a new grind wheel.

- 4 Lock back the screw, install the grinding stock and lock 3 screws.

※ When grind $\varnothing 4\sim 6\text{mm}$ please use correct diamond wheel.
 $\varnothing 7\sim 13\text{mm}$

CAUTION: When open, please **un-plug** the power core.