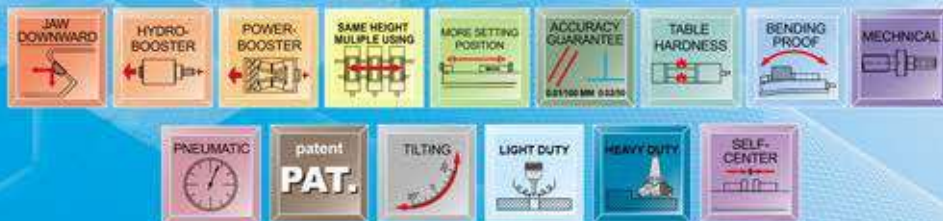




SINCE 1978

VERTIEX

MACHINERY WORKS CO., LTD.



A1-A58

MILLING MACHINE ACCESSORIES

A58-A115

GRINDING MACHINE ACCESSORIES

A116-A191

TOOLING SYSTEM

A192-A195

MACHINE CENTER ACCESSORIES

A196-A225

LATHE MACHINE ACCESSORIES

A226-A236

CUTTING TOOLS



Horizontal / Vertical Rotary Table

صفحه گردان عمودی / افقی



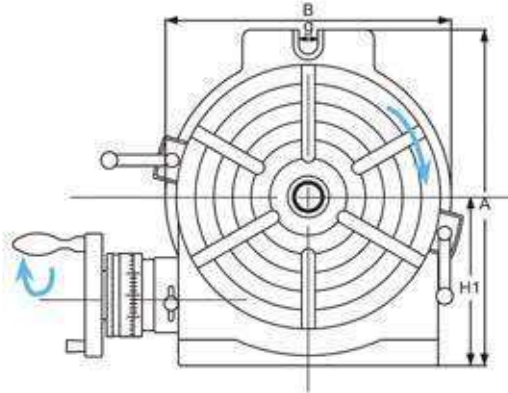
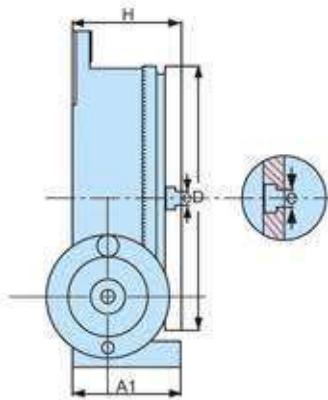
HV-6, 8, 10, 12, 14, 16



New Model



HV-4



| SPECIFICATIONS | HV-4,6 | HV-8,10,12,14,16 |
|--------------------------------|--------|------------------|
| 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 | | | Base dimension | | Width of T-slot | Bolt slots | The Load Capacity For Rotary Table | Center sleeve | Gross Weight(kg) | | Meas. CFT | CODE NO. | | | |
|-----------|----------------|--------|-----|----------------|-----|-----------------|------------|------------------------------------|---------------|------------------|--------|-----------|------------|--------------|----------|------------|
| | Outer diameter | Height | H | H1 | A | | | | | B | e | | | Type | g | Horizontal |
| | | | | | | 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 | 255 | 500 | 435 | 16 | ⊗ | 18 | 140 KGS | 70 KGS | MT-4 | 106.4KGS | 123.1KGS (W) | 4.2 | 1001-006 |

Optional Accessories

(Details on page A3)



Flange



Tailstock



Dividing Plate



EXAMPLE :



W/O Flange



W/ Flange



W/ Dividing Plate

3-Jaw Chuck For Rotary Table, Indexer

- Detail specification & Order NO. shown on page E9
- The Fixing Hole is From Front



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

- Our Tables are made of high density Meehanite 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.

| ITEM NO. | TESTING OBJECTIVE | VARIATION(PER100mm) MAXIMUM TESTED |
|----------|---|------------------------------------|
| 1 | FLATNESS OF CLAMPING SURFACE(CONCAVE) | ±0.015 |
| 2 | PARALLELISM OF CLAMPING SURFACE TO BASE | ±0.02 |
| 3 | SQUARENESS OF CLAMPING SURFACE TO ANGLE FACE | ±0.02 |
| 4 | TRUE RUNNING OF CLAMPING SURFACE | ±0.015 |
| 5 | TRUE RUNNING OF CENTER HOLE MEASURED AT HOLE EDGE | ±0.02 |



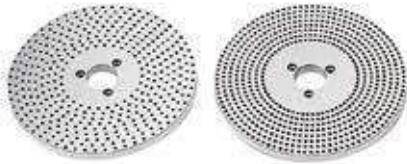
Optional For Rotary Table



متعلقات صفحه گردان

A. DIVIDING PLATES

DP-2, 3, 4, 5



*DP-2 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

EXAMPLE :



| 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 |

A. DIVIDING PLATES

DP-1



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 |

EXAMPLE :

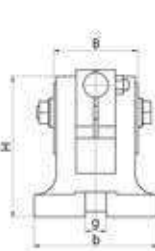


| ORDER NO. | SUIT FOR MODEL | WEIGHT kgs | CODE NO. |
|-----------|------------------------------------|------------|----------|
| *DP-1 | for HV-4, HV-6, VUT-6, VU-100, 150 | 1.4 | 1001-030 |

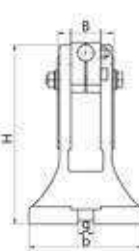
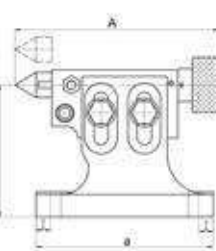
B. TAILSTOCK



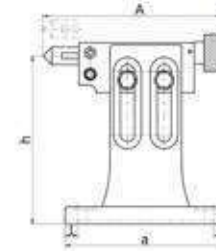
TS-1



TS-1



TS-2~TS-4



TS-3

Tailstock

Unit:mm

| ORDER NO. | adjustable(h) | | A | B | H | I | a | b | g | SUIT FOR MODEL | G.W. kgs | Meas. CFT | CODE NO. |
|-----------|---------------|--------|---------|----|-----|----|-----|-----|----|---|----------|-----------|----------|
| | highest | lowest | | | | | | | | | | | |
| TS-1 | 108 | 80 | 155-180 | 64 | 107 | 11 | 134 | 94 | 16 | HV-4, HV-6, VSI-4, VSI-5, BS-0, VUT-6, VU-100, VU-150 | 3.9 | 0.4 | 1001-022 |
| TS-2 | 150 | 115 | 170-195 | 64 | 150 | 11 | 155 | 110 | 16 | BS-1, CC-6, CS-6, HV-8 | 5.5 | 0.4 | 1001-023 |
| TS-3 | 205 | 130 | 210-235 | 64 | 205 | 13 | 185 | 138 | 16 | CS-8, HV-10, HV-12, CC-8, VUT-10, VUT-12, VU-200 | 8.1 | 0.4 | 1001-024 |
| TS-4 | 260 | 182 | 210-235 | 75 | 260 | 17 | 205 | 144 | 16 | HV-14, CC-12, HV-16 | 11.9 | 0.7 | 1001-025 |



Tilting Rotary Table



صفحه گردان سینوسی

Heavy Duty Type, Rigid & Strong Design



VUT-6

VUT-12



VUT-6

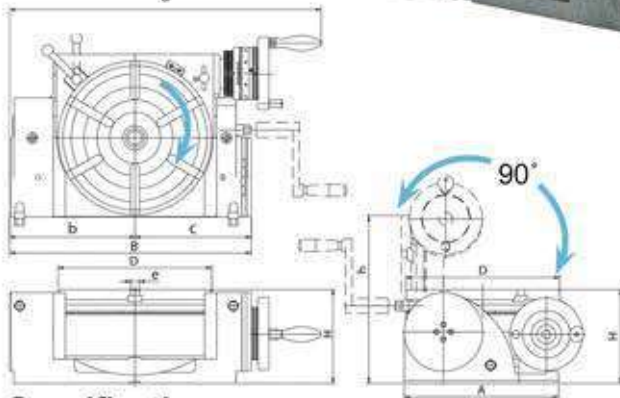
Table Tilting Handle



VUT-10



New Model



- Low profile, low center height.
- 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.



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 |

OPTIONAL : Detail see A3

FLANGE & 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 |

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 |

TS-3

| 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 |



Multiple Tilting Rotary Table



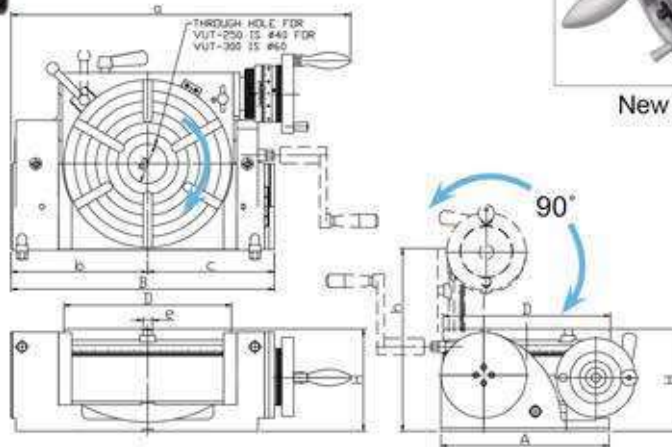
NEW

صفحه گردان سینوسی

1. BIG THROUGH HOLE DESIGN TYPE 250 IS Ø45, TYPE 300 IS Ø65
2. WITH 15°, 24 DIVISION DIRECT INDEX.
3. HEAVY DUTY TYPE. RIGID & STRONG DESIGN.



New Model



- The Feature is same as VUT-6, 10, 12 type.
- 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.

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 | Ø45 | 150 | 75.5 | 1001-015A |
| VUT-300 | 300 | 178 | 319 | 300 | 447 | 551 | 235 | 212 | 16 | Ø65 | 169 | 108 | 1001-016A |

OPTIONAL : Detail see A3

FLANGE & DP-3



TS-3



DIVIDING PLATES

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

TAILSTOCK

| 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 |

Unit:mm

Semi-Universal Dividing Head

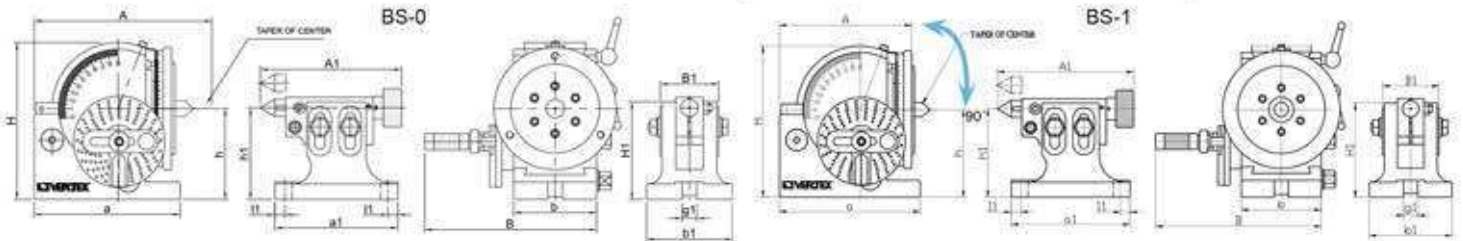
دستگاه تقسیم

Standard Accessories



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 |



BS-0,1 (Head-stock):

BS-0,1 (Tail-Stock):

| ORDER NO. | A | B | H | l | 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 |

| ORDER NO. | A1 | B1 | H1 | l1 | 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. Indirect indexing of all numbers from 2 to 50 and many numbers up to 380 possible
- 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.
- Accurate precision, little backlash, fine appearance and strong structure so can assure smooth rotation.



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



BS-2A-J-8 The Chuck Fixing Hole Is From Front.

OPTIONAL

The Chuck Fixing Hole Is From Front.
F. TYPE



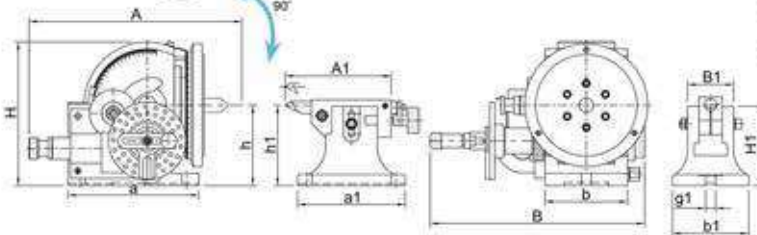
BS-0T 1 1/2 - 8TPI TYPE
BS-0T 1 1/8 - 12TPI TYPE
BS-1T 1 1/2 - 8TPI TYPE
Call VERTEX to check old model's stock.

| ORDER NO. | N.W. (kgs) | G.W. (kgs) | Meas. CFT | Applicable Chuck | CODE NO. |
|-----------|------------|------------|-----------|------------------|----------|
| BS-0 | 19 | (C)20 | 0.8 | 5" (Ø130mm) | 1001-050 |
| BS-1 | 32 | (C)33 | 1.3 | 6" (Ø160mm) | 1001-051 |
| BS-0-J-5 | 24 | (C)25 | 0.8 | WITH 5" CHUCK | 1001-053 |
| BS-1-J-6 | 42 | (C)45 | 1.3 | WITH 6" CHUCK | 1001-054 |

BS-2

دستگاه تقسیم

Standard Accessories



BS-2-J-8 THE CHUCK FIXING HOLE IS FROM FRONT. Thread Spindle: 2 1/4" - 8tpi Call To Check Old Model's Stock.

BS-2T TYPE

BS-2, 2A (Head-stock)

Unit:mm

| ORDER NO. | A | B | H | l | 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 |

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

BS-2, 2A (Tail-stock)

Unit:mm

| ORDER NO. | A1 | B1 | H1 | l1 | 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" F TYPE |
| BS-2A | (C)47.5 | 1.24 | 6" OR 8" F TYPE |

Semi-Universal Dividing Head BS-2A

BS-2A Semi-UNIVERSAL DIVIDING HEAD W/O CHANGE GEAR TYPE

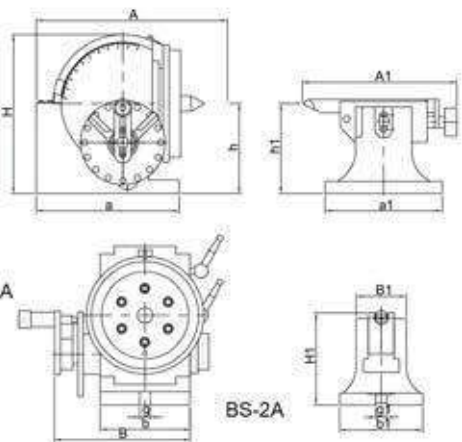


BS-2A

Standard Accessories



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.



صفحه تقسیم / گردان

Standard Accessories



Masking Plate



Face Plate

Optional Accessories

The same as Rotary table
Please see page A3

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

CS-8 with VSK-8A 3-JAW CHUCK 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.



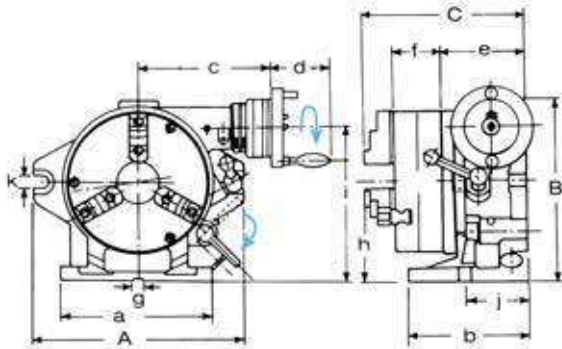
DP-4



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



New Model



| SPECIFICATIONS | CS-6 CC-6 | CS-8 CC-8 |
|--------------------------------|--------------|--------------|
| Degree per one handle rotation | 4° | 4° |
| Scale of micro collar | 2' | 1' |
| vernier reading | 20" | 10" |
| Gear ratio | 1:90 | 1:90 |

Specifications

Unit:mm

| ORDER NO. | Numbers of dividing | Chuck Through Hole | | | | 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 | 160 VSK-6A | 4~42 | 10~156 | 44 | 203 | 50 | 250 | 235 | 221 | 220 |
| CS-8 | | 210 VSK-8A | 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 | (C)43.6 | 1.2 | 1001-060 |
| CS-8 | 160 | 201 | 82 | 125 | 75 | 16 | 155 | 232 | 90 | 18 | (W)78.3 | 3.1 | 1001-061 |

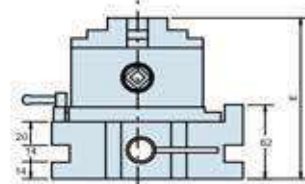
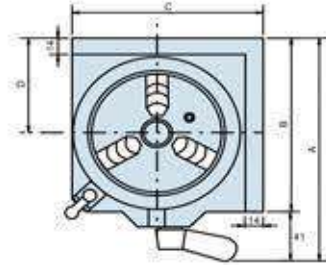


Economical Type Rapid Index VERTEX®

صفحه تقسیم تخت



COLLET INDEXER NON ECONOMICAL



- 3 JAW CHUCK VSC-4A, for VSI-4 / VSC-5A for VSI-5, the big range clamping capacity $\phi 3 - \phi 100$, 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

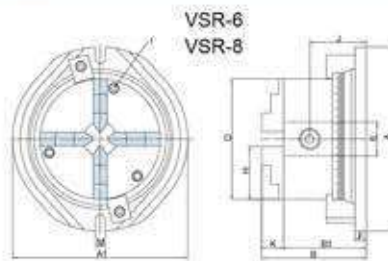
| ORDER NO. | A | B | C | D | E | Through Hole | kgs | CODE NO. |
|-----------|-----|-----|-----|----|-----|--------------|------|----------|
| VSI-4 | 187 | 146 | 146 | 80 | 135 | $\phi 30$ | 10.5 | 1001-064 |
| VSI-5 | 202 | 161 | 161 | 87 | 142 | $\phi 30$ | 14.5 | 1001-065 |

Simple Rotary Chuck

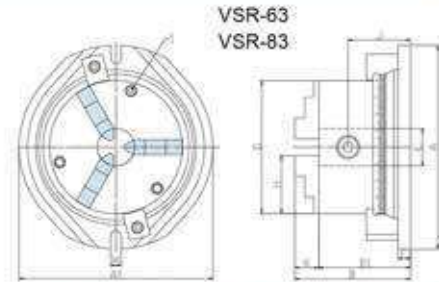
NEW



VSR-63








VSR-6 + VPS-6A 4JAW CHUCK
VSR-8 + VPS-8A 4JAW CHUCK



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

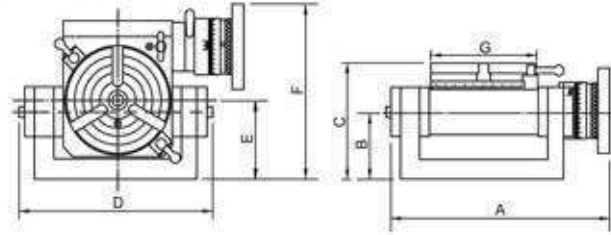
- 4-jaw chuck (include reversable and removable jaw) is designed with swivel base for multifunctional purpose.
- VERTEX simple rotary chuck can be placed and fixed on your desired position.
- 360° vernier scale: smooth swival motion and easy locking by screws.
- Both horizontal and vertical position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

| ORDER NO. | FOR SHAPE | 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-10 |  | 373 | 355 | 165 | | | | 22 | | 3-M12 | | | 16 | 43.5 | 1001-069 |
| 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 |



Universal Tilting Rotary Table VERTEX®

صفحه گردان سینوسی



- 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:

Please see page A3

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 |

Big Through Hole / Fast Indexing Rotary Table



15° DIVISION

Feature:

- Center Bore = $\phi 65\text{mm}$
- 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.



| SPECIFICATIONS | HVD-400 |
|--------------------------------|---------|
| Degree per one handle rotation | 4° |
| Scale of micro collar | 1' |
| vernier reading | 10" |
| Gear ratio | 1:90 |



New Model

Specifications

| ORDER NO. | Through Center hole | Numbers of dividing | Table | | Base dimension | | | Width of T-slot | | Bolt slots | The load capacity for rotary table | | Weight (kg) N.W. G.W | CODE NO. | |
|-----------|---------------------|---------------------|----------------------|------------------|----------------|-----|-----|-----------------|------|------------|------------------------------------|------------|----------------------------|----------|----------|
| | | | Outer diameter A1 | Height D H | H1 | A | B | e | TYPE | | g | Horizontal | | | Vertical |
| | | | | | | | | | | | | | | | |
| HVD-400 | $\phi 65$ | 15° | 128 | 406 | 130 | 255 | 500 | 435 | 16 | | 18 | 140kgs | 70kgs | 122 | 1001-110 |

Hydraulic Machine Vise



- New design: Adjustable pressure device.
- Jam proof system.
- Hydro limit proof.
- Screw shaft broken proof

گیره هیدرولیک

PATENT



VH-12

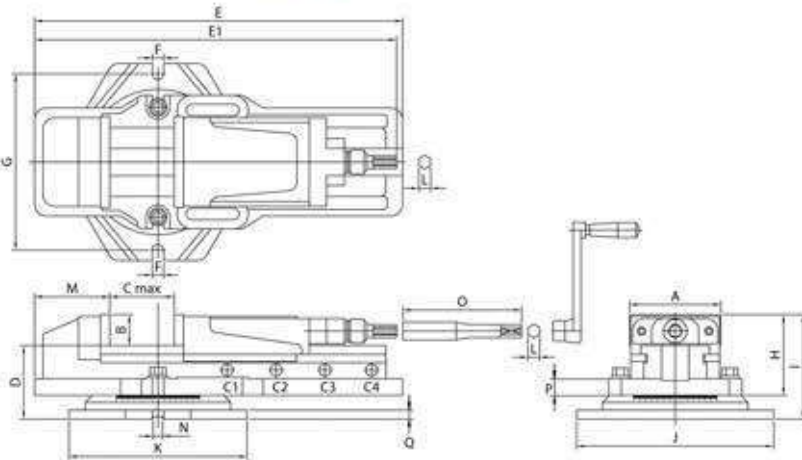


VH-6

Hydraulic controller: provide stable pressure, Hydro indexer. Protect the hydro system. Hydro limit proof reference scale. Screw shaft broken proof.



- New design: jam proof system: prevent wrong clamping force sticks the vise.
- 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.
- Hydro line - one scale indicate about 1/3 of the max. clamp force.
- In order to ensure the accurence when using it' better that don't put swivel base together



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 | 170 | 0-58 | 56-115 | 113-170 | | 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 | 73-150 | 148-210 | | 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 | 98-200 | 198-300 | | 124 | 620 | 800 | 19 | 298 | 136 | 176 | 332 | 300 | 19 | 126 | 16 | 200 | 30 | 4500 | 63 | 65x34x22 | 1002-003 |
| NEW VH-6L | 151 | 52 | 355 | 0-100 | 98-200 | 198-300 | 298-355 | 124 | 620 | 800 | 19 | 298 | 136 | 176 | 332 | 300 | 19 | 126 | 16 | 200 | 30 | 4500 | 63 | 65x34x22 | 1002-007 |
| VH-8 | 204 | 62 | 300 | 0-100 | 98-200 | 198-300 | | 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 | 98-200 | 198-300 | 298-400 | 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 | 73-175 | 173-275 | 273-375 | 144 | 795 | 950 | 17 | 342 | 162 | 206 | 375 | 350 | 19 | 170 | 16 | 200 | 30 | 7500 | 138 | 84x35x27 | 1002-006 |



Tilting Hydraulic Machine Vise **VERTEX**

PATENT

گیره هیدرولیک سینوسی

New Design

- Jam proof system
- Great smooth operation
- Hydro limit proof.
- Screw shaft broken proof



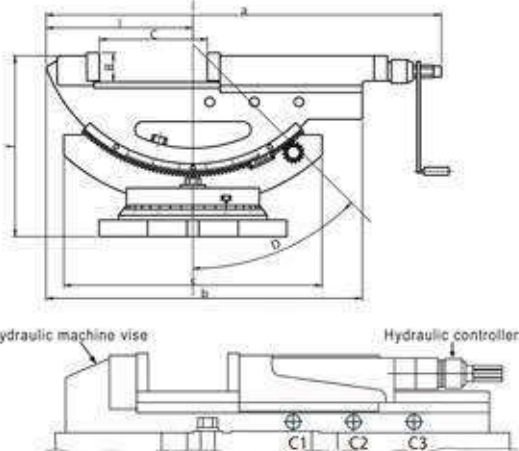
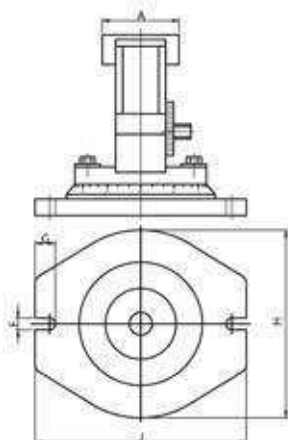
VHT-4



VHT-6

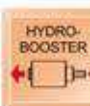
TILTING ADJUSTABLE BY GEAR SYSTEM

50°



Hydraulic controller:
provide stable pressure,
Hydro indexer. Protect the hydro system.
Hydro limit proof reference scale.
Screw shaft broken proof.

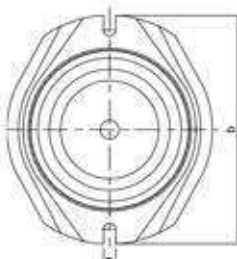
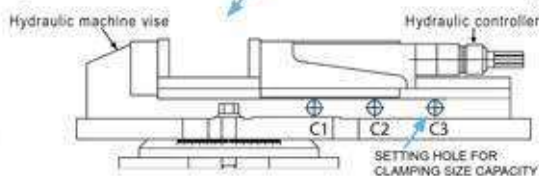
- The same as characters of VH type. Swivel base same as VH type.
- Tilting seat set by two locking screws, works in high stability.
- Angle setting ranges from 0°~50°. Tilting degrees graduated for easy reading.
- Swivel base graduated to 360° and fixable in any position.
- THE (3 STEPS CLAMPING POSITION) SAME AS VH TYPE.
- Accuracy within 0.02mm
- Hydraulic-booster system is guaranteed for using 1 years limited.



| ORDER NO. | A | B | C OPEN | Opening Size For Capacity | | | D | E | F | G | H | J | a | b | c | f | Max. Clamp Force (kgf) | G.W. (kgs) | Meas CFT | CODE NO. |
|-----------|-----|----|--------|---------------------------|--------|---------|-----|----|----|----|-----|-----|-----|-----|-----|-----|------------------------|------------|----------|----------|
| | | | | C1 | C2 | C3 | | | | | | | | | | | | | | |
| VHT-4 | 110 | 36 | 170 | 0-58 | 56-115 | 113-170 | 50° | 15 | 15 | 26 | 240 | 270 | 500 | 404 | 335 | 230 | 2500 | (W)33.3 | 1.2 | 1002-020 |
| VHT-6 | 154 | 54 | 300 | 0-100 | 98-200 | 198-300 | 50° | 20 | 19 | 28 | 300 | 330 | 800 | 585 | 415 | 290 | 4500 | (W)88 | 4.4 | 1002-021 |

Swivel base

CLAMPING CAPACITY (3 STEPS CLAMPING POSITION FIG)



Swivel base

Unit:mm

| ORDER NO. | a | b | c | n | 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 | 16 | 20 | 10 | 1002-012 |
| HS-8 | 373 | 355 | 45 | 16 | 22 | 16 | 1002-013 |

Universal Tilting Hydraulic Machine Vise

PATENT

گیره هیدرولیک سینوسی

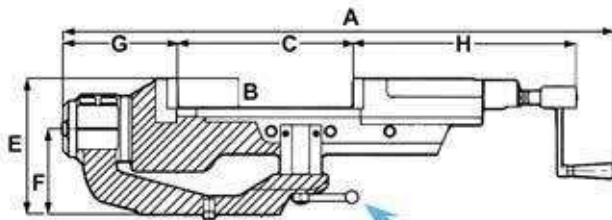
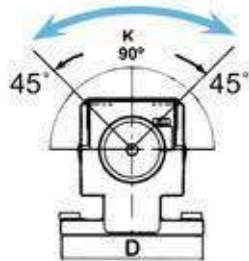
NEW

- JAM PROOF
- HYDRO LIMIT PROOF.
- SCREW SHAFT BROKEN PROOF



Hydraulic controller: provide stable pressure, Hydro indexer. Protect the hydro system. Hydro limit proof reference scale. Screw shaft broken proof.

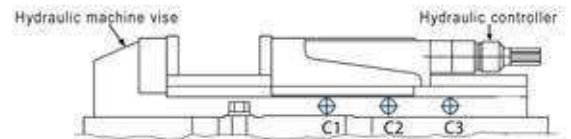
LEFT RIGHT



CLAMPING HANDLE



CLAMPING HANDLE FOR TILTING



- 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 by hand, 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 | Opening Size For Capacity | | | D | E | F | G | H | Max. Clamp Force (kgf) | K Max. Degree | G.W. (kgs) | CODE NO. |
|-----------|-----|----|--------|---------------------------|--------|---------|------|-----|-----|-----|-----|------------------------|---------------|------------|----------|
| | | | | C1 | C2 | C3 | | | | | | | | | |
| VHT-4U | 690 | 36 | 170 | 0-58 | 56-115 | 113-170 | ø165 | 175 | 110 | 130 | 290 | 2500 | 90° | 37.39 | 1002-025 |
| VHT-6U | 940 | 54 | 300 | 0-100 | 98-200 | 198-300 | ø225 | 235 | 140 | 150 | 375 | 4500 | 90° | 93.96 | 1002-026 |



Hydraulic Machine Vise

HYDRO + MECHANICAL

PAT.

Power Build Out Type

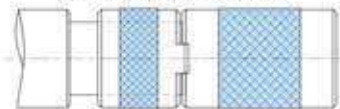


گیره هیدرولیک

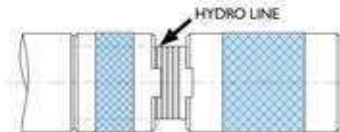


HYDRO FORCE INDICATOR
A→H

COLLAR OPERATE



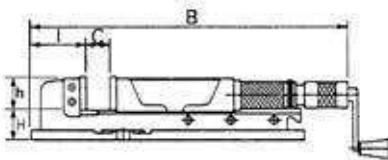
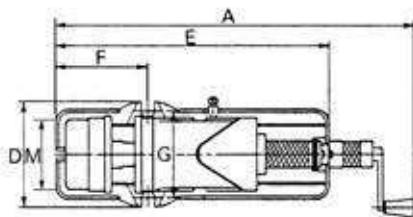
MECHANICAL
COLLAR COME TOGETHER



HYDRO LINE
COLLAR SEPRATE



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



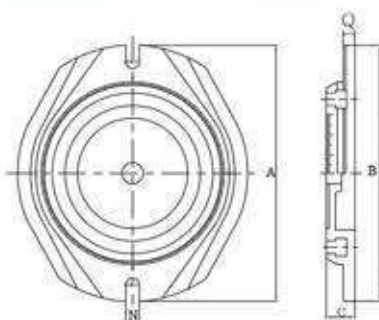
Features

- 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 durability & 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.



VHO-VISE

| ORDER NO. | A | B | C OPEN | D | E | F | G | H | 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 | 74 | 105 | 130 | 55 | 130 | 3500 | 36.5 | 1002-220 |
| VHO-6 | 750 1060 | 600 915 | 0-300 | 240 | 625 | 208 | 196 | 80 | 125 | 160 | 58 | 160 | 4000 | 59.1 | 1002-221 |
| VHO-8 | 830 1140 | 700 1015 | 0-310 | 280 | 700 | 265 | 240 | 100 | 165 | 200 | 63 | 200 | 5000 | 94.3 | 1002-228 |

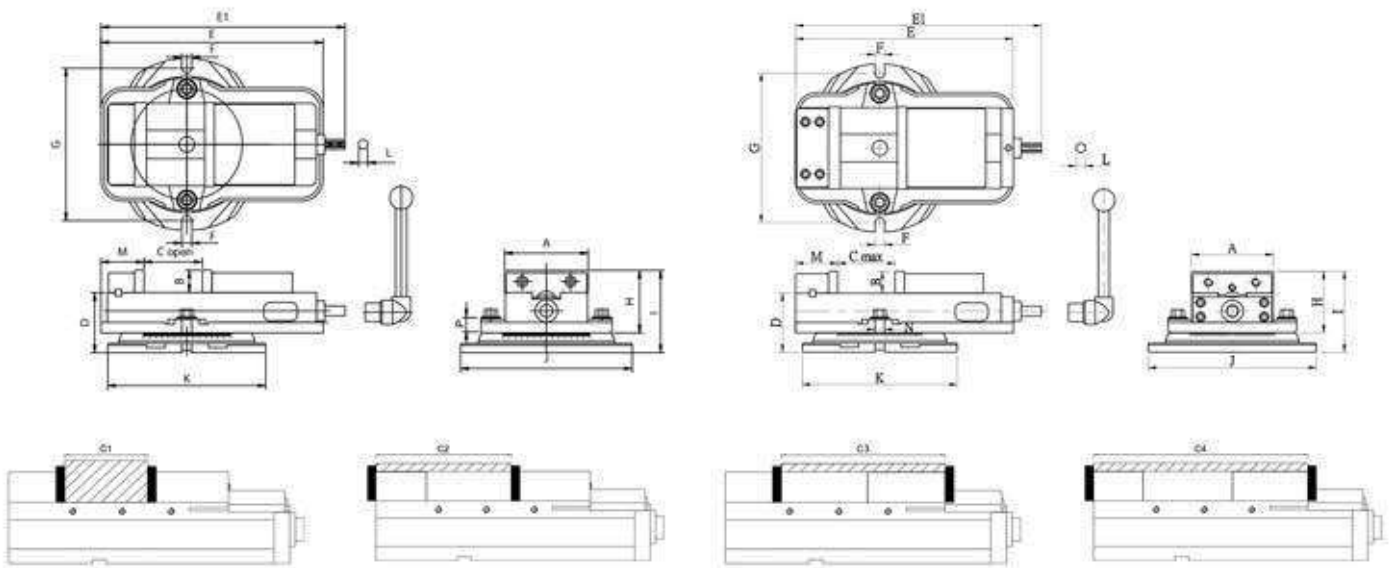


Optional : Swivel Base

| ORDER NO. | A | B | C | N | 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 |



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 - angle lock feature.
- 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 by request.
- In order to ensure the accurence when using it' better that don't put swivel base together



Order No. & Dimensions

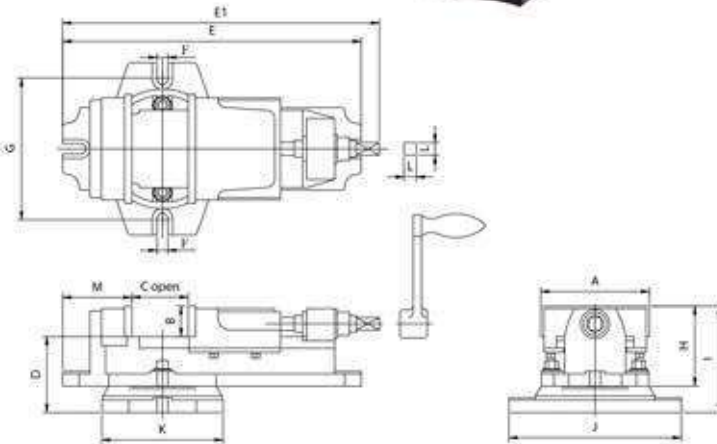
| ORDER NO. | A | B | C OPEN | D | E | E1 | F | G | H | I | J | K | L | M | N | P | MAX. Clamp Force (kgf) | G.W. (KG) | C.F.T. (CM) | CODE NO. |
|-------------------|-----|----|--------|-----|-----|-----|----|-----|-----|-----|-----|-----|------|-----|----|----|------------------------|-----------|-------------|-----------|
| 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 | 150 | 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 |
| NEW VD-810 | 205 | 62 | 275 | 129 | 555 | 615 | 19 | 378 | 147 | 191 | 420 | 377 | 19 | 79 | 16 | 17 | 3000 | 76 | 63x41x24 | 1002-035B |



K-Type Milling Vise



گیره مکانیکی



- 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 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
- In order to ensure the accuracy when using it' better that don't put swivel base together.



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 | 132 | 37 | 80 | 92 | 362 | 384 | 13 | 172 | 97 | 129 | 209 | 147 | 15 | 84 | 900 | 16 | 40x16x15 | 1002.041 |
| VK-6 | 154 | 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 | 59 | 65x27x25 | 1002-043 |

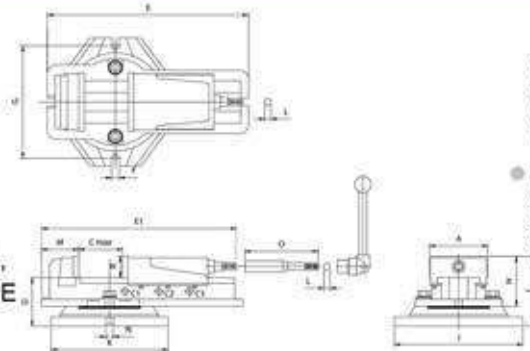
Super Open Vise

MECHANICAL TYPE



VJ-600

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



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

- In order to ensure the accuracy when using it' better that don't put swivel base together



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 | 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 | 19 | 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.

گیره سینوسی

MECHANICAL TYPE



NEW



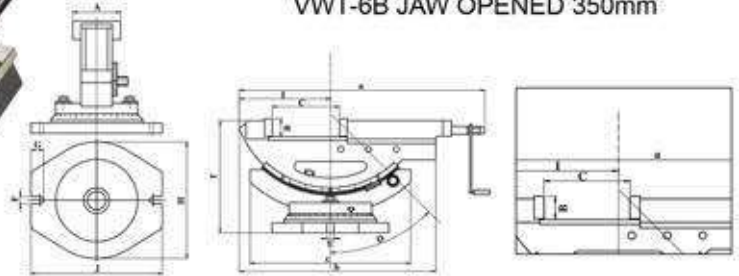
VWT-4B

VWT-6B

SUPER OPEN CAPACITY:

VWT-4B JAW OPENED 220mm

VWT-6B JAW OPENED 350mm



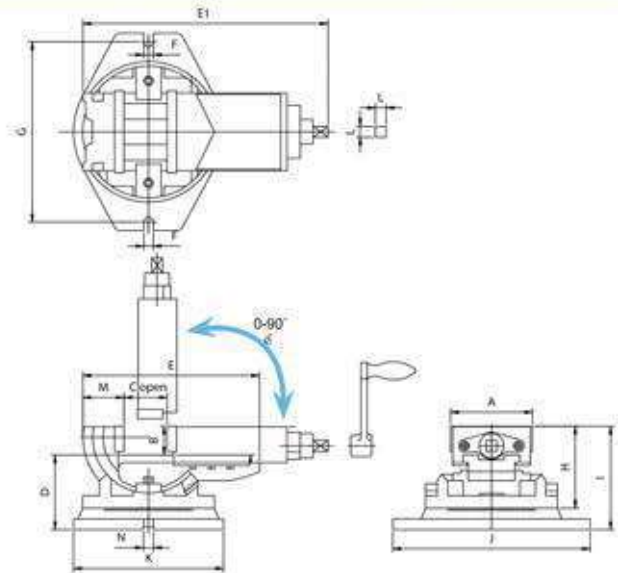
- Tilting seat set by two locking screws, works in high stability.
- Angle setting ranges from 0°~50°. Tilting degrees graduated for easy reading. Swivel base graduated to 360° and fixable in any position.



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 |

2-Way Machine Vise



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



Order No. & Dimensions

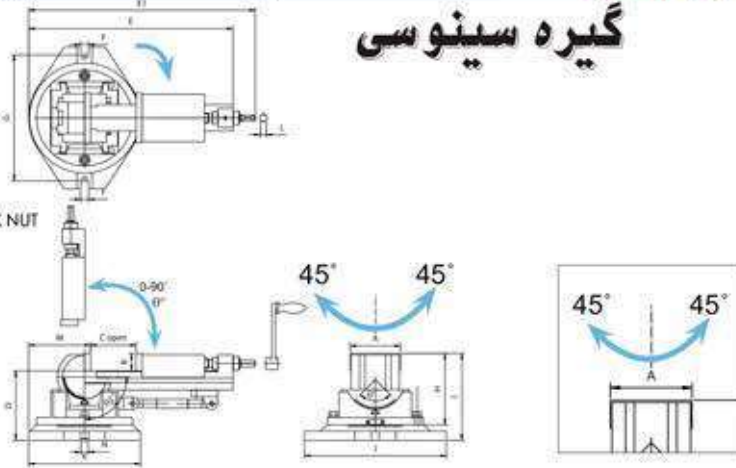
| ORDER NO. | A | B | C OPEN | D | E | E1 | F | G | H | I | J | K | L | M | N | θ | Clamp Force(kgf) | Meas CFT | CODE NO. |
|-----------|-----|----|--------|-----|-----|-----|----|-----|-----|-----|-----|-----|----|----|----|--------|------------------|----------|----------|
| VWT-5 | 130 | 46 | 100 | 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 |



3-Way Angle Milling Vise



گیره سینوسی



- 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.
- Turn ① to adjust tilting angle. fix ② to lock.



Specifications

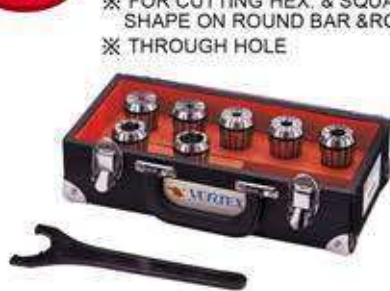
| ORDER NO. | A | B | C OPEN | D | E | E1 | F | G | H | I | J | K | L | M | N | θ | θ_1 | MAX. Clamp Force (kgf) | G.W. (kgs) | Meas CFT | CODE NO. |
|-----------|-----|----|--------|-----|-----|-----|----|-----|-----|-----|-----|-----|----|-----|----|----------|------------|------------------------|------------|----------|----------|
| 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 |

Quick Index Holder

VFV-40H

- SHANK HEX. TYPE
- FOR CUTTING 6 DIVISION TYPE
- EACH 60° FOR 1 DIVISION
- ※ FOR CUTTING HEX. & SQUARE SHAPE ON ROUND BAR & ROD
- ※ THROUGH HOLE

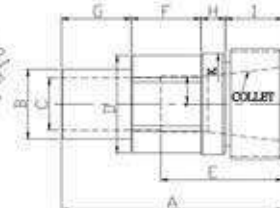
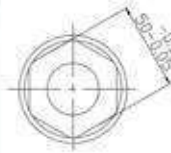
NEW



60° DIVIDING FOR PUT ON THE VISE



HORIZONTAL



VFV-41S

- SHANK SQUARE TYPE
- FOR CUTTING 4 DIVISION
- EACH 90° FOR 1 DIVISION

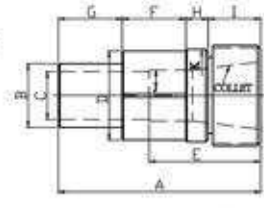
patent PAT.



90° DIVIDING FOR PUT ON THE VISE



VERTICAL



mm

| ORDER NO. | A | B | C | D | E | F | G | H | I | J | K | COLLET SIZE | WEIGHT KGS. | CODE NO. |
|-----------|-----|----|----|----|----|----|----|----|----|----|----|--------------------|-------------|----------|
| VFV-40H | 127 | 40 | 30 | 56 | 70 | 40 | 40 | 14 | 33 | 32 | 58 | ER-40 7 PCS/SET | 4.8 | 1001-101 |
| VFV-41S | 127 | 40 | 30 | 56 | 70 | 40 | 40 | 14 | 33 | 32 | 58 | ER-40 7 PCS/SET | 5.2 | 1001-102 |

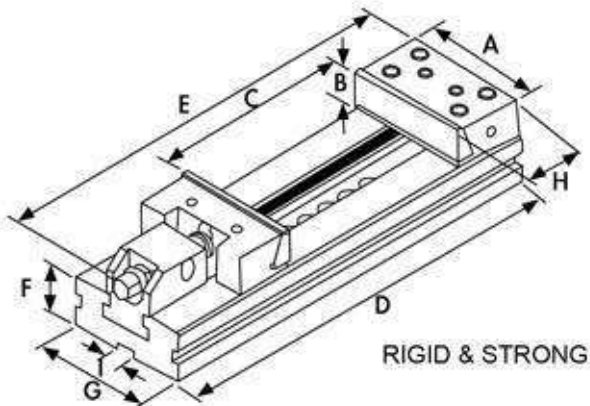


Modular Precision Machine Vise



SAME HEIGHT GUARANTEE

گیره دقیق



RIGID & STRONG

Features

- High Accuracy 0.01/100 mm
- 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 $\pm 0.01/100$ mm
- 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 |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| A | 100 | 125 | 150 | 150 | 150 | 175 | 175 | 175 | 200 | 200 | 200 | 200 |
| B | 30 | 40 | 50 | 50 | 50 | 60 | 60 | 60 | 65 | 65 | 65 | 65 |
| C OPEN | 100 | 150 | 200 | 300 | 400 | 200 | 300 | 400 | 200 | 300 | 400 | 500 |
| D | 270 | 345 | 420 | 520 | 620 | 455 | 555 | 655 | 573 | 595 | 695 | 795 |
| E | 325 | 360 | 530 | 600 | 700 | 620 | 620 | 620 | 718 | 718 | 718 | 880 |
| F | 35 | 40 | 50 | 50 | 50 | 58 | 58 | 58 | 70 | 70 | 70 | 70 |
| G | 75 | 96 | 125 | 125 | 125 | 145 | 145 | 145 | 170 | 170 | 170 | 170 |
| H | 78 | 78 | 90 | 89.4 | 89.4 | 97 | 97 | 97 | 114 | 114 | 114 | 113.4 |
| I | 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 |
| 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 |



Modular Precision Hydraulic Machine Vise



PAT.

SAME HEIGHT GUARANTEE

گیره هیدرولیک دقیق

NEW

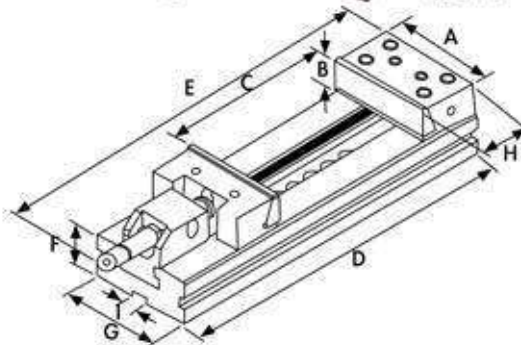


Hydraulic Type

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 mm
- 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 $\pm 0.01/100$ mm



| ORDER NO. | VMP -6BH | VMP -6CH | VMP -7AH | VMP -7BH | VMP -7CH | VMP -8AH | VMP -8BH | VMP -8CH | VMP -8DH |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| A | 150 | 150 | 175 | 175 | 175 | 200 | 200 | 200 | 200 |
| B | 50 | 50 | 60 | 60 | 60 | 65 | 65 | 65 | 65 |
| C OPEN | 300 | 400 | 200 | 300 | 400 | 200 | 300 | 400 | 500 |
| D | 520 | 620 | 455 | 555 | 655 | 573 | 595 | 695 | 795 |
| E | 700 | 800 | 635 | 735 | 835 | 738 | 760 | 860 | 960 |
| F | 50 | 50 | 58 | 58 | 58 | 70 | 70 | 70 | 70 |
| G | 125 | 125 | 145 | 145 | 145 | 170 | 170 | 170 | 170 |
| H | 89.4 | 89.4 | 97 | 97 | 97 | 114 | 114 | 114 | 113.4 |
| I | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Max. Clamp Force (kgf) | 4500 | 4500 | 4500 | 4500 | 4500 | 4500 | 4500 | 4500 | 4500 |
| KGS | 29 | 33 | 38 | 43 | 48 | 65 | 69 | 74 | 90 |
| CODE NO. | 1002-201H | 1002-202H | 1002-193H | 1002-194H | 1002-195H | 1002-196H | 1002-197H | 1002-198H | 1002-203H |



Free Angle Vise

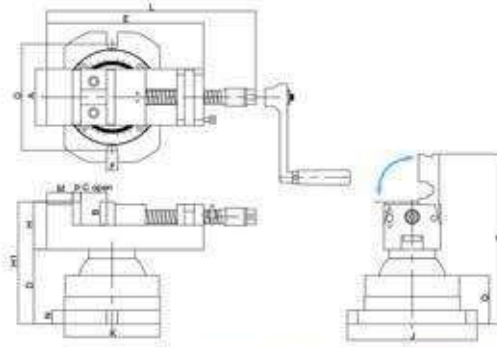


NEW



Features ANY TILTING ANGLE

- Special design for quick clamping. (From the acme thread shaft stationarily)
- Quick setting by sliding movement. Big clamping capability.
- Operating very quick and easy, can increase so much working efficiency than you can image.
- 360° Rotation, Tilting 30°
- Most free angle vise
- For non-normal angle setting.
- Its swivelling and tilting features with clamping make this unit for straight or inclined surface, angular drilling machining on various machine tools or for bench work table.



| ORDER NO. | A | B | C OPEN | D | E | F | G | H | H1 | J | K | L | M | N | P | Q | R | MAX. Clamp Force (kgf) | Weight (kgs) | CODE NO. |
|-----------|-----|----|--------|-----|-----|----|-----|----|-----|-----|-----|-----|----|----|----|----|-----|------------------------|--------------|----------|
| VAV-3 | 82 | 34 | 85 | 110 | 230 | 17 | 158 | 70 | 194 | 190 | 140 | 374 | 38 | 20 | 12 | 72 | 268 | 700 | 17.6 | 1002-214 |
| VAV-4 | 106 | 36 | 104 | 120 | 256 | 17 | 158 | 72 | 206 | 190 | 140 | 422 | 38 | 20 | 16 | 72 | 280 | 800 | 21.4 | 1002-215 |



Lock-Fixed II Precision Machine Vise

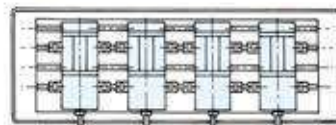
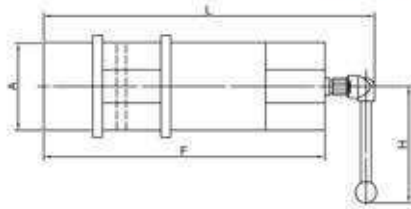
گیره دقیق

ORDER NO. VMC-4
VMC-6

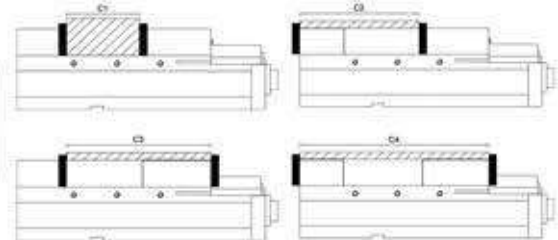


Performed sided vertically.

- 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 as shown.



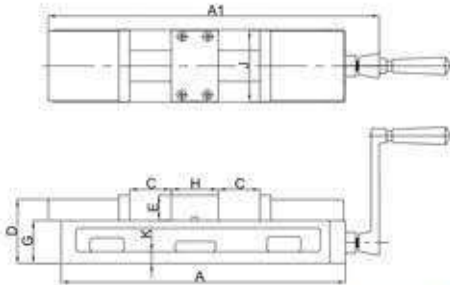
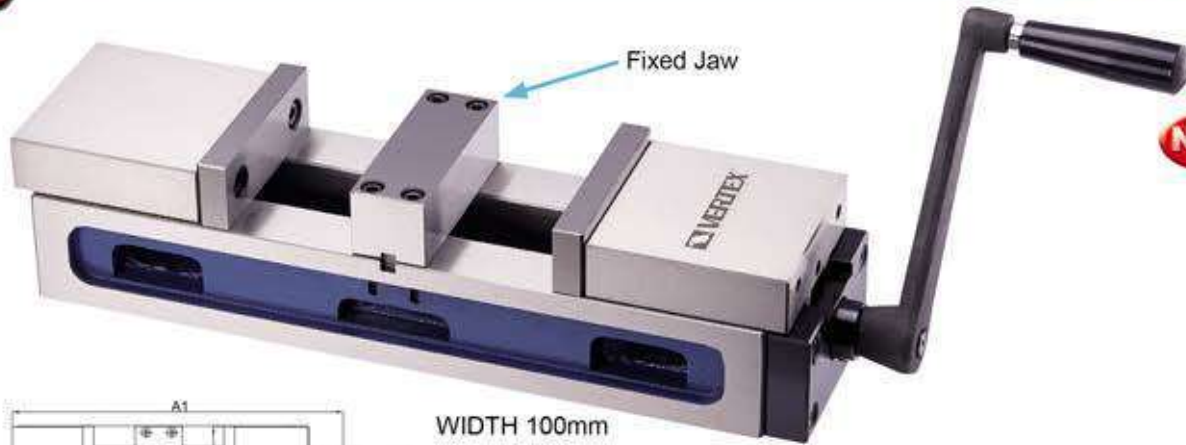
Aligned Performance



| ORDER NO. | A | B | C OPEN | D | E | F | G | L | H | Max. Clamp Force (kgf) | Meas CUFT | Weight (kgs) | CODE NO. |
|-----------|-----|-----|--------|----|----|-----|----|-----|-----|------------------------|-----------|--------------|----------|
| VMC-4 | 108 | 100 | 103 | 36 | 63 | 283 | 16 | 374 | 202 | 1500 | 0.4 | 14.2 | 1002-185 |
| VMC-6 | 156 | 120 | 150 | 46 | 74 | 370 | 16 | 472 | 221 | 2500 | 1.1 | 29.8 | 1002-186 |



Double Clamp Vice



WIDTH 100mm

- Opened 50mm each side.
- Accept 3mm workpiece different length.
- 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.

Feature icons: LIGHT DUTY, JAW DOWNWARD, SAME HEIGHT MULTIPLE USING, MORE SETTING POSITION, ACCURACY GUARANTEE, TABLE HARDNESS, BENDING PROOF, MECHANICAL, SELF-CENTER.

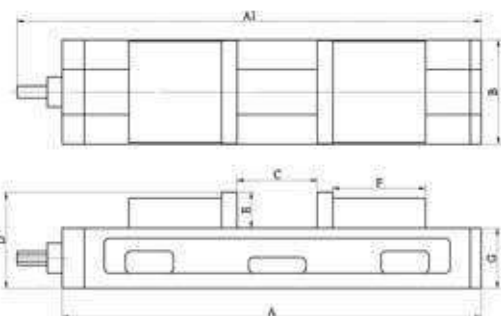
Unit:mm

| ORDER NO. | A | A1 | B | C OPEN | | D | E | G | H | J | K | MAX. Clamp Force (kgf) | 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 Vice

گیره های ۲ فک



- 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.

Feature icons: LIGHT DUTY, JAW DOWNWARD, SAME HEIGHT MULTIPLE USING, ACCURACY GUARANTEE, TABLE HARDNESS, BENDING PROOF, SELF-CENTER, MECHANICAL.

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

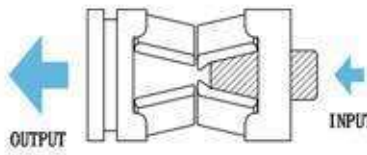
گیره قدرتی

GERMAN TYPE
JAPAN TYPE

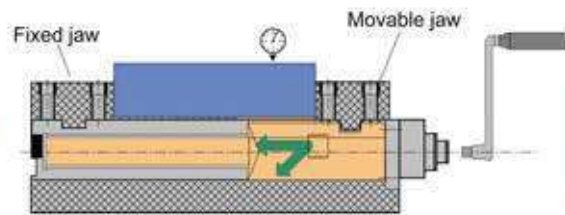


TOGGLE JOINT MECHANISM
DESIGN FOR HEAVY DUTY
WORKING

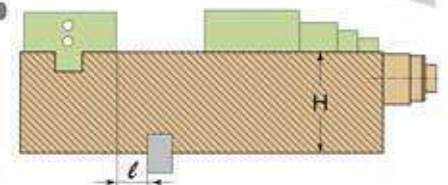
HEAVY DUTY
EURO STYLE



Driving device
Toggle joint device mechanism



LOCK DOWN DESIGN



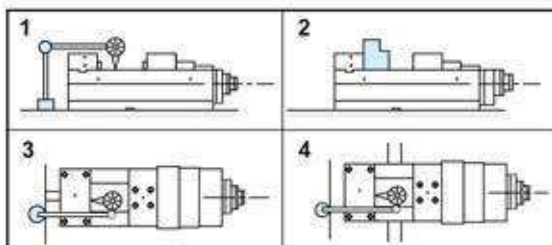
H-Accurance $\pm 0.01\text{mm}$
L-Accurance $\pm 0.01\text{mm}$

SAME HEIGHT GUARANTEE

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: table face to bottom of bed. | | 0.01/100mm |
| 2 | Squareness :between table face and jaw plate. | | 0.02/100mm |
| 3 | Squareness: keways on bottom of table face to jaw plate. | | 0.02/100mm |
| 4 | Parallelism: table face of the block to bottom of bed. | | 0.02/100mm |

گیره قدرتی



- ADJUSTING METHOD
1. FIXED COLLAR
 2. TURN BY WRENCH TO GET NO. 0, 1, 2, 3, 4. TO HAVE CLAMPING FORCE
 3. NO.2 IS MOST SUIT FOR WORKING



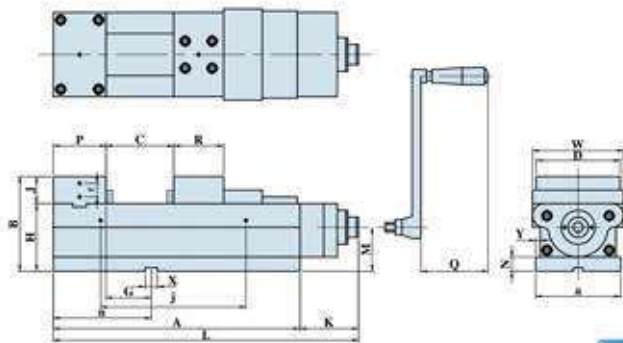
GREAT SMOOTH OPERATION

CLAMPING FORCE CHART

| ORDER NO. | SCALE | | | | |
|-----------|-------|------|------|------|------|
| | 4 | 3 | 2 | 1 | 0 |
| VQC-100 | - | 30KN | 21KN | 12KN | 6KN |
| VQC-125 | - | 40KN | 28KN | 16KN | 8KN |
| VQC-160 | 60KN | 46KN | 32KN | 18KN | 10KN |
| VQC-160L | 60KN | 46KN | 32KN | 18KN | 10KN |
| VQC-200L | 60KN | 46KN | 32KN | 18KN | 10KN |

CLAMPING CAPACITY

| ORDER NO. | JAW J | JAW Open C | B | MAX. Clamping Force (KN) | N.W. kg | G.W. kg |
|-----------|-------|------------|-----|--------------------------|---------|---------|
| VQC-100 | 35 | 128 | 120 | 30 | 23.2 | 26.2 |
| VQC-125 | 40 | 205 | 140 | 40 | 36.5 | 40.4 |
| VQC-160 | 45 | 275 | 165 | 60 | 67.0 | 72.3 |
| VQC-160L | 45 | 355 | 165 | 60 | 72.5 | 78.6 |
| VQC-200L | 70 | 405 | 190 | 60 | 99.5 | 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 | 364 | 140 | 126 | 124.5 | 78 | 74 | 59 | 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 | 215 | 139 | 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 |



Precision Compact MC Vise



SAME HEIGHT GUARANTEE

for machining center

گیره دقیق

Mechanical Type
Great Smooth Operation



DESIGN FOR THIN WORKPIECE



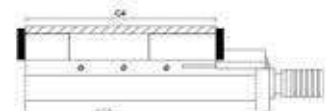
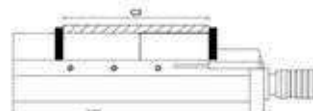
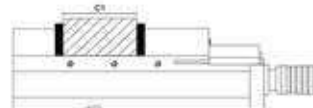
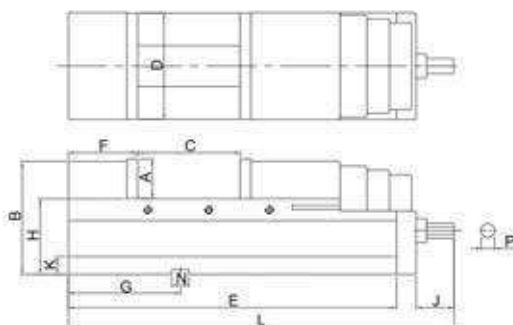
Features

- 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 durability & high precision.
- Tolerance : 0.01/100mm
- Lift proof : press down design.
- Bending resistance : rigid & strong.
- Dust proof : concealed spindle.
- Fast & easy operation.

EXP.



EXP.



Mechanical Type



| ORDER NO. | A | B | C OPEN | D | E | F | G | H | J | K | L | M | N | P | Clamping Force (kgf) | Weight Body | CODE NO. |
|-----------|----|-----|--------|-----|-----|-----|-----|-----|----|----|-----|-----|----|----|----------------------|-------------|----------|
| VMC-100M | 48 | 130 | 125 | 100 | 340 | 80 | 125 | 85 | 55 | 15 | 425 | 101 | 16 | 19 | 3000 | 26 kgs | 4005-064 |
| VMC-130M | 55 | 147 | 180 | 130 | 405 | 85 | 150 | 96 | 55 | 21 | 490 | 131 | 18 | 19 | 3000 | 39 kgs | 4005-065 |
| VMC-160M | 58 | 168 | 240 | 160 | 495 | 100 | 165 | 105 | 55 | 21 | 580 | 161 | 18 | 19 | 3000 | 60 kgs | 4005-066 |
| VMC-200M | 61 | 170 | 280 | 200 | 570 | 118 | 190 | 110 | 55 | 21 | 655 | 201 | 18 | 19 | 3000 | 86 kgs | 4005-067 |
| VMC-160ML | 58 | 168 | 350 | 160 | 595 | 100 | 165 | 105 | 55 | 21 | 680 | 161 | 18 | 19 | 3000 | 67 kgs | 4005-058 |



NC Hydro Machine Vices

PATENT

SAME HEIGHT GUARANTEE



NEW

گیره دقیق NC



COMPARE WITH SAME WIDTH
VISE JAW, VNC TYPE HAS THE
BIGGEST OPENING 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.
- Hydro line - one scale indicate about 1/3 of the max. clamp force.





NC Hydro Machine Vices

PATENT

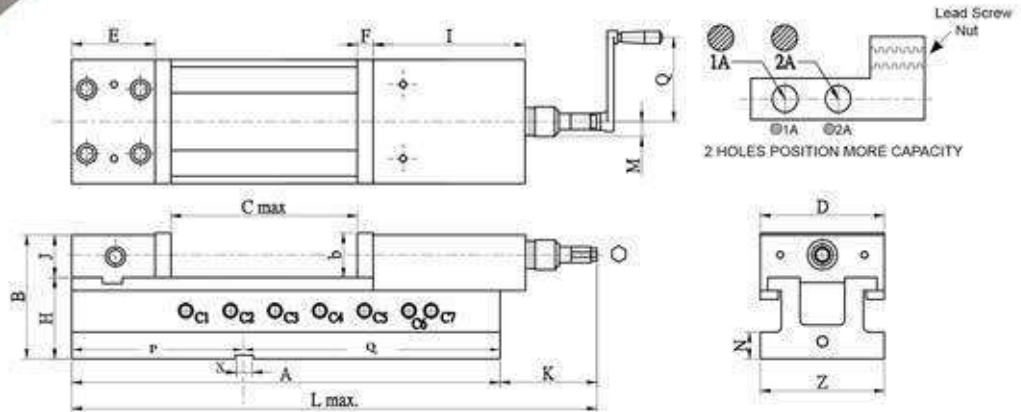
SAME HEIGHT GUARANTEE



گیره دقیق NC

Hydraulic controller:
provide stable pressure,
Hydro indexer. Protect the hydro system.
Hydro limit proof reference scale.
Screw shaft broken proof.

Accessories:



| ORDER NO. | C MAX. Open | MAX. Clamping Force KN | L MAX. mm | C Lock Pin Hole Position For Opening Jaw Size (Clamping Size Capacity) | | | | | | | |
|-----------|-------------|------------------------|-----------|--|-------|--------|---------|---------|---------|---------|---------|
| | | | | Lead Screw Nut | 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 | 190-225 | - | - | - |
| | | | | ⊙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 | 510 | 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 | P | Q | Weight (kgs) | CODE NO. |
|-----------|-----|-----|-----|-----|----|----|----|----|----|-----|-----|----|-----|-----|--------------|----------|
| VNC-100H | 380 | 107 | 100 | 67 | 13 | 38 | 70 | 37 | 24 | 133 | 100 | 14 | 152 | 228 | 23 | 4005-100 |
| VNC-125H | 432 | 126 | 124 | 85 | 15 | 45 | 82 | 44 | 27 | 147 | 125 | 18 | 174 | 258 | 37 | 4005-101 |
| VNC-160H | 550 | 148 | 159 | 102 | 18 | 54 | 95 | 53 | 27 | 189 | 160 | 18 | 219 | 331 | 63 | 4005-102 |
| VNC-160LH | 750 | 148 | 159 | 102 | 18 | 54 | 95 | 53 | 27 | 189 | 160 | 18 | 219 | 531 | 77 | 4005-103 |



Convenient Type Machine Vise



گیره دقیق

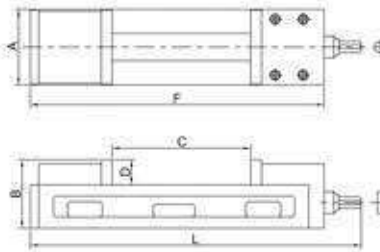
NEW



- 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
- Width 100 mm opened 180 mm.

MOVEABLE JAW

FIXED JAW



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

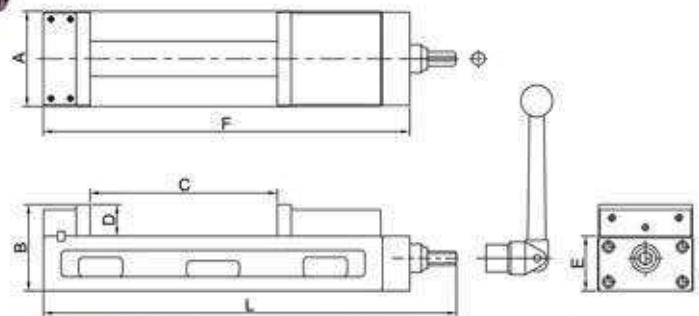


Super Open Ang-Fixed Machine Vise

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 flange hardened 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.
- Width 100 mm opened 210 mm super open.



| ORDER NO. | A | B | C OPEN | D | E | F | L | Max. Clamp Force (kgf) | Weas (kgs) | CODE NO. |
|-----------|-----|----|--------|----|----|-----|-----|------------------------|------------|----------|
| VMC-4L | 108 | 98 | 203 | 36 | 62 | 420 | 470 | 450 | 17.3 | 4005-095 |

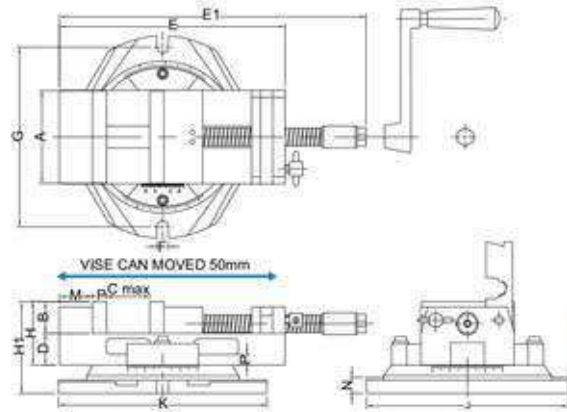
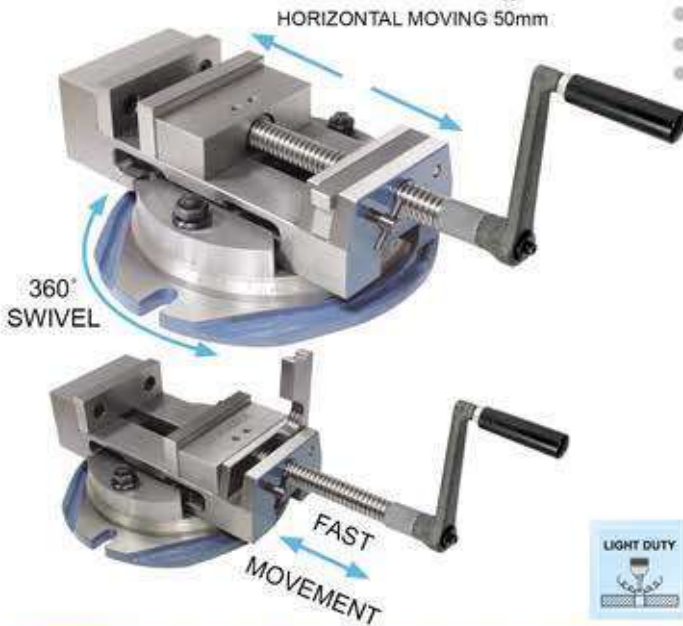


Horizontal Moving Quick Vise VERTEX®

گیره سرعتی افقی

2 WAY MOVING

- Special design, for milling M/C, drilling M/C.
- Easy & quick to find process position.
- For round table drilling machine. If it don't have cross table.
- 360° rotation



NEW



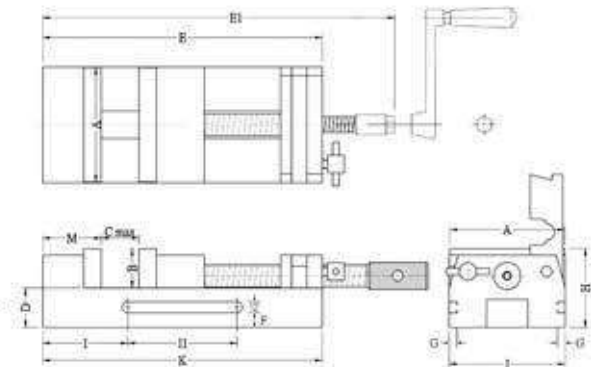
| ORDER NO. | A | B | C max. | D | E | E1 | F | G | H | H1 | J | K | M | N | P | MAX.Clamp Force kgf | G.W. | CODE NO. |
|-----------|-----|----|--------|----|-----|-----|----|-----|----|-----|-----|-----|----|----|----|---------------------|------|----------|
| VQW-80 | 81 | 34 | 85 | 36 | 230 | 374 | 14 | 214 | 70 | 100 | 242 | 230 | 28 | 30 | 12 | 700 | 13.5 | 1002-245 |
| VQW-100 | 105 | 36 | 104 | 36 | 256 | 422 | 16 | 264 | 72 | 106 | 303 | 272 | 37 | 34 | 16 | 800 | 15.8 | 1002-246 |
| VQW-130 | 131 | 36 | 125 | 38 | 297 | 490 | 16 | 264 | 74 | 108 | 303 | 272 | 38 | 34 | 29 | 800 | 22.7 | 1002-247 |

Quick Setting Vise



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
- Accuracy 0.02 / 100 mm

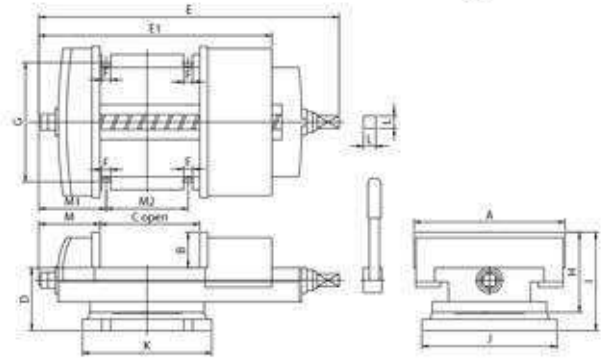


| ORDER NO. | A | B | C max. | D | E | E1 | F | G | H | I | I1 | J | K | M | MAX.Clamp Force kgf | G.W. | CODE NO. |
|-----------|-----|----|--------|----|-----|-----|----|---|----|----|-----|-----|-----|----|---------------------|------|----------|
| VQS-3 | 81 | 34 | 85 | 36 | 230 | 374 | 12 | 5 | 70 | 51 | 128 | 82 | 230 | 50 | 700 | 7 | 1002-262 |
| VQS-4 | 105 | 36 | 104 | 36 | 256 | 422 | 12 | 5 | 72 | 54 | 148 | 106 | 256 | 54 | 800 | 9.5 | 1002-263 |
| VQS-5 | 131 | 36 | 125 | 38 | 297 | 490 | 13 | 5 | 74 | 59 | 178 | 132 | 297 | 67 | 800 | 14.5 | 1002-264 |



Machine Vise For Shaping & Milling Use **VERTEX**

گیره صفحه تراش



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.

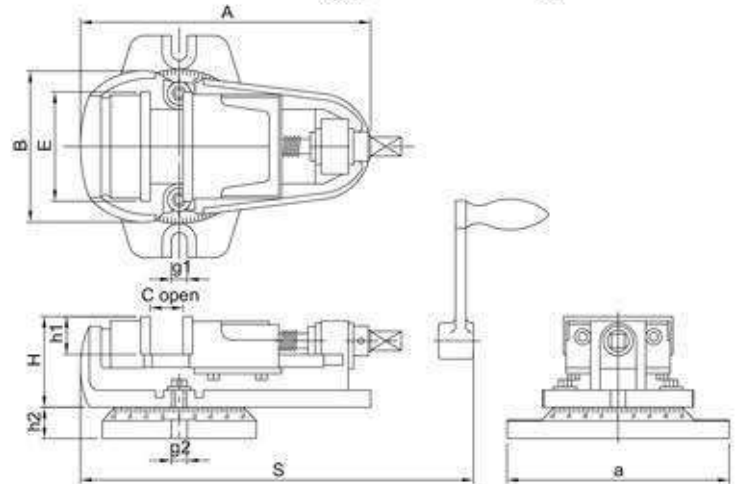
Unit:mm



| 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

گیره فرز تیپ B



- A wider bottom to increase clamping force.
- Groove device to collect cutting oil.
- Full 360° swivel base with line, accurate graduation.
- In order to ensure the accuracy when using it better that don't put swivel base together



| ORDER NO. | A | B | E | H | C OPEN | S | a | h1 | h2 | g1 | g2 | Max. Clamp Force (kgf) | G.W. kgs | CODE NO. |
|-----------|-----|-----|-----|-----|--------|-----|-----|----|----|----|----|------------------------|----------|----------|
| VBV-4 | 270 | 140 | 100 | 79 | 65 | 305 | 212 | 33 | 28 | 12 | 12 | 900 | 13 | 1002-280 |
| VBV-5 | 350 | 180 | 125 | 96 | 100 | 410 | 280 | 37 | 35 | 15 | 15 | 900 | 21.5 | 1002-281 |
| VBV-6 | 452 | 218 | 160 | 103 | 132 | 483 | 317 | 48 | 40 | 16 | 16 | 1000 | 41 | 1002-282 |



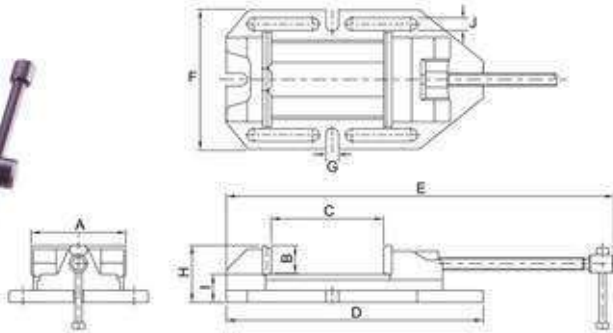
Super Open Drill Vise



EURO TYPE

NEW

گیره دریل



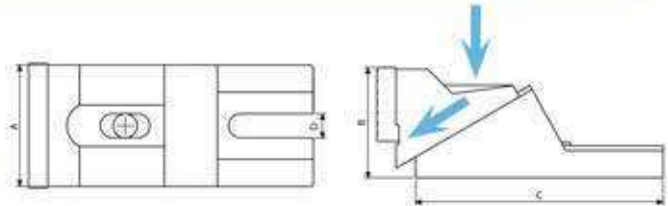
- Big opened.
- Big clamping capacity.
- With prisma jaw for round workpiece.
- For drilling & milling using.



Unit:mm

| ORDER NO. | A | B | C OPEN | D | E | F | G | H | I | J | V | MAX.Clamp Force kgf | G.W. (kgs) | CFT (cm) | CODE NO. |
|-----------|-----|----|--------|-----|-----|-----|----|----|----|----|------|---------------------|------------|--------------------|----------|
| VRV-4 | 110 | 32 | 130 | 316 | 471 | 179 | 16 | 73 | 40 | 16 | 5-32 | 450 | 9.8 | 32.3 x 13.3 x 12.9 | 1002-320 |
| VRV-5 | 135 | 40 | 160 | 366 | 552 | 207 | 16 | 81 | 40 | 16 | 6-40 | 650 | 14.0 | 32.3 x 13.3 x 12.9 | 1002-321 |
| VRV-6 | 160 | 50 | 220 | 447 | 693 | 247 | 16 | 96 | 45 | 16 | 7-48 | 900 | 25.7 | 32.3 x 13.3 x 12.9 | 1002-322 |

Free Vise

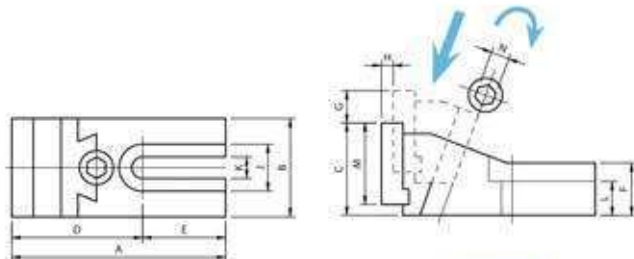


- FV type is light duty.
- Free style clamping For big workpiece.
- Adjustable distance 15mm For clamping.



Unit:mm

| ORDER NO. | DIMENSION (WxHxL) | CLAMPING CAPACITY (HxL) | ACCESSORIES BOLT SIZE | MAX.Clamp Force kgf | WEIGHT (kgs/2PCS) | CODE NO. |
|-----------|-------------------|-------------------------|-------------------------------------|---------------------|-------------------|----------|
| FV-350 | 75x67x150mm | 140x350mm | M12 x 75L x 2PCS, M12 x 125L x 2PCS | 900 | 7.5 | 1002-290 |
| FV-450 | 100x90x200mm | 180x450mm | M12 x 75L x 2PCS, M12 x 125L x 2PCS | 900 | 14 | 1002-291 |
| FV-550 | 125x120x250mm | 250x550mm | M16 x 75L x 2PCS, M16 x 125L x 2PCS | 900 | 23 | 1002-292 |



- Free style clamping For big workpiece.
- Heavier duty.
- Adjustable distance 10mm For clamping.



Unit:mm

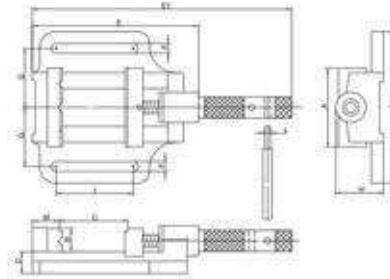
| ORDER NO. | A | B | C | D | E | F | G | H | J | K | L | M | N | MAX.Clamp Force kgf | ACCESSORIES BOLT SIZE | N.W. (kgs) | CODE NO. |
|-----------|-----|------|------|-----|----|------|----|----|------|----|------|------|----|---------------------|-----------------------|------------|----------|
| SV-62 | 139 | 64 | 59.5 | 85 | 54 | 33.5 | 21 | 9 | 30.5 | 18 | 22 | 52.5 | 12 | 1800 | M12 x 75L x 4PCS | 5.8 | 1002-293 |
| SV-85 | 192 | 86.5 | 86 | 115 | 77 | 53 | 24 | 10 | 36 | 18 | 25.5 | 59.5 | 12 | 1800 | M16 x 75L x 4PCS | 11 | 1002-294 |
| SV-125 | 218 | 127 | 84 | 124 | 94 | 51.5 | 33 | 18 | 45.5 | 20 | 23.5 | 73 | 12 | 1800 | M16 x 75L x 4PCS | 21 | 1002-295 |



Drill Vise



گیره دریل



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

LIGHT DUTY



| 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 |

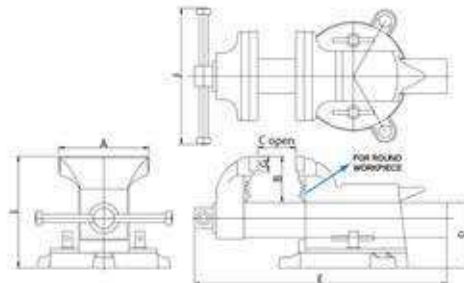


Steel Bench Vise With Base

NEW



360° SWIVING BASE



mm

| ORDER NO. | A | B | C OPEN | D | E | G | I | J | Clamp Force (kgf) | WEIGHT (kgs) | CODE NO. |
|-----------|-----|-----|--------|-----|-----|----|-----|-----|-------------------|--------------|----------|
| BVV-3 | 79 | 51 | 75 | 87 | 280 | 18 | 138 | 178 | 1300 | 6 | 1002-330 |
| BVV-4 | 104 | 61 | 100 | 87 | 310 | 18 | 148 | 178 | 1800 | 7 | 1002-331 |
| BVV-5 | 127 | 68 | 125 | 93 | 370 | 22 | 165 | 198 | 2300 | 10.5 | 1002-332 |
| BVV-6 | 154 | 78 | 150 | 108 | 420 | 22 | 183 | 228 | 2800 | 14 | 1002-333 |
| BVV-8 | 205 | 87 | 200 | 115 | 500 | 22 | 202 | 238 | 3000 | 18 | 1002-334 |
| BVV-10 | 253 | 100 | 250 | 114 | 570 | 22 | 220 | 263 | 3000 | 24 | 1002-335 |



Quick Bench Vise

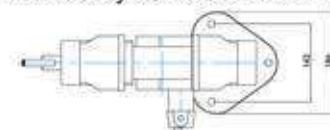
ORDER NO.VQS-40 CODE NO.1002-096

NEW



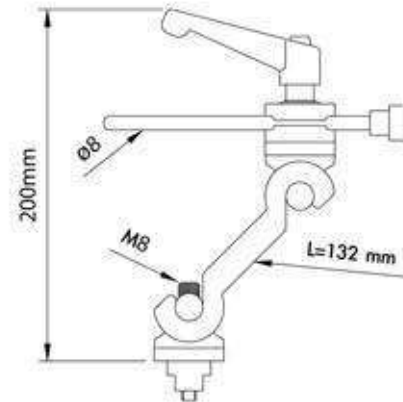
QUICK ACTION HANDLE

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





Universal Work Stopper

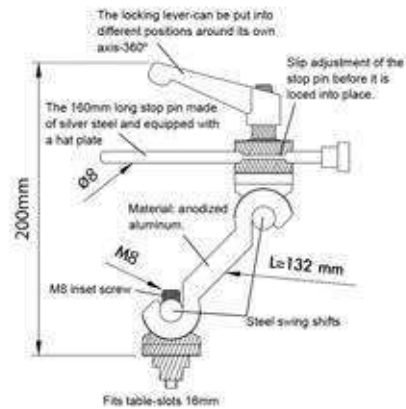


NON TEETH TYPE
ORDER NO. VWS-123
CODE NO. 1002-105
WEIGHT: 0.9kg
T-SLOT: 16mm

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)



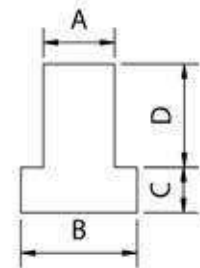
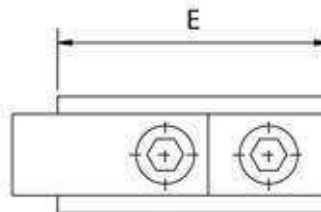
T Slot Clamps

PATENT



بغل بند

For Thin Work Piece



- 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 |



Prisma Jaw



فک گیره



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

| V CLAMPING CAPACITY | |
|---------------------|------------|
| HORIZONTAL V | VERTICAL V |
| Ø25 | Ø25 |
| Ø25 | Ø25 |
| Ø30 | Ø30 |
| Ø40 | Ø40 |

| 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-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-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 |

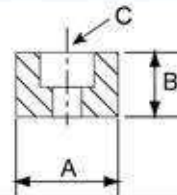
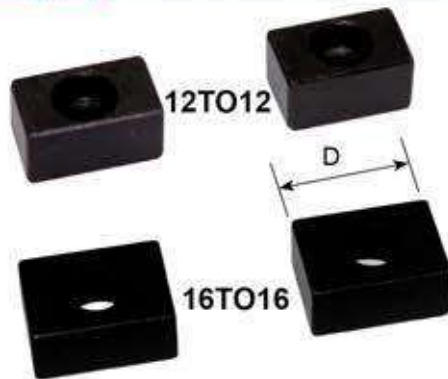
| ORDER NO. | kgs | CODE NO. |
|-----------|--------|----------|
| VWS-VMC-4 | 0.35kg | 1002-140 |
| VWS-VMC-6 | 0.4kg | 1002-141 |

| 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 |

| 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-VQS-3 | 0.3kg | 1002-160 |
| VWS-VQS-4 | 0.42kg | 1002-161 |
| VWS-VQS-5 | 0.51kg | 1002-162 |

Thread Rod Guide Block

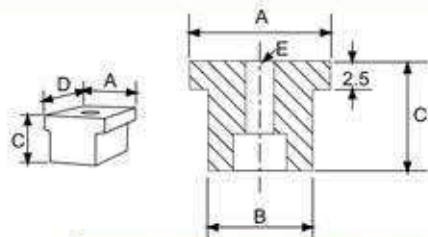


- For quick vise setup
- Multi - Purpose
- 4 PCS / SETS
- Match vise with Machine table slot
- Material: S45C

For vise

| ORDER NO. | A | -0.01 -0.08 | B | C For | D | WEIGHT kgs | CODE NO. |
|-----------|----|----------------|----|----------|----|---------------|----------|
| 12TO12 | 12 | | 10 | M4 | 20 | 0.07 | 1002-370 |
| 14TO14 | 14 | | 10 | M5 | 20 | 0.07 | 1002-371 |
| 16TO16 | 16 | | 10 | M6 | 22 | 0.09 | 1002-372 |
| 18TO18 | 18 | | 12 | M6 | 22 | 0.13 | 1002-373 |
| 20TO20 | 20 | | 12 | M6 | 24 | 0.20 | 1002-374 |

Thread Rod Guide Block

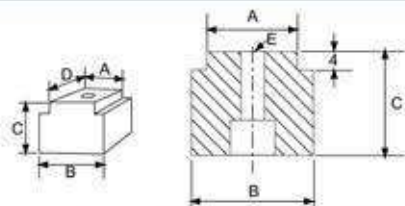


- For quick vise setup
- Multi - Purpose
- 4 PCS / SETS
- Material: S45C

For vise

| ORDER NO. | A | -0.01 -0.08 | B | -0.01 -0.08 | C | D | E | WEIGHT kgs | CODE NO. |
|-----------|----|----------------|----|----------------|----|----|----|---------------|----------|
| 16TO14 | 16 | | 14 | | 14 | 20 | M6 | 0.10 | 1002-350 |
| 18TO14 | 18 | | 14 | | 16 | 20 | M6 | 0.12 | 1002-351 |
| 18TO16 | 18 | | 16 | | 16 | 20 | M6 | 0.13 | 1002-352 |

Thread Rod Guide Block



- For quick vise setup
- Multi - Purpose
- 4 PCS / SETS
- Material: S45C

For vise

| ORDER NO. | A | -0.01 -0.08 | B | -0.01 -0.08 | C | D | E | WEIGHT kgs | CODE NO. |
|-----------|----|----------------|----|----------------|----|----|----|---------------|----------|
| 14TO16 | 14 | | 16 | | 14 | 20 | M6 | 0.12 | 1002-361 |
| 14TO18 | 14 | | 18 | | 16 | 20 | M6 | 0.13 | 1002-362 |
| 16TO18 | 16 | | 18 | | 16 | 20 | M6 | 0.15 | 1002-363 |

52-PCS Steel Clamping Kit



58 PCS/SET

کیت روبند

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 |

- 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-20

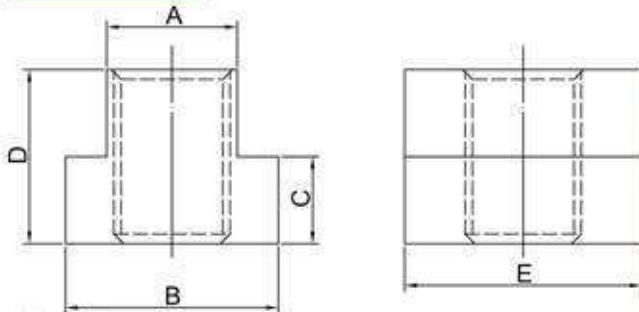
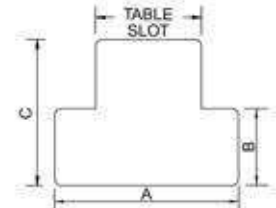
Metric Size

| 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 |

- CK-18, CK-20, CK-206, Pack in wooden No Plastic Tray.
- The parts of every specification all can be purchased individually.

INDIVIDUALLY PARTS T-SLOT NUT

HRC 34°



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 |

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 | 7/8-9 | 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 | 3/4-10 | 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 | 7/8-9 | 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 | 1-1/16 | 1-5/8 | 5/8 | 1 | 1-1/2 | 0.21 | 1003-193 |
| 3418I | 1-1/16 | | 1-5/8 | 11/16 | 1-1/2 | 2 | 0.25 | 1003-194 |



Coupling Nut

HRC 34°

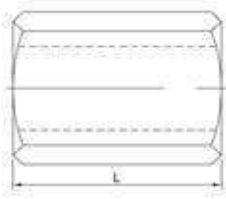
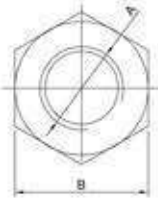


مهرد روپند



Metric Size

| 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(kg) | 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 | 1-1/4 | 1-7/8 | | 1003-066I |
| 2618I | 1-8 | 1-5/8 | 2-1/2 | | 1003-067I |



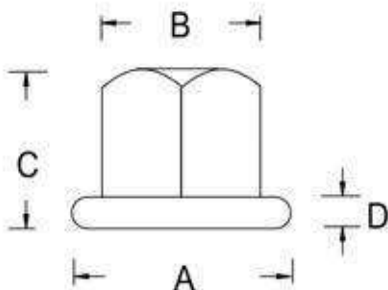
Flange Nut

HRC 34°



Metric Size

| ORDER NO. | Thread | A | B (Mm) | 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 | 21 | 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 | 40 | 32 | 25 | 6 | 0.10 | 1003-055 |
| 4517 | M20x2.5 | 40 | 32 | 25 | 6 | 0.092 | 1003-056 |
| 4518 | M24x3.0 | 50 | 41 | 32 | 6 | 0.12 | 1003-057 |



Inch Size

| ORDER NO. | Thread | A | B (Mm) | 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 | 21 | 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°

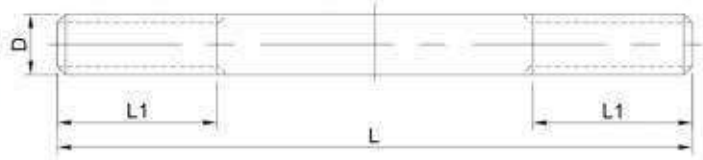
Heat Treated Steel Studs



پیج روبند



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 | M18x2.5P | 250 | 45 | 0.31 | 1003-117 |
| 13512M | | 300 | 45 | 0.38 | 1003-118 |
| 1363M | | 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 | M24x3.0P | 250 | 50 | 0.50 | 1003-146 |
| 13712M | | 300 | 50 | 0.65 | 1003-147 |
| 1384M | | 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

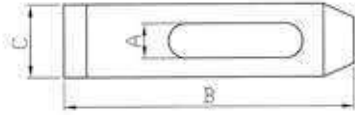
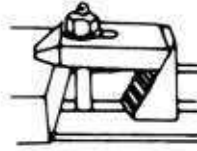
| ORDER NO. | D | L | L1 | WEIGHT (kgs) | CODE NO. |
|-----------|------------------|-----|------|--------------|-----------|
| 1333I | 3/18-16 | 3" | 30 | 0.04 | 1003-081I |
| 1334I | | 4" | 40 | 0.05 | 1003-082I |
| 1335I | | 5" | 40 | 0.06 | 1003-083I |
| 1336I | | 6" | 40 | 0.07 | 1003-084I |
| 1337I | | 7" | 40 | 0.09 | 1003-085I |
| 1338I | | 8" | 40 | 0.10 | 1003-086I |
| 1343I | 1/2-12 1/2-13 | 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 | | 8" | 40 | 0.15 | 1003-096I |
| 1353I | 5/8-11 | 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 | 3/4-10 | 10" | 45 | 0.31 | 1003-117I |
| 13512I | | 12" | 45 | 0.38 | 1003-118I |
| 1363I | | 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

کلمپ روبند

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 | 0.11 | 1003-030 |
| 6123 | M8 or M10 | | 100 | 25 | 16 | 0.26 | 1003-031 |
| 6133 | M8 or M10 | | 150 | 28 | 19 | 0.48 | 1003-032 |
| 6214 | M12 | 14 | 64 | 28 | 12 | 0.125 | 1003-033 |
| 6224 | M12 | | 100 | 32 | 19 | 0.31 | 1003-034 |
| 6234 | M12 | | 150 | 32 | 22 | 0.59 | 1003-035 |
| 6215 | M16 | 18 | 64 | 32 | 16 | 0.16 | 1003-036 |
| 6225 | M16 | | 100 | 38 | 19 | 0.39 | 1003-037 |
| 6235 | M16 | | 150 | 38 | 22 | 0.71 | 1003-038 |
| 6316 | M20 or M18 | 20 | 100 | 38 | 19 | 0.36 | 1003-039 |
| 6326 | M20 or M18 | | 150 | 38 | 25 | 0.73 | 1003-040 |
| 6336 | M20 or M18 | | 200 | 44 | 28 | 1.44 | 1003-041 |
| 6417 | M24 | 26 | 150 | 50 | 32 | 1.15 | 1003-042 |
| 6427 | M24 | | 200 | 50 | 35 | 2 | 1003-043 |
| 6437 | M24 | | 250 | 50 | 38 | 2.67 | 1003-044 |



Step Block

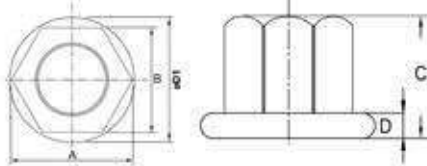
بلوک پله ای

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 |

NEW



By machine process.
With turned & milled
Heat treated and oxide fines
HRC 34°

Metric Size

| ORDER NO. | Thread | A | B | C | D | ØD1 | Weight (kg) | CODE NO. |
|-----------|------------|-------|----|----|-----|-----|-------------|----------|
| CFN1017 | M10 X 1.5 | 18.90 | 17 | 15 | 4 | 22 | 0.02 | 1003-160 |
| CFN1219 | M12 X 1.75 | 21.10 | 19 | 18 | 4 | 25 | 0.03 | 1003-161 |
| CFN1422 | M14 X 2.0 | 24.50 | 22 | 21 | 4.5 | 28 | 0.04 | 1003-162 |
| CFN1624 | M16 X 2.0 | 26.80 | 24 | 24 | 5 | 31 | 0.06 | 1003-163 |
| CFN1827 | M18 X 2.5 | 30.10 | 27 | 27 | 5 | 34 | 0.09 | 1003-164 |



C-Clamp Cast Steel

NEW



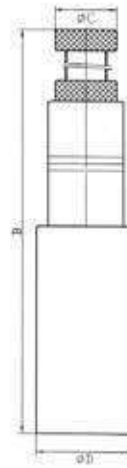
| ORDER NO. | MAX. OPEN | THROAT DEPTH | LxW | WEIGHT (kgs) | CODE NO. |
|-----------|-----------|--------------|-----------|--------------|----------|
| VCL-2C | 1-7/8" | 1-7/8" | 120x84mm | 0.22 | 1003-210 |
| VCL-3C | 2-3/4" | 2" | 163x91mm | 0.38 | 1003-211 |
| VCL-4C | 3-7/8" | 2-1/2" | 195x102mm | 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 |



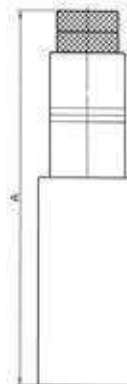
Screw Jack

جک پیچی

- Work clamping
- Material: S45C
- Support heavy weight



VSJ-500



VSJ-40, 70, 150, 250

| ORDER NO. | ADJUSTABLE CAPACITY | A | B | C | ØD | KN | K.G. | CODE NO. |
|-----------|---------------------|-----|-----|----|----|----|------|----------|
| VSJ-40 | 40-50mm | 40 | 52 | 30 | 40 | 50 | 0.3 | 1014-000 |
| VSJ-70 | 65-90mm | 65 | 95 | 28 | 38 | 50 | 0.4 | 1014-001 |
| VSJ-150 | 90-140mm | 88 | 140 | 40 | 50 | 50 | 1.1 | 1014-002 |
| VSJ-250 | 140-230mm | 135 | 230 | 45 | 55 | 50 | 2.3 | 1014-003 |
| VSJ-500 | 265-360mm | 265 | 360 | 45 | 72 | 50 | 4.6 | 1014-004 |

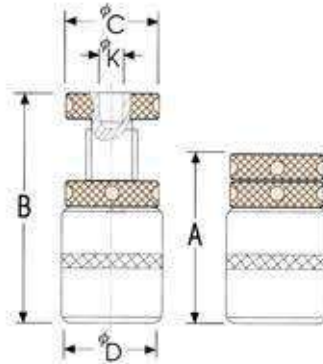


Thread Rod Jack With Magnet VERTEX®

جک مگنتی



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



| ORDER NO. | A | B | C | D | K | K.G. | CODE NO. |
|-----------|-----|-----|----|----|------|------|----------|
| VSJM-50 | 42 | 47 | 35 | 40 | 11.5 | 0.4 | 1014-010 |
| VSJM-70 | 51 | 65 | 35 | 40 | 11.5 | 0.5 | 1014-011 |
| VSJM-85 | 67 | 87 | 40 | 45 | 11.5 | 0.7 | 1014-012 |
| VSJM-110 | 86 | 116 | 40 | 45 | 11.5 | 0.8 | 1014-013 |
| VSJM-165 | 110 | 170 | 45 | 50 | 11.5 | 1.4 | 1014-014 |

Thread Rod Jack Set

NEW



- SUITABLE FOR IRREGULAR WORKPIECE. RAPID SETTING & FIXED.
- WORK CLAMPING & SUPPORT.
- HEIGHT ADJUSTER

PADS:



VSJ-1A



VSJ-2A



VSJ-3A



VSJ-4A



VSJ-5A



VSJ-6A

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-70A x 2 VSJ-150A x 2 | VSJ-1A, VSJ-2A, VSJ-3A VSJ-4A, VSJ-5A, VSJ-6A | 4.0 | 1014-020 |
| VSJ-B | VSJ-150A x 2 VSJ-250A x 2 | VSJ-1A, VSJ-2A, VSJ-3A VSJ-4A, VSJ-5A, VSJ-6A | 7.5 | 1014-021 |



Ground Parallels

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

To provide more convenient processing for milling vise.

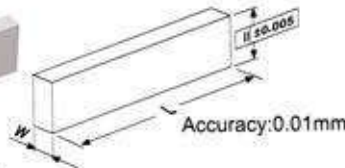


کیت زیرکاری

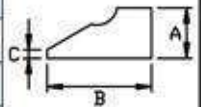
Unit:mm



- Hardness: HRC 48°-53°
- Accuracy: 0.01mm
- Process: Four-side ground
- 1 set includes 18 pcs
- Packed by plastic case, G.W.: 11.7 kgs, Meas: 0.3 CFT.
- Dimension: 390x292x84mm



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



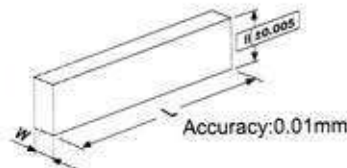
Ground Parallels

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.
- Dimension: 290x228x80mm



Unit:mm

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

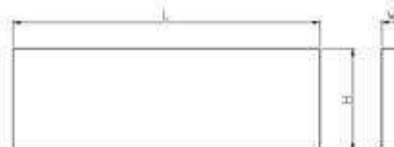


Ground Parallels

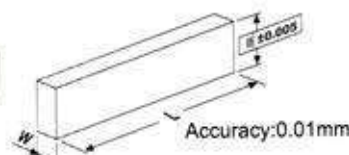
ORDER NO.VP-128A CODE NO.1004-020

28 PCS/SET 10.7kgs

VP-128A 10mm WIDTH



- Hardness: HRC 48°-53°
- MADE OF HIGH GRADE ALLOY STEEL HARDENED AND GROUND.
- Dimension: 390x292x82mm



Unit:mm

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



Precision Parallels

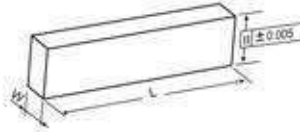
کیت زیر کاری



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 |

- Dimension: 390x292x82mm

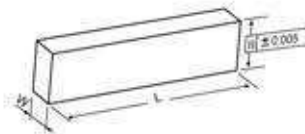


VP-018 Thin Type Parallels Set

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

3Wx150Lx20 PCS/SET

- Hardness: HRC 48°-53°



G.W. 2.5kgs.

ACCURACY: 0.01mm

THICKNESS 1/8" ≈ 3mm

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

- Dimension: 290x230x73mm

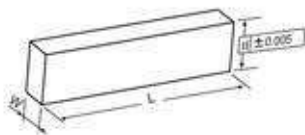


VP-163 Precision Parallels

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

5Wx150Lx8 PCS/SET

- Hardness: HRC 48°-53°



G.W. 1.7kgs.

ACCURACY: 0.01mm

THICKNESS 3/16" ≈ 5mm

| WxHxLxPcs |
|------------|
| 5x25x150x2 |
| 5x31x150x2 |
| 5x38x150x2 |
| 5x44x150x2 |

- Dimension: 175x85x55mm



VP-146 Ground Parallels

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

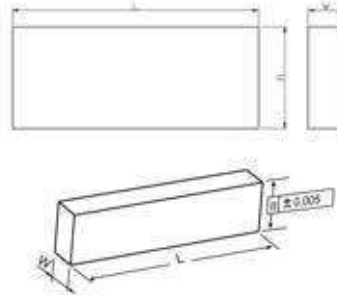


4.6Wx150Lx12 PCS/SET

Accuracy: 0.01 mm

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NEW



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

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

● Dimension: 195x180x90mm



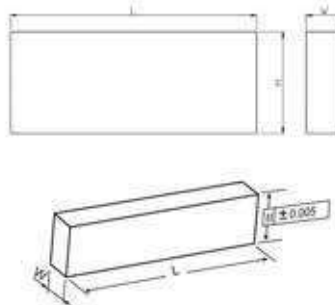
VP-168 Ground Parallels

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

6.8Wx150Lx14 PCS/SET

Accuracy: 0.01 mm

NEW



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

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

● Dimension: 225x200x90mm



VP-200 Ground Parallels

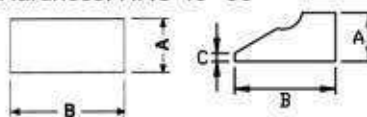
ORDER NO.VP-200 CODE NO.1004-085

NEW



MADE OF HIGH GRADE
ALLOY STEEL
HARDENED AND
GROUND.
ACCURACY: 0.01/100 MM
G.W. :15.6 KGS

● Hardness: HRC 48°-53°



FOR OVER 150 mm, 200mm
JAW PLATE VISE USING

● Dimension: 355x318x85mm

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

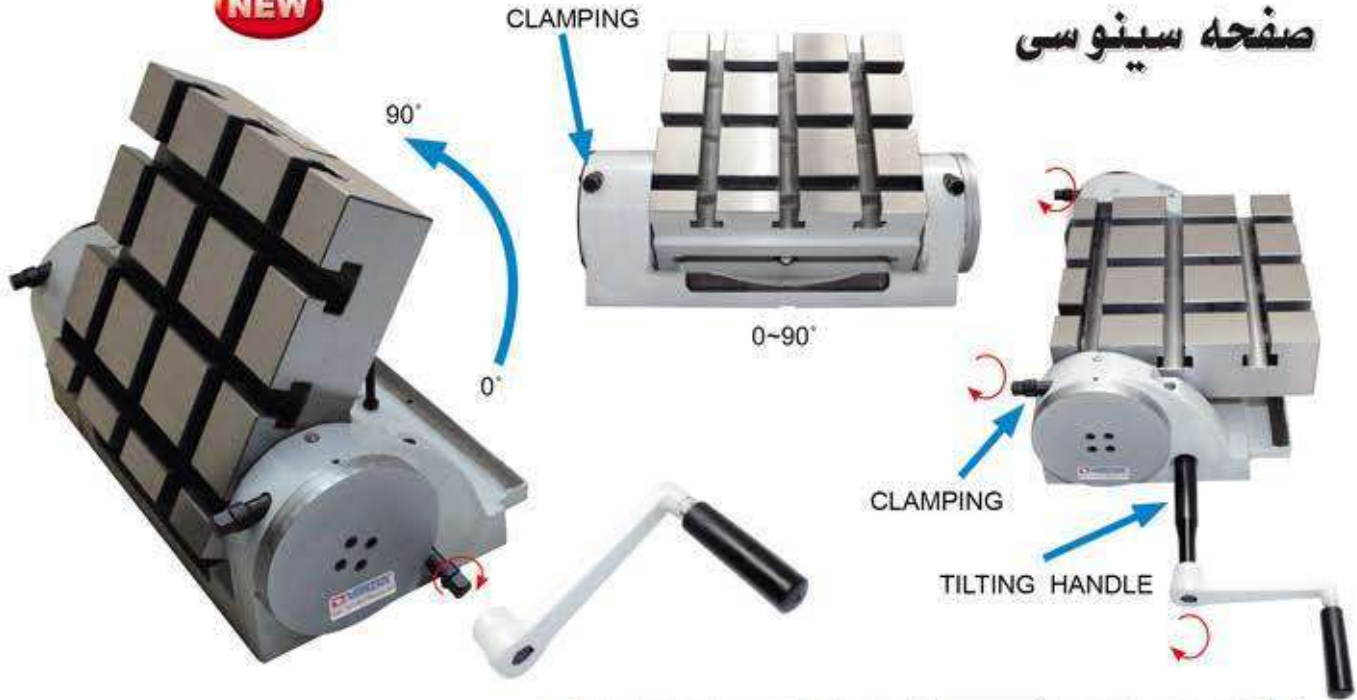
Heavy Duty Tilting Plate



TILTING PLATE & CLAMPING HANDLE

NEW

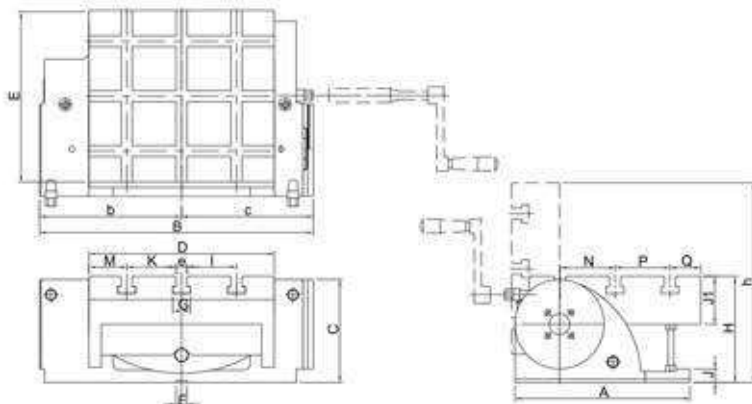
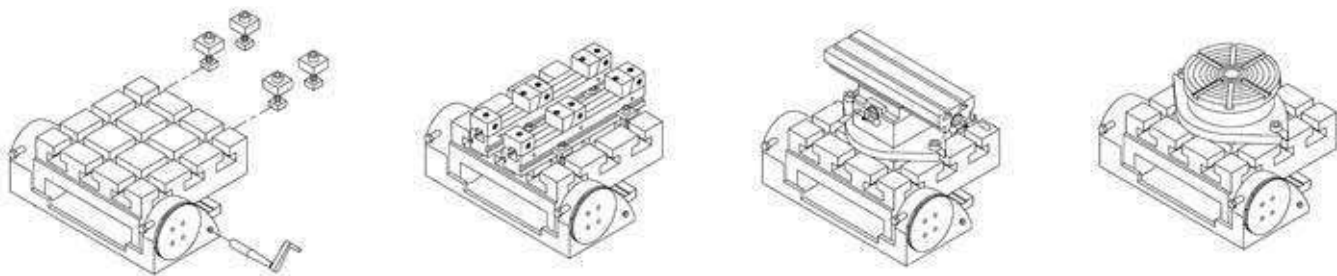
صفحه سینوسی



| ORDER NO. | Horizontal | Vertical | CODE NO. |
|-----------|------------|----------|----------|
| VUT-1515 | 30 kgs | 12 kgs | 1004-110 |
| VUT-2726 | 45 kgs | 20 kgs | 1004-111 |
| VUT-3230 | 70 kgs | 35 kgs | 1004-112 |



USING EXAMPLE:



- 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.
- Worm shafts are hardened and ground.
- Tilting plate with slots enable Multi-position work fixing.
- Strong structure.
- FC 25

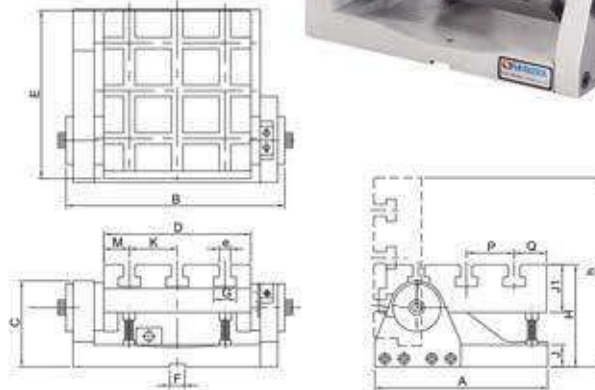
Unit:mm

| ORDER NO. | A | B | C | D | E | F | G | H | I | J | J1 | K | M | N | P | Q | b | c | e | h | KGS | CODE NO. |
|-----------|-----|-----|-----|-----|-----|----|----|-----|----|----|----|----|----|----|-----|----|-----|-----|----|-----|------|----------|
| VUT-1515 | 180 | 285 | 113 | 156 | 150 | 16 | 20 | 115 | 44 | 16 | 50 | 44 | 28 | 50 | 50 | 30 | 145 | 140 | 10 | 251 | 17.6 | 1004-110 |
| VUT-2726 | 255 | 399 | 150 | 270 | 258 | 16 | 22 | 155 | 72 | 20 | 70 | 72 | 55 | 80 | 80 | 45 | 207 | 192 | 12 | 291 | 59.4 | 1004-111 |
| VUT-3230 | 300 | 449 | 169 | 320 | 298 | 16 | 26 | 169 | 92 | 25 | 75 | 92 | 60 | 98 | 100 | 48 | 232 | 217 | 16 | 305 | 83 | 1004-112 |

Light Duty Tilting Plate



صفحه سینوسی



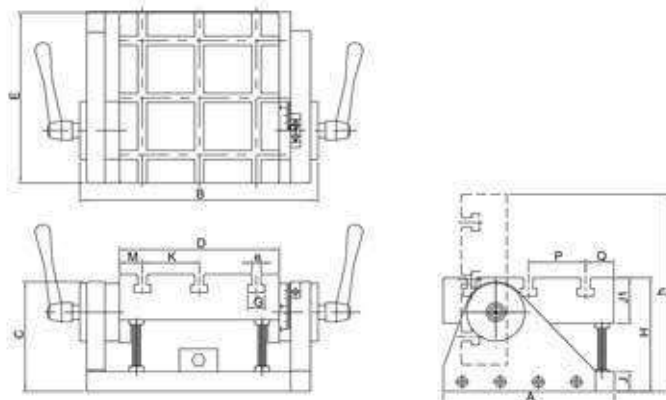
- Light cutting.
- Tilting angle adjustable: 0°-90°
- Can install with vise and mag. chuck.

| ORDER NO. | A | B | C | D | E | F | G | H | I | J | J1 | K | M | P | Q | e | h | Kgs | CODE NO. |
|-----------|-----|-----|----|-----|-----|----|----|-----|----|----|----|----|----|----|----|----|-----|-----|----------|
| VU-1517 | 180 | 228 | 92 | 154 | 176 | 16 | 20 | 105 | 44 | 22 | 50 | 50 | 27 | 50 | 34 | 12 | 198 | 14 | 1004-120 |

5Unit:mm

Light Duty Tilting Plate

NEW



- Light cutting.
- Tilting angle adjustable: 0°-90°
- Can install with vise and mag. chuck.

| ORDER NO. | A | B | C | D | E | G | H | I | J | J1 | K | M | P | Q | e | h | Kgs | CODE NO. |
|-----------|-----|-----|-----|-----|-----|----|-----|----|----|----|----|----|----|----|----|-----|-----|----------|
| VII-2122 | 225 | 312 | 144 | 210 | 224 | 20 | 154 | 69 | 26 | 60 | 75 | 30 | 75 | 37 | 12 | 258 | 28 | 1004-121 |

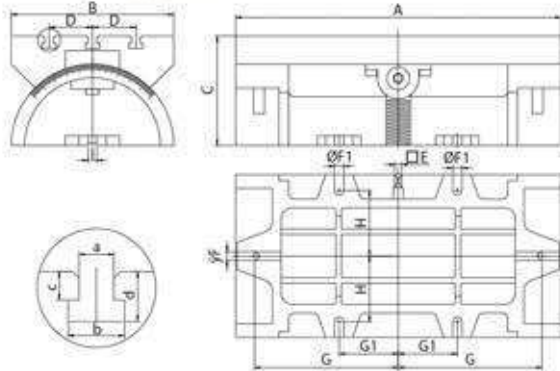
5Unit:mm

Adjustable Angle Plate

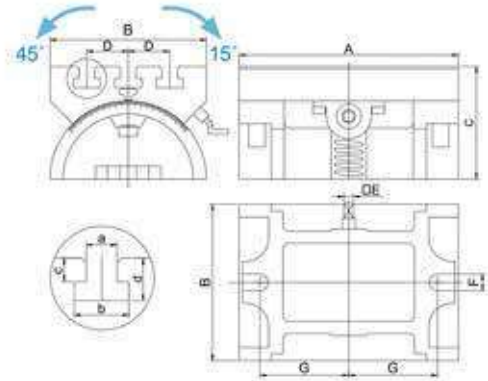


میز سینوسی

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



VP-600



VP-180
VP-250
VP-380



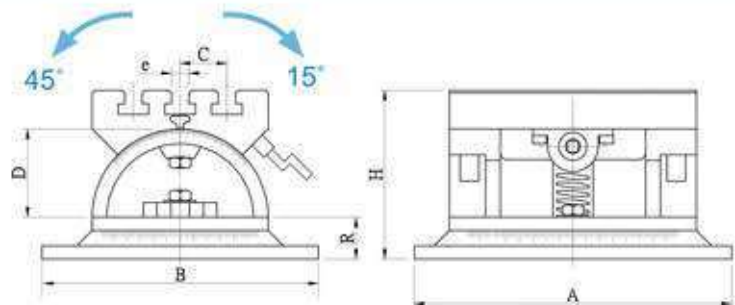
Unit:mm

| 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



360° 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 | 380 | 255 | 255 | 16 | 50 | 127 | 52 | 56 | 1004-101 |



Precision Cross Table



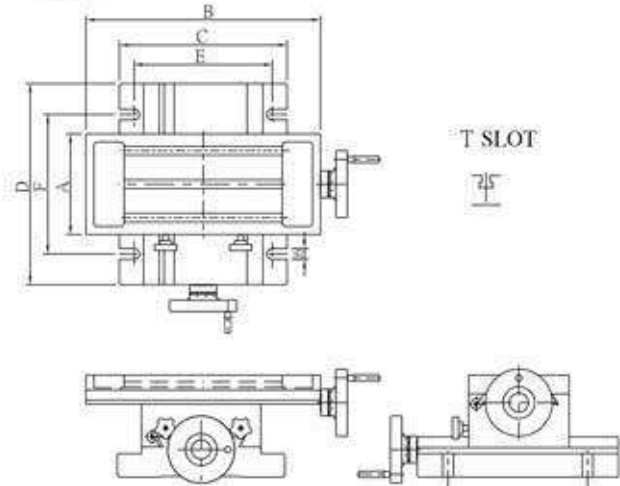
میز صلیبی



VCT-514



VCT-407



DRAWING OF VCT-514

- Material: over FC-30
- Precision: 0.02/100mm

Specifications

| ORDER NO. | A | B | C | D | E | F | Travel Stroke | T Slot | Total height | Dial graduation | PACKING LxWxH mm | 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 |

Unit:mm



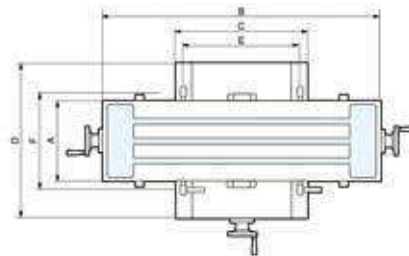
Precision Cross Table

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



VCT-830

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.



Unit:mm

Specifications

| ORDER NO. | A | B | C | D | E | F | Travel Stroke | T Slot | Total height | Dial graduation | PACKING LxWxH mm | 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

LIGHT DUTY

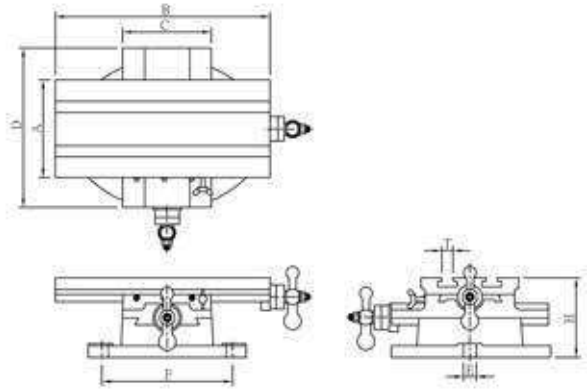


میز صلیبی



VCT-512

Table: 310x141mm
 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

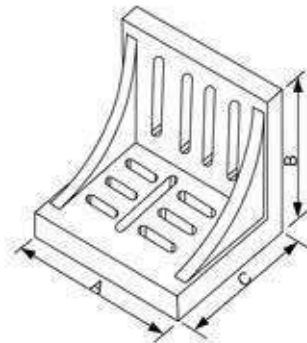


| ORDER NO. | A | B | C | D | E | F | Stroke | T Slot | Total height | PACKING LxWxH mm | WEIGHT kgs | CODE NO |
|-----------|-----|-----|-----|-----|----|-----|---------|--------|--------------|------------------|------------|----------|
| VCT-512 | 141 | 310 | 128 | 230 | 19 | 185 | 200x125 | 16 | 115mm | 430x265x155 | 16.5 | 1007-020 |



Right Angle Plate

گونیا



- 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

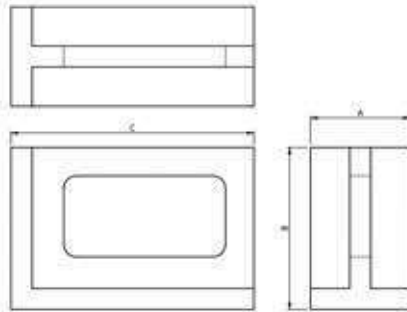
| ORDER NO. | Approx Dimensions | | | WEIGHT (kgs) | CODE NO. |
|-----------|-------------------|-----|-----|--------------|----------|
| | A | B | C | | |
| VR-6 | 150 | 126 | 115 | 3.8 | 1013-010 |
| VR-8 | 202 | 150 | 126 | 7.4 | 1013-011 |
| VR-10 | 250 | 202 | 126 | 12.1 | 1013-012 |
| VR-12 | 300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



Precision Right Angle Plate



گونیا



- 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 |



Slotted Angle Plate

VR-45



VR-100

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

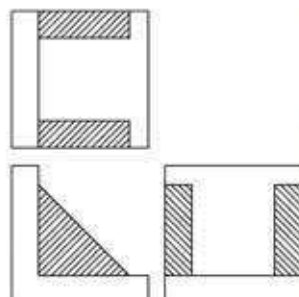
| ORDER NO. | Approx Dimensions | | | APPROX WEIGHT (kgs) | CODE NO. |
|-----------|-------------------|--------|--------|---------------------|----------|
| | A | B | C | | |
| VR-45 | 4-1/2" | 3-1/2" | 3" | 1.3 | 1013-020 |
| VR-60 | 6" | 5" | 4-1/2" | 3.2 | 1013-021 |
| VR-80 | 8" | 6" | 5" | 7.4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



Plain Angle Plate

Machined & precision ground

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



| 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 |

- Material: S45C
- Easy adjustment
- Work clamping & support.



| 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 | Clamping Force | G.W. | CODE NO. |
|-----------|-------------------|---------------|-----------|-----------------|----------------|------|----------|
| VCB-404 | 16 | M12x5" | 115x42x39 | 0 or 3 1/2" | 1 | 1.6 | 1015-005 |
| VCB-405 | 18 | M16x6" | 133x50x49 | 0 or 4" | 1.5 | 2.7 | 1015-006 |
| VCB-406 | 22 | M20x7" | 157x60x54 | 0 or 4 3/4" | 2 | 4.6 | 1015-007 |
| VCB-408 | 28 | M24x8" | 7x2 7/8 | 0 or 6" | 2.5 | 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 |



Auto Center Punch

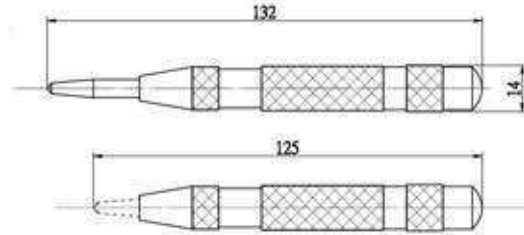
ORDER NO.VACP-1 CODE NO.1019-020



سنجه نشان



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. The force from spring pressure.

- Also can use to break car windows
- N.W. : 0.07kg



Draw Bar



- For milling machine

| 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-A | 1/2-13UNF | 555 | 635 | 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



B TYPE



F TYPE

F IS FOR FRONT (X)
 B IS FOR BACK (Y)
 (MILLING MACHINE)
 B SERIES RUBBER IS PLAIN 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-6225F | 620x250 | 2.2" | 0.2 | 1021-006 |



Dustproof Halogen Lamp Beam

VERTEX®

WATER PROOF UNIVERSAL TYPE



چراغ هالوژن

VHL-300 SERIES



Features

- Coil transformer built in base for directly connect to voltage of Ac power. (110V, 220V, 380V, 24V...)
- Specify voltage as desired when ordering.
- It accepts bulb 55W
- Furnished with 1.8 meter cord with plug.
- Fitted with coil transformer resisting unstable voltage.
- Long service life.
- IP65
- with water proof articulated arm.
- ※ Please confirm voltage & phase when order.

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 |



Quartz Halogen Lamp Beam



UNIVERSAL TYPE

- 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.

چراغ هالوژن



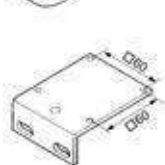
VHL-20F SERIES

- 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.

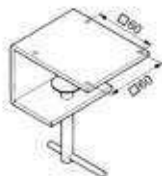
OPTIONAL



J-M01



J-L02



J-C02

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

| 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 |

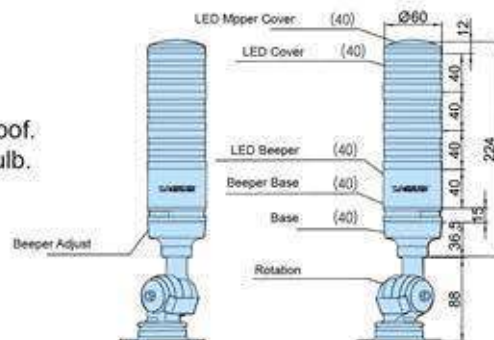
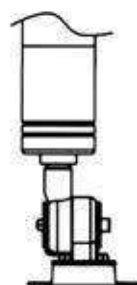
※ Please confirm voltage & phase when order.



Water - Proof Bright LED Signal Light



- Signal light with feature of multi-function, water proof.
 - Lamp of signal light, adopted high efficient LED bulb.
- ※ Please confirm voltage & phase when order.



- Suit for machine tools & etc, show signal 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. | Bulb | Enclosure IP | weight (kgs) | CODE NO. |
|-----------|------|--------------|--------------|----------|
| VLED-SL | 24V | IP54 | 0.77 | 1025-026 |

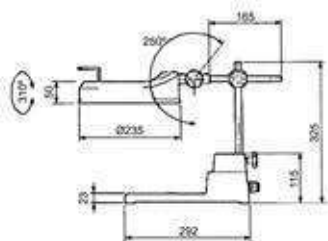


Magnifying Fluorescent Work Light Beam VERTEX®

چراغ ذره بین دار



VHL-30TEB
BENCH TYPE



VHL-30TEB BENCH TYPE

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.

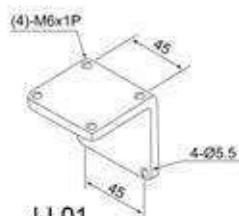
Designed with a magnifier lens on luminaire head giving 5 Diopter of magnification 2.25x than actual object. The fluorescent lighting provides day light effect without flash.

● OPTIONAL ●

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



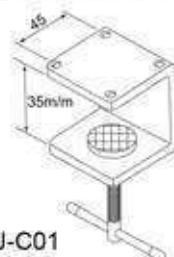
● OPTION



J-L01

MOUNTING ANGLE
PLATE

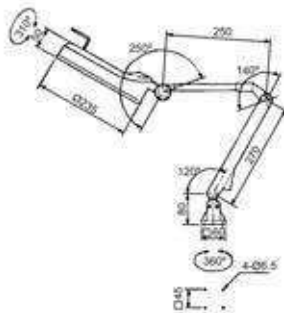
● STANDARD ACC.



J-C01

MOUNTING CLAMP

VHL-30MEB



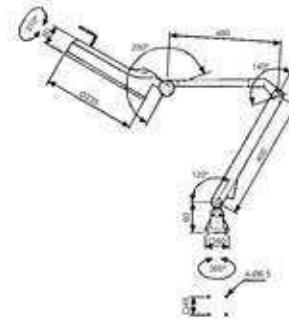
VHL-30MEB MEDIUM ARM

WITH 5X LENSE



3 Diopter auxiliary lens
(optional)

VHL-30LEB



VHL-30LEB LONG ARM

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.

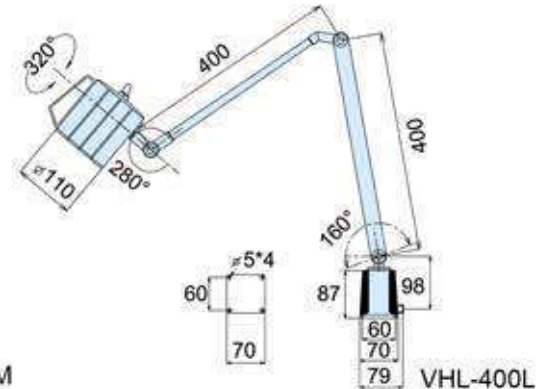
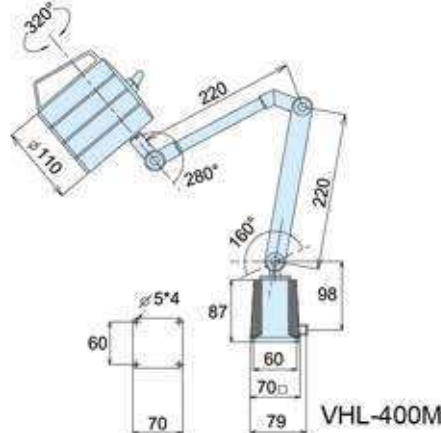
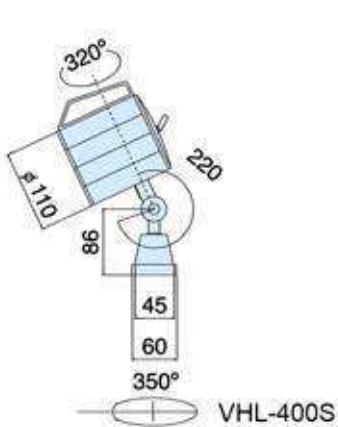
| ORDER NO. | WEIGHT (kg) | CODE NO. |
|-----------|-------------|----------|
| VHL-30TEB | 3.5 | 1025-060 |
| VHL-30MEB | 2.9 | 1025-062 |
| VHL-30LEB | 2.9 | 1025-063 |
| J-L01 | 0.6 | 1025-014 |
| VHL-3X | 0.3 | 1025-065 |

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



Water-Proof Halogen Lighting Beam VERTEX®

چراغ هالوژن ضد آب



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 ADPOED WITH A BULB (12V/50W). CUSTOMERS' SPECIFICATIONS ALSO ACCEPTED.

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.

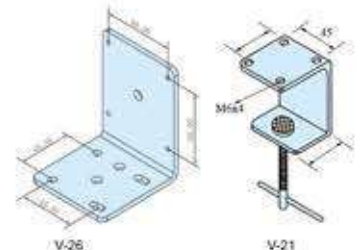
VHL-400M

- 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•

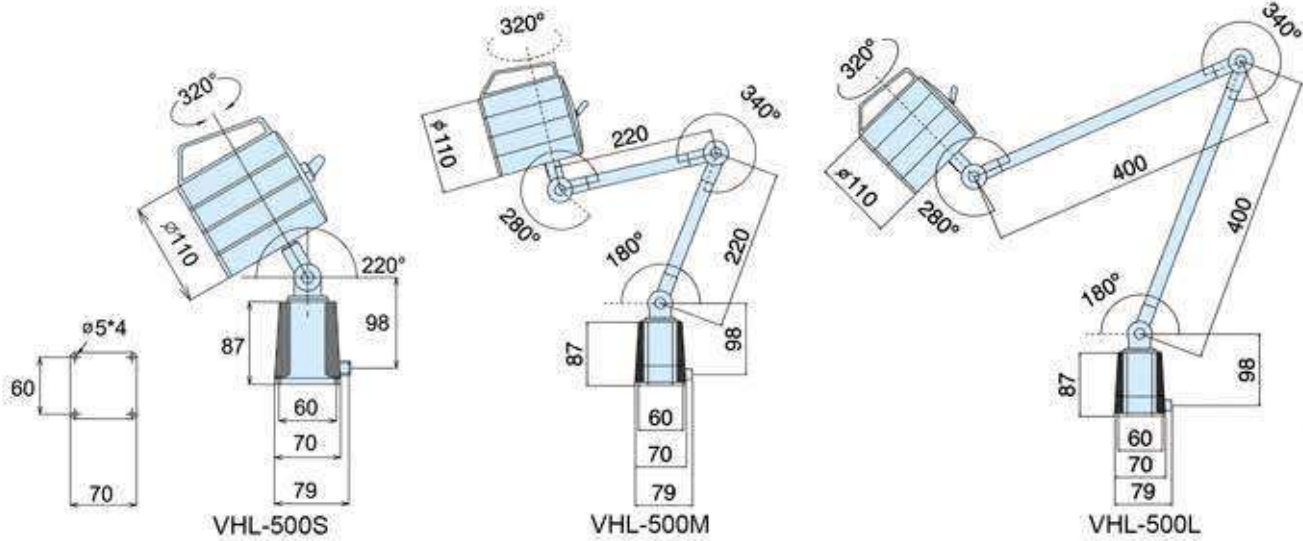


| ORDER NO. | VOLTAGE | BULB | ARM LENGTH L x l | OPTIONAL ACCESSORIES | WEIGHT (N.W.) | CODE NO. | ORDER NO. | WEIGHT (kg) | CODE NO. |
|-----------|-------------|---------|---------------------|-------------------------|------------------|-----------|--------------|----------------|-------------|
| VHL-400L | 110V - 220V | 12V 50W | 400x400 | V-26 | 3.8 | 10 25-100 | V-21 | 0.48 | 1025-107 |
| VHL-400M | 110V - 220V | 12V 50W | 220x220 | V-26 | 3.5 | 1025-101 | V-26 | 0.19 | 1025-108 |
| VHL-400S | | 12V 50W | | V-20 / V-21 | 2.8 | 1025-102 | | | |



Water-Proof Halogen Lighting Beam VERTEX®

چراغ هالوژن ضد آب



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

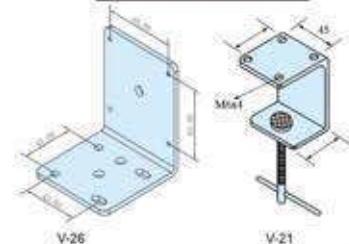
VHL-500M

- 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.

● OPTIONAL ●



| ORDER NO. | VOLTAGE | BULB | ARM LENGTH L x l | OPTIONAL ACCESSORIES | WEIGHT (N.W.) | CODE NO. | ORDER NO. | WEIGHT (kg) | CODE NO. |
|-----------|-------------|-------------------|------------------|----------------------|---------------|----------|-----------|-------------|----------|
| VHL-500L | 110V - 220V | 12V 50W - 24V 50W | 400x400 | V-26 | 4 | 1025-103 | V-21 | 0.48 | 1025-107 |
| VHL-500M | 110V - 220V | 12V 50W - 24V 50W | 200x220 | V-26 | 3.8 | 1025-104 | V-26 | 0.19 | 1025-108 |
| VHL-500S | 110V - 220V | 12V 50W - 24V 50W | | V-26 | 2.7 | 1025-105 | | | |

Concentrate LED Lamp

UNIVERSAL TYPE

VERTEX®

چراغ LED



NEW



VLED-30L

VLED-30M

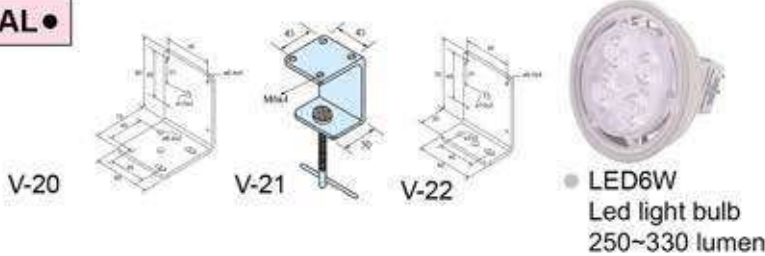
Features

- 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

※ Please confirm voltage & phase when order.

| 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



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 |

Wide Range LED Lamp

NEW



Features

- Power consumption :21.5W
- Angle:36°
- Color temperature:2800K
- Lumens value:210 lm
- Voltage:AC 220V power 12V
- With transformer built-in

OPTIONAL



Magnet base
V-51

Mounting Angle plate
V-52

| ORDER NO. | VOLTAGE | BULB | ARM L x ℓ | WEIGHT N.W.(KGS) | CODE NO. | ORDER NO. | WEIGHT (kg) | CODE NO. |
|-----------|---------|-----------|-----------|------------------|----------|-----------|-------------|----------|
| VHL-50FT | AC 220V | 12V / 20W | 500 mm | 1.69 | 1025-151 | V-51 | 0.52 | 1025-161 |
| | | | | | | V-52 | 0.27 | 1025-162 |



Concentric Test Stand



صفحه دو مرنگ

NEW



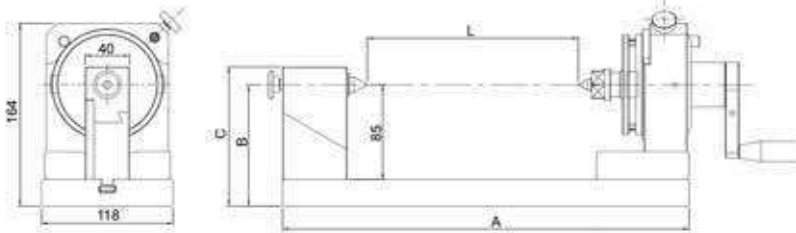
Feature

- For Checking Roundness & True Running Accuracy
- For Grinding High Accuracy Outer Diameter & Round Bar On Surface Grinder By Accurated Center And Holder.

Specification

- Body Center high : 85 mm
- Base to punch center : 109 mm
- Division & Accuracy : 24 & $15' \pm 10''$
- Workpiece length : 0-450mm
- Material : sks-3, HRC 60-62
- Roundness : 0.002 mm
- Parallelism : 0.002 / 100mm
- Squareness : 0.002 / 100mm

Unit:mm



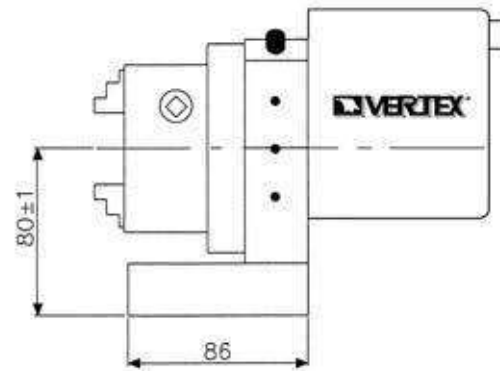
| ORDER NO. | A | B | C | L | Division | Graduation | N.W. (kgs) | CODE NO. |
|-----------|-----|-----|-----|-------|--------------------------|------------|------------|----------|
| VCI-150P | 375 | 109 | 125 | 0-150 | 24 ($15' \pm 10''$) | 360° | 20 | 2021-113 |
| VCI-250P | 475 | 109 | 125 | 0-250 | | | 23 | 2021-114 |
| VCI-350P | 575 | 109 | 125 | 0-350 | | | 26 | 2021-115 |



Fixed Speed Punch Former

AUTO TYPE

NEW



- 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.
- 3 inch 3 jaw chuck.

| ORDER NO. | O.D. | I.D. | Max. Dia. of Workpiece | Center Height | Motor Output-W Input-V | Graduation | R.P.M. | N.W. (kgs) | CODE NO. |
|-----------|------|-------|------------------------|---------------|------------------------|------------|--------|------------|----------|
| V-PS-80M | 2-70 | 24-64 | Ø50 | 80-81 | 15W 110/220V | 360° | 110 | 11.72 | 2021-130 |

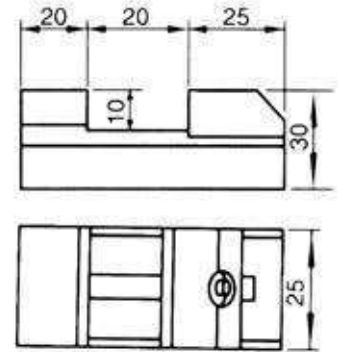
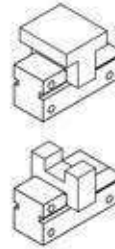
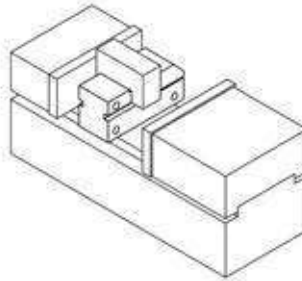


Mini Tool Maker Vise

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

WEIGHT:0.3kg

گیره سنگ خورده

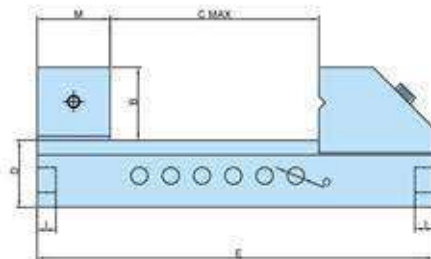
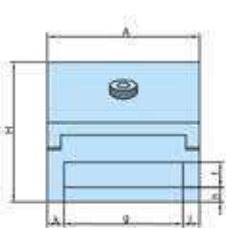


Tool makers vise of mini type which can be put in a bigger vise to process the small and precise workpiece. Also it can be used in an E.D.M. machine and grinding machine.

Squareness and parallelism : within ± 0.005 mm / 100 mm.

| ORDER NO. | Weight (kgs) | CODE NO. |
|-----------|--------------|----------|
| VMV-10 | 0.3 | 2003-001 |

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 ± 0.005 mm / 100 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: 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 | 74 | 28 | 150 | 5 | 10 | 37 | 6 | 5 | 5 | 57 | 30 | 8 | 2 | 2003-011 |
| VMV-25 | SK2 | 62 | 34 | 89 | 28 | 170 | 7 | 10 | 52 | 6 | 5 | 5 | 62 | 30 | 8 | 3.3 | 2003-012 |
| VMV-30 | SK2 | 72 | 34 | 99 | 32 | 190 | 9 | 12 | 56 | 7 | 8 | 8 | 66 | 35 | 8 | 4.5 | 2003-013 |
| VMV-35 | SK2 | 88 | 45 | 120 | 40 | 225 | 12 | 12 | 64 | 11 | 12 | 12 | 85 | 40 | 10 | 7 | 2003-014 |
| VMV-40 | SK2 | 98 | 45 | 125 | 40 | 230 | 12 | 12 | 64 | 11 | 17 | 17 | 85 | 40 | 10 | 8.9 | 2003-015 |
| VMV-50 | SK2 | 125 | 50 | 157 | 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 |



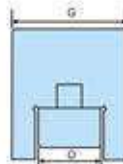
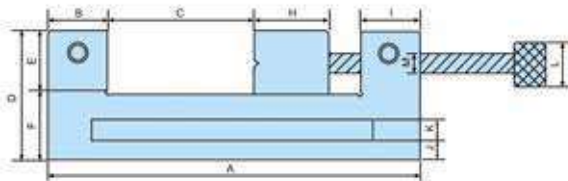
Tool Maker Vise



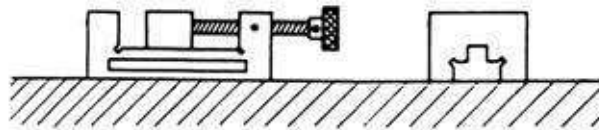
گیره سنگ خورده



- Made of SK material of J.I.S. specification.
- Hardened by heat treatment and precision ground.
- Squareness and parallelism are ensured to be within $\pm 0.005 \text{ mm} / 100 \text{ mm}$.
- 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: HRC $54^{\circ} \pm 2^{\circ}$



TOLERANCE $\pm 0.005 \text{ mm} / 100 \text{ mm}$



Unit:mm

| ORDER NO. | MATERIAL | A LENGTH | B | JAW C OPENING | D | E | F | G | H | I | J | K | L | M | O | HEIGHT (mm) | HARDEN | WEIGHT (KGS) | CODE NO. |
|-----------|----------|----------|----|---------------|----|----|----|----|-------|-------|-------|-------|-------|-------|-------|-------------|-----------|--------------|----------|
| VDV-20 | SK2 | 154 | 25 | 55 | 54 | 24 | 29 | 47 | 45 | 25 | 9.50 | 10.15 | 34.70 | 15.80 | 18.7 | 54 | HRC54'±2' | 2.5 | 2003-020 |
| VDV-25 | SK2 | 175 | 25 | 75 | 60 | 29 | 30 | 62 | 44.80 | 25 | 10 | 10.90 | 39.60 | 18.95 | 26 | 60 | HRC54'±2' | 3.9 | 2003-021 |
| VDV-30 | SK2 | 180 | 30 | 71 | 70 | 29 | 40 | 72 | 51.85 | 25 | 14 | 12.35 | 50.35 | 18.95 | 26 | 70 | HRC54'±2' | 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 | 30.20 | 73 | HRC54'±2' | 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 | 29.60 | 73 | HRC54'±2' | 10.1 | 2003-024 |



Tool Makers Vise



گیره سنگ خورده

Good Design With High Precision And Rigid Accuracy :

Material Hardened: SKS HRC 60° Sub-zero processing.

Parallelism: Within 0.003 / 100 mm

Squareness: Within 0.005 / 100 mm

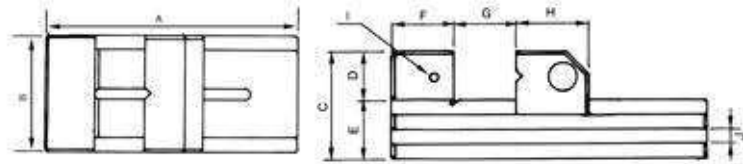
Angle tol: Within 15 sec Within 20 sec

Material: SKS2

*Sine conversion table attached page B16



Fixed Down Jaw Designed



| ORDER NO. | A | B | C | D | E | F | G | H | I | J | N.W (kgs) | CODE NO. |
|-----------|-----|----|----|----|----|----|-----|----|----|----|-----------|----------|
| VC20 | 150 | 48 | 53 | 25 | 28 | 25 | 84 | 40 | M6 | 8 | 1.6 | 2003-070 |
| VC25 | 176 | 63 | 59 | 30 | 29 | 30 | 95 | 48 | M6 | 8 | 2.8 | 2003-071 |
| VC30 | 190 | 73 | 68 | 35 | 33 | 35 | 100 | 53 | M6 | 9 | 4 | 2003-072 |
| VC40 | 245 | 98 | 90 | 45 | 45 | 45 | 135 | 65 | M8 | 12 | 9.02 | 2003-073 |



Tool Makers Vise

Accuracy :

Material Hardened: Sub-zero processing.

Parallelism: Within 0.003 / 100 mm

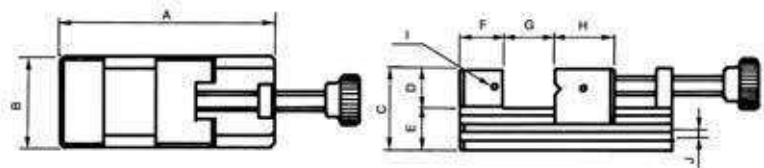
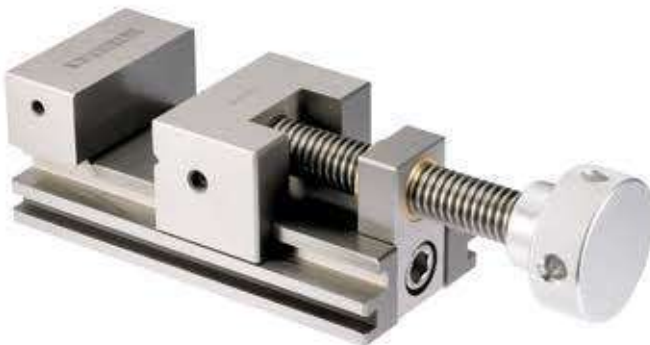
Squareness: Within 0.005 / 100 mm

Angle tol: Within 15 sec Within 20 sec

Material: SKS2

Hardness: HRC 54°±2°

*Sine conversion table attached page B16



| 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 Universal Angle Vise



گیره سنگ خورده سینوسی

NEW



VUA-3

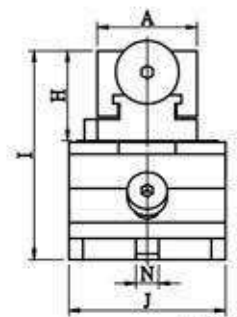
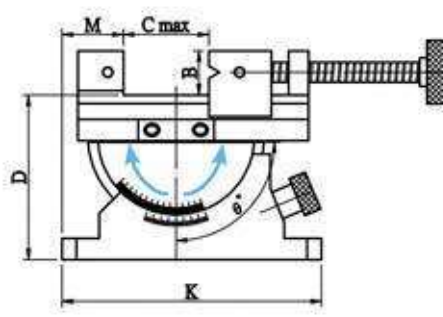
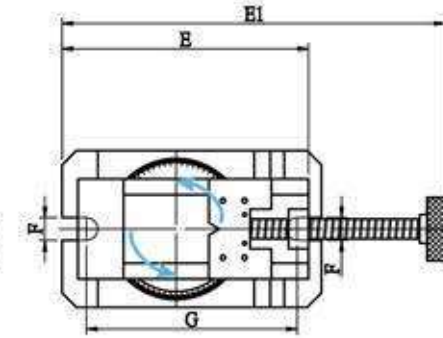


VUA-4



Features

- 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: VISE SK-2
- Hardness: HRC 52° $\pm 2^\circ$
- Load capacity : 25kgs



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

ميز دقيق سينوسي

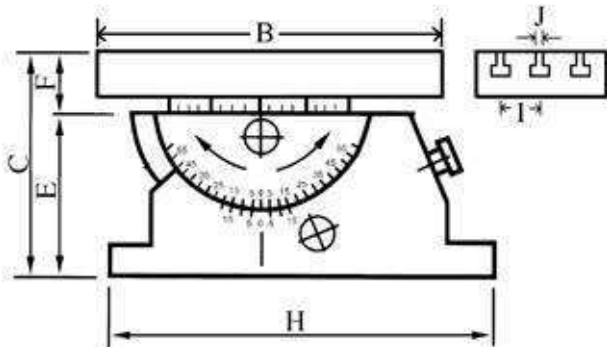


Features

- 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
- Vise bottom to base parallelism ± 0.02 mm
- Squareness ± 0.02
- Material: SK-2
- Hardness: HRC $52^{\circ} \pm 2^{\circ}$
- Load capacity : 25kgs



- Example
For single purpose



Unit:mm

| 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 |



Sine Bar With Magnetic



خط کش سینوسی



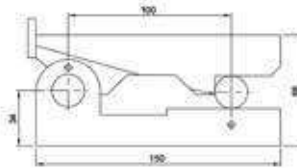
There is magnet in the bottom which can be run on any kind of machine for testing angle use.

The thread can for stopper screw



Height Gage Block PAGE B76

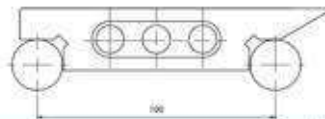
● Example



Unit:mm

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

Sine Bar



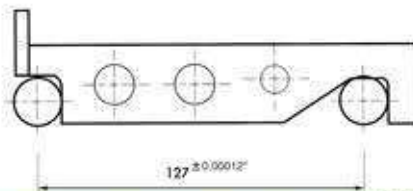
Unit:mm

| 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° | Ø20mm | 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 0.005 mm / 100 mm



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 |

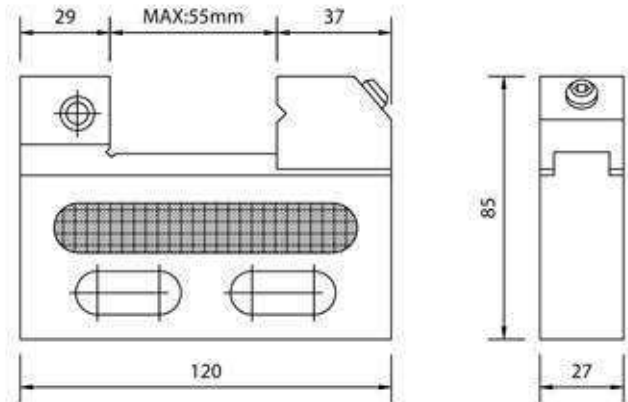
HOW TO CHOOSE THE BLOCK FOR SINE BAR

| DISTANCE GAUGE BLOCK CAN GET DEGREE | SIN 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 |



EDM Tool Marker Vise (STAINLESS) VERTEX®

گیره مخصوص وایر کات



Material: SUS 440

Hardness: HRC 58°~60°

Squareness: Within 0.005 mm

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

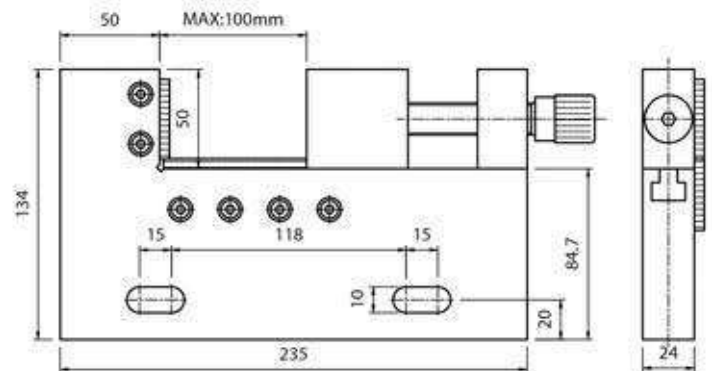
※ Not 100% magnetic proof

| | | |
|--------------------|---------------------|-----------------|
| PARALLELISM | ±0.002 mm / 100 mm | |
| SQUARENESS | ±0.002 mm / 100 mm | |
| ORDER NO. | WEIGHT (kgs) | CODE NO. |
| VSTV-50W | 1.4 | 2008-040 |

| | |
|--------------------|------------|
| MAX.OPENING | 55 mm |
| THICKNESS | 27 mm |
| JAW DEEP | 25 mm |
| N.W | 1.01 kgs |
| MATERIAL | SUS 440 |
| HARDNESS | HRC 54°±2° |



EDM Tool Maker Vise (STAINLESS)



● Do not over lock.

※ Not 100% magnetic proof

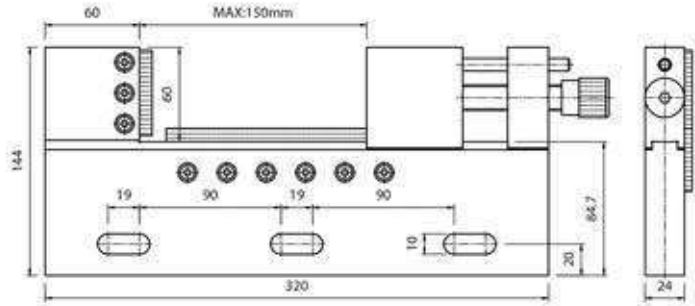
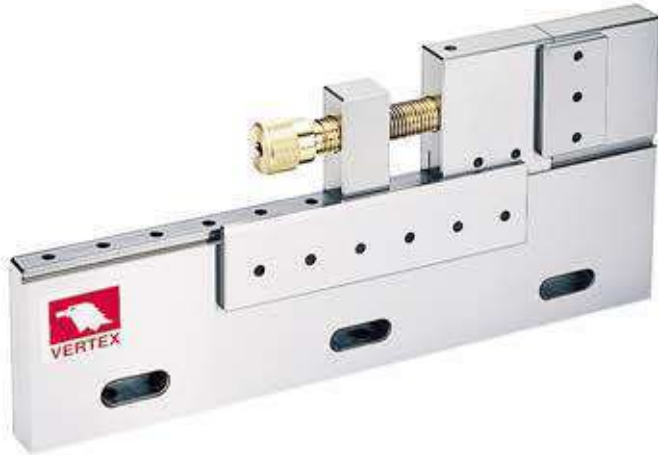
| | | |
|--------------------|---------------------|-----------------|
| PARALLELISM | ±0.002 mm / 100 mm | |
| SQUARENESS | ±0.002 mm / 100 mm | |
| ORDER NO. | WEIGHT (kgs) | CODE NO. |
| VSTV-100W | 4.88 | 2008-050 |

| | |
|--------------------|------------|
| MAX.OPENING | 100 mm |
| THICKNESS | 24 mm |
| JAW DEEP | 50 mm |
| N.W | 4.88 kgs |
| MATERIAL | SUS420 |
| HARDNESS | HRC 54°±2° |



EDM Tool Marker Vise (STAINLESS) VERTEX®

گیره مخصوص وایر کات



- Do not over lock.
- ✘ Not 100% magnetic proof

| | | |
|-------------|--------------------|----------|
| PARALLELISM | ±0.002 mm / 100 mm | |
| SQUARENESS | ±0.002 mm / 100 mm | |
| ORDER NO. | WEIGHT (kgs) | CODE NO. |
| VSTV-150W | 6.75 | 2008-060 |

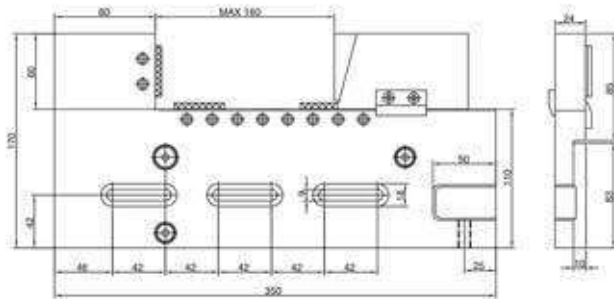
| | |
|-------------|------------|
| MAX.OPENING | 150 mm |
| THICKNESS | 24 mm |
| JAW DEEP | 60 mm |
| N.W | 6.75 kgs |
| MATERIAL | SUS420 |
| HARDNESS | HRC 54°±2° |



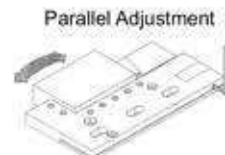
EDM Tool Maker Vise (STAINLESS)



- Over lock may break vise.
- ✘ Not 100% magnetic proof



- Parallelism: 0.003 / 100 mm, Squareness: 0.005 / 100 mm.
- Hardness: up to HRC 45°~55°.
- The vise can be adjusted up and down, left and right, forth and back to set parallelism.
- High water pressure resistance.



| | | |
|-------------|--------------------|----------|
| PARALLELISM | ±0.003 mm / 100 mm | |
| SQUARENESS | ±0.005 mm / 100 mm | |
| ORDER NO. | WEIGHT (kgs) | CODE NO. |
| VSTV-320W | 8 | 2008-090 |

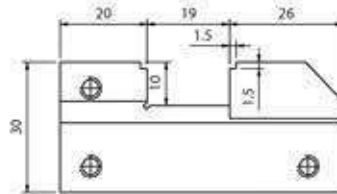
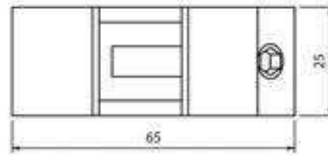
| | |
|-------------|------------|
| MAX.OPENING | 160 mm |
| THICKNESS | 24 mm |
| JAW DEEP | 60 mm |
| N.W | 8 kgs |
| MATERIAL | STAVAX |
| HARDNESS | HRC 52°±2° |



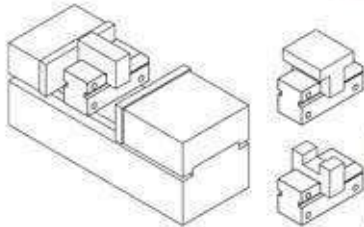
Tool Maker Vise (STAINLESS)



گیره سنگ خورده



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 $\pm 0.003 / 100$ mm
※ Not 100% magnetic proof



| ORDER NO. | MATERIAL | LENGHT | WIDTH | JAW OPENING | JAW HEIGHT | HARDEN | WEIGHT (kgs) | CODE NO. |
|-----------|----------|--------|-------|-------------|------------|-------------|--------------|----------|
| VSTV-10V | SUS 440 | 65 | 25 | 19 | 10 | HRC 56°-58° | 0.3 | 2008-070 |



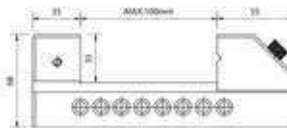
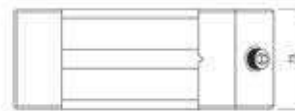
Tool Maker Vise (STAINLESS)

MINI TYPE FOR EDM

| ORDER NO. | WEIGHT (kgs) | CODE NO. |
|-----------|--------------|----------|
| VBST-30 | 4.5 | 2008-075 |

Material: SUS 440
Hardness: HRC 58°-60°
Squareness: Within 0.005 / 100 mm
※ Not 100% magnetic proof

Unit:mm



| TOLERANCE | |
|-----------|----------------|
| A | ± 0.004 mm |
| B | ± 0.005 mm |
| C | ± 0.005 mm |
| D | ± 0.005 mm |
| E | ± 0.005 mm |
| F | ± 0.005 mm |
| G | ± 0.005 mm |

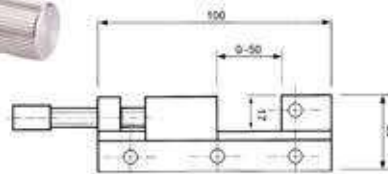


Tool Maker Vise (STAINLESS)

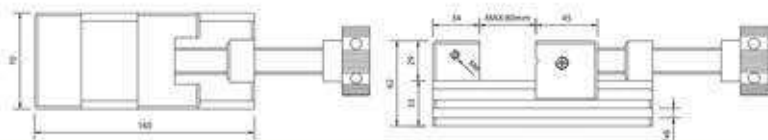
FOR EDM



VSTV-20



VSTV-25



- Material: SUS 440
- Hardness: HRC 56°
- Squareness: Within 0.005 / 100 mm
- It was made by tool steel of stainless steel system and was precision ground after hardened by heat treatment. So, it will not be rusted even permeation.
- The vise can clamp workpiece by moveable Jaw without lifting. It is easier and convenient for processing small workpieces.
- ※ Not 100% magnetic proof

| ORDER NO. | MATERIAL | LENGHT | HEIGHT | JAW OPENIG | JAW WIDTH | JAW HEIGHT | HARDEN | WEIGHT (kgs) | CODE NO. |
|-----------|----------|--------|--------|------------|-----------|------------|--------|--------------|----------|
| VSTV-20 | SUS440 | 100 | 35 | 50 | 35 | 17 | HRC56° | 1.2 | 2008-079 |
| VSTV-25 | | 160 | 62 | 80 | 70 | 29 | | 4.4 | 2008-080 |



Angle Plate



وی بلوک سنگ خورده



VAP-1



VAP-2



VAP-3

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

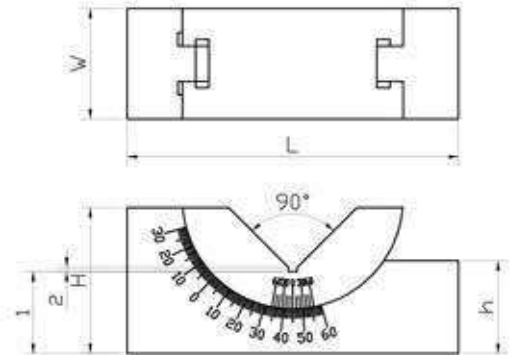
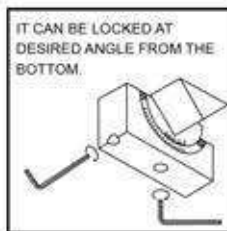
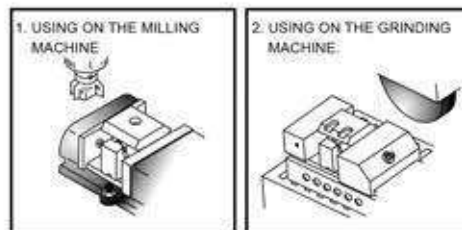
Material: SK2

Hardness: HRC 50°-54°

Squareness: ± 0.01 mm

Angular measures from 0°-60°

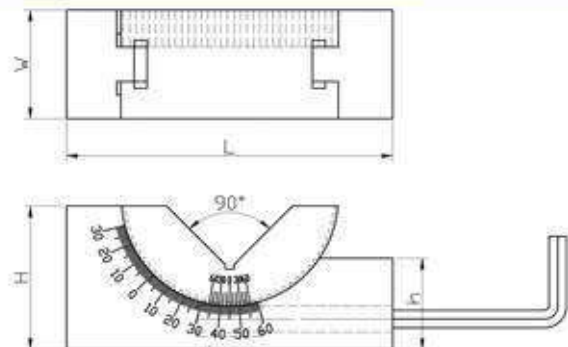
⊗ Not for LAB



| 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



Angle Can Be Adjusted From 0°-60° By Screw

⊗ Not for LAB

| 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 |



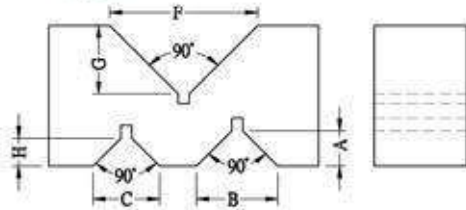
Precision V Block



وی بلوک سنگ خورده



Material : Steel
 Hardness : HRC 52
 Accuracy : 0.02 mm / 100 mm
 ● For Production
 ✖ Not for LAB



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°)

✖ Not for LAB



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

✖ Not for LAB

mm

| 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 / ₁₆ " L x 1 ³ / ₁₆ " W x 5 ⁹ / 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 ⁵ / ₃₂ " H | 3.8 | 2006-011 |

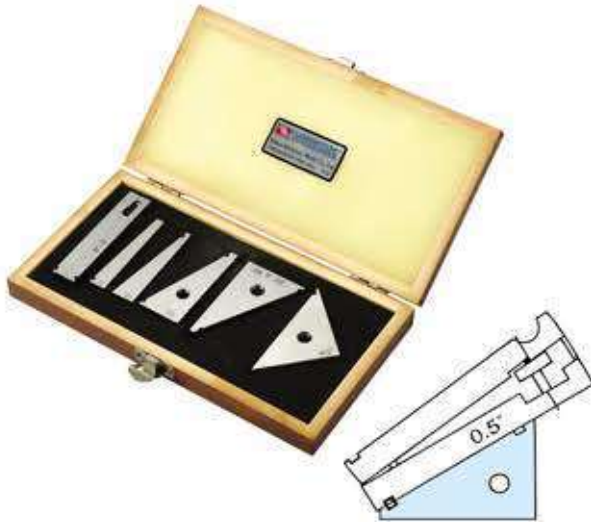


Micrometric Tangent Bar & Angle Gauge Block Set VERTEX®

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

WEIGHT:1kg

گیج زاویه دار



Micrometric Tangent Bar & Angle Gauge Block Set

- Made of Hardened Steel, Precision Ground.
 - Accuracy ± 0.001 " Per Inch.
 - Interlocking Slots.
 - Size of Angle Blocks: .35"x3"
- A Complete set for Angular set-ups. No Other Gauges Required.

- 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 : HRC 50°
- ✘ Not for LAB



Solid Angle Plates

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

WEIGHT:0.3kg



Solid Angle Plates

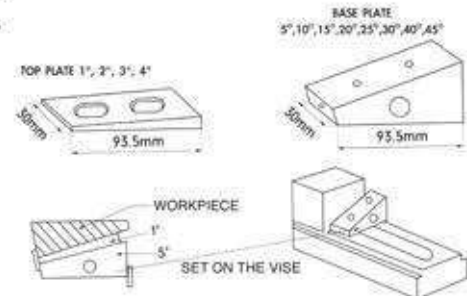
- Precision ground angles for convenient set-ups in tooling, production and inspection.
- Four holes on top of it for easy mounting.
- 1/4" Thick, packed in cardboard box.
- Set of 3"x3"x4-3/8", 45°x45°x90°x1pc
2"x3-15/32"x4", 30°x60°x90°x1pc
- Hardness : HRC 50°
- ✘ Not for LAB



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 Hrc 55°
- Made By The Material Of Sk2
- Can Be Cooperate Two Set For Use.
- ✘ Not for LAB

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



Hardened Steel Square



گونیا مویی



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.

※ Not for LAB

| 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 |

Hardness : HRC50°

Square

Alloysteel Grounded HRC50° ± 2

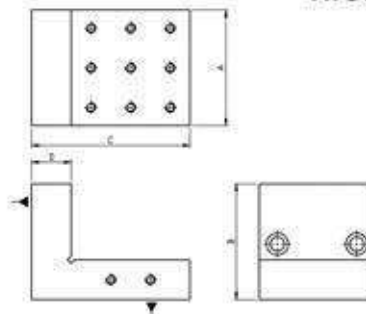


※ Not for LAB

| 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 |

Precision Steel Angle Plate

HIGH PRECISION TYPE



MATERIAL : YK30 ALLOY STEEL
ACCURACY : 0.005/100MM
HARDEN TREATMENT UP TO HRC 58°
※ Not for LAB

| ORDER NO. | A | B | C | D | N.W (KGS) | CODE NO. |
|-----------|-----|-----|-----|----|-----------|----------|
| VRS-33 | 3" | 3" | 4" | 1" | 2.2 | 2006-060 |
| | 75 | 75 | 100 | 25 | | |
| VRS-44 | 4" | 4" | 4" | 1" | 3.7 | 2006-061 |
| | 100 | 100 | 100 | 25 | | |
| VRS-46 | 4" | 4" | 6" | 1" | 4.5 | 2006-062 |
| | 100 | 100 | 150 | 25 | | |
| VRS-85 | 8" | | 8" | | 14.3 | 2006-063 |
| | 200 | 120 | 200 | 40 | | |
| VRS-1206 | 12" | 6" | 12" | 2" | 32.3 | 2006-064 |
| | 300 | 150 | 300 | 50 | | |



V-Block With Clamp



وی بلوک کلمپ دار



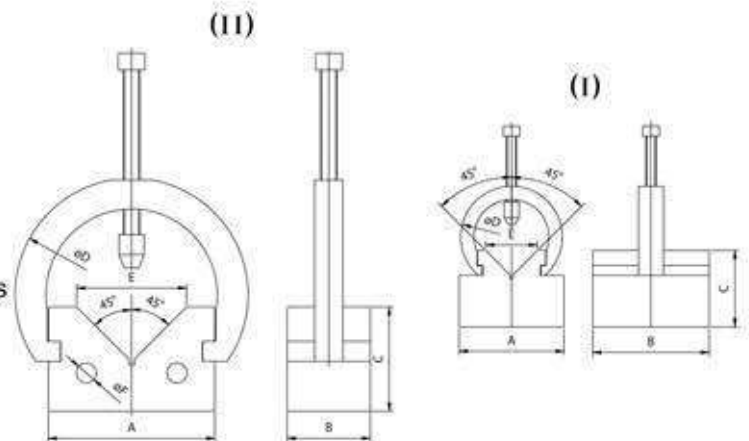
PAIRS
VBC-196
VBC-197



PAIRS
VBC-195



- 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.
- ※ Not for LAB



| ORDER NO. | | A | B | C | D | E | F | N.W. (kgs) | CODE.NO. |
|-----------|-----|-----|----|-----|-----|-----|---------------|------------|----------|
| VBC-195 | I | 63 | 70 | 46 | 61 | 31 | 12 | 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 |

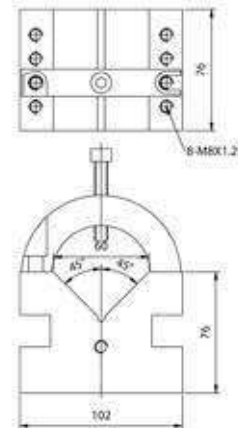
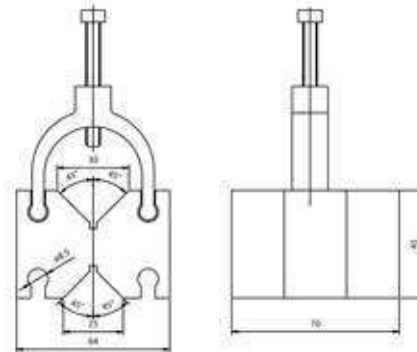
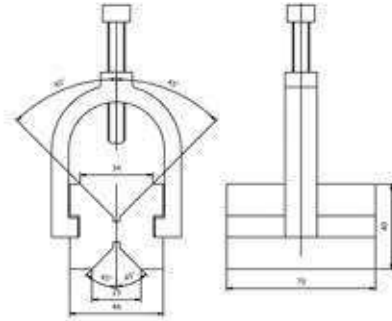
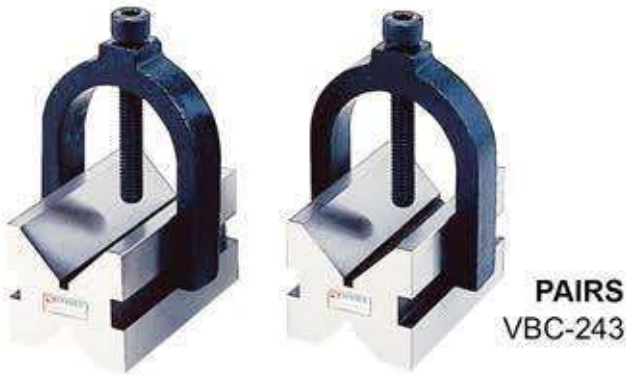
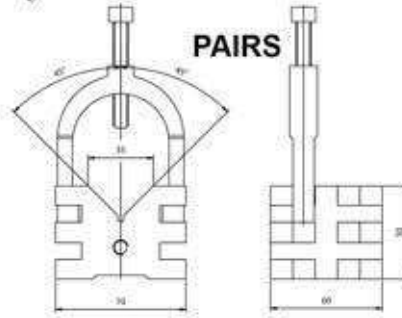


V-Block With Clamp



Alloysteel Grounded HRC50*

وی بلوک کلیمپ دار



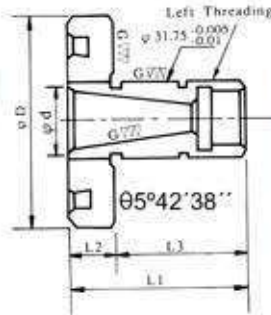
| ORDER NO. | W | H | L | W.OF SMALL VEE | W.OF LARGER VEE | PACKING | G.W. (kgs) | CODE NO. |
|-----------|---------------|---------------|---------------|----------------|-----------------|--------------|------------|----------|
| VBC-003 | 2.36 60mm | 1.86 50mm | 2.75 70mm | NON | V35 X V5.5 | 110x80x110mm | 2.4 | 2007-010 |
| VBC-243 | 2 3/4 70mm | 1 3/4 45mm | 1 5/8 42mm | NON | V32 X V3.5 | 75x80x100mm | 1.9 | 2007-020 |
| VBC-006 | 2 1/2 64mm | 1 3/4 45mm | 2 3/4 70mm | V25 X V3.5 | V30 X V3.5 | 110x80x110mm | 2.6 | 2007-030 |
| VBC-009 | 4 102mm | 3 76mm | 3 76mm | NON | V59 X V4.5 | 70x50x110mm | 3.9 | 2007-040 |



Grinding Wheel Flange



بالانس سنگ



| ORDER NO. | ϕD | ϕd | 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 | TA TUNG | 1 | 2013-011 |

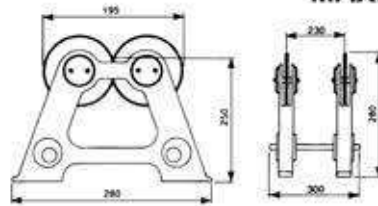
Unit: mm



Wheel Balancing Stand

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

WEIGHT:12.5 kgs



MAX.WHEEL DIAMETER ALLOWED ϕ 500mm

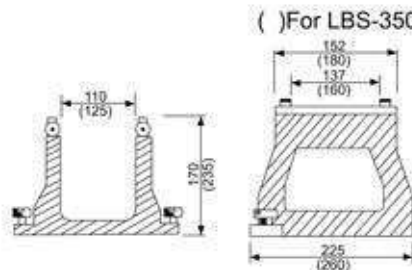
The stand is specifically designed to improve accuracy and longer life for grinding. It is finished with cast iron and fine through hardened to HRC 55°.



Level Balancing Stand

ORDER NO.LBS-100
CODE NO.2014-010
WEIGHT:8.8 kgs

ORDER NO.LBS-350
CODE NO.2014-011
WEIGHT:15.1 kgs

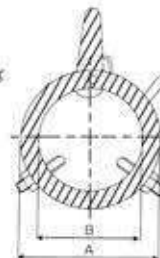
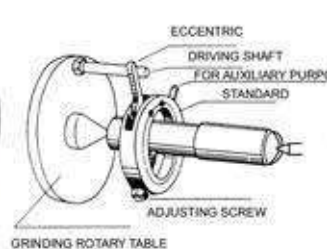


()For LBS-350

This machine encloses minute leveling instrument.
The adjustment of horizontal enable rapidly and accurately.
MAX.WHEEL DIAMETER ALLOWED ϕ 200 mm, ϕ 350 mm



Driving Carrier



| ORDER NO | CAPACITY | A | B | WEIGHT (kg) | CODE NO. |
|----------|-----------------------|-----|-----|-------------|----------|
| VDC-13 | $\phi 6\sim\phi 14$ | 36 | 18 | 0.1 | 2014-020 |
| VDC-22 | $\phi 13\sim\phi 24$ | 48 | 28 | 0.2 | 2014-021 |
| VDC-30 | $\phi 20\sim\phi 33$ | 58 | 38 | 0.2 | 2014-022 |
| VDC-40 | $\phi 31\sim\phi 42$ | 68 | 48 | 0.2 | 2014-023 |
| VDC-50 | $\phi 36\sim\phi 50$ | 78 | 58 | 0.3 | 2014-024 |
| VDC-60 | $\phi 40\sim\phi 62$ | 89 | 68 | 0.3 | 2014-025 |
| VDC-80 | $\phi 60\sim\phi 80$ | 119 | 88 | 0.6 | 2014-026 |
| VDC-100 | $\phi 80\sim\phi 100$ | 140 | 109 | 0.7 | 2014-027 |

FEATURES:

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



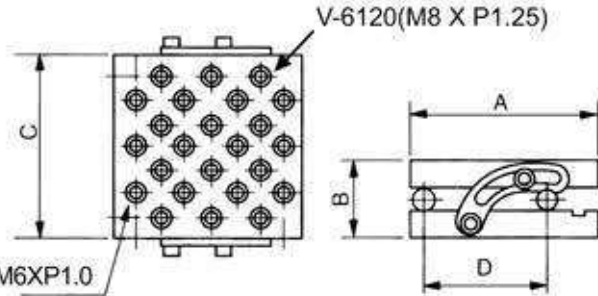
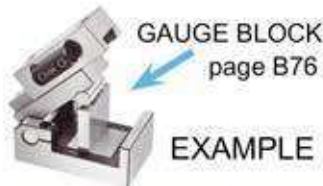
Sine Plates



میز سینی

Design by the principles of SINE, angle grinding can be done well. High precision of parallelism within 0.002 mm 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.

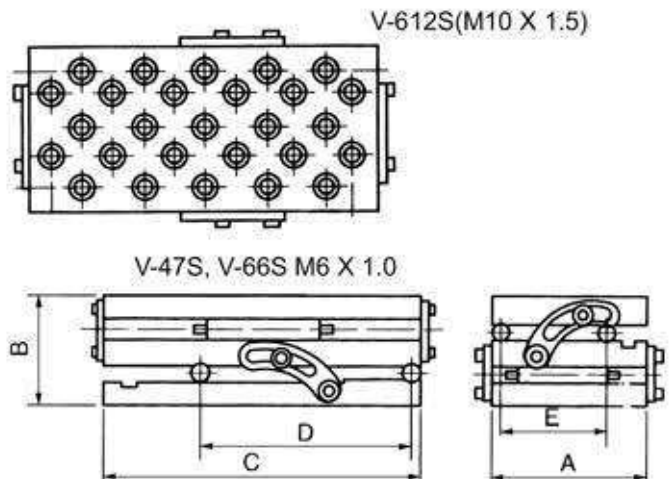
Minute angle step 0.2 built into the front gauge block roll eliminates steps in base plate.

Two end rails and one locking strap included

Tapped holes on the top.

Center distance of tools with 0.005 mm(0.0001")

V-612S within 0.008 mm(0.0003")



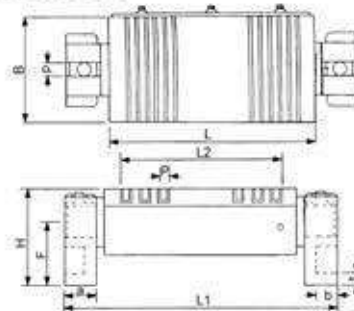
| ORDER NO. | A | B | C | D | E | N.W (kgs) | CODE NO. |
|-----------|-----|-----|-----|-----|-----|-----------|----------|
| V-47S | 100 | 100 | 175 | 125 | 75 | 9.9 | 2015-010 |
| V-66S | 150 | 100 | 150 | 100 | 100 | 12.4 | 2015-011 |
| V-612S | 150 | 100 | 300 | 100 | 100 | 23.7 | 2015-012 |



Rotary Permanent Magnetic Plate

650 GAUSS

مگنت سینوسی



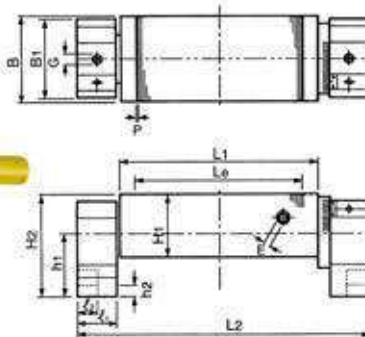
- Can grind the (0°-90°) angle work-piece, could be easily set by graduated collar.

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(2+6) | 50 | 35 | 17 | 96 | 380 | 16 | 150 | 33.2 | 2015-080 |
| VLU-612B | 150x300 | 150 | 300 | 245 | | | | | | 430 | | | | |
| VLU-618B | 150x450 | 150 | 450 | 414 | | | | | | 565 | | | | |

Rotary Fine Pole Permanent Magnetic Plate

550 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 | r1 | r2 | G | h1 | | | | h2 |
| VLU-407BF | 100X175 | 100 | 175 | 125 | 78 | 2.5 (1+1.5) | 293 | 100 | 50 | 25 | 16 | 103 | 50 | 145 | 19 | 2015-090 |
| VLU-510BF | 125X250 | 125 | 250 | 200 | | | 368 | | | | | | | | 27 | 2015-091 |
| VLU-612BF | 150X300 | 150 | 300 | 246 | | | 418 | | | | | | | | 31 | 2015-092 |
| VLU-614BF | 150X350 | 150 | 350 | 296 | | | 468 | | | | | | | | 37 | 2015-093 |
| VLU-618BF | 150X450 | 150 | 450 | 396 | | | 568 | | | | | | | | 43 | 2015-094 |

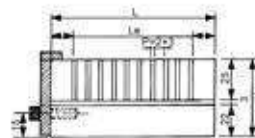
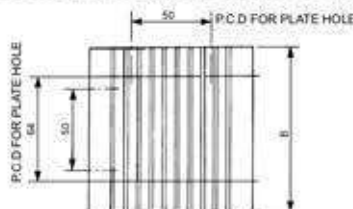
Hi-Power Mini Type Permanent Magnetic Plate

2200 Gauss

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.



NO ON/OFF SWITCH

Unit:mm

| ORDER NO. | DIMENSION | CHUCKING SIZE | | | POLE PITCH P | HEIGHT H | TESTING BLOCK | WEIGHT (kgs) | CODE NO. |
|-----------|-----------|---------------|-----|-----|--------------|----------|---|--------------|----------|
| | | B | L | Le | | | | | |
| VG-404H | 100X100 | 100 | 100 | 72 | 5(2+3) | 50 | □ 50x25t TEST BLOCK(TUNGSTEN) 210N(21kgf) | 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 VERTEX®

650 GAUSS

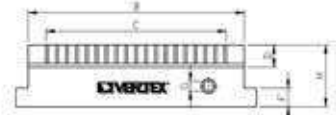
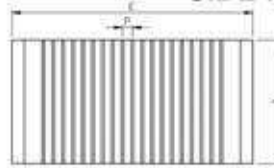
مگنت مکانیکی

SIDE MAGNETIC FORCE 18KGF

PLATE CENTER 26 KGF



TESTING BLOCK
□25X25X20mm
BLOCK (TUNGSTEN)



(2+6)
Suit for work piece thickness $\geq 3\text{mm}$ length $\geq 25\text{mm}$
Mag. force : 650 GS

Good for workpiece bigger in length & width

- Permanent magnetic for ce.
- Well operation, specially treated, nondeformation and high precision.

Unit:mm

| ORDER NO. | SIZE | CHUCKING SIZE | | | | POLE PITCH P | CHUCK MOUNTING FACE | | | SWITCH TYPE | HEIGHT H | WEIGHT KGS | CODE NO. |
|-----------|---------|---------------|-----|-----|----|-----------------|---------------------|------|----------------------------------|-------------|----------|------------|----------|
| | | A | B | C | D | | G | E | F | | | | |
| VG-407 | 100x175 | 100 | 175 | 146 | 20 | 8(2+6) | 8 | 15 | 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-824 | 200x600 | | 600 | 556 | | | | | | | 620 | 2015-118 | |
| 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

600 GAUSS

SIDE MAGNETIC FORCE 19KGF

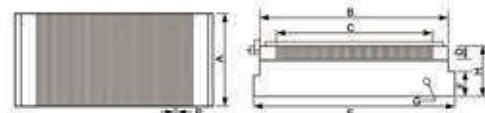
PLATE CENTER 28 KGF



TESTING BLOCK
□25X25X20mm
BLOCK (TUNGSTEN)

(2+6)
Suit for work piece thickness $\geq 3\text{mm}$ length $\geq 25\text{mm}$
Mag. force : 600 GS

Good for workpiece bigger in length & width

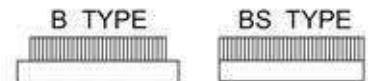


APPLICATION

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



Fine Pole Magnetic Plate



مگنت گرد



SIDE MAGNETIC FORCE 21KGF
PLATE CENTER 30 KGF
550 GAUSS

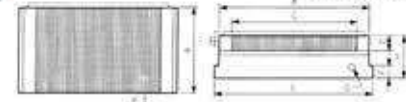
A TYPE



(1+1.5)

Suit for work piece thickness $\leq 2\text{mm}$, length $\geq 25\text{mm}$
Mag. force : 550 GS.

S TYPE



A TYPE

S TYPE



Good for workpiece smaller in length & width

TESTING BLOCK
□25X25X20mm
BLOCK (TUNGSTEN)

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 lightly.

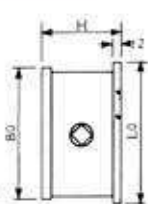
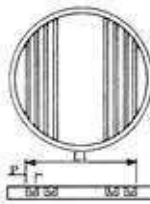
The chuck surface has a wider effective magnetic area than other chuck of similar type.

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 | | | 20 | 125 | 250 | | 15 | 13.1 | 2015-142 |



Round Type Magnetic Plate



ORDER NO. VGD TYPE

Magnetic field intensity:

Higher than 450 gauss

APPLICATION

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

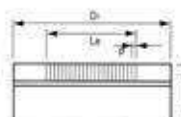
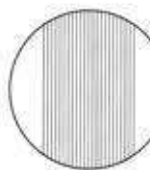
Unit:mm

| 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 |



Fine Pole Round Type Magnetic Plate

PLATE SIDE 21KGF
PLATE CENTER 30 KGF



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).

550 GAUSS

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 |

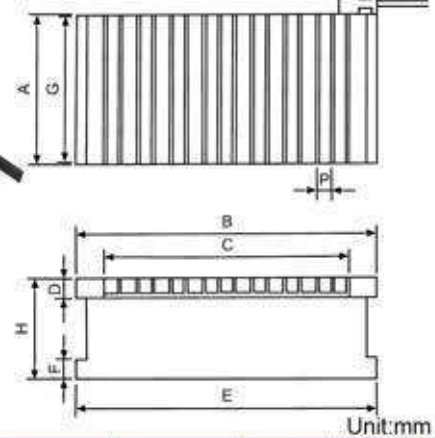


Standard Pole Electro Magnetic Chuck



450 GAUSS

مگنت برقی



Unit:mm

APPLICATION

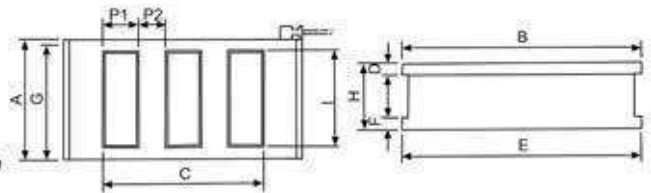
Most suitable for grinding operation, of standard electromagnetic chuck.

| ORDER NO. | DIMENSION | CHUCKING SIZE | | | | POLE PITCH | | CHUCK MOUNTING FACE | | | | VOLTAGE | CURRENT | WEIGHT (kg) | CODE NO. |
|------------|-----------|---------------|------|-----|----|------------|-----|---------------------|----|----|--------|---------|---------|-------------|----------|
| | | A | B | C | D | P | 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 |



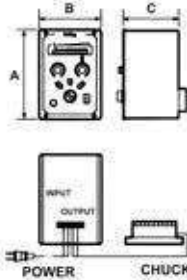
MAGNETIC CHUCK CURRENT ADJUSTER

(For Rectify & Demagnetize)

ترانس مگنت

ORDER NO. VCC-705(5A)

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

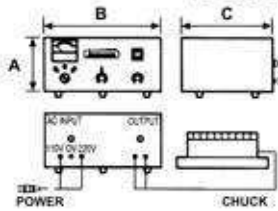


FEATURES

- 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

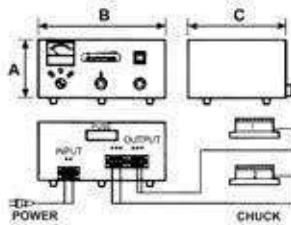
VCC-815 (15A) FOR VEA-2040~VEA2460 / VLZ-2060 / VEM-50100A / VEM-50100Z



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

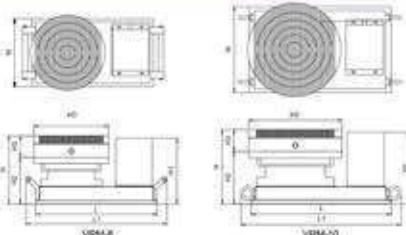
- Suitable for super powerful type of big electric magnetic chucks and could control 2 chucks at the same time.
- With current capacity of 20A; demagnetizing time is 8-15 seconds.
- Precisely adjust the magnetic force of electric magnetic chucks and indicate LED voltage and current.
- Built-in fan for 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 rotary grinding.
- The precision is within 0.002 mm. 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 | 370 | 176 | 180 | 177 | 122 | 58 | 200 | 220V | 60kg | 8001-047 |
| VRM-10 | 376 | 422 | 218 | 190 | 183 | 132 | 58 | 250 | 220V | 80kg | 8001-048 |



Magnetic Transisting Block



وی بلوک مگنتی

VCP-1



VCP-3



VCP-2

- VCP-1 Chuck Parallels
100x50x25 mm
3¹⁵/₁₆"x2"x1" Matched pair.
- VCP-2 Chuck Blocks
49.5x58x45.5 mm
1³¹/₃₂"x2⁵/₁₆"x1¹³/₁₆" Matched pair.
- VCP-3 Chuck Block
109x58x46 mm
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:4.2 kgs



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 | | 49.5x58x45.5 | VCP-2 |



Magnetic Adjustable Link

ORDER NO.VCP-5 CODE NO.2015-420

WEIGHT:0.8 kg

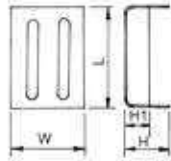


- Each block 2"x1"x1".Length overall: 4¹/₈". width over all 2¹/₈".
- For Holding and welding.
- Magnetic blocks can be set at any angle by adjustment and locking of the wing nut. When used in multiples, a number of sheets can be held in complicated arrangement.
- Compact in size for holding work in confined spaces.



Magnetic Steel Sheet Separator

براده جمع کن



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 useful for chips separation on the small conveyor belt.

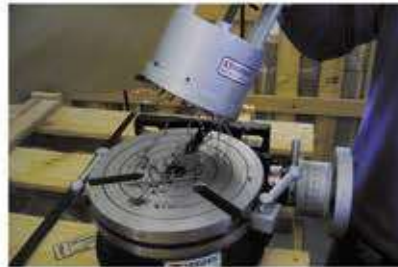


Unit:mm

| 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.

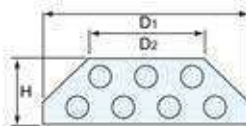
| ORDER NO. | Dimension | Holding Mass | Weight kgs | CODE NO. |
|-----------|-----------|--------------|------------|----------|
| VCP-15 | ø112x178H | 0.9 | 1.9 | 2015-440 |



Magnetic Separating Bar Unit



VMS-9B



VMS-7B

VMS-7B

BAR TUBE

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. | D1 | D2 | H | BAR TUBE | WEIGHT KGS | CODE NO. |
|-----------|-----|-----|----|-----------|------------|----------|
| VMS-7B | 175 | 112 | 75 | ø22.2x180 | 2.4 | 2015-450 |
| VMS-9B | 218 | 156 | 75 | ø22.2x230 | 3.8 | 2015-451 |



Permanent-Electro Magnetic Chuck VERTEX®

Suitable for Milling

Max. Power 1000 kva / 100 cm²

مگنت برقی

NEW



5 SIDES MACHINING

CONTROLLER TYPE:

- ※ C1 for VPE-2540, 2560, 2580, 3030, 3040, 3060, 4040
44x40x33cm WEIGHT Kgs: 11Kgs
- ※ C2 for VPE-25100, 3080, 3090, 4060, 4080, 5060
44x40x33cm WEIGHT Kgs: 11Kgs
- ※ C4 for VPE-40100, 5080, 50100, 60100
52x40x40cm WEIGHT Kgs: 12Kgs



SETS CONTROLLER INCLUDED

optional:



VSB- 49X48X30 mm
SPRING BLOCK



VTJ- 50X50X32.5 mm
MAGNETIC TRANSISTING
SOFT JAW

| ORDER NO. | ACCESSORIES | SIZE | WEIGHT KGS | CODE NO. |
|-----------|-------------------------------|---------------|------------|----------|
| VSB- | SPRING BLOCK | 49x48x30 mm | 0.5 | 2033-450 |
| VTJ- | MAGNETIC TRANSISTING SOFT JAW | 50x50x32.5 mm | 0.59 | 2033-451 |

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.

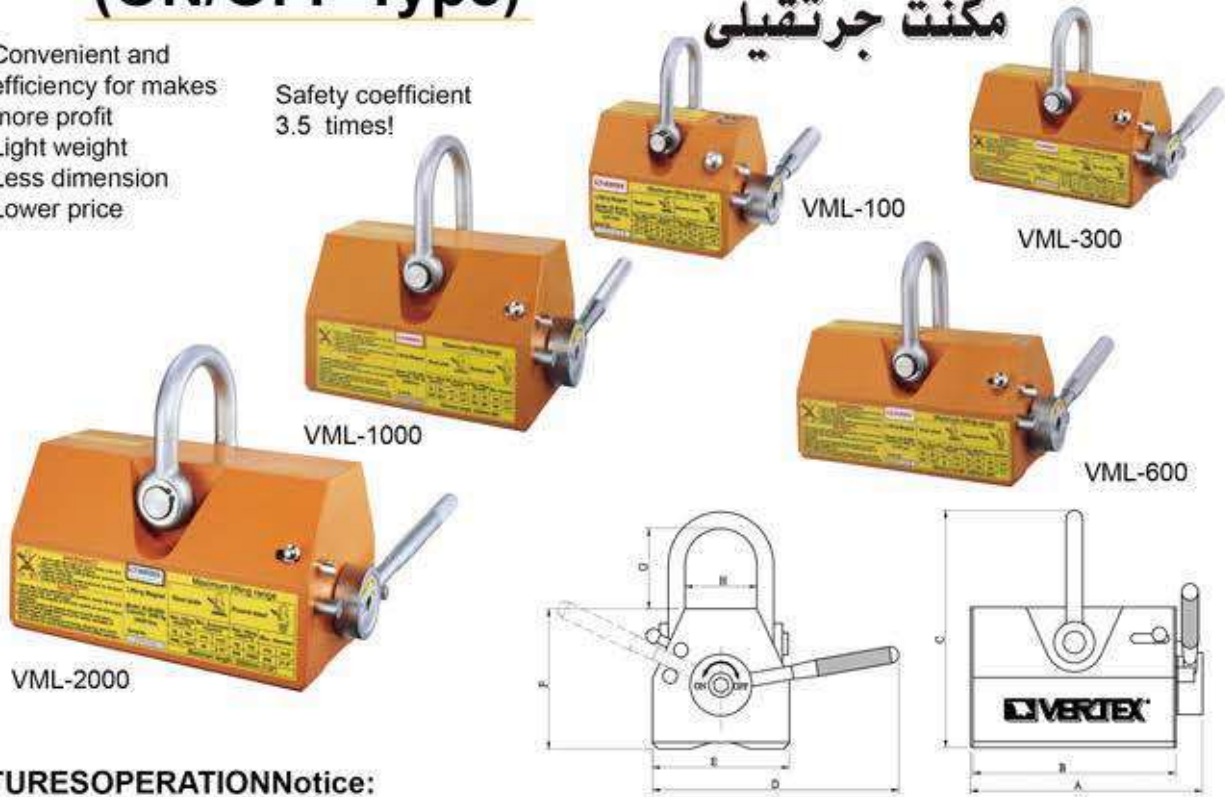


Permanent Magnetic Lifter (ON/OFF Type) VERTEX®

مگنت جرثقیلی

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

Notice:

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

- Never operate over human's head.

ON



OFF



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 | kg lbs | | |
| 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 |

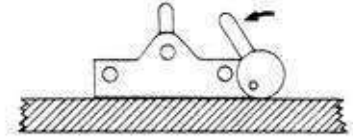


FEATURES

- 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.

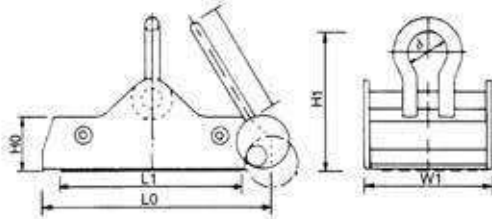
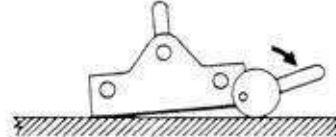
LOADING

- 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.



- Never operate over human's head.

| 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 | 65 | 130 | 50 | 135 | 46.8 | 2018-041 |

Magnetic Holder

HANDLE TYPE



VML-80



VML-140

FEATURES

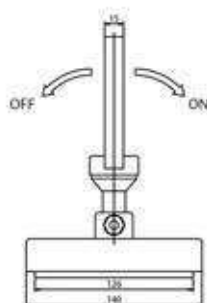
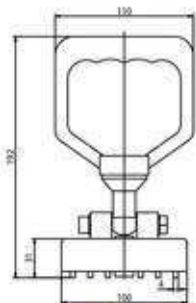
- Work is held and released very smoothly.
- Most suitable to move materials or semi-finished products such as black steel plate, flat iron and other materials etc.

HOLDING POWER

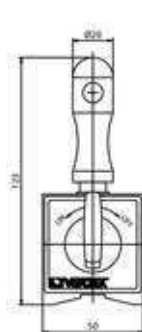
It depends on the attractive face, quality and thickness of material and clearance between the material and magnet.

MAXIMUM HOLDING POWER

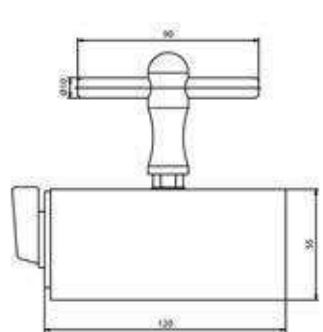
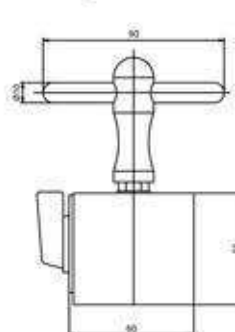
Workpiece must be thick enough and the surface must be free of dust. magnetic attraction is best and with low carbon-soft steels.



VML-150



VML-80



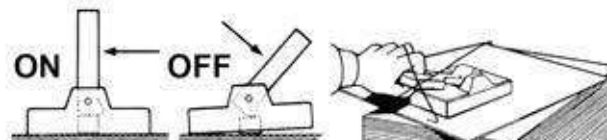
VML-140

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-130 | 130kgf | 120 | 50 | 55 | 1.9 | 2018-053 |
| VML-150 | 150kgf | 140 | 100 | 192 | 2.5 | 2018-056 |





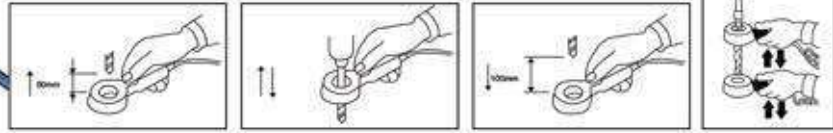
Demagnetizer



دی مگنت



- Suit for drill, end mill, hard ware, cutting tool...etc.
- Handy type, it can also use the cutting tool.
- ※ Guaranteed for 3 months.



| ORDER NO. | INPUT VOLTAGE | 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
 ※ Guaranteed for 3 months.
 ※ Built-in over-heat safety Stop

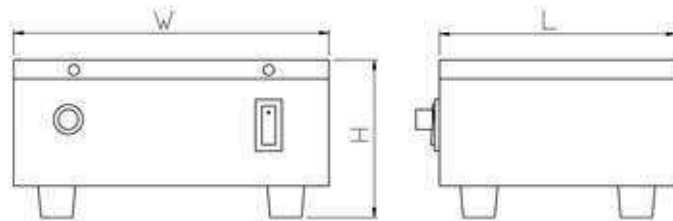
- Suit for molding.
- Work perfectly in the narrow place.
- No need to remove the workpiece.



| ORDER NO. | INPUT VOLTAGE (SINGLE PHASE) | CURRENT | ※ USING TIME | DIMENSION | | | WEIGHT KGS | CODE NO. |
|-----------|------------------------------|---------|--|-----------|----|----|------------|----------|
| | | | | L | M | H | | |
| VDM-50 | 110V/220V/1PH | 1.2A | Demagnetize 1 minute waiting 4 minutes | 345 | 35 | 25 | 1.2 | 2019-031 |

Demagnetizer

Demagnetizer one way only



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. Rest 10 Min Per 3 hrs.
- With the design of double coils inside to avoid heat release.
- ※ Guaranteed for 3 months.
- ※ If operate ←→ will cause item magnetized

DELUXE TYPE

Unit:mm

| 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 |



Demagnetizer

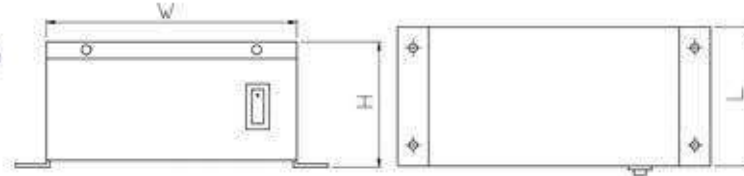
دی مگنت



VDM-8, 11

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.
- ※ Guaranteed for 3 months.



Unit:mm

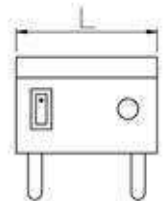
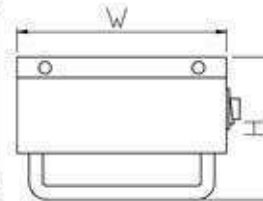
| ORDER NO. | INPUT VOLTAGE | CAPACITY | WORKING SURFACE | HEIGHT | WEIGHT (KGS) | DUTY CYCLE | CODE NO. |
|-----------|------------------|----------|-----------------|--------|--------------|------------|----------|
| VDM-8 | AC- 110V 220V | 210VA | 160X110 | 100 | 4.5 | 50% | 2019-011 |
| VDM-11 | 110V 220V | 550VA | 200X280 | 130 | 16 | 100% | 2019-021 |



Mini Type Demagnetizer

FOR HANDY AND CAN NOT BE MOVED OBJECT

- Suitable for large type workpiece.
- ※ Guaranteed for 3 months.



Unit:mm

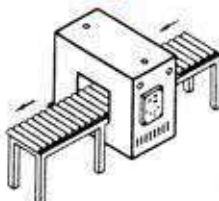
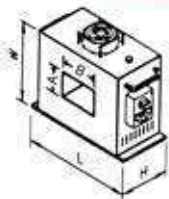
| ORDER NO. | INPUT VOLTAGE | CAPACITY | WORKING SURFACE | HEIGHT | WEIGHT (KGS) | DUTY CYCLE | CODE NO. |
|-----------|-----------------|----------|-----------------|--------|--------------|------------|----------|
| VDM-9 | AC-110V 220V | 110VA | 123X83 | 83 | 1.8 | 90% | 2019-020 |



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.
- ※ Guaranteed for 3 months.



| 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) | 3520 VA | 370 | 370 | 200 | 100 | 150 | 33 | 100% | 2019-025 |
| VDM-250 | | 4840 VA | 470 | 370 | 200 | 150 | 250 | | | 52 |
| VDM-450 | AC 220/380V (3 phase) | 4400 VA | 700 | 500 | 200 | 250 | 450 | 80 | | 2019-027 |



Chip Collector Mini Handy Type

براده جمع کن

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.
- ※ Need normal work temp

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 | 120x70mm | 0.7 | 0.4' | 700 mm | 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 | kgf | CUFT | LENGTH | WEIGHT KGS | TOTAL WIDTH | CODE NO. |
|-----------|---------|--------------|-----|-------|------------|------------|-------------|----------|
| VCC-19 | In Bulk | 0.85 | 83 | 1.15' | 720~1035mm | 1.5 | 377 mm | 2019-043 |



Chip Collector With Flexible Arm

Flexible Magnetic Pick-Up Tool

WEIGHT:0.4kg



| ORDER NO. | VCC-20 |
|--------------|---------------------------|
| PACKING | Tied On Card |
| HOLDING MASS | 0.11 |
| CUFT | 0.04' |
| LENGTH | 533 mm |
| CAPACITY | 1.2 lbs / 0.54kgs / 50kgf |
| CODE NO. | 2019-044 |



Chip Collector With LED

Lighted Flexible Magnetic Pick-Up Tool

WEIGHT:0.2kg



| ORDER NO. | VCC-21 |
|--------------|---------------------------|
| PACKING | Tied On Card |
| HOLDING MASS | 0.08 |
| CUFT | 0.04' |
| LENGTH | 533 mm |
| CAPACITY | 0.7 lbs / 0.31kgs / 30kgf |
| CODE NO. | 2019-045 |

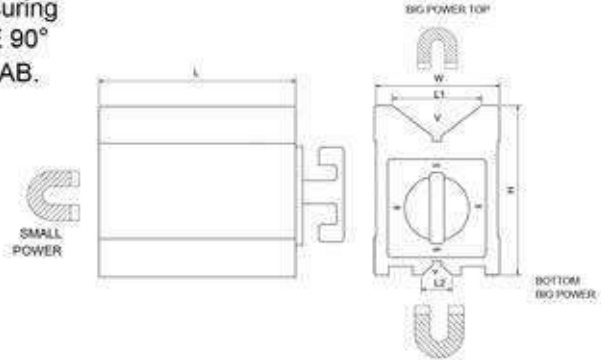
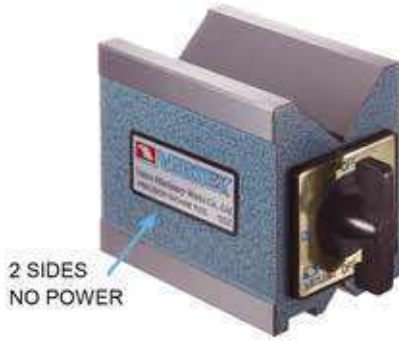
With 2pc 1.5V batteries



Magnetic V Block وی بلوک مگنتی VERTEX®

1 PCS

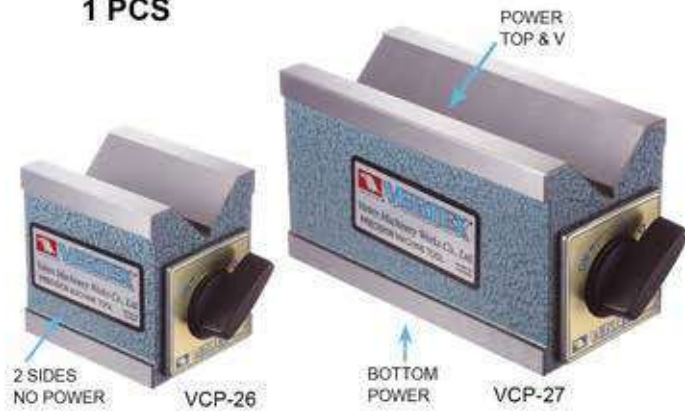
- For round / square workpiece
- For checking on surface plate during the production.
- For measuring
- V ANGLE 90°
- ※ Not for LAB.



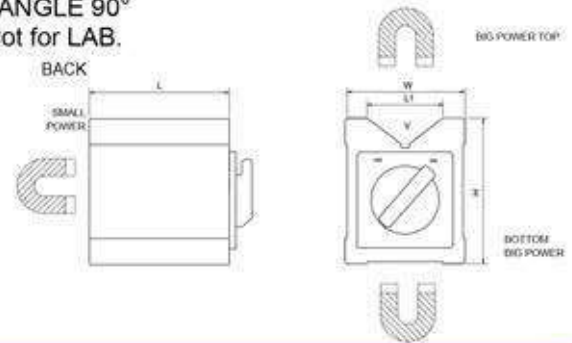
| ORDER NO. | Magnetic Power(pull) | V | v | Dimension | | | | | Wt. kgs | CODE NO. |
|-----------|----------------------|--------|--------|---------------|-------------|-------------|-------------|-------------|---------|----------|
| | | | | H | W | L | L1 | L2 | | |
| VCP-25 | 70kgf | ø7~ø60 | ø7~ø25 | 95.3 3.75" | 70 2.76" | 101.6 4" | 45 1.97" | 18 0.75" | 3.9 | 2015-501 |

Magnetic V Block

1 PCS



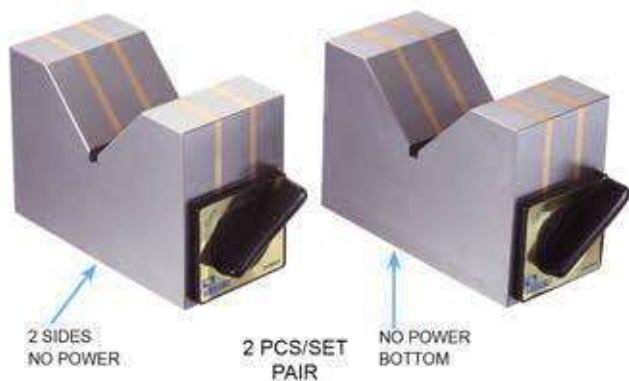
- For round / square workpiece
- For checking on surface plate during the production.
- For measuring
- V ANGLE 90°
- ※ Not for LAB.



| ORDER NO. | Magnetic Power(pull) | V | Dimension | | | | Wt. kgs | CODE NO. |
|-----------|----------------------|--------|-------------|-------------|--------------|------------|---------|----------|
| | | | H | W | L | L1 | | |
| VCP-26 | 50kgf | ø8~ø50 | 73 2.87" | 60 2.13" | 70 2.76" | 37 1.5" | 1.8 | 2015-510 |
| VCP-27 | 70kgf | ø8~ø50 | 73 2.87" | 60 2.36" | 125 4.29" | 38 1.5" | 3.3 | 2015-511 |

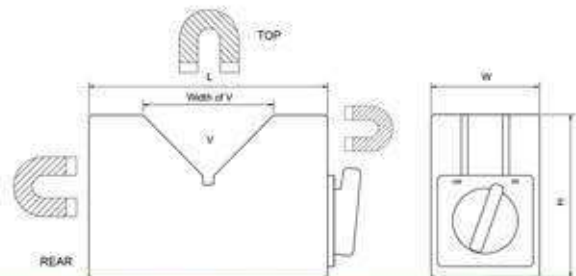
Magnetic V Block

PAIR



Magnetic V-Block

- Two pieces finished to the same dimension and accuracy are used together as a set.
- For round / square workpiece
- For checking on surface plate during the production.
- V ANGLE 90°
- ※ Not for LAB.



| ORDER NO. | Magnetic Power(pull) | V | Dimension | | | Width of V | Wt. kgs | CODE NO. |
|-----------|----------------------|---------|-------------|-------------|--------------|-------------|---------|----------|
| | | | H | W | L | | | |
| VCP-29 | 17kgf | ø8~ø80 | 74 2.91" | 48 1.77" | 110 4.33" | 60 2.36" | 4.9 | 2015-521 |
| VCP-30 | 22kgf | ø8~ø120 | 100 | 50 | 150 | 90 | 8.0 | 2015-522 |

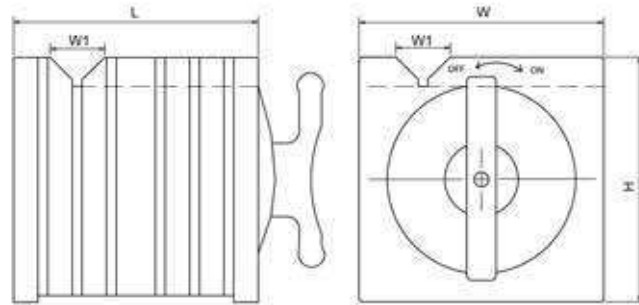


Magnetic Square Block



FOR MEASURING

بلوک مغنتی

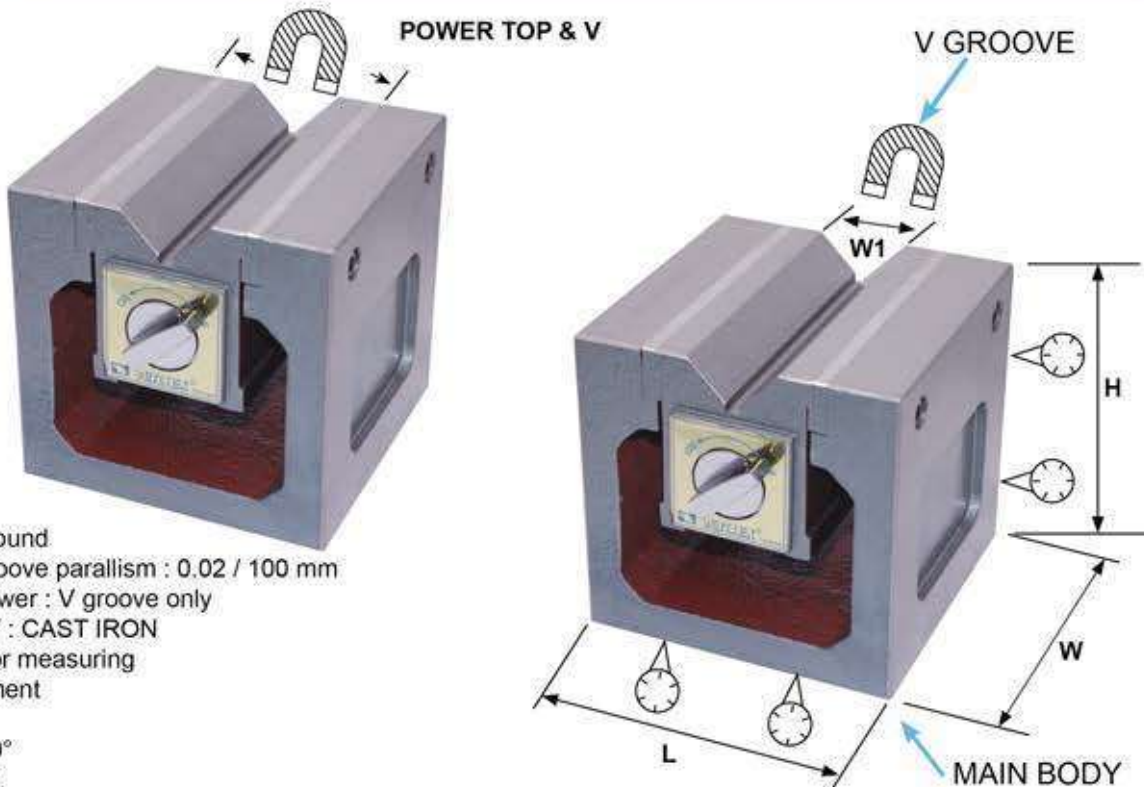


- The V-Blocks and Parallels transfer the magnetism from permanent magnetic chucks.
- The steel used in all V-Blocks and Parallels is selected for the highest magnetic transfer and is cast integrally with aluminum.
- For measuring
- V ANGLE 90°
- ※ Not for LAB

| ORDER NO. | Mag. Power of V groove | Mag. Power of base | V | H | W | L | W1 | Wt. kgs | CODE NO. |
|-----------|------------------------|--------------------|--------|--------------|--------------|--------------|-------------|---------|----------|
| VCP-31 | 25kgf | 50kgf | ø7~ø22 | 100 3.94" | 100 3.94" | 100 3.94" | 23 1.02" | 6.5 | 2015-530 |
| VCP-32 | 50kgf | 140kgf | ø7~ø29 | 150 5.91" | 150 5.91" | 150 5.91" | 29 1.26" | 20.3 | 2015-531 |

Magnetic Square Holder

NEW



- Precision ground
- Base & V groove parallelism : 0.02 / 100 mm
- Magnetic power : V groove only
- MAIN BODY : CAST IRON
- Light duty, for measuring
- Easy movement
- Multi - type
- V ANGLE 90°
- ※ Not for LAB.

| ORDER NO. | Mag. Power of V groove | V | H | W | L | W1 | Wt. kgs | CODE NO. |
|-----------|------------------------|--------|-----|-----|-----|----|---------|----------|
| VCP-40 | 70kgf | ø8~ø50 | 125 | 125 | 125 | 37 | 8.54 | 2015-540 |



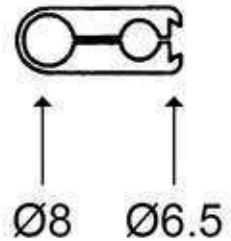
FIXED ARM TYPE VMB-B,01,02 THE DIAL CLAMP HOLE Ø6.5 & Ø8



※knob may vary & shape & color



- If you would like to turn around the ARM of VMB series, don't rotate the ARM directly, because the thread in the base will be disintegrated, please loose the knob first (in the middle of ARM), then the ARM will be rotated, thanks! After you set the position, Fix the Knob.
- Before you set the new position, you must loose the knob. Hold at the connection between Rod & Base to prevent thread breaking.



| 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-03 | 115X50X55 | 130KGS | Ø20X310 | Ø14X200 | 3.9 | 2015-607 |
| VMB-181 | 73x50x55 | 100KGS | Ø30X175.5 | Ø21x137 | 1.9 | 2015-609A |
| VMB-185 | 73x50x55 | 100KGS | Ø31X124.5 | Ø28x113 | 2.0 | 2015-609B |



Magnetic Tools FOR DIAL GAUGE, INDICATORS

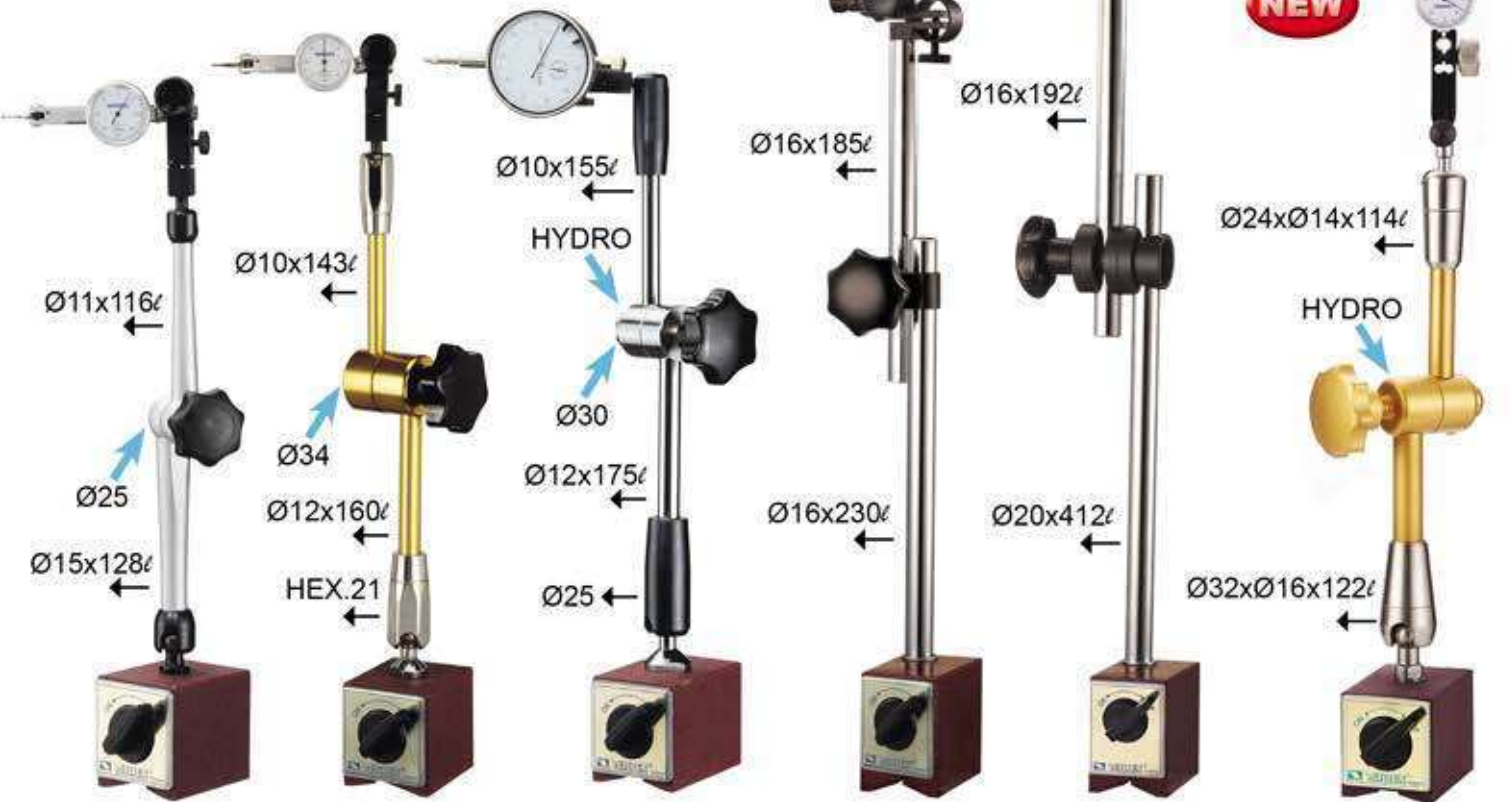


UNIVERSAL ARM TYPE
THE DIAL CLAMP HOLE Ø6.5 & Ø8

※knob may vary & shape & color

پایه ساعت

WITHOUT DIAL INDICATOR



ORDER NO.
VMB-70
DELUXE UNIVERSAL
MAGNETIC BASE/
100kgs

ORDER NO.
VMB-106
MECHANICAL ARM
MAGNETIC BASE/
100kgs

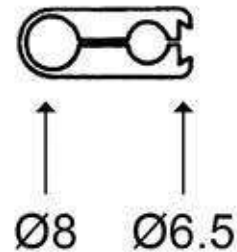
ORDER NO.
VMB-106H
HYDRAULIC ARM
MAGNETIC BASE/
100kgs

ORDER NO.
VMB-160

ORDER NO.
VMB-180

ORDER NO.
VMB-182H
HYDRAULIC ARM
MAGNETIC BASE/
100kgs

- If you would like to turn around the ARM of VMB series, don't rotate the ARM directly, because the thread in the base will be disintegrated, please loose the knob first (in the middle of ARM), then the ARM will be rotated, thanks! After you set the position, Fix the Knob.
- Before you set the new position, you must loose the knob.
Hold at the connection between Rod & Base to prevent thread breaking.
- Hold the Mag. Base while moving & lifting



| 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-70 | 73X50X55 | 100KGS | Ø15X128 | Ø11X116 | 1.7 | 2015-604 |
| VMB-106 | 73X50X55 | 100KGS | Ø12X160 | Ø10X143 | 1.9 | 2015-605 |
| VMB-106H | 75X50X55 | 100KGS | Ø12X175 | Ø10X155 | 2.2 | 2015-606 |
| VMB-160 | 70x46x60 | 100KGS | Ø16x230 | Ø16x185 | 2.1 | 2015-608 |
| VMB-180 | 75x60x80 | 100KGS | Ø20x412 | Ø16x192 | 3.8 | 2015-609 |



Magnetic Tools



MICRO ADJUSTMENT

W/O MICRO ADJUSTMENT

پایه ساعت



ORDER NO. VMF-112
MINI MAGNETIC
BASE

ORDER NO. VMF-113
MINI MAGNETIC
BASE

VMF-102A

VMF-102B

ORDER NO. VMF-102A/B
MINI DELUXE UNIVERSAL
MAGNETIC BASE
SUITABLE FOR EDM USING.



ORDER NO. VH-70
MINI MAGNETIC
BASE
ROUND BASE OR
SQUARE BASE



ORDER NO. VMS-1/4
ORDER NO. VMS-3/8
STEEL HOSE WITH
NOZZLE

※knob may vary
& shape & color

| 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 | 30KGS | Ø20 X 70 | Ø15 X 65 | 0.6 | 2015-619 |
| VMF-113 | 34.5X30X35 | 30KGS | 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 | 30KGS | Ø20 X 70 | Ø20 X 65 | 0.57 | 2015-621A |
| VMF-102B | Ø31X31H | 30KGS | 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 |



چراغ مگنت دار



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

※ knob may vary
& shape & color

- If you would like to turn around the ARM of VMB series, don't rotate the ARM directly, because the thread in the base will be disintegrated, please loose the knob first (in the middle of ARM), then the ARM will be rotated, thanks!
After you set the position, Fix the Knob.
- Before you set the new position, you must loose the knob.
Hold at the connection between Rod & Base to prevent thread breaking.
- Hold the Mag. Base while moving & lifting

| ORDER NO. | BASE SIZE LXWXH(MM) | HOLDING POWER | MAIN ROD O.D X L | WEIGHT (KGS) | CODE NO. |
|-----------|------------------------|------------------|---------------------|-----------------|----------|
| VMB-06 | 60X50X55 | 80KGS | Ø16X208 | 1.6 | 2015-610 |
| VML-A | 60X50X55 | 80KGS | Ø20X200 | 1.5 | 2015-611 |
| VML-B | 60X50X55 | 80KGS | Ø26X200 | 1.5 | 2015-612 |
| VML-C | 60X50X55 | 80KGS | Ø20X460 | 2.2 | 2015-616 |

پایه مگنت



ORDER NO. VMB-00
MAGNETIC BASE ONLY
M8X1.25p,80kgs



ORDER NO. VMB-09
MAGNETIC BASE ONLY
M8X1.25p,30kgs



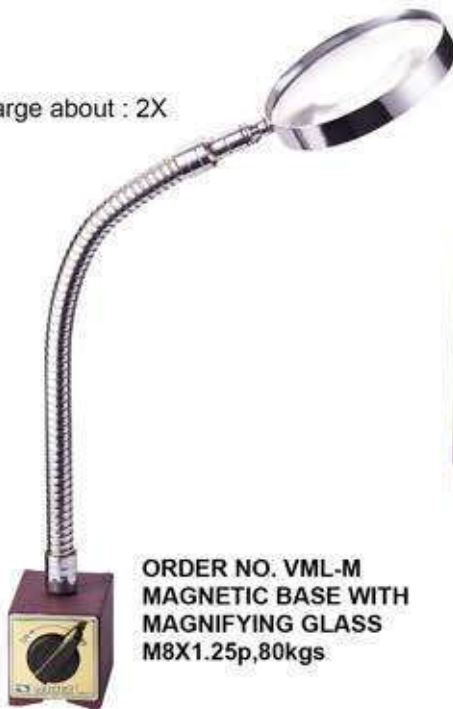
ORDER NO. VMB-10
MAGNETIC BASE ONLY
M8X1.25p,100kgs



NEW
without dial gauge

ORDER NO. VTB-120
TESTER ARM BASE
please see page B81

Enlarge about : 2X



ORDER NO. VML-M
MAGNETIC BASE WITH
MAGNIFYING GLASS
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
Page B65

- If you would like to turn around the ARM of VMB series, don't rotate the ARM directly, because the thread in the base will be disintegrated, please loose the knob first (in the middle of ARM), then the ARM will be rotated, thanks!

After you set the position, Fix the Knob.

- Before you set the new position, you must loose the knob.

Hold at the connection between Rod & Base to prevent thread breaking.

- Hold the Mag. Base while moving & lifting

※knob may vary
& shape & color

| ORDER NO. | BASE SIZE LXWXH(MM) | HOLDING POWER | MAIN ROD O.D X L | WEIGHT (KGS) | CODE NO. |
|-----------|------------------------|------------------|---------------------|-----------------|----------|
| VMB-00 | 60X50X55 | 80KGS | | 1.1 | 2015-613 |
| VMB-09 | 34.5X30X35 | 30KGS | | 0.2 | 2015-646 |
| VMB-10 | 73X50X55 | 100KGS | | 1.25 | 2015-645 |
| VMB-11 | 117X50X55 | 140KGS | | 2.1 | 2015-614 |
| VMB-12 | 60X50X55 | 80KGS | | 1.1 | 2015-615 |
| VML-M | 60X50X55 | 80KGS | Ø15X325 | 1.7 | 2015-617 |
| VTB-120 | Ø120 | | Ø25 X 125 | 2.65 | 2022-015 |



Magnetic Tools



شیلنگ اب صابون پایه مغنت



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

※knob may vary
& shape & color

● Hold the Mag. Base while moving & lifting

| 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-54 | 60X50X55 | 80KGS | Ø16 X 330 | 2PCS.HOSE | 1.4 | 2015-622 |
| VMH-62 | 60X50X55 | 80KGS | Ø16 X 330 | 3PCS.HOSE | 1.5 | 2015-623 |
| VMH-63 | 60X50X55 | 80KGS | Ø11 X 330 | 1PCS.HOSE | 1.6 | 2015-642 |
| VMH-64 | 60X50X55 | 80KGS | Ø11 X 330 | 2PCS.HOSE | 2 | 2015-643 |
| VMH-65 | 60X50X55 | 80KGS | Ø11 X 330 | 3PCS.HOSE | 2.2 | 2015-644 |

Thin Round Magnet



لیفت مگنت

NEW



VMH-D13, D30



VMH-T66, T80

- For Basic light Mag. force
- To combine with other tool
- To remove light weight iron object.
- I.D. Ø M6.6 / M8
- Can serve as hanger.



Unit : mm

| ORDER NO. | HOLDING POWER | ØD | THICKNESS | WEIGHT (kg) | CODE NO. |
|-----------|---------------|----|-----------|-------------|----------|
| VMH-D13 | 13 kgf | 66 | 10.5 | 0.16 | 2015-711 |
| VMH-D30 | 30 kgf | 80 | 13.0 | 0.34 | 2015-712 |
| VMH-T66 | 13 kgf | 66 | 10.5 | 0.16 | 2015-716 |

Round Magnet Holder

NEW



VMD-R30



VMD-R50



VMD-S14



VMD-S20

- For Basic light Mag. force
- To combine with other tool
- To remove light weight iron object.
- Support for positioning
- Magnetic force only work on the bottom.

※Every magnet need to work under 70°C

| ORDER NO. | HOLDING POWER | DIMENSIONS | TAPPER HOLE | WEIGHT (KGS) | CODE NO. |
|-----------|---------------|--------------|-------------|--------------|----------|
| VMD-R18 | 18 kgf | Ø 30 x 25 | M6 | 0.12 | 2015-721 |
| VMD-R30 | 30 kgf | Ø 40 x 30 | M8 | 0.26 | 2015-722 |
| VMD-R50 | 50 kgf | Ø 50 x 40 | M8 | 0.54 | 2015-723 |
| VMD-S14 | 14 kgf | 26 x 26 x 25 | - | 0.12 | 2015-724 |
| VMD-S20 | 20 kgf | 26 x 60 x 25 | M6 | 0.28 | 2015-725 |



Magnetic Tapper



قلاویز زن دستی

NEW



※knob may vary
& shape & color

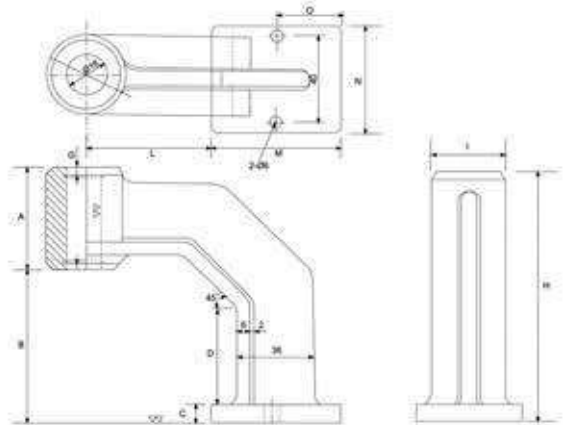
Cost higher



Example.



- MAX. stroke 60 mm
- Suit for large workpiece
- TAP thread capacity M3-M12
- Magnetic force 80 kgf
- Horizontal / Vertical
- Portable
- Great for machine case & thin plate tapping job.
- TAP & Iron piece not included.



Unit : mm

| ORDER NO. | A | B | C | D | H | I | L | M | N | O | WEIGHT (kgs) | CODE NO. |
|-----------|----|----|----|----|-----|----|----|----|----|----|--------------|----------|
| VTM-13 | 50 | 72 | 10 | 45 | 122 | 36 | 60 | 60 | 50 | 30 | 3.10 | 2015-731 |



Magnetic Clamp

Welder's Magnetic Ground Clamp

Heavy-duty steel housing holds a powerful magnet for fast, yet safe ground.

Ground wire will rotate 360° for easy access.

Equipped with a spring-loaded brass electrode, the magnetic ground clamps attach securely direct to work surface.



| ORDER NO. | MASS | CUFT | L x W x H | WEIGHT (kg) | CODE NO. |
|-----------|--------|-------|-------------|-------------|----------|
| VCC-30 | 10kgs | 0.07' | 70 x 52 m/m | 0.48 | 2033-220 |
| VCC-31 | 5.6kgs | 0.05' | 49 x 40 m/m | 0.12 | 2033-221 |



Magnetic Quick Clamp



L



M

| ORDER NO. | SIZE | PACKING | MASS | CUFT | DIMENSION | | | WEIGHT (kg) | CODE NO. |
|-----------|------|--------------|-------|-------|-----------|-----|----|-------------|----------|
| | | | | | L | W | H | | |
| VCC-33 | M | Sliding Card | 26kgs | 0.03' | 120 | 82 | 14 | 0.32 | 2033-223 |
| VCC-34 | L | Sliding Card | 25kgs | 0.03' | 158 | 102 | 19 | 0.68 | 2033-224 |

Multi-Function Mist Coolant System

شینگ آب صابون شیر دار

ORDER NO.VCS-500 CODE NO.2015-700
WEIGHT:0.8kg

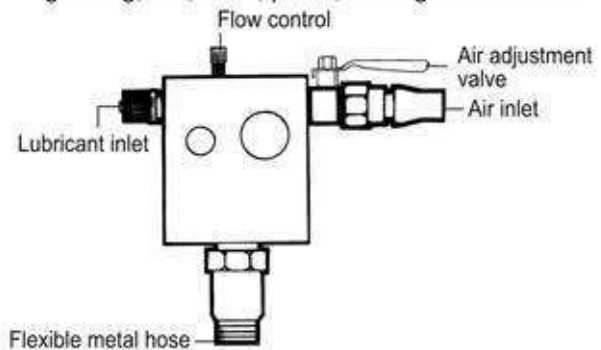


FEATURES

- 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.....

EXAMPLE



Mist Coolant With Magnetic Base

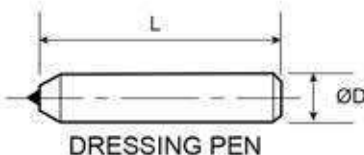
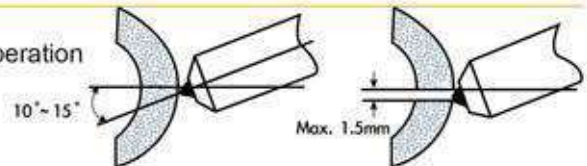


ORDER NO. VMH-71 (1 HOSE)
MAGNETIC BASE WITH
MIST COOLANT SYSTEM

| 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



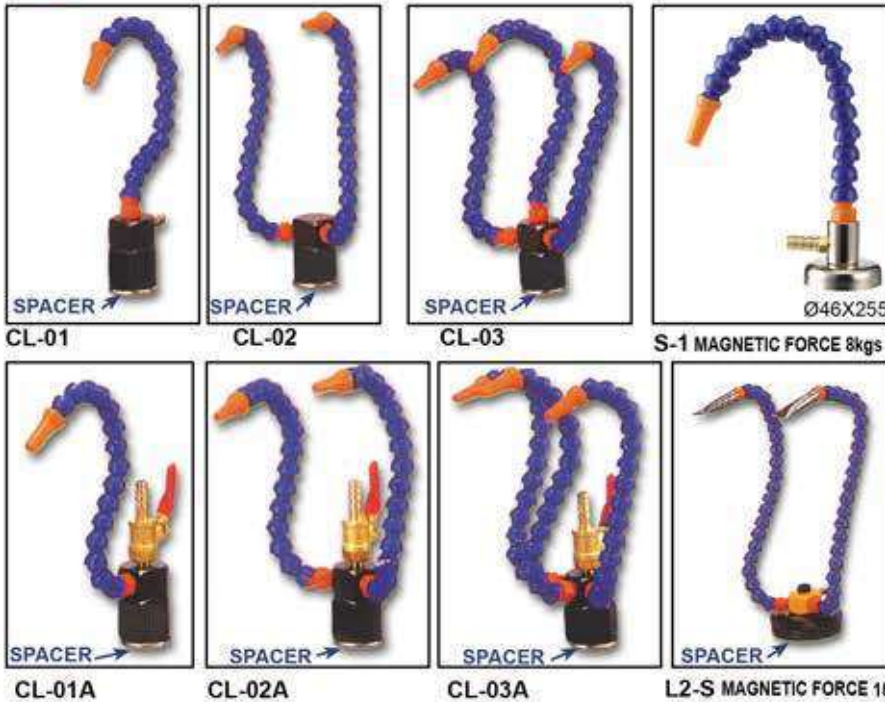
SINGLE POINT DIAMOND DRESSERS

| 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 VERTEX®

شینگ آب صابون شیر دار



- 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



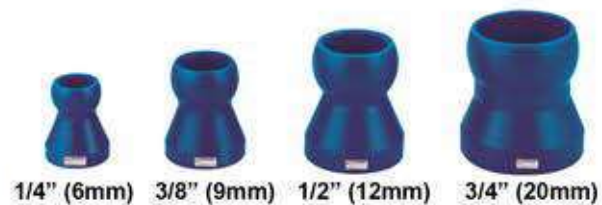
- 4 kinds of orifice inner diameter are available: 1/4", 3/8", 1/2", and 3/4".
- Adjustable Coolant Hose is highly pliable; it holds its shape well and will not spring back.
- Made of Dupont 100P material, this highly rigid yet resilient acetal (POM) is strongly resistant to oils and chemicals.
- Adjustable 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

شیلنگ آب صابون

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 NPT 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 NPT 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



3/4" VALVE & HOSE KIT

66720

44CM Length Hose Kit
Assembled with:
3/4" Male PT or NPT Valve

ORDER NO. VHK-3/4 CODE NO.2016-007





Precision Gauge Blocks



گیج بلوک



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 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 |

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 | | 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 | | 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 |



Ceramic Gauge Blocks



گیج بلوک سرامیکی



CHOICE DIFFERENT SIZE GAUGE BLOCK FOR TOTAL THE HEIGHT

HOW TO CHOOSE THE BLOCK FOR SINE BAR

| DISTANCE GAUGE BLOCK CAN GET DEGREE | SIN BAR | CENTER | SIN 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 | |

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.

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 |
| | | 1.001-1.009 | 0.001 | 9 | | | |
| VGB-112C-1 | 112 | 0.5-24.5 | 0.01 | 49 | 1 | 3.7 | 2006-190 |
| | | 25-100 | 0.05 | 49 | | | |
| VGB-103C-0 | 103 | 1.005 | - | 1 | 0 | 3.6 | 2006-091 |
| | | 1.01-1.49 | 0.01 | 49 | | | |
| VGB-103C-1 | 103 | 0.5-24.5 | 0.01 | 49 | 1 | 3.6 | 2006-191 |
| | | 25-100 | 0.5 | 49 | | | |
| VGB-87C-0 | 87 | 1.001-1.009 | 0.001 | 9 | 0 | 3 | 2006-092 |
| | | 1.01-1.49 | 0.01 | 49 | | | |
| VGB-87C-1 | 87 | 0.5-9.5 | 0.5 | 19 | 1 | 3 | 2006-192 |
| | | 10-100 | 10 | 10 | | | |
| VGB-47C-0 | 47 | 1.005 | - | 1 | 0 | 2.4 | 2006-093 |
| | | 1.01-1.09 | 0.01 | 9 | | | |
| VGB-47C-1 | 47 | 1.1-1.9 | 0.1 | 9 | 1 | 2.4 | 2006-193 |
| | | 1-24 | 1 | 24 | | | |
| | | 25-100 | 25 | 4 | | | |



Cast Iron Surface Plates



صفحه صافی چدنی



- 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 high precision work, inspection and countless other uses.

Surface Plates

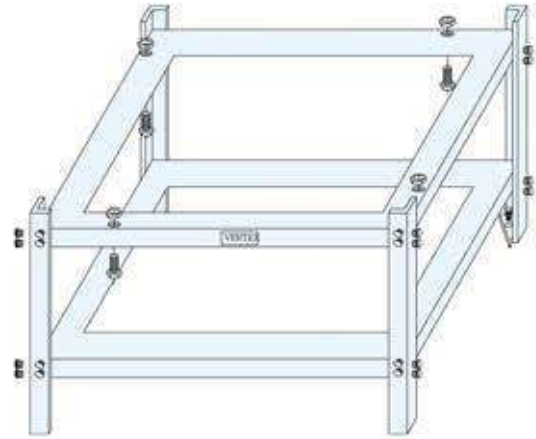
Unit:mm

| ORDER NO. | SIZE | SURFACE ACCURACY | APPROX. WEIGHT | CODE NO. |
|-----------|--------------|------------------|----------------|----------|
| | mm | | kgs | |
| 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 |

NEW



Separated Modular Design DIY Type.
Low Profile Packing
With Adjustment Screw For Leveling



Cast Iron Surface Plates Stand

| ORDER NO. | STAND SIZE | KGS | CODE NO. |
|-----------|--------------|------|-----------|
| | mm | | |
| VSD-09N | 450x600x700 | 25.6 | 2021-009N |
| VSD-10N | 600x600x700 | 28.2 | 2021-010N |
| VSD-11N | 600x900x700 | 47.8 | 2021-011N |
| VSD-12N | 900x900x700 | 54.3 | 2021-012N |
| VSD-13N | 900x1200x700 | 78.0 | 2021-013N |



Black Granite Surface Plates

صفحه صافی گرانیت



- 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.
- Surface Accuracy : 0.013~0.0065 / 100 mm

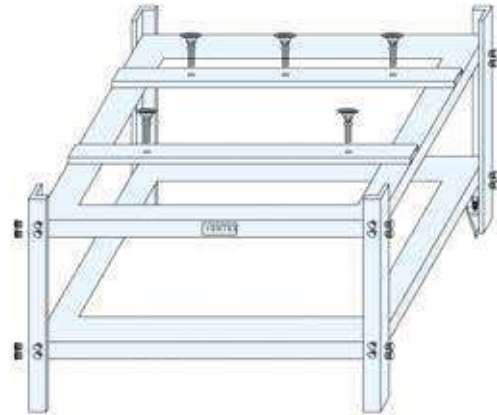
Accuracy and O-Edge Style available only in toolroom Grade A

Surface Plates

Unit:mm

| ORDER NO. | SIZE | SURFACE ACCURACY | APPROX. WEIGHT | CODE NO. |
|-----------|---------------|------------------|----------------|----------|
| | mm | mm | kgs | |
| VSG-04 | 250x300x52 | 0.0065 | 12.6 | 2021-019 |
| VSG-05 | 300x300x60 | 0.0065 | 17 | 2021-020 |
| VSG-06 | 300x450x60 | 0.0065 | 25 | 2021-021 |
| VSG-07 | 450x450x75 | 0.0065 | 46 | 2021-022 |
| VSG-09 | 450x600x100 | 0.007 | 82 | 2021-023 |
| VSG-10 | 600x600x100 | 0.009 | 109 | 2021-024 |
| VSG-11 | 600x900x110 | 0.009 | 185 | 2021-025 |
| VSG-13 | 900x1200x135 | 0.012 | 440 | 2021-027 |
| VSG-14 | 1000x1000x135 | 0.012 | 408 | 2021-028 |
| VSG-15 | 1000x1500x200 | 0.013 | 910 | 2021-029 |
| VSG-21 | 900x900x160 | 0.013 | 380 | 2021-032 |

NEW



Strong & Rigid

Separated Modular Design DIY Type.
Low Profile Packing
With Adjustment Screw For Leveling
Material : SS41

Black Granite Surface Plates Stand

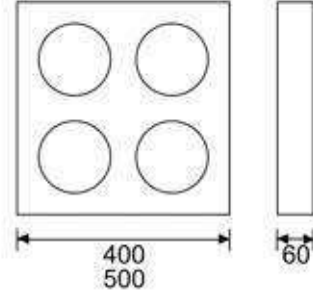
| ORDER NO. | STAND SIZE | KGS | CODE NO. |
|-----------|---------------|------|-----------|
| | mm | | |
| VSGD-09N | 450x600x700 | 32.6 | 2021-023N |
| VSGD-10N | 600x600x700 | 35.9 | 2021-024N |
| VSGD-11N | 600x900x700 | 53.7 | 2021-025N |
| VSGD-13N | 900x1200x700 | 72.8 | 2021-027N |
| VSGD-14N | 1000x1000x700 | 72.3 | 2021-028N |
| VSGD-15N | 1000x1500x700 | 83.7 | 2021-029N |
| VSGD-21N | 900x900x600 | 73.0 | 2021-032N |



Granite Square Rulers



خط کش گرانیت

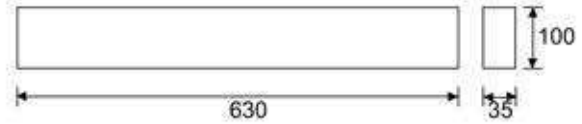


Accuracy:
SQUARENESS 0.002 / 100 mm

Unit: mm

| 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 / 100 mm

Unit: mm

| 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



Accuracy:
SQUARENESS 0.002 / 100 mm

mm

| ORDER NO. | Size | Thickness | Weight (kgs) | CODE NO. |
|-----------|---------|-----------|--------------|----------|
| VGT-300 | 300x200 | 30 | 5.7 | 2022-020 |
| VGT-400 | 400x250 | 30 | 8.4 | 2022-021 |
| VGT-600 | 600x400 | 63 | 27.5 | 2022-022 |



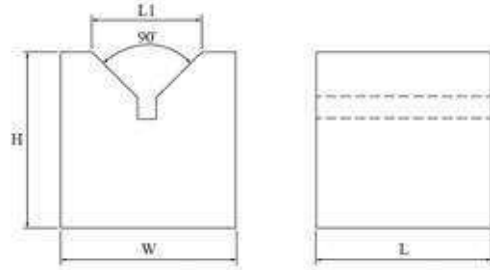
Granite V-Block



وی بلوک گرانیتی



PAIR



Accuracy:

PARALLELISM 0.005 / 100 mm. mm

| ORDER NO. | CAPACITY Ø | | DIMENSION | | | | KGS | CODE NO. |
|-----------|------------|-------|-----------|-----|-----|----|-----|----------|
| | MIN. | MAX. | H | W | L | L1 | | |
| VG-63 | Ø 4 | Ø 65 | 65 | 65 | 65 | 38 | 1.7 | 2022-030 |
| VG-100 | Ø 10 | Ø 100 | 100 | 100 | 100 | 62 | 6.3 | 2022-031 |



Horizontal Leveling Instrument



0.02 / 100 mm

- When the bubble is in the center & touch and with in 2 red line, then the surface is leveled.

| 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



0.02 / 100 mm

- When the bubble is in the center & touch and with in 2 red line, then the surface is leveled.

| ORDER NO. | DIMENSION | Weight (kgs) | CODE NO. |
|-----------|--------------|--------------|----------|
| VSL-200A | 200x200x39.5 | 4.10 | 2022-053 |
| VSL-300A | 300x300x44.6 | 8.83 | 2022-054 |



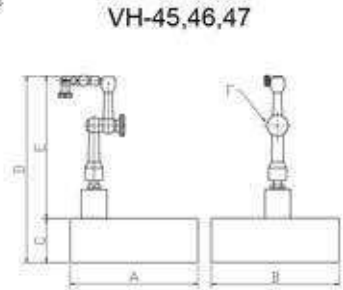
Granite Surface Stand



پایه ساعت گرانیتی



MAX. stroke 60 mm



- THE DIAL GAUGE IS OPTIONAL
- ACCURACY: 0.005/100mm

※ Gauge not included

| ORDER NO. | AxB GRANITE PLATE DIEMENSION | C | D | E | F | WEIGHT (kgs) | CODE NO. |
|-----------|------------------------------|----|-----|-----|------|--------------|-----------|
| VH-41 | 6" x 6" 150x150 mm | 52 | 252 | 200 | 8 mm | 6 | 2022-001A |
| VH-42 | 6" x 9" 150x220 mm | 52 | 252 | 200 | 8 mm | 9 | 2022-002A |
| VH-43 | 9" x 12" 230x300 mm | 90 | 290 | 200 | 8 mm | 22 | 2022-003A |
| VH-45 | 6" x 6" 150x150 mm | 52 | 185 | 133 | 8 mm | 6 | 2022-005 |
| VH-46 | 6" x 9" 150x220 mm | 52 | 185 | 133 | 8 mm | 7.9 | 2022-006 |
| VH-47 | 9" x 12" 230x300 mm | 90 | 223 | 133 | 8 mm | 19.1 | 2022-007 |

Tester Arm Base

FOR SURFACE PLATE

NEW



For smooth moving on granite / cast iron test surface plate.

- Measuring aid
- Equipped with flexible arm
- For smooth measuring on granite / cast iron surface plate!
- Without dial gauge
- Base fine adjustment
- Bottom high precision finish : 0.02mm tolerance
- Material : Steel
- Single-hand operation
- Great for side measuring
- Reliable 1 knob locking mechanism

2-STEP ROUND SHAPE BASES IS EASY TO MOVE WITH 1 HAND.

EXAMPLE



※ Gauge not included

※ WITHOUT DIAL GAUGE

| ORDER NO. | BASE (Ø) | MAIN ROD O.D x L | SUB ROD O.L x L | WEIGHT (kgs) | CODE NO. |
|-----------|----------|------------------|-----------------|--------------|----------|
| VTB-120 | 120 | Ø25 x 125 | Ø25 x 125 | 2.65 | 2022-015 |

mm



Cleaning Paper



پین گیج

ORDER NO. P-1000(PAPER)
CODE NO.2021-200

SIZE: WIDTH: 240 MM (±1CM)
LENGTH: 350 M, G.W. 11 kgs
PACK: 2 ROLL/CARTON
COLOR: WHITE

ORDER NO. S-1000(STAND)
CODE NO.2021-220

450L x 330W x 800H
G.W. 2.7 kgs

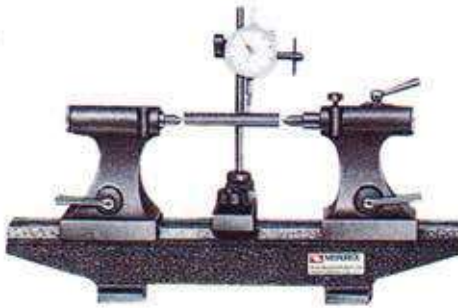


Concentric Test Stand

NEW

• For work shop use only

VCI-400



VCI-200



※ Gauge not included

mm

| 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 |



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 |

کولیس - میکرومٹر



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 |

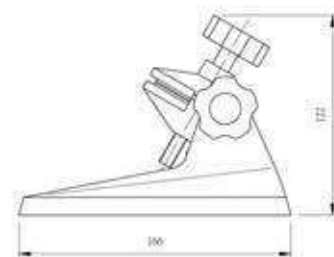
| ORDER NO. | 1 SCALE | WEIGHT(kg) | CODE NO. |
|------------|---------|------------|----------|
| VIM-5075 | 0.01 mm | 0.4 | 2023-067 |
| VIM-75100 | | 0.4 | 2023-068 |
| VIM-100125 | | 0.42 | 2023-069 |

Measuring Instrument



MICROMETER STAND

MAX. OPENED
17mm



166x110x122 mm

| ORDER NO. | WEIGHT(kg) | CODE NO. |
|-----------|------------|----------|
| VH-19 | 1.3 | 2023-090 |



Measuring Instrument



ساعت اندیکاتور

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

NIDDLE TYPE



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, 450, 500, 600

| ORDER NO | 1 SCALE | WEIGHT (kgs) | CODE NO. |
|----------|---------|--------------|----------|
| VHG-12 | 0.02 mm | 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 |

Measuring Instrument

MICROMETER HEAD



| ORDER NO. | SCALE x L | WEIGHT(kg) | CODE NO. |
|-----------|------------|------------|----------|
| VMH-25 | 0.01x25 mm | 0.2 | 2023-040 |



VAL-60



VAL-50



VAL-30



VAL-10



VAL-20

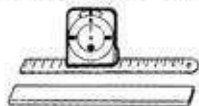
Oil Type Protractor With Magnets

| 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 |
| VAL-20 | 70x65x30mm | ABS | 0.2° | 0.2 | 2033-104 |
| 13mm ¹ / ₂ "x3M/10' | | | | | |

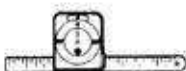
- The pointer is rotating in a hydraulic oil for stable, precise and error-eliminating reading, even to a differential subgraduation less than one degree. The two pointers or the vernier versus the annular graduations are read super imposedly with minimum reading error.
- Double annular graduations are 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.

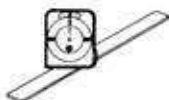
MULTI-FUNCTION ANGLE LEVEL



A Thin iron plate (The magnet power the thicker the weaker) may be attracted under the angle level for wider measurement.



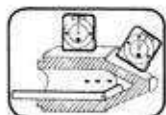
Inserting a straight extension rule into a bottom slot if the angle level.



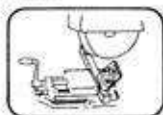
Attracting the angle level on an iron plate for measuring an angle inside a tank.



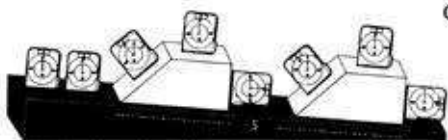
1. Suitable for working machines



2. Grinding machine



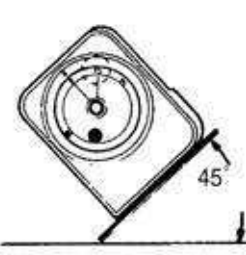
3. Out & inner cone angle



A standard angle block laid on a Non-horizontal Plane

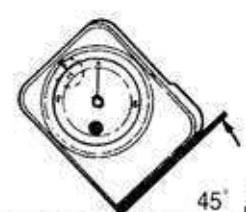
Finding an angle

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



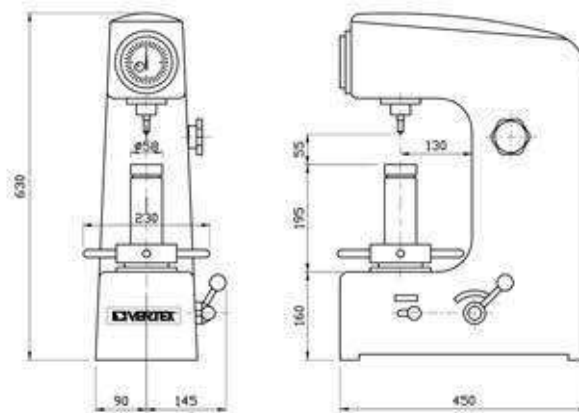
Hardness Tester

ORDER NO.VHT-260 CODE NO.2033-201



سختی سنج

NEW



- Swing 260mm
- Workpiece max. height : 170mm
- L x W x H : 466 x 238 x 630 mm
- Weight : 86.2 kgs
- 3 pressure degree : 60, 100, 150 kgs
- Rockwell scale : HRA>70
HRB 30 - 100
HRC 20 - 67

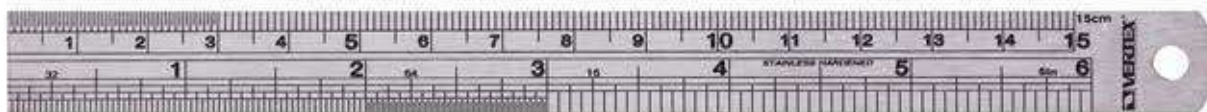
ACCESSORIES :

- 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 |

Thread Size & Depth Gauge

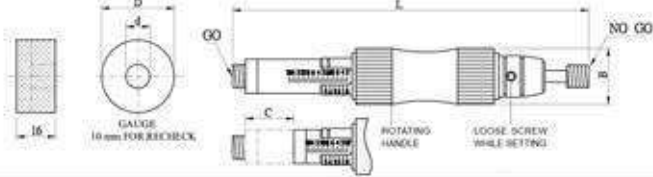


رینگ گیج

NEW



- INSTANT RESULT, QUICK READING
- THREAD PLUG GAUGE CHECK SIZE BY GO / ØD mm STD ACTION & THREAD DEPTH.
- RING GAUGE TO SET O POINT BEFORE USE
- 1 MARK : 0.2 mm, M3 x 0.5-6H H 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 | 102 | Ø30 | Ø3.3 | 8 | 0.12 | 2022-400 |
| VSD-M4 | M4x0.7-6H | 17 | 102 | Ø30 | Ø4.3 | 8 | 0.12 | 2022-401 |
| VSD-M5 | M5x0.8-6H | 17 | 114 | Ø30 | Ø5.5 | 20 | 0.14 | 2022-402 |
| VSD-M6 | M6x1-6H | 17 | 114 | Ø30 | Ø6.5 | 20 | 0.14 | 2022-403 |
| VSD-M8 | M8x1.25-6H | 23 | 140 | Ø30 | Ø10 | 26 | 0.2 | 2022-404 |
| VSD-M10 | M10x1.5-6H | 23 | 140 | Ø30 | Ø10.5 | 26 | 0.2 | 2022-405 |

Plug Gauge

NEW



- The metric thread plug gauge & ring gauge
- Plug Gauge conform to DIN13 / DIN2280.

The Metric Thread Plug Gauge In Coarse Thread

Unit : mm

| ORDER NO. | Size (mm) | Weight (kg) | CODE NO. | ORDER NO. | Size (mm) | Weight (kg) | CODE NO. |
|-----------|-------------|-------------|----------|-----------|------------|-------------|----------|
| VPG-3M | M3 x 0.5P | 0.03 | 2033-340 | VPG-18M | M18 x 2.5P | 0.19 | 2033-349 |
| VPG-4M | M4 x 0.7P | 0.03 | 2033-341 | VPG-20M | M20 x 2.5P | 0.24 | 2033-350 |
| VPG-5M | M5 x 0.8P | 0.03 | 2033-342 | VPG-22M | M22 x 2.5P | 0.24 | 2033-351 |
| VPG-6M | M6 x 1.0P | 0.04 | 2033-343 | VPG-24M | M24 x 3.0P | 0.28 | 2033-352 |
| VPG-8M | M8 x 1.25P | 0.07 | 2033-344 | VPG-27M | M27 x 3.0P | 0.34 | 2033-353 |
| VPG-10M | M10 x 1.5P | 0.07 | 2033-345 | VPG-30M | M30 x 3.5P | 0.40 | 2033-354 |
| VPG-12M | M12 x 1.75P | 0.11 | 2033-346 | VPG-33M | M33 x 3.5P | 0.66 | 2033-355 |
| VPG-14M | M14 x 2.0P | 0.12 | 2033-347 | VPG-36M | M36 x 4.0P | 0.71 | 2033-356 |
| VPG-16M | M16 x 2.0P | 0.12 | 2033-348 | | | | |

Ring Gauge

GO TYPE

NEW



- The metric thread plug gauge & ring gauge
- Ring Gauge conform to DIN13 / DIN2285.

Standard Size The Metric Thread Ring Gauge In Coarse Thread

Unit : mm

| ORDER NO. | Size (mm) | Weight (kg) | CODE NO. |
|-----------|-------------|-------------|----------|
| VRG-3 | M3 x 0.5P | 0.04 | 2033-370 |
| VRG-4 | M4 x 0.7P | 0.04 | 2033-371 |
| VRG-5 | M5 x 0.8P | 0.04 | 2033-372 |
| VRG-6 | M6 x 1.0P | 0.07 | 2033-373 |
| VRG-8 | M8 x 1.25P | 0.08 | 2033-374 |
| VRG-10 | M10 x 1.5P | 0.09 | 2033-375 |
| VRG-12 | M12 x 1.75P | 0.15 | 2033-376 |
| VRG-14 | M14 x 2.0P | 0.15 | 2033-377 |
| VRG-16 | M16 x 2.0P | 0.20 | 2033-378 |
| VRG-18 | M18 x 2.5P | 0.24 | 2033-379 |
| VRG-20 | M20 x 2.5P | 0.24 | 2033-380 |
| VRG-22 | M22 x 2.5P | 0.42 | 2033-381 |
| VRG-24 | M24 x 3.0P | 0.42 | 2033-382 |
| VRG-27 | M27 x 3.0P | 0.51 | 2033-383 |
| VRG-30 | M30 x 3.5P | 0.56 | 2033-384 |
| VRG-33 | M33 x 3.5P | 0.72 | 2033-385 |



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(P) | 3008-101 |

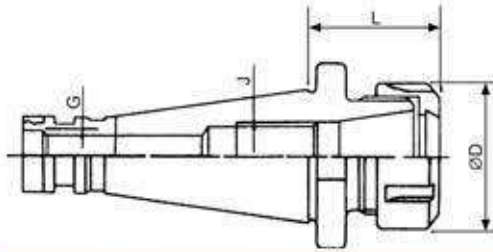
ER Spring Collet Chuck System

Collet Chuck Kit Whit ISO Taper Shank DIN 2080/ISO SHANK
DIN 6499

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NT-40



ER



| 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 |



NT-30

Collet Chuck kit With ISO Taper Shank

Including shank, full set of collets, wrench and case.

Caution:

Please notify the taper size, collete 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 | 2.0 | 3021-410 |

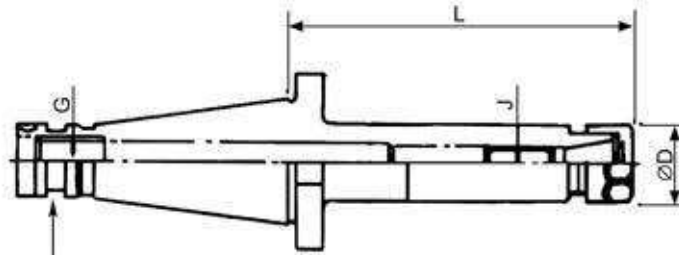


ER Spring Collet Chuck System

Extended Collet Holder With ISO Shank
DIN 2080/ISO SHANK EXTENDED CHUCK

DIN 6499

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NT40 WITH MAHO GROOVE



| 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 | NT-40 | ER-20 | 76 | 34 | 5/8"-11W or M16X2.0P | 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, collete type, set range, and set numbers when ordering.



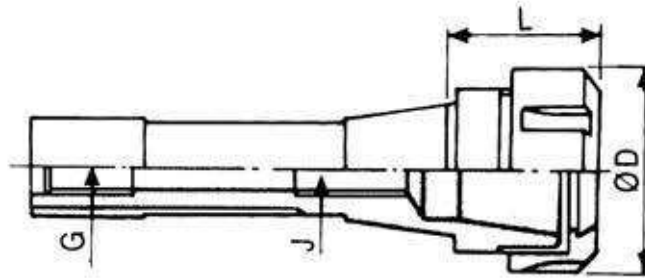
| ORDER NO. | TAPER | COLLET TYPE | RANGE | PCS/SET | L | WEIGHT KGS | CODE NO. |
|-----------|-------|-------------|-------|---------|-----|------------|----------|
| V-241 | NT-30 | ER-16 | 1-10 | 10 | 76 | 1.9 | 3020-409 |
| V-242 | | | 3-10 | 8 | | 1.8 | 3020-410 |
| V-242A | NT-30 | ER-20 | 2-13 | 12 | 76 | 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 | NT-40 | ER-20 | 2-13 | 12 | 76 | 2.3 | 3021-415 |
| V-248 | | | 4-13 | 10 | | 2.2 | 3021-416 |
| V-249 | | 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

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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 | 7/16"X20 UNF | 0.8 | 3027-302 |
| V-303 | | ER-40 | 70 | 63 | 7/16"X20 UNF | 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, collte 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 |



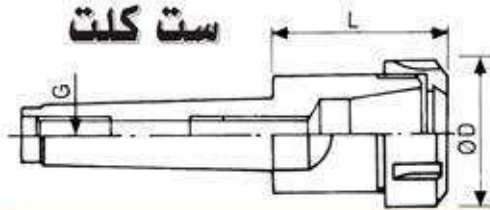
ER Spring Collet Chuck System

Collet Holders With Morse Taper Shank

DIN 6499 DIN 228

MT-SHANK
MT / MK

ER



| 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 M10X1.5P, M12X1.75P USA 1/2"-UNC13 | 0.3 | 3024-301 |
| V-405 | | ER32 | 70 | 50 | | 0.8 | 3024-302 |
| V-406 | | ER40 | 80 | 63 | | 1.1 | 3024-303 |
| NEW V-451 | MT3 | ER20 | 43 | 34 | 1/2"-12NC or M12X1.75P | 0.3 | 3024-304 |
| V-452 | | ER25 | 47 | 42 | | 0.5 | 3024-305 |
| V-407 | MT4 | ER32 | 60 | 50 | 5/8"-11W or M16X2.0P | 1 | 3025-301 |
| V-408 | | ER40 | 82 | 63 | | 1.4 | 3025-302 |
| V-409 | | ER50 | 85 | 78 | | 2.2 | 3025-303 |
| V-410 | MT5 | ER40 | 82 | 63 | 1"-8W or M24X3.0P | 2.1 | 3026-301 |
| V-411 | | ER50 | 85 | 78 | | 2.9 | 3026-302 |

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, collete 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 | | | 3-10 | 8 | 1 | 3023-402 |
| V-414 | MT2 | ER20 | 2-13 | 12 | 1.3 | 3023-403 |
| V-415 | | | 4-13 | 10 | 1.2 | 3023-404 |
| V-416 | MT2 | ER25 | 2-16 | 15 | 2.4 | 3023-405 |
| V-418 | | | 4-16 | 7 | 1.3 | 3023-407 |
| V-419 | MT3 | ER16 | 1-10 | 10 | 1.5 | 3024-401 |
| NEW V-420 | | | 3-10 | 8 | 1.1 | 3024-402 |
| V-441 | MT3 | ER20 | 2-13 | 12 | 1.35 | 3023-408 |
| V-442 | | | 4-13 | 10 | 1.3 | 3023-409 |
| V-443 | MT3 | ER25 | 2-16 | 15 | 2.5 | 3023-410 |
| V-444 | | | 4-16 | 7 | 2.1 | 3023-411 |
| V-421 | MT3 | ER32 | 3-20 | 18 | 4.1 | 3024-403 |
| V-422 | | | 4-20 | 11 | 3 | 3024-404 |
| V-423 | | | 6-20 | 6 | 2.7 | 3024-405 |
| V-424 | MT3 | ER40 | 4-26 | 23 | 7.2 | 3024-406 |
| V-425 | | | 4-26 | 15 | 6 | 3024-407 |
| V-426 | | | 6-25 | 7 | 4.5 | 3024-408 |
| V-427 | MT4 | ER32 | 3-20 | 18 | 4.3 | 3025-401 |
| V-428 | | | 4-20 | 11 | 3.2 | 3025-402 |
| V-429 | | | 6-20 | 6 | 2.9 | 3025-403 |
| V-430 | MT4 | ER40 | 4-26 | 23 | 7.3 | 3025-404 |
| V-431 | | | 4-26 | 15 | 6.1 | 3025-405 |
| V-432 | | | 6-25 | 7 | 4.6 | 3025-406 |
| V-433 | MT4 | ER50 | 12-34 | 12 | 9 | 3025-407 |
| V-434 | | | 4-26 | 23 | 8.2 | 3026-401 |
| V-435 | MT5 | ER40 | 4-26 | 15 | 6.9 | 3026-402 |
| V-436 | | | 6-25 | 7 | 5.4 | 3026-403 |
| V-437 | MT5 | ER50 | 12-34 | 12 | 9.5 | 3026-404 |

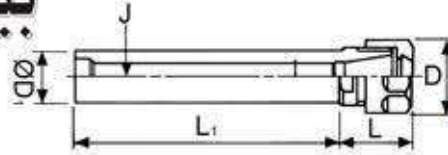


ER Spring Collet Chuck System VERTEX®

Collet Holders With Straight Shank

DIN6499 STRAIGHT SHANK

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METRIC SIZE

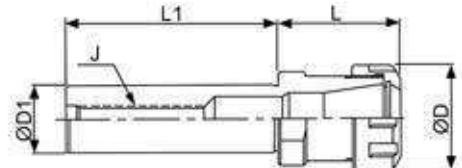
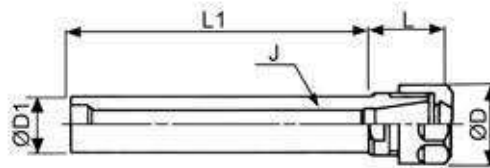
| ORDER NO. | COLLET TYPE | SHANK D1XL1 | L | D | J | KGS | CODE NO. |
|-----------|-------------|-------------|----|----|-----|-----|-----------|
| V-530 | ER11 | Ø16X50 | 21 | 19 | M6 | 0.1 | 3007-300 |
| V-531 | | Ø16X100 | 21 | 19 | M6 | 0.2 | 3007-311 |
| V-532 | | Ø16X150 | 21 | 19 | M6 | 0.3 | 3007-312 |
| V-501A | ER16 | Ø16X100 | 21 | 28 | M10 | 0.3 | 3003-301A |
| V-501 | ER16 | Ø20X50 | 30 | 28 | M10 | 0.2 | 3003-301 |
| V-502 | | Ø20X100 | 30 | 28 | M10 | 0.3 | 3003-302 |
| V-503 | | Ø20X150 | 30 | 28 | M10 | 0.4 | 3003-303 |
| V-504 | ER16 | Ø25X100 | 30 | 28 | M10 | 0.5 | 3003-304 |
| V-504A | | Ø25X50 | 30 | 28 | M10 | 0.3 | 3003-306 |
| V-505 | | Ø25X150 | 30 | 28 | M10 | 0.7 | 3003-305 |
| V-505A | | Ø25X200 | 30 | 28 | M10 | 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 | M10 | 0.5 | 3004-303 |
| V-509 | ER20 | Ø25X150 | 36 | 34 | M10 | 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 | ER25 | 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 |



NEW

With Flat Shank

NEW



INCH SIZE

| ORDER NO. | COLLET TYPE | SHANK D1XL1 | L | D | J | KGS | CODE NO. |
|-----------|-------------|----------------|----|----|---------|------|----------|
| V-571 | ER16 | ST 5/8" X 4" | 36 | 28 | 3/8"-16 | 0.2 | 3003-320 |
| V-572 | | ST 3/4" X 4" | 32 | | | 0.24 | 3003-321 |
| V-573 | | ST 3/4" X 6" | 32 | | | 0.32 | 3003-322 |
| V-574 | ER20 | ST 1" X 4" | 32 | 34 | 3/8"-16 | 0.35 | 3003-323 |
| V-575 | | ST 3/4" X 4" | 34 | | | 0.25 | 3004-320 |
| V-576 | | ST 3/4" X 6" | 34 | | | 0.33 | 3004-321 |
| V-577 | | ST 1" X 4" | 34 | | | M12 | 0.36 |
| V-578 | ER32 | ST 1" X 3" | 58 | 50 | M12 | 0.5 | 3006-320 |
| V-579 | | ST 1-1/4" X 4" | 58 | | | 0.6 | 3006-321 |



ER Spring Collet Chuck System

DIN 6499 STRAIGHT SHANK

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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 | ER16 | 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 | | 1-10 | 10 | 1.3 | 3003-409 |
| V-610 | Ø25X150L | | 3-10 | 8 | 1.3 | 3003-410 |
| V-611 | Ø20X50L | ER20 | 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-616 | Ø20X50L | | 4-13 | 10 | 1.3 | 3004-406 |
| V-615A | Ø25X50L | ER20 | 2-13 | 12 | 1.3 | 3004-409 |
| V-616A | Ø25X50L | | 4-13 | 10 | 1.3 | 3004-410 |
| V-617 | Ø25X100L | | 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 | ER25 | 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 | ER11 | 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 | ER25 | 2-16 | 15 | 2.5 | 3005-416 |
| V-636 | Ø32X60L | | 6-16 | 7 | 1.9 | 3005-418 |
| V-637 | Ø25X80L | ER32 | 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 | ER32 | 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 | ER32 | 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 | ER32 | 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 | ER40 | 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 | ER40 | 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.

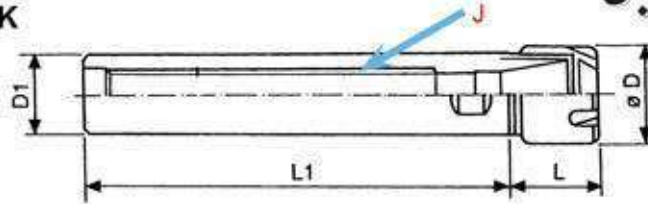
ER Spring Collet Chuck System VERTEX®

MINI TYPE STRAIGHT SHANK HOLDER

DIN 6499 MINI STRAIGHT SHANK

NEW

ست بیبی کلت



MINI TYPE NUT

Collet Chuck Kit With Straight Shank

Including shank, full set of collets, wrench and case.

COLLET HOLDER (MINI TYPE)

| ORDER NO. | COLLET TYPE | SHANK D1XL1 | D | L | J | KGS | CODE NO. |
|-----------|-------------|-------------|----|----|-----|------|----------|
| V-541 | ER8M | ST08X50L | 12 | 24 | | 0.04 | 3001-290 |
| V-542 | | ST10X50L | | 19 | | 0.05 | 3001-291 |
| V-543 | | ST10X80L | | 19 | | 0.07 | 3001-292 |
| V-544 | ER8M | ST12X50L | 12 | 14 | | 0.05 | 3001-293 |
| V-545 | | ST12X100L | | 14 | | 0.09 | 3001-294 |
| V-546 | | ST12X150L | | 14 | | 0.12 | 3001-295 |
| V-551 | ER11M | ST16X50L | 16 | 22 | M6 | 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 | M10 | 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 | M12 | 0.2 | 3013-301 |
| V-557 | | ST20X100L | 28 | | | 0.3 | 3013-302 |
| V-558 | | ST20X150L | 28 | | | 0.4 | 3013-303 |
| V-559 | ER20M | ST25X100L | 28 | 33 | M12 | 0.4 | 3013-304 |
| V-560 | | ST25X150L | 28 | | | 0.6 | 3013-305 |
| V-561 | ER16M | ST16X100L | 22 | 22 | M10 | 0.2 | 3012-304 |
| V-562 | ER16M | ST25X100L | 22 | 22 | M10 | 0.4 | 3012-305 |
| V-563 | | ST25X150L | 22 | | | 0.6 | 3012-306 |
| V-563A | | ST25X200L | 22 | | | 32 | 0.5 |
| V-557A | ER20M | ST20X200L | 28 | 35 | M10 | 0.4 | 3013-306 |
| V-560A | | ST25X200L | 28 | | | M12 | 0.5 |

* For the 50L A side of the shank is milled has flate surface.



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 | ER11M | 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 | ER16M | 1-10 | 10 | 0.6 | 3012-407 |
| V-694A | ST20X100L | ER16M | 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 | ER16M | 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 | ER20M | 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 |



MINI TYPE NUT



Clamping Nuts For Collets

ER CLAMPING NUT SYSTEM



DIN 6499

مهرد کلت

ER



ER20M



ER16M



ER11MS



ER40KM
WITH A BEARING



ER40UM



ER16UM

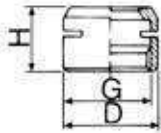


FIG.1 ER11,16,20MS

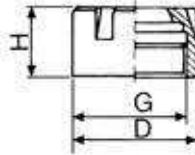


FIG.2 ER11,16,20M
ER8M, 25M

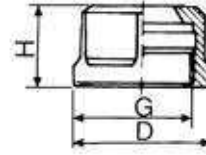


FIG.3 ER11,16,20UM

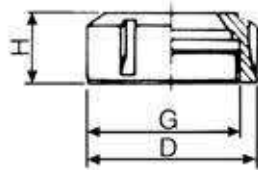


FIG.4 ER25,32,40,50UM

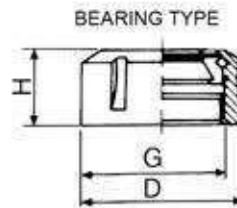


FIG.5 ER40,50KM



CLAMPING NUTS

| ORDER NO. | Fig. | COLLET TYPE | D | H | G | WEIGHT KG. | CODE NO. |
|-----------|------|-------------|----|------|-----------|------------|----------|
| V-800 | 3 | ER11UM | 19 | 11.5 | M14X0.75P | 0.04 | 3015-001 |
| V-801 | 3 | ER16UM | 28 | 17 | M22X1.5P | 0.05 | 3015-002 |
| V-802 | 3 | ER20UM | 34 | 19 | M25X1.5P | 0.09 | 3015-003 |
| V-803 | 4 | ER25UM | 42 | 20 | M32X1.5P | 0.13 | 3015-004 |
| V-804 | 4 | ER32UM | 50 | 23 | M40X1.5P | 0.14 | 3015-005 |
| V-805 | 4 | ER40UM | 63 | 25 | M50X1.5P | 0.25 | 3015-006 |
| V-806 | 4 | ER50UM | 78 | 35 | M64X2.0P | 0.5 | 3015-007 |
| V-807 | 1 | ER11MS | 16 | 12 | M13X0.75P | 0.008 | 3015-008 |
| V-808 | 2 | ER16M | 22 | 18 | M19X1.0P | 0.03 | 3015-009 |
| V-809 | 2 | ER20M | 28 | 19 | M24X1.0P | 0.045 | 3015-010 |
| V-810A | 5 | ER40KM | 63 | 29 | M50X1.5P | 0.3 | 3015-011 |
| V-810B | 5 | ER50KM | 78 | 40 | M64X2.0P | 0.58 | 3015-012 |
| V-810C | 2 | ER11M | 16 | 12 | M13X0.75P | 0.02 | 3015-013 |
| V-810D | 2 | ER8M | 12 | 10.8 | M10X0.75P | 0.05 | 3015-014 |
| V-810E | 2 | ER25M | 35 | 20 | M30X1.0P | 0.05 | 3015-015 |
| V-811A | | ER16MS | 22 | 18 | M19X1.0P | 0.02 | 3015-016 |
| V-811B | | ER20MS | 28 | 19 | M24X1.0P | 0.035 | 3015-017 |



Clamping Wrench For Collets



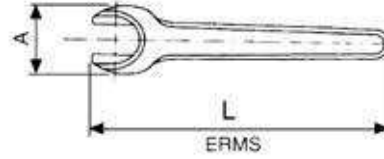
ER WRENCH SYSTEM

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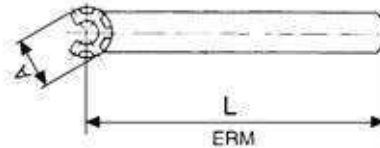
DIN6499



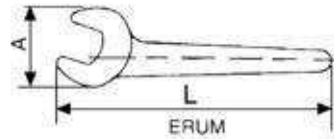
ERMS



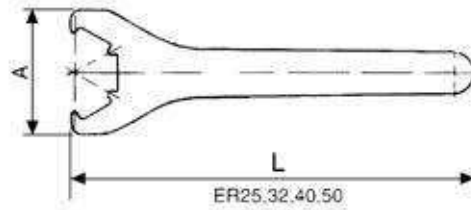
ERM



ERUM11, 16, 20



ERUM25, 32, 40, 50



| ORDER NO. | TYPE | A | L | KGS | CODE NO. |
|-----------|--------|------|-----|------|----------|
| V-820 | ER11UM | 35 | 135 | 0.07 | 3015-100 |
| V-821 | ER11MS | 22 | 100 | 0.07 | 3015-101 |
| V-822 | ER11M | 17 | 95 | 0.05 | 3015-102 |
| V-823 | ER16M | 22.5 | 118 | 0.06 | 3015-103 |
| V-815 | ER16UM | 44 | 140 | 0.08 | 3015-104 |
| V-824 | ER20M | 28 | 130 | 0.08 | 3015-105 |
| V-816 | ER20UM | 53 | 170 | 0.1 | 3015-106 |
| V-811 | ER25UM | 65 | 210 | 0.2 | 3015-107 |
| V-812 | ER32UM | 75 | 250 | 0.4 | 3015-108 |
| V-813 | ER40UM | 90 | 290 | 0.5 | 3015-109 |
| V-814 | ER50UM | 110 | 350 | 0.9 | 3015-110 |
| V-817 | ER8M | 13 | 75 | 0.04 | 3015-111 |
| V-818 | ER25M | 36.5 | 135 | 0.1 | 3015-112 |
| V-825 | ER40KM | 90 | 290 | 0.5 | 3015-113 |
| V-826 | ER50KM | 110 | 350 | 0.9 | 3015-114 |
| V-827 | ER16MS | 32 | 120 | 0.12 | 3015-115 |



ER Spring Collet Chuck System

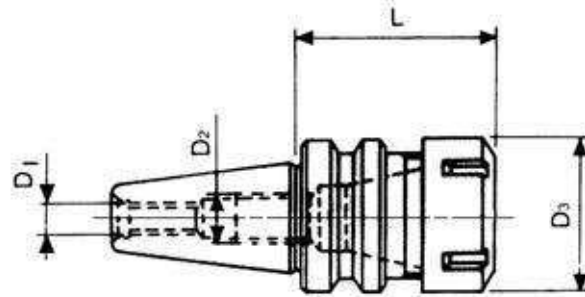
Collet Holders With BT Taper Shank
(For CNC Machine Center)
ER-32 ER-40

MAS403 BT-SHANK

کلت پر چاک



ACCURACY
RUNOUT 0.005mm
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 | 3033-305 |
| 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 | 3033-321 |
| 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 VERTEX®

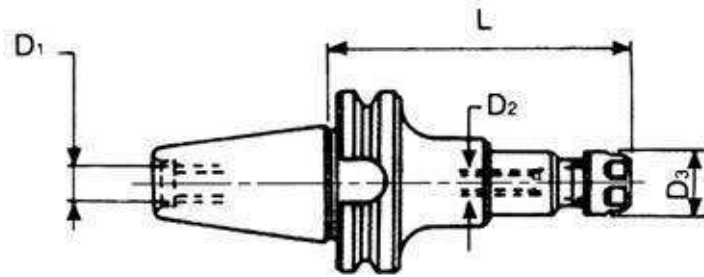
Collet Holders With Extension Type BT Taper Shank
ER-16, ER-20

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BT-40-ER20

ACCURACY
RUNOUT 0.005mm
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 | | | 28 | 100 | M16 | 1.4 | 3032-302 |
| V-774 | | | 28 | 150 | M16 | 1.7 | 3032-308 |
| V-774A | BT40 | ER20 | 34 | 70 | M16 | 1.3 | 3032-303 |
| V-775 | | | 34 | 100 | M16 | 1.5 | 3032-304 |
| V-775A | | | 34 | 135 | M16 | 1.6 | 3032-309 |
| V-775B | | | 34 | 150 | M16 | 1.9 | 3032-310 |
| V-775C | BT40 | ER25 | 42 | 150 | M16 | 2.1 | 3032-311 |
| V-733 | BT40 | ER32 | 50 | 150 | M16 | 2 | 3033-354 |
| V-776 | BT50 | ER16 | 28 | 100 | M24 | 2.3 | 3033-301 |
| V-777 | | | 28 | 150 | M24 | 4.3 | 3033-302 |
| V-743A | | | 28 | 200 | M24 | 7.5 | 3033-364 |
| V-778 | BT50 | ER20 | 34 | 100 | M24 | 4.1 | 3033-303 |
| V-779 | | | 34 | 150 | M24 | 4.8 | 3033-304 |
| V-735 | | | 34 | 200 | M24 | 5 | 3033-356 |
| V-736 | BT50 | ER25 | 42 | 100 | M24 | 4.3 | 3033-357 |
| V-737A | | | 42 | 150 | M24 | 4.8 | 3033-358 |
| V-744A | | | 42 | 200 | M24 | 8 | 3033-365 |
| V-738A | BT50 | ER32 | 50 | 150 | M24 | 5.5 | 3033-359 |
| V-739A | | | 50 | 200 | M24 | 6.5 | 3033-360 |
| V-741A | BT50 | ER40 | 63 | 200 | M24 | 7.5 | 3033-362 |
| V-742A | BT50 | ER50 | 78 | 150 | M24 | 6.7 | 3033-363 |



ER Spring Collet Chuck System

ست کلت فشنگی

MAS403 BT-SHANK DIN 6499

ER



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



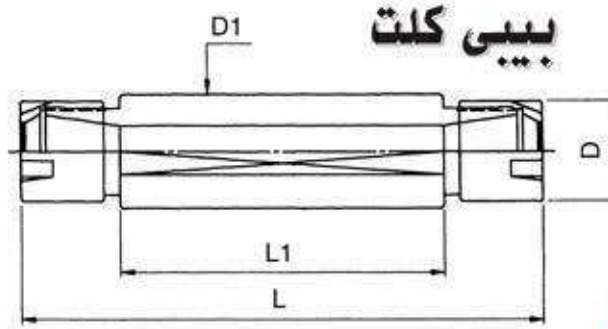
M TYPE DOUBLE HEAD

FOR CNC LATHE ONLY

UM TYPE



M TYPE



M TYPE

| 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 | | 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 | | 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 | | 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 | | Ø25-ER20 M2-80 | 122 | 80 | 28 | 0.35 | 3032-437 |

UM TYPE

| ORDER NO. | COLLET TYPE | SHANK (ØD1-ER-L1) | L | L1 | D | WEIGHT (KGS) | CODE NO. |
|-----------|-------------|-------------------|-----|----|----|--------------|----------|
| V-855 | ER11 | Ø20-ER11 UM2-50 | 80 | 50 | 19 | 0.15 | 3032-428 |
| V-856 | | Ø20-ER11 UM2-70 | 100 | 70 | 19 | 0.19 | 3032-429 |
| V-859 | ER16 | Ø20-ER16 UM2-80 | 124 | 80 | 28 | 0.35 | 3032-439 |
| V-862 | ER20 | Ø20-ER20 UM2-80 | 134 | 80 | 34 | 0.38 | 3032-438 |



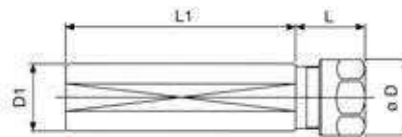
ST/ER Straight Shank With Single Head Spindle

FOR CNC LATHE ONLY

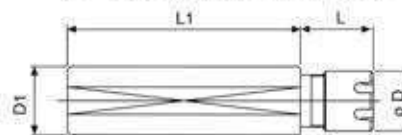
M TYPE SINGLE HEAD



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 | | Ø25-ER16M-70 | 21 | 70 | 22 | 0.25 | 3032-442 |
| V-843 | | 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 | | Ø25-ER16UM-70 | 21 | 70 | 28 | 0.25 | 3032-445 |
| V-846 | | 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 | | Ø25-ER20UM-70 | 23 | 70 | 34 | 0.3 | 3032-448 |

ER-SK Taper Shank

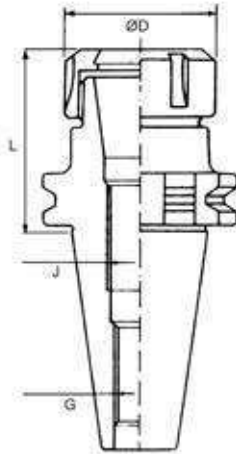
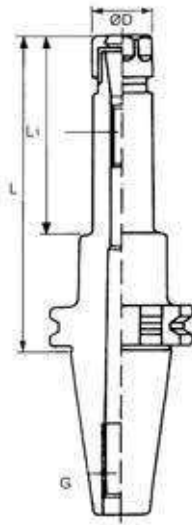
COLLET HOLDER WITH SK-SHANK
DIN 69871



& COLLET CHUCK SET DIN 69871

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ER



| 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-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-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 |



COLLET CHUCK KIT WITH SK-SHANK DIN 69871

INCLUDING SHANK, FULL SET OF COLLETS, WRENCH AND CASE.

ER



| 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-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



Milling Chuck

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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 25 mm)
3. High rigidity & Clamping force.
4. 1 set including : 1 chuck shank holder
1 wrench ; 1 case.
7 or 15 pcs of collet.



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

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DIFFERENT SHANK STYLE



FULL SET

| ORDER NO. | COLLETS SIZE OZ-25 | | PCS | WEIGHT (KGS) | CODE NO. |
|-----------|--------------------|---|----------|--------------|----------|
| | TAPER | COLLETS | | | |
| VB-101 | NT30 | Inch 1/8"-1" 15PCS 1/4"-1" 7PCS Metric 3mm-25mm 15pcs 6mm-25mm 7pcs | 7 | 3.7 | 3101-101 |
| VB-102 | | | 15 | 5.2 | 3101-102 |
| VB-103 | | | 7 | 4 | 3101-103 |
| VB-104 | NT40 | | 15 | 5.5 | 3101-104 |
| VB-105 | NT50 | | 7 | 6.5 | 3101-105 |
| VB-106 | | | 15 | 8.5 | 3101-106 |
| VB-107 | MT3 | | 7 | 3.3 | 3101-107 |
| VB-108 | | | 15 | 5.2 | 3101-108 |
| VB-109 | MT4 | | 7 | 3.9 | 3101-109 |
| VB-110 | MT5 | | 15 | 5.4 | 3101-110 |
| VB-111 | | | 7 | 4.7 | 3101-111 |
| VB-112 | R8 | | 15 | 6.2 | 3101-112 |
| VB-113 | | | 7 | 3.7 | 3101-113 |
| VB-114 | MT2 | | 15 | 5.2 | 3101-114 |
| VB-115 | | | 7 | 3.6 | 3101-115 |
| VB-116 | 15 | 5.1 | 3101-116 | | |

NEW

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"v |
| 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" |



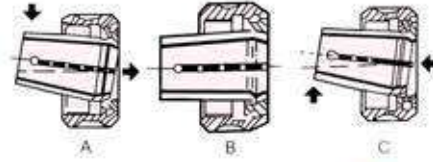
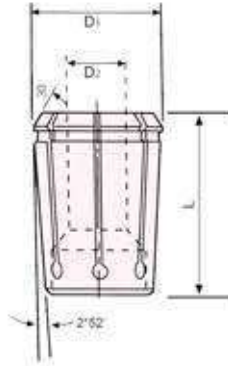
DIN 6388 Collet For Milling Chuck **VERTEX**

COLLET DIN 6388, TYPE A

DIN 6388 #16,#25,#32 SERIES

COLLET MUST BE ASSEMBLED INTO THE CLAMPING NUT BEFORE INSERTING INTO THE CHUCK

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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



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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 |

NEW ■ DIN 6388 16#
■ OZ-16 COLLET

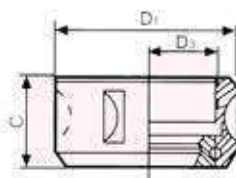
| ORDER NO. | MM SIZE | CODE NO. |
|-----------|---------|----------|
| OZ-1602 | 2.0 | 3100-001 |
| OZ-1603 | 3.0 | 3100-002 |
| OZ-1604 | 4.0 | 3100-003 |
| OZ-1605 | 5.0 | 3100-004 |
| OZ-1606 | 6.0 | 3100-005 |
| OZ-1607 | 7.0 | 3100-006 |
| OZ-1608 | 8.0 | 3100-007 |
| OZ-1609 | 9.0 | 3100-008 |
| 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

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| 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 |

Unit:mm

WRENCH FOR COLLETS DIN6388 TYPE A



| 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 |

Unit:mm

Milling Collet Chuck



OZ-25
COLLET HOLDER WITH BT-SHANK

DIN 6388 # 25 SERIES MAS 403
ست کلت فشنگی BT-SHANK



| 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
DIN 69871 & CAT TPE

DIN 6388 # 25, #32 SERIES

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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 |



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-OZ32-80L | SK40 | #32 | 6.0-32 | 15PCS | 9.2 | 3101-127 |
| VB-274 | SK40-OZ32-80L | | #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 | SK50 | #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 | CAT40 | #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 | CAT50 | #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 |



C-20,25,32,42 Collet

C-TYPE COLLET



فشنگی سری C



METRIC



C TYPE

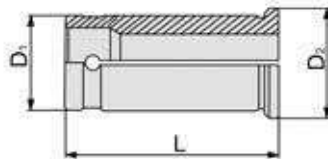
20, 25, 32, 42 STRAIGHT COLLET

| 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", 3/4" | 20 | 25 | 52 | 6 | 3202-184 |
| C-25-7I | C-25 | 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1" | 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 |

| ORDER NO. | WEIGHT |
|-----------|--------|
| C-20 | 0.1 |
| C-25 | 0.18 |
| C-32 | 0.22 |
| C-42 | 0.35 |

C-20,25,32,42 Wrenches



| 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 |

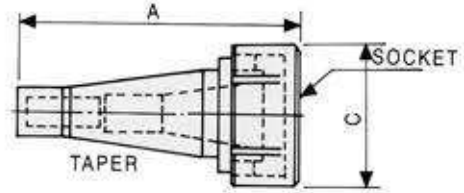


Quick-Change Tooling System VERTEX®

MILLING-QUICK CHANGE HOLDER

OZ DIN 6388

کلت



- 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



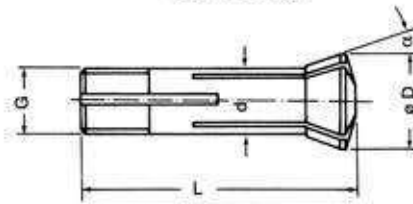
| ORDER NO. | TAPER | SOCKET | FULL SET | WEIGHT KGS | CODE NO. |
|-----------|-------|--------|--|------------|----------|
| VD-111 | NT30 | NT30 | 1.MILLING QUICK-CHANGE HOLDER 2.DRILL CHUCK HOLDER 3.MORSE TAPER HOLDER 4.FACE MILL HOLDER 5.DIN6388 #25 COLLET CHUCK HOLDER 6.DIN6388 #25 15PCS COLLET 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 |



5C Collet System

5C RANGE

فشنگی ابزار تیزکنی
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 |



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 |

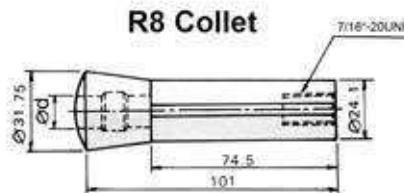
| ORDER NO. | d | CODE NO. |
|-----------|----|----------|
| 5C-3 | 3 | 3205-001 |
| 5C-4 | 4 | 3205-002 |
| 5C-5 | 5 | 3205-003 |
| 5C-6 | 6 | 3205-004 |
| 5C-7 | 7 | 3205-005 |
| 5C-8 | 8 | 3205-006 |
| 5C-9 | 9 | 3205-007 |
| 5C-10 | 10 | 3205-008 |
| 5C-11 | 11 | 3205-009 |
| 5C-12 | 12 | 3205-010 |
| 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 |

| 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 |

R8 Collet System



R8 Collet



■ L:101 ■ 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 |

| 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



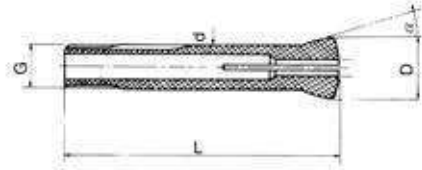
NO.1 U2 COLLET RANGE SIZE 3~16mm
NO.2 U2 COLLET RANGE SIZE 18~25mm

فشنگی ابزار تیزکنی

NO.1



NO.2

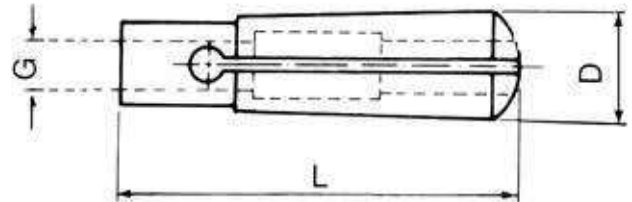


■ L:120 ■ D:28 ■ d:20 ■ G:2.0P ■ Accuracy: ±0.02mm
■ α:17°30' ■ WEIGHT:0.18KGS ■ Hardness: HRC47°

| 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

| ORDER NO. | Q'TY | RANGE SIZE | DRAW BAR SIZE |
|-----------|------|-----------------------------|---------------|
| MT3-□ | 1 PC | Ø 4, 6, 8, 10, 12, 16, 20MM | G1 |

| ORDER NO. | d | CODE NO. |
|-----------|----|----------|
| MT3-4 | 4 | 3208-100 |
| MT3-6 | 6 | 3208-101 |
| MT3-8 | 8 | 3208-102 |
| MT3-10 | 10 | 3208-103 |
| MT3-12 | 12 | 3208-104 |
| MT3-16 | 16 | 3208-105 |

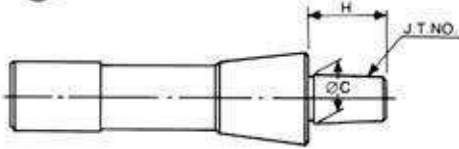


Drill Chucks Arbor



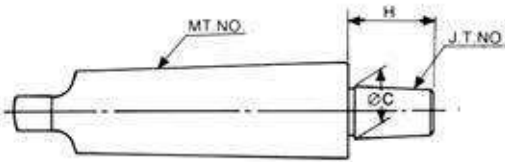
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R8



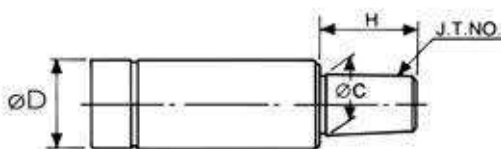
| ORDER NO. | TAPER | JT NO. | C | H | WEIGHT (kg) | CODE NO. |
|-----------|-------|--------|--------|----|-------------|----------|
| VJ-120 | R8 | JT3 | 20.60 | 34 | 0.5 | 3209-000 |
| VJ-121 | | JT1 | 9.754 | 18 | 0.5 | 3209-001 |
| VJ-122 | | JT2 | 13.94 | 20 | 0.5 | 3209-002 |
| VJ-123 | | JT6 | 17.17 | 26 | 0.5 | 3209-003 |
| VJ-124 | | B16 | 15.733 | 24 | 0.5 | 3209-004 |

MT3.4.5



| ORDER NO. | TAPER | JT NO. | C | H | WEIGHT (kg) | CODE NO. |
|-----------|-------|--------|--------|-----|-------------|-----------|
| VJ-126 | MT2 | JT3 | 20.6 | 34 | 0.24 | 3209-006 |
| VJ-126-1 | | B16 | 15.733 | 29 | 0.2 | 3209-006A |
| VJ-126-3 | | B18 | 17.78 | 37 | 0.21 | 3209-006B |
| VJ-130 | | JT6 | 17.17 | 28 | 0.22 | 3209-029 |
| VJ-130-2 | | JT5 | 35.89 | 50 | 0.5 | 3209-029A |
| VJ-130-4 | | JT4 | 28.55 | 45 | 0.4 | 3209-029B |
| VJ-137 | | JT2 | 14.2 | 25 | 0.2 | 3209-056 |
| VJ-131 | MT3 | JT6 | 17.17 | 26 | 0.4 | 3209-030 |
| VJ-131-2 | | JT5 | 35.89 | 50 | 0.7 | 3209-030A |
| VJ-131-4 | | JT33 | 15.85 | 28 | 0.3 | 3209-030B |
| VJ-134 | | B16 | 15.733 | 24 | 0.3 | 3209-033 |
| VJ-134-2 | | B18 | 17.78 | 37 | 0.4 | 3209-033A |
| VJ-138 | | JT2 | 14.20 | 25 | 0.3 | 3209-034A |
| VJ-138-1 | | JT3 | 20.60 | 34 | 0.35 | 3209-034 |
| VJ-138-2 | JT4 | 28.55 | 45 | 0.5 | 3209-035 | |
| VJ-132 | MT4 | JT6 | 17.17 | 26 | 0.7 | 3209-031 |
| VJ-132-1 | | JT3 | 20.60 | 34 | 0.7 | 3209-031A |
| VJ-132-7 | | JT4 | 28.55 | 45 | 0.85 | 3209-031B |
| VJ-132-4 | | JT5 | 35.89 | 50 | 1 | 3209-031C |
| VJ-132-5 | | JT2 | 14.2 | 25 | 0.64 | 3209-031D |
| VJ-132-6 | | JT33 | 15.85 | 28 | 0.65 | 3209-031E |
| VJ-132-8 | | B18 | 17.78 | 37 | 0.7 | 3209-031F |
| VJ-135 | B16 | 15.733 | 29 | 0.7 | 3209-036 | |
| VJ-133 | MT5 | JT6 | 17.17 | 26 | 1.6 | 3209-032 |
| VJ-133-1 | | JT3 | 20.60 | 35 | 1.6 | 3209-032A |
| VJ-133-2 | | JT4 | 28.55 | 46 | 1.8 | 3209-032B |
| VJ-133-3 | | JT5 | 35.89 | 51 | 2 | 3209-032C |
| VJ-133-4 | | JT2 | 14.2 | 26 | 1.6 | 3209-032D |
| VJ-133-5 | | JT33 | 15.85 | 29 | 1.6 | 3209-032E |

C20.25.32



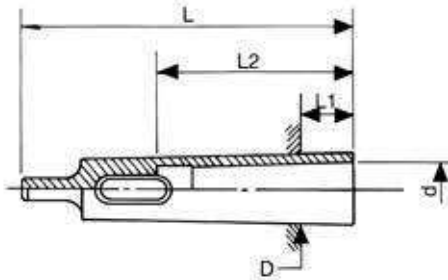
| ORDER NO. | SHANK ØD | JT NO. | C | H | WEIGHT (kg) | CODE NO. | |
|-----------|----------|--------|--------|-------|-------------|-----------|----------|
| VJ-139 | C20 | JT1 | 9.754 | 19 | 0.2 | 3209-058 | |
| VJ-139-1 | | JT0 | 6.35 | 9 | 0.2 | 3209-058A | |
| VJ-140 | | JT2 | 14.20 | 25 | 0.2 | 3209-059 | |
| VJ-140-1 | | JT3 | 20.60 | 35 | 0.2 | 3209-059A | |
| VJ-140-2 | | B10 | 10.25 | 21 | 0.15 | 3209-059B | |
| VJ-141 | | JT6 | 17.17 | 26 | 0.2 | 3209-060 | |
| VJ-140-3 | | B12 | 12.1 | 22.5 | 0.2 | 3209-060A | |
| VJ-140-4 | | 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 |



Morse Taper Sleeve



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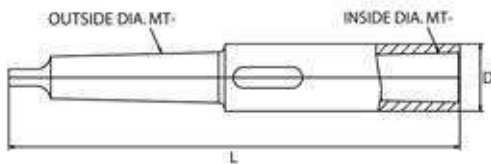
| ORDER NO. | I.D.xO.D. | D | d | L | l1 | l2 | WEIGHT (kg) | CODE NO. |
|-----------|-----------|--------|--------|-----|------|-----|-------------|----------|
| VQ-101 | MT2xMT3 | 23.825 | 17.780 | 112 | 18 | 67 | 0.2 | 3210-001 |
| VQ-102 | MT2xMT4 | 31.267 | 17.780 | 124 | 6.5 | 67 | 0.5 | 3210-002 |
| VQ-103 | MT2xMT5 | 44.399 | 17.780 | 156 | 6.5 | 67 | 1.4 | 3210-003 |
| VQ-104 | MT2xMT6 | | | | | | 4.13 | 3210-004 |
| 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 |
| 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 |



Morse Taper Extension Sockets

MORSE TAPER EXTENSION SOCKETS

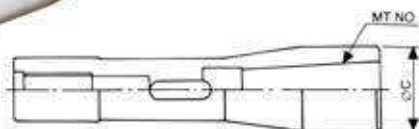
- For adapting tools with morse taper shanks to machine having smaller morse taper spindle or for adapting tools with morse taper shanks to machine having the same or larger morse taper spindle.
- Hardened and ground throughout.



| 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 | 0.35 | 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 | 4.2 | 3210-030 |



R8 With Morse Taper Sleeve



| ORDER NO. | SHANK | SIZE | MT NO. | WEIGHT (kg) | CODE NO. |
|-----------|-------|--------|--------|-------------|----------|
| VQ-121 | R8 | R8-MT1 | MT1 | 0.36 | 3211-003 |
| VQ-122 | R8 | R8-MT2 | MT2 | 0.4 | 3211-001 |
| VQ-123 | R8 | R8-MT3 | MT3 | 0.5 | 3211-002 |



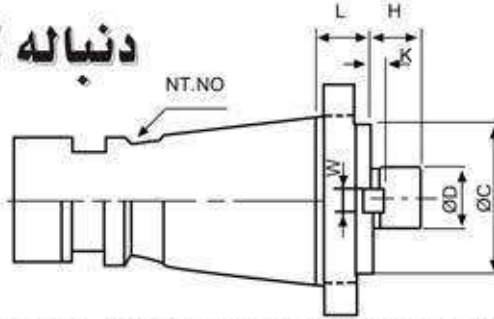
Face Mill Arbor

NT30, 40, 50, R8, MT3, 4

DIN 2080/ISO SHANK



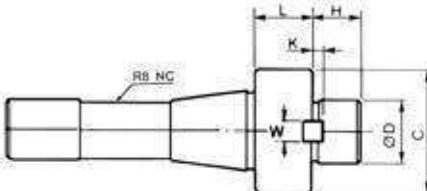
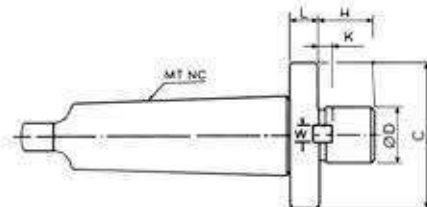
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NT40 WITH MAHO GAP



NT30



MATERIAL:SCM-21 HARDNESS:HRC 50°-55°

Squareness of mounting surface:Less than 0.0002"(0.005mm)

Deflection in shaft and taper:Less than 0.0002"(0.005mm)



INCH THREAD
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 | | 31.75 | 23 | 12.75 | 7 | 73 | 20 | 1 | 3212-002 |
| VF-103 | | 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 | | 31.75 | 22 | 12.75 | 7 | 73 | 20 | 1.5 | 3212-005 |
| VF-106 | | 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 | | 31.75 | 22 | 12.75 | 7 | 73 | 20 | 3.3 | 3212-010 |
| VF-111 | | 38.1 | 23 | 15.90 | 9 | 82 | 20 | 3.6 | 3212-011 |
| VF-112 | | 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 | | 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 MM THREAD

| 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 | | 27 | 20 | 12.75 | 7 | 53 | 20 | 0.8 | 3212-101 |
| VF-122 | | 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 | | 16 | 17 | 16.4 | | 40 | 20 | 1.17 | 3212-103A |
| VF-124 | | 27 | 20 | 12.75 | 7 | 53 | 20 | 1.3 | 3212-104 |
| VF-125 | | 32 | 23 | 15.90 | 7 | 63 | 20 | 1.4 | 3212-105 |
| VF-126 | | 40 | 26 | 19.05 | 8 | 85 | 20 | 1.9 | 3212-106 |
| VF-127 | | 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 | | 27 | 20 | 12.75 | 7 | 53 | 20 | 3.3 | 3212-109 |
| VF-130 | | 32 | 23 | 15.90 | 7 | 63 | 20 | 3.5 | 3212-110 |
| VF-131 | R8 | 40 | 26 | 19.05 | 8 | 85 | 20 | 3.7 | 3212-111 |
| VF-132 | | 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 | | 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 |



Milling Collet Chuck

COLLET HOLDER WITH ISO-SHANK
OZ-32



DIN 6388 # 32 SERIES
DIN 2080 NT-SHANK

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| 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 |



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 |

Milling Collet Chuck Kit

Including Shank, full set of collets, wrench and case.
OZ-32 DIN 6388



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" |



Morse Taper Adapter

NT-30, 40, 50, R8, MT3, 4

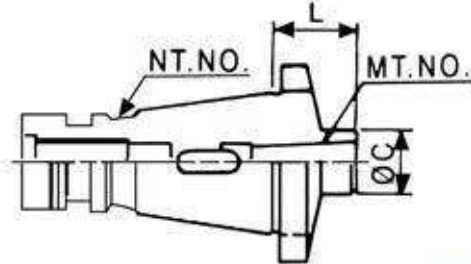


DIN 2080/ISO SHANK



MORSE TAPER ADAPTER
WITH STRAIGHT SHANK

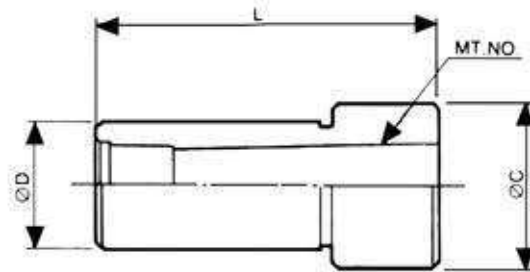
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STANDARD TYPE

| ORDER NO. | TAPER | TYPE | C | L | WEIGHT (kgs) | CODE NO. |
|-----------|-------|------|----|-----|--------------|----------|
| VI-102 | NT30 | MT2 | 32 | 50 | 0.6 | 3211-031 |
| VI-103 | | MT3 | 35 | 65 | 0.7 | 3211-032 |
| VI-104 | NT40 | MT1 | 25 | 30 | 0.9 | 3211-033 |
| VI-105 | | MT2 | 32 | 30 | 1 | 3211-034 |
| VI-106 | | MT3 | 40 | 70 | 1.2 | 3211-035 |
| VI-107 | NT50 | MT4 | 50 | 90 | 1.5 | 3211-036 |
| VI-108 | | MT2 | 32 | 30 | 2.8 | 3211-037 |
| VI-109 | | MT3 | 40 | 30 | 2.7 | 3211-038 |
| VI-110 | NT50 | MT4 | 50 | 45 | 3.2 | 3211-039 |
| VI-111 | | 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-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-MT2 | 25 | MT2 | 33 | 70 | 0.2 | 3211-063 |
| VI-135 | | C25-MT3 | 25 | MT3 | 33 | 90 | 0.2 | 3211-064 |
| VI-136 | C32 | C32-MT1 | 32 | MT1 | 37 | 60 | 0.36 | 3211-065 |
| VI-137 | | C32-MT2 | 32 | MT2 | 37 | 70 | 0.37 | 3211-066 |
| VI-138 | | C32-MT3 | 32 | MT3 | 37 | 90 | 0.35 | 3211-067 |
| VI-138-4 | | C32-MT4 | 32 | MT4 | 37 | 112 | 0.3 | 3211-068 |

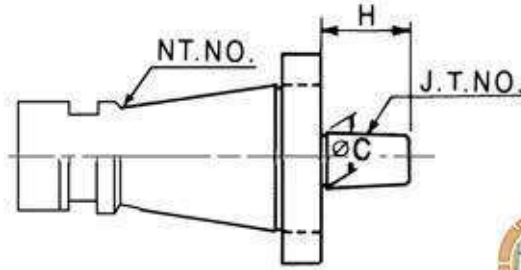


Jacobs Taper Drill Chuck Arbor

NT30, 40, 50-JT & B

DIN 2080/ISO SHANK

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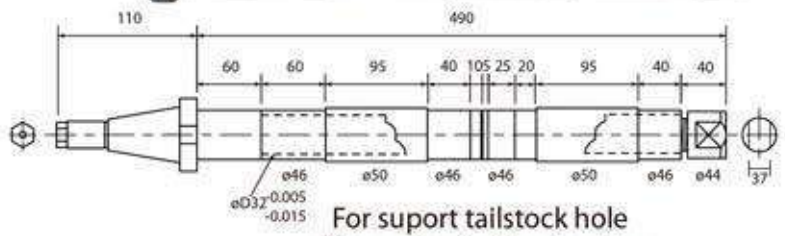


| ORDER NO. | TAPER | JT NO | C | H | WEIGHT (kgs) | CODE NO. |
|-----------|-------|-------|--------|----|--------------|----------|
| VJ-106 | NT40 | JT6 | 17.17 | 26 | 1 | 3209-095 |
| VJ-109 | NT50 | JT6 | 17.17 | 26 | 3.2 | 3209-098 |
| VJ-111 | NT30 | B16 | 15.733 | 24 | 0.5 | 3209-099 |
| VJ-112 | NT40 | B16 | 15.733 | 24 | 1 | 3209-100 |

PLEASE NOTIFY THE DRAW BAR THREAD SIZE IS MM SIZE OR INCH SIZE WHEN ORDERING.

Horizontal Milling Arbor

NEW With Key Way Wide 5/16"



| ORDER NO. | TAPER | ØD | ØC | G | L | L1 | WEIGHT (kg) | CODE NO. |
|-----------|------------------|----|----|----------|-----|-----|-------------|----------|
| VL-110 | NT40 M16x2.0P | 32 | 46 | M30 x P2 | 600 | 490 | 7.5 | 3209-130 |

Tang For Morse Taper Shank

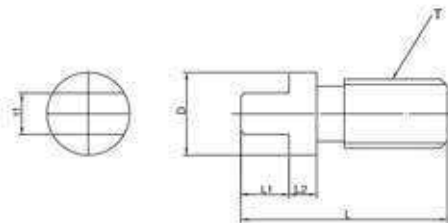
SURFACE TREATMENT: BLACKENING

HRC 45°

NEW



Tang for draw bar thread type to tang type



| ORDER NO. | Morse | D | L | L1 | L2 | T | t1 | WEIGHT | CODE NO. |
|-----------|-------|----|----|----|----|----------|------|--------|----------|
| VMTS-2 | 2 | 12 | 30 | 7 | 4 | M10X1.5 | 6 | 0.02 | 3209-201 |
| VMTS-3 | 3 | 17 | 40 | 12 | 4 | M12X1.75 | 7.5 | 0.04 | 3209-202 |
| VMTS-4 | 4 | 24 | 46 | 13 | 5 | M16X2 | 11.5 | 0.09 | 3209-203 |
| VMTS-5 | 5 | 34 | 47 | 14 | 5 | M24X3 | 15.5 | 0.18 | 3029-204 |



Oli-Feed Holder / Slo

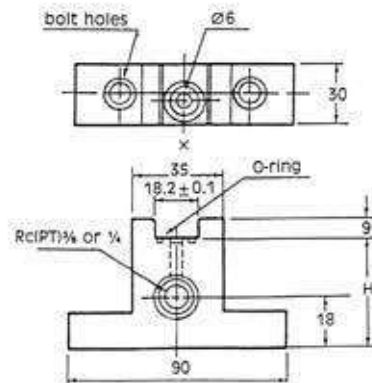
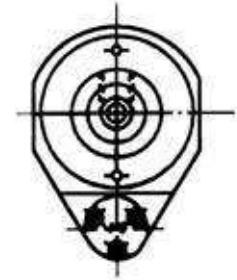
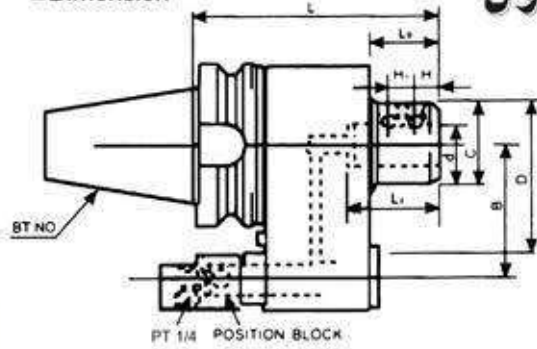


Coolant hole holder for straight shank
BT40,BT50

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■Dimension



(Note) H & X dimensions differ depending on machines employed.

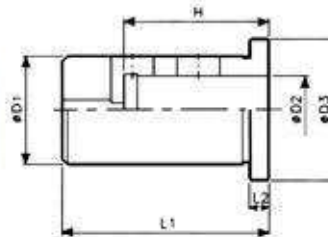
POSITIONING BLOCK

In using, OIL-FEED holder, positioning block illustrated here is necessary. The positioning block can be mounted to the spindle guide but it shall be mounted so as not to interfere with ATC arm, etc. of machine. it is necessary to consult the machine manufacturer about the proper mounting.

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 |
| BT50SLO32-165 | 32 | 165 | 80 | 54 | 100 | 42 | 60 | 15 | 15 | 7.1KGS | 3214-003 |
| BT50SLO40-165 | 40 | 165 | 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 | | | | 50 | 0.5 | 3214-106 |



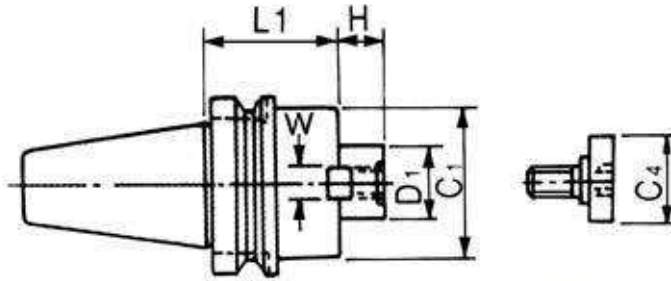
Face Mill Arbor



BT30,40,50

BT-SHANK MAS 403

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INCH FMA TYPE

| ORDER NO. | TAPER | D1 | L1 | H | C1 | W | C4 | N.W. (KG) | CODE NO. |
|-----------|--------|-------|-----|--------|-------|------|-----|-----------|----------|
| BT-101 | BT30 | 25.4 | 45 | 22 | 45 | 9.5 | 33 | 1.0 | 3212-201 |
| BT-103 | BT40 | 25.4 | 45 | 22 | 50 | 9.5 | 33 | 1.6 | 3212-203 |
| BT-105 | | 25.4 | 90 | 22 | 50 | 9.5 | 33 | 1.6 | 3212-205 |
| BT-106 | | 31.75 | 45 | 30 | 60 | 12.7 | 40 | 1.8 | 3212-206 |
| BT-108 | | 31.75 | 90 | 30 | 60 | 12.7 | 40 | 2.8 | 3212-208 |
| BT-109 | BT50 | 38.1 | 60 | 34 | 74 | 15.9 | 50 | 2.5 | 3212-209 |
| BT-111 | | 25.4 | 45 | 22 | 60 | 9.5 | 33 | 4.2 | 3212-211 |
| BT-112 | | 25.4 | 105 | 22 | 50 | 9.5 | 33 | 4.9 | 3212-212 |
| BT-113 | | 25.4 | 150 | 22 | 50 | 9.5 | 33 | 6.2 | 3212-213 |
| BT-114 | | 31.75 | 45 | 30 | 70 | 12.7 | 40 | 4.0 | 3212-214 |
| BT-115 | | 31.75 | 75 | 30 | 60 | 12.7 | 40 | 4.8 | 3212-215 |
| BT-116 | | 31.75 | 105 | 30 | 60 | 12.7 | 40 | 5.6 | 3212-216 |
| BT-117 | | 38.1 | 45 | 34 | 85 | 15.9 | 50 | 4.6 | 3212-217 |
| BT-118 | 38.1 | 75 | 34 | 85 | 15.9 | 50 | 5.6 | 3212-218 | |
| BT-119 | 50.8 | 45 | 36 | 95 | 19.05 | 65 | 4.8 | 3212-219 | |
| BT-121 | 47.625 | 75 | 38 | 128.57 | 25.4 | - | 7.9 | 3212-221 | |

METRIC FMB TYPE

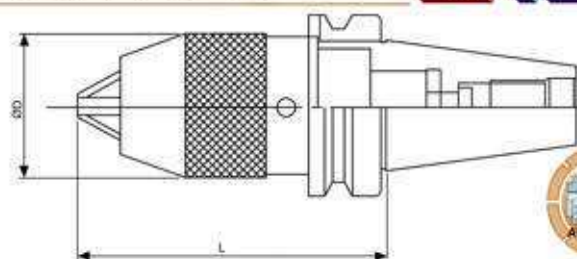
| ORDER NO. | TAPER | D1 | L1 | H | C1 | W | C4 | N.W. (KG) | CODE NO. |
|-----------|-------|----|-----|----|----|----|----|-----------|----------|
| BT-150 | BT30 | 22 | 45 | 18 | 48 | 10 | 33 | 2.0 | 3212-267 |
| BT-151 | | 27 | 45 | 20 | 60 | 12 | 33 | 2.2 | 3212-268 |
| BT-152 | BT40 | 22 | 45 | 18 | 48 | 10 | 50 | 1.5 | 3212-269 |
| BT-153 | | 22 | 90 | 18 | 48 | 10 | 33 | 2.2 | 3212-270 |
| BT-154 | | 27 | 45 | 20 | 60 | 12 | 33 | 1.7 | 3212-271 |
| BT-155 | | 27 | 90 | 20 | 60 | 12 | 33 | 2.7 | 3212-272 |
| BT-156 | | 32 | 45 | 22 | 62 | 14 | 50 | 1.8 | 3212-273 |
| BT-157 | | 40 | 60 | 26 | 85 | 16 | 50 | 2.7 | 3212-274 |
| BT-158 | BT50 | 22 | 45 | 18 | 60 | 10 | 33 | 4.2 | 3212-275 |
| BT-159 | | 22 | 75 | 18 | 60 | 10 | 33 | 4.6 | 3212-276 |
| BT-160 | | 27 | 45 | 20 | 70 | 12 | 33 | 4.3 | 3212-277 |
| BT-161 | | 27 | 75 | 20 | 60 | 12 | 33 | 4.9 | 3212-278 |
| BT-162 | | 27 | 105 | 20 | 60 | 12 | 33 | 5.7 | 3212-279 |
| BT-163 | | 32 | 75 | 22 | 75 | 14 | 50 | 5.5 | 3212-280 |
| BT-164 | | 32 | 105 | 22 | 80 | 14 | 33 | 6.5 | 3212-281 |
| BT-165 | | 32 | 150 | 22 | 80 | 14 | 33 | 8.7 | 3212-282 |
| BT-166 | | 40 | 75 | 26 | 85 | 16 | 50 | 6 | 3212-283 |



Drill Chuck Holder / APU



کلت سه نظام اتومات



| 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 |

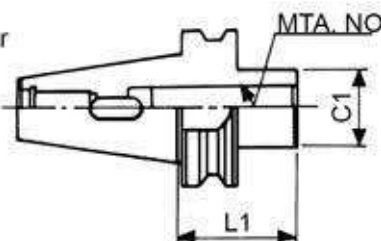


Morse Taper Adaptor

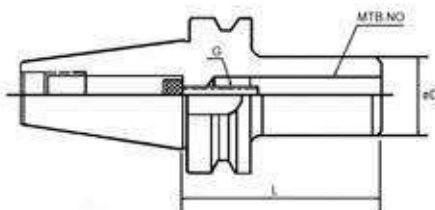
BT30,40,50-MTA,MTB

MAS 403 BT-SHANK

Pull Stud For MTA Adaptor



Pull Stud For MTB Adaptor



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 | | MT-3 | 80 | 40 | 1.2 | 3211-092 |
| BT-209 | | MT-1 | 50 | 25 | 1.1 | 3211-094 |
| BT-212 | BT40 | MT-2 | 50 | 32 | 1.1 | 3211-095 |
| BT-213 | | MT-2 | 120 | 32 | 1.4 | 3211-095A |
| BT-215 | | MT-3 | 75 | 40 | 1.3 | 3211-096 |
| BT-216 | | MT-3 | 135 | 40 | 1.7 | 3211-096A |
| BT-218 | | MT-4 | 95 | 48 | 1.5 | 3211-097 |
| BT-219 | | MT-4 | 165 | 48 | 2.3 | 3211-097A |
| BT-220 | | MT-1 | 45 | 25 | 3.5 | 3211-098 |
| BT-223 | BT50 | MT-2 | 50 | 32 | 3.5 | 3211-099 |
| BT-224 | | MT-2 | 135 | 32 | 4 | 3211-099A |
| BT-226 | | MT-3 | 65 | 40 | 3.6 | 3211-100 |
| BT-227 | | MT-3 | 150 | 40 | 4.4 | 3211-100A |
| BT-229 | | MT-4 | 75 | 48 | 3.6 | 3211-101 |
| BT-230 | | MT-4 | 180 | 48 | 4.9 | 3211-101A |
| BT-231 | MT-5 | 105 | 65 | 4.2 | 3211-102 | |

Morse Taper Adaptor



MTB TYPE (STANDARD TYPE)

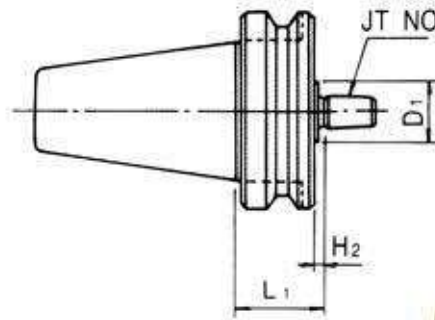
| ORDER NO. | TAPER | MT.NO. | L | ØD | G | WEIGHT(KG) | CODE NO. |
|-----------|-------|--------|----|----|-----|------------|----------|
| BT-236 | BT40 | MTB1 | 45 | 25 | M16 | 1 | 3211-105 |
| BT-237 | | MTB2 | 45 | 32 | M10 | 1 | 3211-106 |
| BT-238 | | MTB3 | 75 | 40 | M12 | 1.2 | 3211-107 |
| BT-239 | | MTB4 | 75 | 48 | M16 | 1.3 | 3211-108 |
| BT-241 | BT50 | MTB2 | 45 | 32 | M10 | 3.6 | 3211-110 |
| BT-242 | | MTB3 | 60 | 40 | M12 | 3.7 | 3211-111 |
| BT-243 | | MTB4 | 75 | 48 | M16 | 3.7 | 3211-112 |
| | | | | | | | |



Jacobs Taper Arbor



MAS 403 BT-SHANK



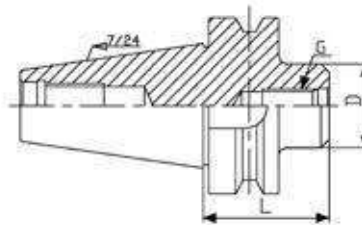
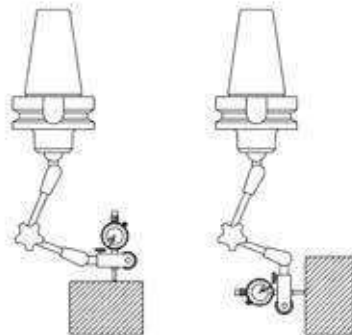
| ORDER NO. | TAPER | JT.NO. | L1 | D1 | H2 | WEIGHT (KG) | CODE NO. |
|-----------|-------|--------|----|----|----|-------------|-----------|
| BT-315 | BT40 | JT-6 | 45 | 30 | 4 | 1.2 | 3209-147 |
| BT-316 | | JT-6 | 90 | 30 | 4 | 1.4 | 3209-148 |
| BT-325 | BT50 | JT-6 | 45 | 30 | 4 | 4.2 | 3209-151 |
| BT-332 | BT40 | B16* | 45 | 30 | 4 | 1.45 | 3209-155 |
| BT-332-1 | | B18* | 45 | | | | 3209-155A |
| BT-333 | BT50 | B16* | 45 | 30 | 4 | 5.1 | 3209-156 |
| BT-333-1 | | B18* | 45 | | | | 3209-156A |



Lever Checking Holders



M8 THREAD FOR CHECKING ARM



| 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 |



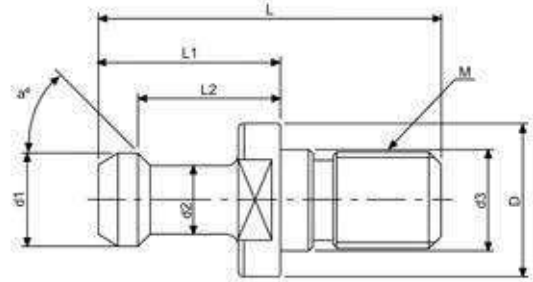
Pull Studs

BT 30, 40, 50



FOR MAS 403

پیچ پول استاد



THREAD GROUND

- MATERIAL: SNM 21
- HARDNESS: HRC 54°±2°
- SHANK BT-30(P 30T)
- SHANK BT-40(P 40T)
- SHANK BT-50(P 50T)

Unit:mm

| ORDER NO. | TAPER NO. | a° | L | L1 | L2 | D | d1 | d2 | d3 | M | NOTE | CODE NO. |
|-----------|-----------|----|----|----|----|------|----|----|------|-----|-------------|----------|
| BT-510 | BT30X90° | 90 | 43 | 23 | 18 | 16.5 | 11 | 7 | 12.5 | M12 | P30T-3(90°) | 3215-007 |
| BT-501 | BT30X45° | 45 | 43 | 23 | 18 | 16.5 | 11 | 7 | 12.5 | M12 | P30T-1(45°) | 3215-008 |
| BT-502 | BT30X60° | 60 | 43 | 23 | 18 | 16.5 | 11 | 7 | 12.5 | M12 | P30T-2(60°) | 3215-009 |
| BT-511 | BT40X90° | 90 | 60 | 35 | 28 | 23 | 15 | 10 | 17 | M16 | P40T-3(90°) | 3215-010 |
| BT-503 | BT40X45° | 45 | 60 | 35 | 28 | 23 | 15 | 10 | 17 | M16 | P40T-1(45°) | 3215-011 |
| BT-504 | BT40X60° | 60 | 60 | 35 | 28 | 23 | 15 | 10 | 17 | M16 | P40T-2(60°) | 3215-012 |
| BT-512 | BT50X90° | 90 | 85 | 45 | 35 | 38 | 23 | 17 | 25 | M24 | P50T-3(90°) | 3215-013 |
| BT-505 | BT50X45° | 45 | 85 | 45 | 35 | 38 | 23 | 17 | 25 | M24 | P50T-1(45°) | 3215-014 |
| BT-506 | BT50X60° | 60 | 85 | 45 | 35 | 38 | 23 | 17 | 25 | M24 | P50T-2(60°) | 3215-015 |



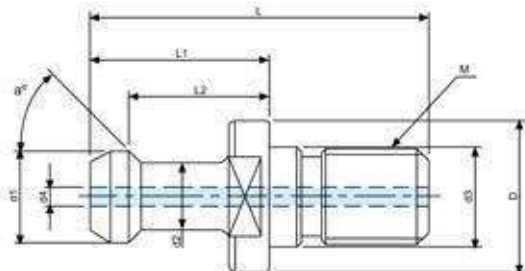
Pull Studs

MAS 403
BT-40,50

JIS B6339-1986

• With through hole for internal coolant

FOR MAS 403

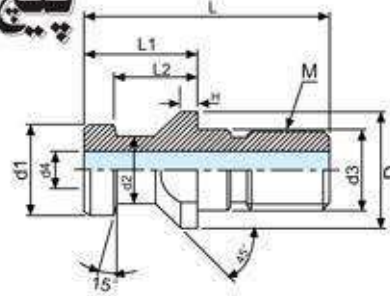


Unit:mm

| 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 69872-1988

پیچ پول استاد

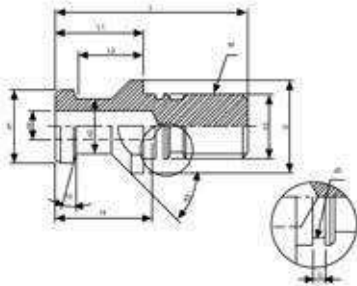


With Collant Hole

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 | 3 | M12 | | 3215-066 |
| BT-523 | DIN40-A | 54 | 26 | 20 | 23 | 19 | 14 | 17 | 7 | M16 | 4 | 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 |



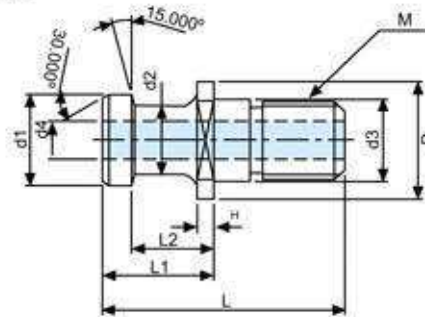
WITHOUT O-RING DIN69872-B TYPE

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-1984A



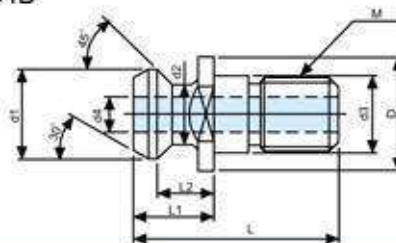
With Collant Hole

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 | 3 | 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-1984B



With Collant Hole

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 |

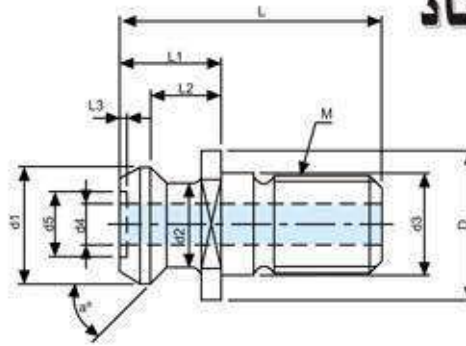


Pull Studs



پیچ پول استاد

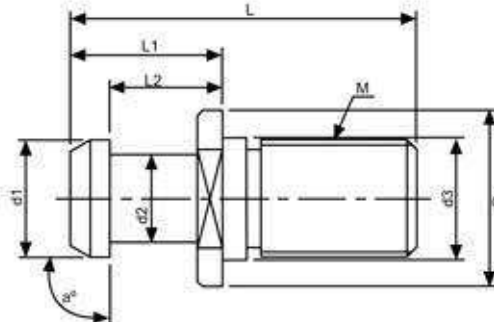
MAZAK FOR MAZAK MACHINE



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 |

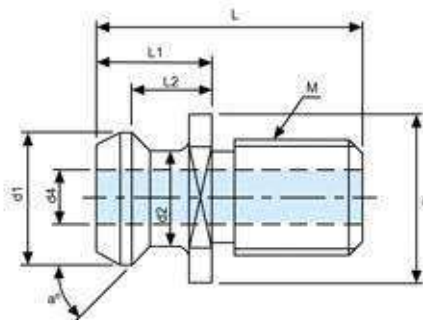
MITSUI FOR MITSUI MACHINE



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 |

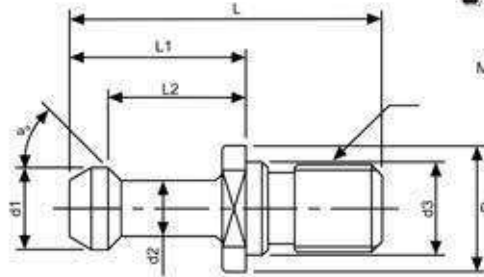


Pull Studs



پیچ پول استاد

CAT-BT FOR BT MACHINE



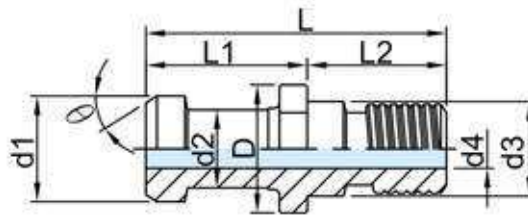
Unit:mm

| 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 |



Pull Studs

FOR JIS 6339B-40P



With Collant Hole
OKUNMA JIS #40

Unit:mm

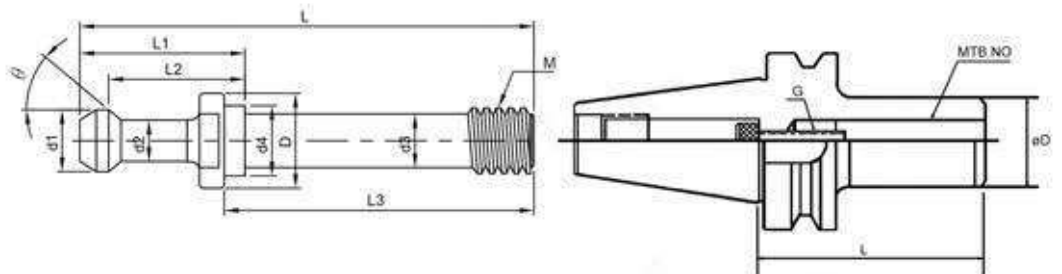
| ORDER NO. | TAPER NO. | a° | L | L1 | L2 | D | d1 | d2 | d3 | d4 | M | CODE NO. |
|-----------|-----------|----|----|----|----|----|----|----|----|----|-----|----------|
| BT-556 | JIS | 30 | 54 | 29 | 23 | 23 | 19 | 14 | 17 | 7 | M16 | 3215-111 |

STEEL: SNCM-21



Pull Studs

FOR MAS 403



Unit:mm

| ORDER NO. | TAPER NO. | a° | L | L1 | L2 | L3 | D | d1 | d2 | d3 | d4 | M | CODE NO. |
|-----------|-----------|----|-----|----|----|----|----|----|----|----|----|-----|----------|
| BT-560 | BT40-MTB3 | 45 | 105 | 35 | 28 | 70 | 23 | 15 | 10 | 17 | 13 | M12 | 3215-121 |
| BT-561 | BT40-MTB4 | 45 | 110 | 35 | 28 | 75 | 23 | 15 | 10 | 17 | 13 | M16 | 3215-122 |



Sidelock End Mill Holder



DIN69871 A

WELDON TYPE

DIN 69871A

کلت سه نظام

■ Dimensions:

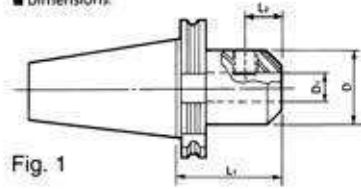


Fig. 1

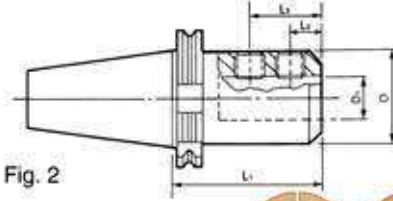


Fig. 2



Unit:mm

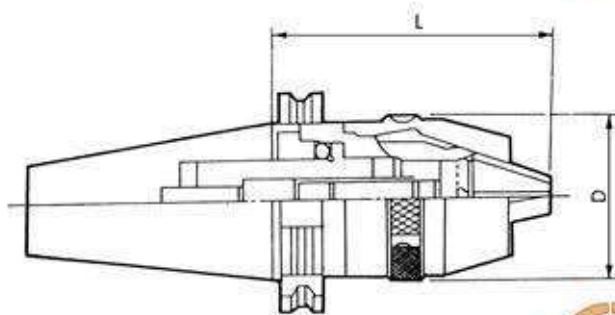


| ORDER NO. | SIZE | Fig. | D1 | D | L1 | L2 | L3 | WEIGHT (kg) | CODE NO. |
|-----------|---------------|------|----|----|-----|------|----|-------------|----------|
| SK-417 | SK40-EM6-50 | 1 | 6 | 25 | 50 | 18 | - | 1 | 3213-207 |
| SK-418 | SK40-EM8-50 | 1 | 8 | 28 | 50 | 18 | - | 1.1 | 3213-208 |
| 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 DIN 69871A | SAME SIZE | Clamping range (Ømm) | D | L | | WEIGHT (kg) | CODE NO. |
|-----------|-----------------|-------------|----------------------|------|---------|---------|-------------|----------|
| | | | | | Minimum | Maximum | | |
| SK-511 | SK40-APU08 | INT-8-SK40 | 0.5-8 | 35.6 | 81 | 90 | 1.4 | 3301-001 |
| SK-512 | SK40-APU13 | INT-13-SK40 | 1-13 | 52 | 99 | 111 | 1.9 | 3301-002 |
| SK-514 | SK50-APU13 | INT-13-SK50 | 1-13 | 52 | 93 | 106 | 3.9 | 3301-004 |
| SK-509 | SK30-APU08 | INT-8-SK30 | 0.5-8 | 35.6 | 80 | 88 | 0.7 | 3301-005 |
| SK-510 | SK30-APU13 | INT-13-SK30 | 1-13 | 52 | 98 | 104 | 1.34 | 3301-006 |
| SK-515 | SK40-APU16 | INT-16-SK40 | 3-16 | 56.8 | 127 | 140 | 2.4 | 3301-007 |
| SK-516 | SK50-APU16 | INT-16-SK50 | 3-16 | 56.8 | 98 | 111 | 3.9 | 3301-008 |



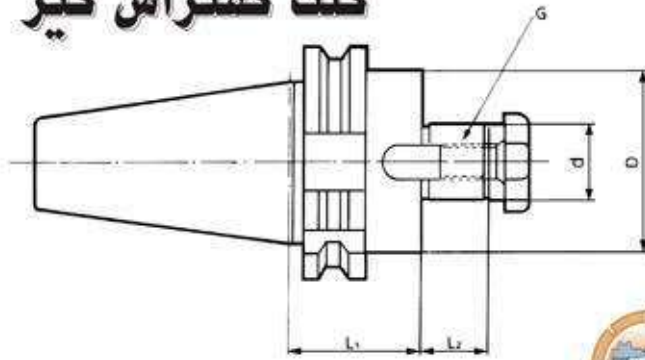
Face Mill Holder



Holder For Face Mill Cutter.
DIN69871 A

DIN 69871A

کلت کف تراش گیر



Unit:mm

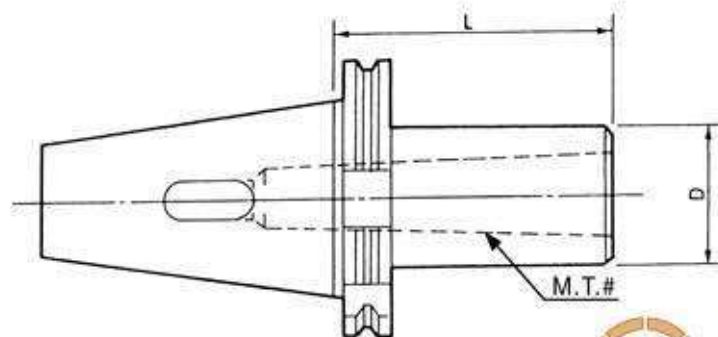
| ORDER NO. | SIZE | d | D | L1 | L2 | G | WEIGHT(kg) | CODE NO. |
|-----------|---------------|----|----|----|----|-----|------------|----------|
| SK-112 | SK40-FMB22-50 | 22 | 48 | 50 | 18 | M10 | 1.5 | 3211-202 |
| SK-113 | SK40-FMB27-50 | 27 | 60 | 50 | 20 | M12 | 1.6 | 3211-203 |
| SK-114 | SK40-FMB32-50 | 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 |



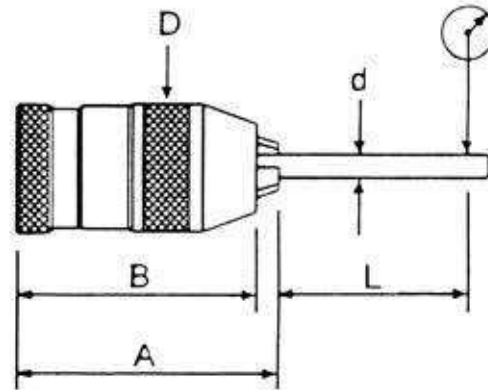
Integrated Type Keyless Drill Chucks

FOR DRILL ONLY , NOT FOR END MILL OR TAP

CAT-TYPE



کلت سه نظام



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 |

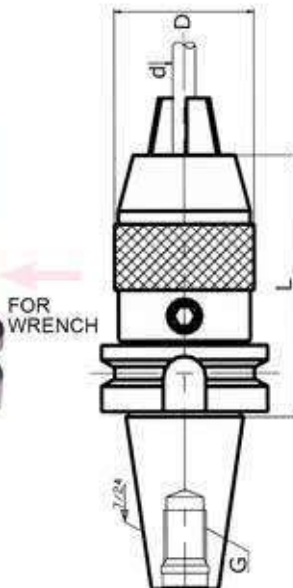
| ITEM NO. | d mm | L mm | Max Tolerance mm | Torque kgf-cm |
|----------|------|------|------------------|---------------|
| INT-8 | 3 | 25 | 0.05 | 160 |
| | 6 | 30 | | |
| | 8 | | | |
| INT-10 | 3 | 25 | 0.05 | 260 |
| | 6 | 30 | | |
| | 10 | | | |
| INT-13 | 5 | 30 | 0.05 | 400 |
| | 10 | 25 | | |
| | 13 | | | |
| INT-16 | 5 | 25 | 0.05 | 480 |
| | 10 | 30 | | |
| | 16 | | | |



Integrated Type Keyless Drill Chucks

CAN FOR TAP

RL type keyless drill chuck with BT SHANK
SK SHANK
NT 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.

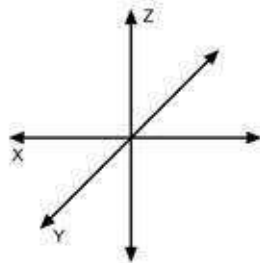
| ORDER NO. | Clamping Capacity mm / d | L | D | G | CODE NO. |
|------------|--------------------------|-----|----|------------|----------|
| BT40-VRL13 | 0.5-13 | 95 | 50 | M16 | 3301-090 |
| BT40-VRL16 | 3-16 | 113 | 57 | M16 | 3301-091 |
| SK40-VRL13 | 0.5-13 | 85 | 50 | M16 | 3301-092 |
| SK40-VRL16 | 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 |

مرکز یاب ۳ بعدی



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: 0.93 KGS



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 |



KNT Type Keyless Drill Chucks

FOR DRILL ONLY , NOT FOR END MILL OR TAP

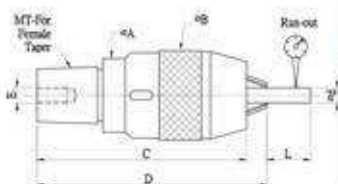
This chuck for CNC keyless drill chuck holders, built by the highest engineering standard.

- 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.
- 2500R.P.M



ACCURACY

| ITEM NO. | Ød mm | L mm | Max Run-out mm | Torque kgf-cm |
|----------|-------|------|----------------|---------------|
| KNT-8 | 3 | 35 | 0.05 | 160 |
| | 6 | | | |
| | 8 | 50 | | |
| KNT-13 | 5 | 55 | 0.05 | 320 |
| | 10 | | | |
| | 13 | 75 | | |
| KNT-16 | 5 | 55 | 0.05 | 480 |
| | 10 | | | |
| | 16 | 80 | | |



| 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 | 0.5-16 | MT3 | 42 | 56 | 115 | 128 | M8x1.25 | 1.2 | 18/0.6 | 24/25 | 3033-602 |



Integrated Type Keyless Drill Chucks VERTEX®

کلت سه نظام

| 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 | 36 | 150 | 157 | 0.8 | 3301-030 |
| INT-8-JC-20 | 0.5-8 | 0-5/16" | JC-20 | 36 | 134 | 141 | 0.8 | 3301-031 |
| INT-8-BT30 | 0.5-8 | 1/64"-1/8" | BT30 | 36 | 78 | 85 | 1 | 3301-070 |
| INT-8-BT40 | 0.5-8 | 1/64"-1/8" | BT40 | 36 | 77 | 86 | 1.5 | 3301-072 |
| INT-8-NT30 | 0.5-8 | 1/64"-1/8" | NT30 | 36 | 67 | 75 | 0.8 | 3301-080 |
| INT-8-NT40 | 0.5-8 | 1/64"-1/8" | NT40 | 36 | 66 | 74 | 1.3 | 3301-081 |
| INT-8-SK40 | 0.5-8 | | SK-40 | 36 | 81 | 87 | 1.4 | 3301-083 |
| INT-13-R8 | 1-13 | 1/64"-1/2" | R8 | 50 | 196 | 205 | 1.5 | 3301-032 |
| INT-13-MT2 | 1-13 | 0-1/2" | MT-2 | 50 | 172 | 184 | 1.3 | 3301-082 |
| INT-13-MT3 | 1-13 | 0-1/2" | MT-3 | 50 | 190 | 201 | 1.4 | 3301-033 |
| INT-13-MT4 | 1-13 | 0-1/2" | MT-4 | 50 | 216 | 227 | 1.8 | 3301-034 |
| INT-13-JC-20 | 1-13 | 0-1/2" | JC-20 | 50 | 153 | 164 | 1.4 | 3301-035 |
| INT-13-JC-25 | 1-13 | 0-1/2" | JC-25 | 50 | 163 | 174 | 1.6 | 3301-036 |
| INT-13-JC-32 | 1-13 | 0-1/2" | JC-32 | 50 | 173 | 185 | 1.8 | 3301-037 |
| INT-13-NT30 | 1-13 | 0-1/2" | NT-30 | 50 | 86 | 99 | 1.4 | 3301-038 |
| INT-13-NT40 | 1-13 | 0-1/2" | NT-40 | 50 | 85 | 96 | 1.8 | 3301-039 |
| INT-13-BT30 | 1-13 | 1/64"-1/2" | BT30 | 50 | 96 | 108 | 1.4 | 3301-071 |
| INT-13-BT40 | 1-13 | 0-1/2" | BT-40 | 50 | 100 | 111 | 2 | 3301-040 |
| INT-13-BT50 | 1-13 | 0-1/2" | BT-50 | 50 | 106 | 117 | 4.7 | 3301-041 |
| INT-13-NT50 | 1-13 | 0-1/2" | NT-50 | 50 | 100 | 112 | 4.3 | 3301-059 |
| INT-13-SK30 | 1-13 | | SK-30 | 50 | 99 | 111 | 1.34 | 3301-084 |
| INT-13-SK40 | 1-13 | | SK-40 | 50 | 100 | 113 | 1.9 | 3301-085 |
| INT-13-SK50 | 1-13 | | SK-50 | 50 | 93 | 106 | 3.9 | 3301-087 |
| INT-16-R8 | 3-16 | 1/8"-5/8" | R8 | 57 | 198 | 211 | 1.9 | 3301-042 |
| INT-16-MT3 | 3-16 | 1/8"-5/8" | MT3 | 57 | 194 | 207 | 1.9 | 3301-043 |
| INT-16-MT4 | 3-16 | 1/8"-5/8" | MT4 | 57 | 219 | 232 | 2 | 3301-044 |
| INT-16-JC-20 | 3-16 | 1/8"-5/8" | JC-20 | 57 | 152 | 165 | 1.8 | 3301-045 |
| INT-16-JC-25 | 3-16 | 1/8"-5/8" | JC-25 | 57 | 162 | 178 | 1.7 | 3301-046 |
| INT-16-JC-32 | 3-16 | 1/8"-5/8" | JC-32 | 57 | 184 | 179 | 2.2 | 3301-047 |
| INT-16-NT40 | 3-16 | 1/8"-5/8" | NT-40 | 57 | 113 | 126 | 2.6 | 3301-049 |
| INT-16-BT40 | 3-16 | 1/8"-5/8" | BT-40 | 57 | 113 | 127 | 2.5 | 3301-050 |
| INT-16-BT50 | 3-16 | 1/8"-5/8" | BT-50 | 57 | 111 | 124 | 5 | 3301-051 |
| INT-16-NT50 | 3-16 | 1/8"-5/8" | NT-50 | 57 | 104 | 117 | 4.5 | 3301-056 |
| INT-16-SK40 | 3-16 | 1/8"-5/8" | SK-40 | 57 | 127 | 141 | 2.4 | 3301-057 |
| INT-16-SK50 | 3-16 | 1/8"-5/8" | SK-50 | 57 | 97 | 110 | 3.9 | 3301-058 |

| ORDER NO. | SIZE DIN 69871A | Clamping range (Ømm) | D | L | | WEIGHT (kg) | CODE NO. |
|-------------|--------------------|----------------------------|------|---------|---------|----------------|----------|
| | | | | Minimum | Maximum | | |
| INT-8-SK40 | SK40-APU08 | 0.5-8 | 35.6 | 81 | 87 | 1.4 | 3301-001 |
| INT-13-SK40 | SK40-APU13 | 1-13 | 52 | 100 | 113 | 1.9 | 3301-002 |
| INT-13-SK50 | SK50-APU13 | 1-13 | 52 | 93 | 106 | 3.9 | 3301-004 |
| INT-13-SK30 | SK30-APU13 | 1-13 | 52 | 99 | 111 | 1.34 | 3301-006 |
| INT-16-SK40 | SK40-APU16 | 3-16 | 56.8 | 127 | 140 | 2.4 | 3301-007 |
| INT-16-SK50 | SK50-APU16 | 3-16 | 56.8 | 97 | 110 | 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 | Ø36 | 0.8 | 3301-073 |
| INT-13-CAT30 | 0.5-13 | 1/64"-1/2" | | Ø50 | 1 | 3301-074 |
| INT-8-CAT40 | 0.5-8 | 1/64"-1/8" | CAT40 | Ø36 | 1.32 | 3301-075 |
| INT-13-CAT40 | 0.5-13 | 1/64"-1/2" | | Ø50 | 2.1 | 3301-076 |
| INT-16-CAT40 | 3-16 | 1/8"-5/8" | CAT50 | Ø57 | 2.26 | 3301-077 |
| INT-13-CAT50 | 0.5-13 | 1/64"-1/2" | | Ø50 | 3.95 | 3301-078 |
| INT-16-CAT50 | 3-16 | 1/8"-5/8" | | Ø57 | 4.2 | 3301-079 |



Integrated Type Keyless Drill Chucks VERTEX®

FOR DRILL ONLY , NOT FOR END MILL OR TAP

کلت سه نظام



The main-shafts is of integrated type, which is much more superior than the traditional design. The major features are as follows:

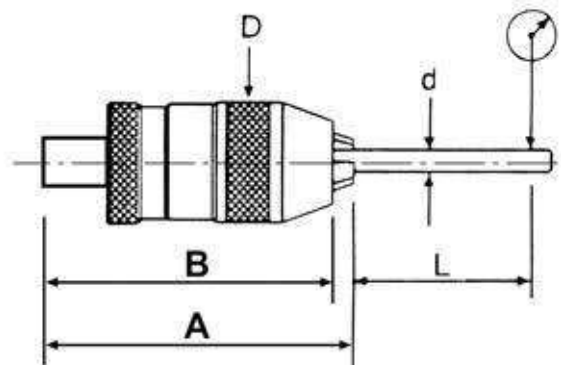
- Extremely rigid construction. Accuracy is same as page C66
- The accumulative tolerances can be reduced to a minimum, since the traditional mechanism requiring an ARBOR to connect the Drill Chucks which will generate the accumulative tolerances. The Integrated type Keyless Drill Chuck is designed to solve this problem totally.
- Prevent the Drill Chucks from falling out.
- Extremely safe in operation.
- 2500 R.P.M.



STANDARD ACCES.

ACCURACY

| ITEM NO. | d mm | L mm | Max Tolerance mm | Torque kgf-cm |
|----------|------|------|------------------|---------------|
| INT-8 | 3 | 25 | 0.05 | 160 |
| | 6 | 30 | | |
| | 8 | 30 | | |
| INT-10 | 3 | 25 | 0.05 | 260 |
| | 6 | 30 | | |
| | 10 | 30 | | |
| INT-13 | 5 | 30 | 0.05 | 400 |
| | 10 | 25 | | |
| | 13 | 25 | | |
| INT-16 | 5 | 25 | 0.05 | 480 |
| | 10 | 30 | | |
| | 16 | 30 | | |





Keyless Drill Chucks

TYPE:S FOR DRILL ONLY , NOT FOR END MILL OR TAP



HEAVY DUTY TYPE S

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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 |



Note

CAUTIONS



CAUTIONS:

- ✘ DO NOT USE END MILL AND TAP WITH DRILL CHUCK
- DRILL CHUCK ONLY CAN PROCESS VERTICAL JOB.
- ADD COOLANT WHILE HEAVY CUTTING.
- ✘ WHILE PROCESSING:
DO NOT MAKE HORIZONTAL MOVEMENT
OR ELSE, IT WILL CAUSE 3 JAWS' DEFORMATION.
NOT FOR END MILL.



Keyless Drill Chucks

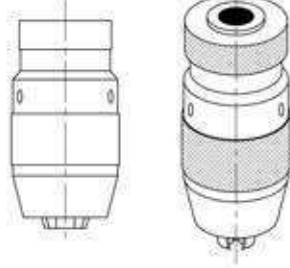


TYPE: XHSP

SPECIAL HEAVY DUTY TYPE

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FOR DRILL ONLY , NOT FOR END MILL OR TAP



- 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 instantaneous change of direction and equipped with spanner hole for tightening perfect safety.
- Especially suitable for CNC machining center & milling machine use.
- Accuracy: 50 mm length within 0.05 mm
- The key is optional

OPTIONAL ACCES.

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 | 40/0.6 | 13/14 | 3304-010 |
| 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 ACCESSES. | | | | | | 3304-001 | |
| 11032 | | 16XHSP | | | | | | | | 3304-002 | |
| 11033 | | 8XHSP | | | | | | | | 3304-003 | |
| 11034 | | 10XHSP | | | | | | | | 3304-004 | |



Keyless Drill Chucks

TYPE: H

FOR DRILL ONLY , NOT FOR END MILL OR TAP

STANDARD TYPE



Unit:mm

| 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 | 93.7 | 110.0 | 1080 | 3302-044 |

- Industrial design especially for life and safety while in operation.
- All hardened parts ensure long term for milling machines and drilling.



Key Type Drill Chucks



سه نظام آچاری



- Suitable for 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 |
| 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 |
| 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 |
| 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 |
| 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 |



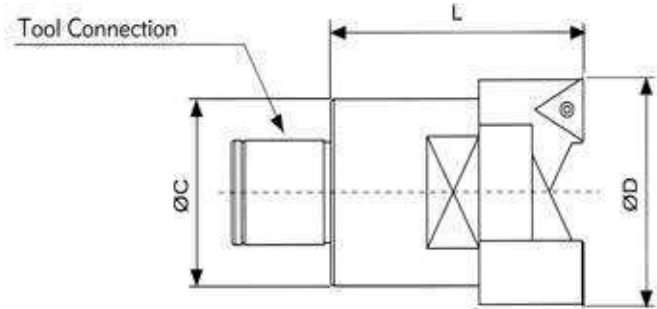
Changeable 2 Inserts Rough Boring Head VRB

VMH-SYSTEM

Boring diameter from $\varnothing 25$ - $\varnothing 350$ mm

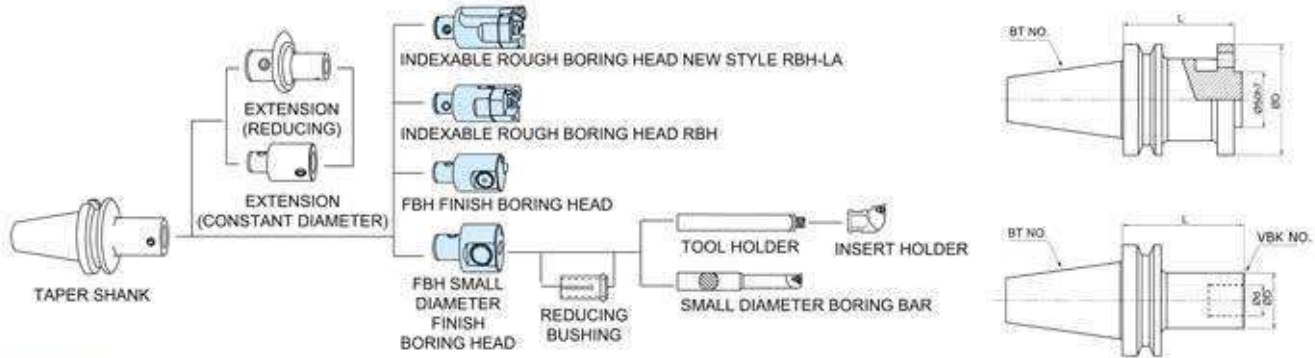
※Adjustable

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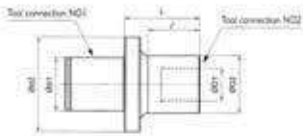


● INSERT STYLE -C ◆
-T ▲
-S ■

| | ORDER NO. | Tool connection | D(mm) Boring Range | | L (mm) | C (mm) | Insert | Weight (g) | CODE NO. | | | |
|------------|-------------|--|--------------------|-----|--------|------------|------------|------------|----------|------------|----|-----------|
| | VRB25-33C | B2080 | 25 | 33 | 45 | 24 | CCMT060204 | 0.15 | 3320-270 | | | |
| | VRB32-42C | B3080 | 32 | 42 | 55 | 31 | CCMT060204 | 0.3 | 3320-271 | | | |
| | VRB32-42T | | | | | | TCMT110204 | | 3320-272 | | | |
| | VRB40-55C | B4070 | 40 | 55 | 65 | 39 | CCMT09T304 | 0.5 | 3320-273 | | | |
| | VRB40-55T | | | | | | TCMT16T304 | | 3320-274 | | | |
| | VRB40-55S | | | | | | SCMT09T304 | | 3320-275 | | | |
| | VRB52-70C | B5060 | 52 | 70 | 75 | 50 | CCMT09T304 | 1 | 3320-276 | | | |
| | VRB52-70T | | | | | | TCMT16T304 | | 3320-277 | | | |
| | VRB52-70S | | | | | | SCMT09T304 | | 3320-278 | | | |
| | VRB68-92C | B6065 | 68 | 92 | 85 | 64 | CCMT120408 | 2 | 3320-279 | | | |
| | VRB68-92T | | | | | | TCMT16T304 | | 3320-280 | | | |
| | VRB68-92S | | | | | | SCMT120404 | | 3320-281 | | | |
| | VRB90-122C | B6065 | 90 | 122 | 100 | 80 | CCMT120408 | 2.9 | 3320-282 | | | |
| | VRB90-122T | | | | | | TCMT220408 | | 3320-283 | | | |
| VRB90-122S | SCMT120404 | | | | | | 3320-284 | | | | | |
| | VRB120-164C | VT-BT40-BS70 VT-BT50-BS100 VT-BT50-BS200 VT-BT50-BS300 VT-BT50-BS400 | 120 | 164 | 95 | 100 | CCMT120408 | 3.8 | 3320-285 | | | |
| | VRB120-164T | | | | | | TCMT220408 | | 3320-286 | | | |
| | VRB120-164S | | | | | | SCMT120404 | | 3320-287 | | | |
| | VRB160-204C | | 160 | 204 | 130 | 130 | CCMT120408 | 4.8 | 3320-288 | | | |
| | VRB160-204T | | | | | | TCMT220408 | | 3320-289 | | | |
| | VRB160-204S | | | | | | SCMT120404 | | 3320-290 | | | |
| | VRB200-300C | 200 | 300 | 95 | 170 | CCMT120408 | 6.5 | 3320-291A | | | | |
| | VRB200-300T | | | | | TCMT220408 | | 3320-292A | | | | |
| | VRB200-300S | | | | | SCMT120404 | | 3320-293A | | | | |
| | VRB300-400C | | | | | 300 | | 400 | 260 | CCMT120408 | 10 | 3320-297A |
| | VRB300-400T | | | | | | | | | TCMT220408 | | 3320-298A |
| | VRB300-400S | | | | | | | | | SCMT120404 | | 3320-299A |



Extension (Reduced)



| ORDER NO. | d1 | d2 | D1 | D2 | L | l | Applicable Boring Heads | Weight (kg) | CODE NO. |
|------------|----|----|----|----|---------------|-----|-------------------------|-------------|---------------|
| VBQ2-1-36 | 14 | 24 | 11 | 19 | 36 | 30 | FBB20 | 0.1 | 3320-301 |
| VBQ3-1-41 | 18 | 31 | | | 41 | 30 | FBB20 | 0.15 | 3320-302 |
| VBQ3-2-37 | | | 14 | 24 | 37 | 25 | VRB25 ; FBB25 | 0.15 | 3320-303 |
| VBQ4-1-58 | 22 | 39 | 11 | 19 | 58 | 40 | FBB20 | 0.3 | 3320-304 |
| VBQ4-2-50 | | | 14 | 24 | 50 | 36 | VRB25 ; FBB25 | 0.3 | 3320-305 |
| VBQ4-3-50 | | | 18 | 31 | 50 | 37 | VRB32 ; FBB32 | 0.35 | 3320-306 |
| VBQ5-1-60 | 28 | 50 | 11 | 19 | 60 | 40 | FBB20 | 0.45 | 3320-307 |
| VBQ5-2-54 | | | 14 | 24 | 54 | 35 | VRB25 ; FBB25 | 0.45 | 3320-308 |
| VBQ5-2-74 | | | | | 74 | 55 | VRB25 ; FBB25 | 0.5 | 3320-309 |
| VBQ5-3-47 | | | 18 | 31 | 47 | 29 | VRB32 ; FBB32 | 0.5 | 3320-310 |
| VBQ5-3-72 | | | | | 72 | 54 | VRB32 ; FBB32 | 0.6 | 3320-311 |
| VBQ5-4-42 | | | 22 | 39 | 42 | 25 | VRB40 ; FBB40 | 0.5 | 3320-312 |
| VBQ5-4-67 | 67 | 50 | | | VRB40 ; FBB40 | 0.7 | 3320-313 | | |
| VBQ6-1-70 | 36 | 64 | 11 | 19 | 70 | 40 | FBB20 | 0.9 | 3320-314 |
| VBQ6-2-63 | | | 14 | 24 | 63 | 45 | VRB25 ; FBB25 | 0.7 | 3320-315 |
| VBQ6-2-93 | | | | | 93 | 75 | VRB25 ; FBB25 | 0.8 | 3320-316 |
| VBQ6-3-56 | | | 18 | 31 | 56 | 39 | VRB32 ; FBB32 | 0.75 | 3320-317 |
| VBQ6-3-96 | | | | | 96 | 79 | VRB32 ; FBB32 | 0.95 | 3320-318 |
| VBQ6-4-51 | | | | | 51 | 35 | VRB40 ; FBB40 | 0.85 | 3320-319 |
| VBQ6-4-101 | | | 22 | 39 | 101 | 85 | VRB40 ; FBB40 | 1.3 | 3320-320 |
| VBQ6-5-41 | | | | | 28 | 50 | 41 | 25 | VRB52 ; FBB52 |
| VBQ6-5-91 | | | 91 | 75 | | | VRB52 ; FBB52 | 1.45 | 3320-322 |

Extension (Constant Diameter)



| ORDER NO. | d | D | L | Applicable Boring Heads | Weight (kg) | CODE NO. |
|-----------|----|----|----|---------------------------------------|-------------|----------|
| VBQ1-1-30 | 11 | 19 | 30 | FBB20 | 0.07 | 3320-323 |
| VBQ2-2-30 | 14 | 24 | 30 | VRB25 ; FBB25 | 0.1 | 3320-324 |
| VBQ3-3-30 | 18 | 31 | 30 | VRB32 ; FBB32 | 0.15 | 3320-325 |
| VBQ4-4-45 | 22 | 39 | 45 | VRB40 ; FBB40 ; FBB44 | 0.4 | 3320-326 |
| VBQ5-5-60 | 28 | 50 | 60 | VRB52 ; FBB52 ; FBB55 | 0.8 | 3320-327 |
| VBQ6-6-60 | 36 | 64 | 60 | VRB68/VRB90 ; FBB68, 100, 150 ; FBB66 | 1.4 | 3320-328 |



High Precision Boring Head Set VERTEX®

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1 SCALE 0.005 mm
0.01 mm per Ø

BORING CAPACITY Ø8-Ø280

• Boring Bar
PAGE C83

NEW



Clampinf Screw For
Boring Head

Clamping Screw For
Boring Bar

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: 27 mm. For Ø diameter is 0.01 mm
- 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-SK50 | SK-50 | | M24X3.0P | | 3320-501 |
| 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 |
|--------------|---------|---------|---------|---------------------------|--------|--------|
| BRB2008-32 | 8-11 | 32 | 80 | TBGT060102L SUMITOMO | TS2001 | T6 |
| BRB2010-40 | 10-13 | 40 | 80 | | | |
| BRB2012-53 | 12-17 | 53 | 85 | TPGH090204L MITSUBISHI | TS2504 | T8 |
| BRB2016-68 | 16-21 | 68 | 100 | | | |
| BRB2020-83 | 20-130 | 83 | 115 | TPGH110304L MITSUBISHI | TS3005 | T10 |
| BRB2025-96 | 25-135 | 96 | 135 | | | |
| BRB2030-115 | 30-140 | 115 | 154 | | | |
| BRB2035-97-L | 120-280 | 14 | 99 | | | |



Universal Boring And Facing Master Head **VERTEX**

BORING CAPACITY Ø5-Ø250
FOR VERTICAL HOLE BORING IS Ø110

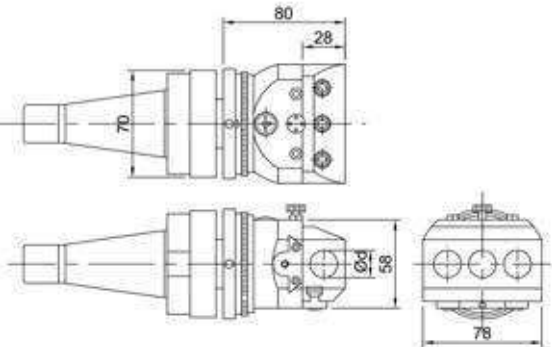
1 SCALE 0.01 mm per Ø

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Boring Bar
PAGE C83

| 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 |
| VBHU-214 | C-20 | | | 6 | 3401-013 |




SPECIFICATION VBHU

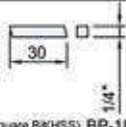
Unit:mm

| ACTUAL SIZE | OVERING BAR HOLE SIZE | BORING BAR HOLE SIZE | CENTER DIST BETWEEN HOLES. | CROSS HOLE DIA | OFFSET |
|-------------|-----------------------|----------------------|----------------------------|----------------|--------|
| 78 | 100 | 18 | 23 | 18 | 15 |

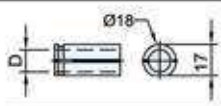
It is construction with precision parts, freedom of selection feeding quantity, auto feed and stop. Processing range from 5mm to 250mm.




Stop Rod
BP-17



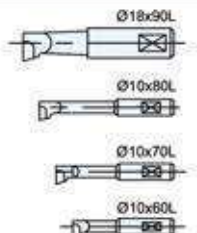
Square Bit(HSS) BP-18



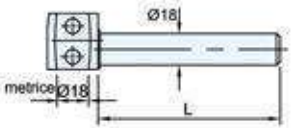
| Clamping Sleeve | |
|-----------------|-----|
| metric | D |
| BP-7 | Ø10 |
| BP-8 | Ø12 |



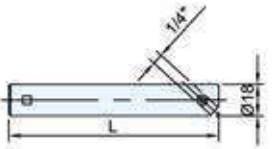
| Allen Key | |
|-----------|---|
| | A |
| BP-14 | 4 |
| BP-15 | 5 |
| BP-16 | 6 |



| Boring Bar | |
|------------|--------|
| metric | ØxL |
| BP-9 | Ø18x90 |
| BP-10 | Ø10x80 |
| BP-11 | Ø10x70 |
| BP-12 | Ø10x60 |



| Boring Bar | |
|------------|-----|
| metric | L |
| BP-21 | 104 |



| Boring Bar | |
|------------|-----|
| metric | L |
| BP-1 | 90 |
| BP-2 | 120 |



Boring Head Set C-Type



1 SCALE 0.01 mm

0.02 mm per Ø

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• Boring Bar
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VBHC-BC2 SET TYPE



MAX. BORING DEPTH 50 mm

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-BC3 SET TYPE

BORING CAPACITY Ø10~Ø110



| ORDER NO. | WEIGHT (kgs) | CODE NO. |
|-----------------|--------------|----------|
| VBHC-R-8-BC-2 | 2 | 3401-150 |
| VBHC-MT-2-BC-2 | 1.66 | 3401-149 |
| 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-BC-2 | 2.65 | 3401-155 |
| VBHC-BT-40-BC-2 | 2.65 | 3401-156 |
| VBHC-BT-50-BC-2 | 5.65 | 3401-157 |
| VBHC-C-20-BC-2 | 1.75 | 3401-158 |
| VBHC-SK-40-BC-2 | | 3401-174 |
| VBHC-SK-50-BC-2 | | 3401-176 |

BORING CAPACITY Ø10~Ø220



| ORDER NO. | WEIGHT (kgs) | CODE NO. |
|-----------------|--------------|----------|
| VBHC-R-8-BC-3 | 4.2 | 3401-160 |
| VBHC-MT-2-BC-3 | 4 | 3401-148 |
| 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 | 4.34 | 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 |
| VBHC-SK-40-BC-3 | | 3401-175 |
| VBHC-SK-50-BC-3 | | 3401-177 |



Boring Head Shank C-Type



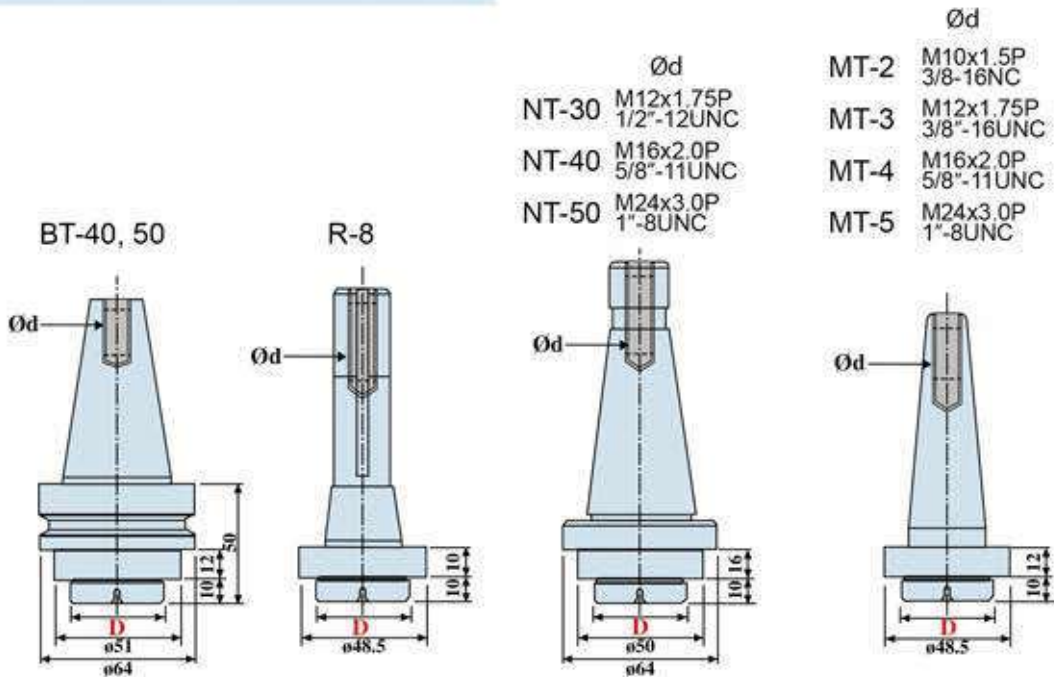
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FOR VBHC-TYPE
AND BC-2, BC-3, BC-4
BORING HEAD



D: 1 1/2"-18UNC

The shanks are made for C-type boring head use.
Also it can be replaced from time to time.



| | Ød |
|-------|-------------------------|
| NT-30 | M12x1.75P 1/2"-12UNC |
| NT-40 | M16x2.0P 5/8"-11UNC |
| NT-50 | M24x3.0P 1"-8UNC |
| MT-2 | M10x1.5P 3/8"-16NC |
| MT-3 | M12x1.75P 3/8"-16UNC |
| MT-4 | M16x2.0P 5/8"-11UNC |
| MT-5 | M24x3.0P 1"-8UNC |

| ORDER NO. | VBC-R8 | VBC-NT30 | VBC-NT40 | VBC-MT2 | VBC-MT3 | VBC-MT4 | VBC-MT5 |
|-------------|----------|----------|----------|----------|----------|----------|----------|
| WEIGHT (KG) | 0.4 | 0.7 | 1.3 | 0.39 | 0.6 | 0.9 | 1.6 |
| CODE NO. | 3401-210 | 3401-211 | 340-212 | 3401-209 | 3401-213 | 3401-214 | 3401-215 |

| ORDER NO. | VBC-BT40 | VBC-BT50 | VBC-C20 | VBC-SK40 | VBC-BT30 | VBC-SK50 |
|-------------|----------|----------|----------|----------|----------|----------|
| WEIGHT (KG) | 1.4 | 3.97 | 0.4 | 1.28 | 1.1 | 1.3 |
| CODE NO. | 3401-216 | 3401-217 | 3401-219 | 3401-222 | 3401-223 | 3401-224 |



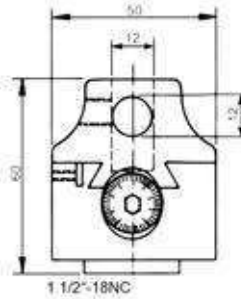
C-Type Boring Head



1 SCALE 0.01 mm
0.02 mm per Ø



ORDER NO. VBC-2



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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.

SPECIFICATION

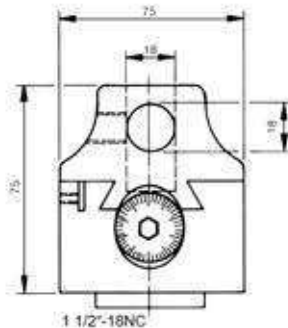
BORING CAPACITY Ø10-Ø100

| 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 0.01 mm
0.02 mm per Ø



ORDER NO. VBC-3



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.

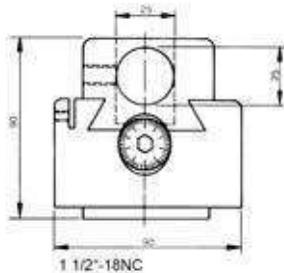
The direct reading adjusting screw is ground after hardening and a plainly marked dial face in non-reflecting satin chrome allows easy reading and adjustments of .0005 or less.

All Criterion Boring Heads have threaded backs for use with a variety of shanks. This model takes a 1-1/2"-18NC threaded shank.

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 0.01 mm
0.02 mm per Ø

This is a bigger boring head which can be put on a large machine to process more as you want. The radius of boring hole can reach on about Ø400mm 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

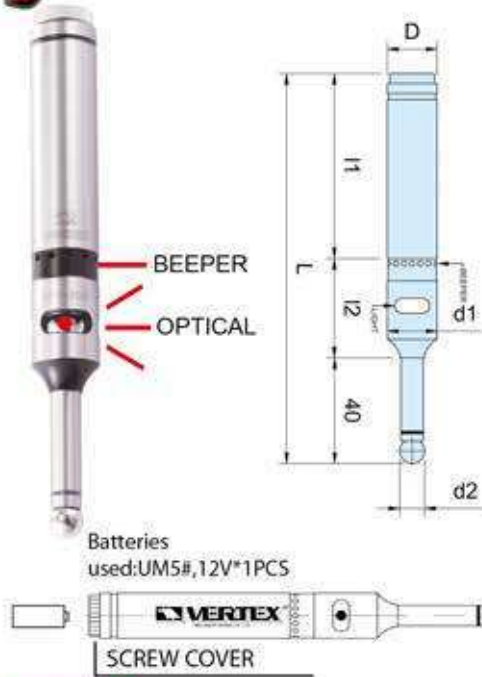
| ORDER NO. | ACTUAL SIZE | OVERALL LENGTH | BORING BAR HOLE SIZE | CENTER DIST BETWEEN HOLES. | CROSS HOLE DIA | OFFSET | WEIGHT (kg) | CODE NO. |
|-----------|-------------|----------------|----------------------|----------------------------|----------------|--------|-------------|----------|
| VBC-4(l) | 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



مهاس یاب بوقی نوری



Edge Finder with Beeper & Optical

- 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

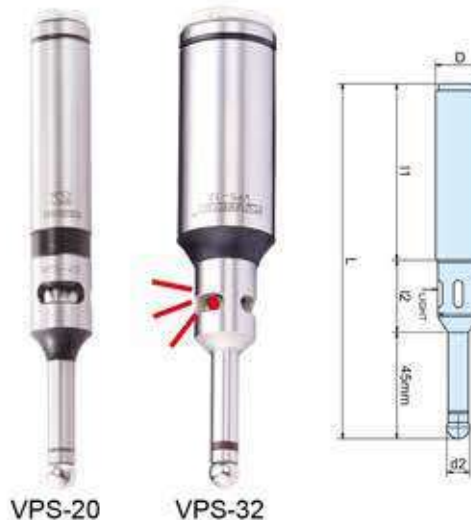
| ORDER NO. | D | d1 | d2 | L | I1 | I2 | BATTERY TYPE | WEIGHT (kg) | CODE NO. |
|-----------|-------------------|----|----|-----|----|----|------------------------|-------------|----------|
| VPS-20B | $\varnothing 20$ | 18 | 10 | 157 | 77 | 41 | UM-5#(SP) x1PCS/12V | 0.4 | 3402-001 |
| VPS-32B | $\varnothing 32$ | 18 | 10 | 157 | 74 | 41 | | 0.7 | 3402-002 |
| VPS-3/4B | $\varnothing 3/4$ | 18 | 10 | 157 | 74 | 41 | | 0.7 | 3402-012 |



Touch Point Sensor

Optical Type

Without Beeper



- 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.
- Edge Finder
- Accuracy: Within $\pm 0.005\text{mm}$

OPTICAL TYPE

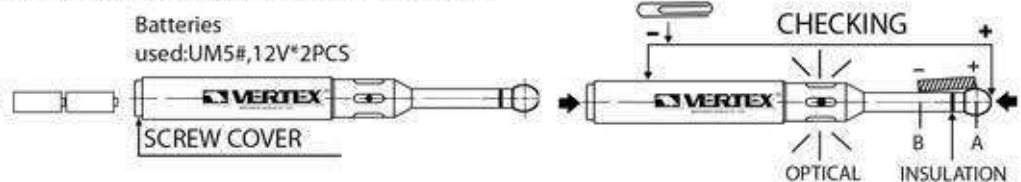
Unit:mm

| ORDER NO. | D | d1 | d2 | L | I1 | I2 | 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 |

After Reading the Following instruction, please use touch point sensor correctly due to it's a highly sensitive position detector. Don't Rotate the touch point sensor while using it.

1. Install BATTERY

Take off the screw cover and insert batteries correctly. Do not insert batteries upside down.

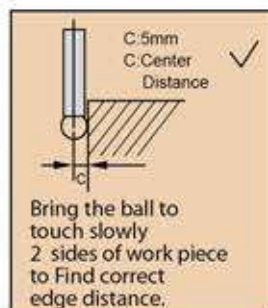


2. CONFIRMATION OF LIGHTING

CHECK the lighting of red lamp by touching A-B part with a metal (clip, L-PLATE etc.)

3. MEASURING METHOD

As soon as the ball (outside dia. 10mm \varnothing) touches the work piece with the main spindle stopped, The red lamp lights on.





Touch Point Sensor

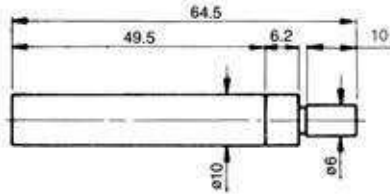


Edge Finder

مماس یاب



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

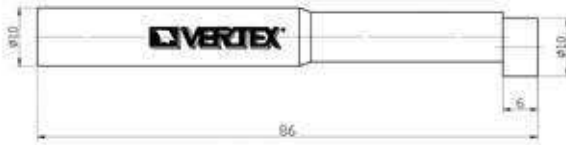
Made of tool steel, hardened and ground.

Suitable rotation speed : VPS-201 450 to 600rpm.

VPS-401 600 to 1,000 rpm



CREAMIC TYPE VPS-201C



MECHANICAL TYPE

| ORDER NO. | VPS-201 | VPS-201C |
|-------------|----------|----------|
| WEIGHT (KG) | 0.03 | 0.06 |
| CODE NO. | 3402-005 | 3402-007 |



Touch Point Sensor

Deluxe Type

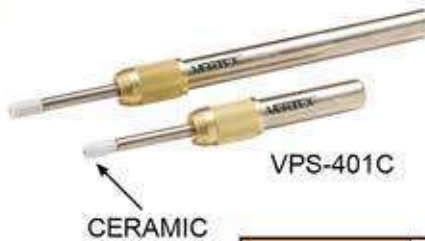
FEATURES:

- Material: high-carbon steel.
- Accuracy: within ± 0.003 mm
- Hardness: HRC 58' ± 1 '
- R.P.M. Within 600-1000
- Suitable for milling machine. Drill machine and boring machine.
- Edge Finder

VPS-401 (2 PCS/SET)
 VPS-402A(LONG) SINGLE
 VPS-402B(SHORT) SINGLE



VPS-401

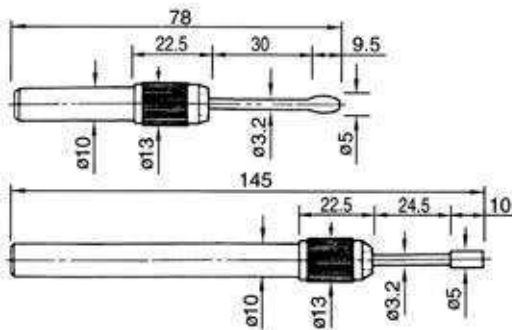


VPS-401C

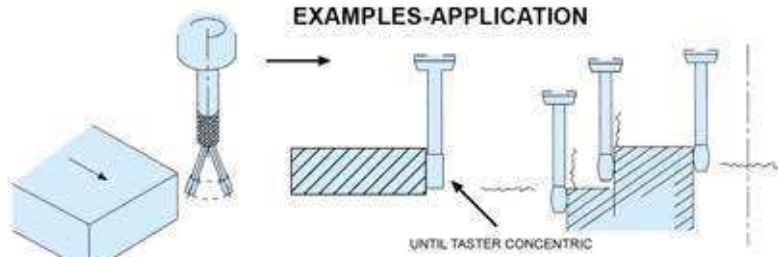
CERAMIC

STEEL

| ORDER NO. | VPS-401 | VPS-401C |
|-------------|----------|----------|
| PCS/SET | 2PCS/SET | 2PCS/SET |
| MATERIAL | STEEL | CERAMIC |
| WEIGHT (KG) | 0.26 | 0.26 |
| CODE NO. | 3402-006 | 3402-008 |



EXAMPLES-APPLICATION





Touch Point Sensor

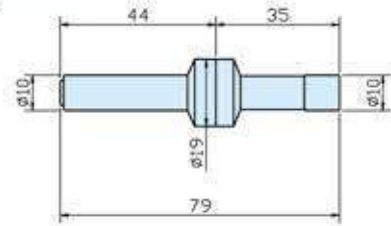


MECHANICAL TYPE

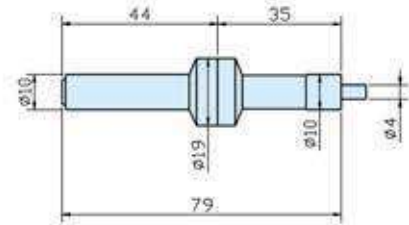
مهاس ياب مکانیکی



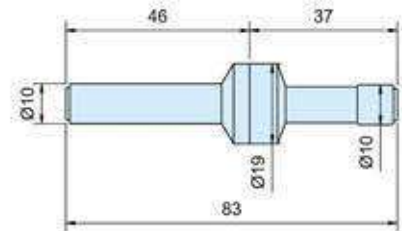
VPS-301 STEEL
VPS-301S STAINLESS



VPS-302 STEEL
VPS-302S STAINLESS



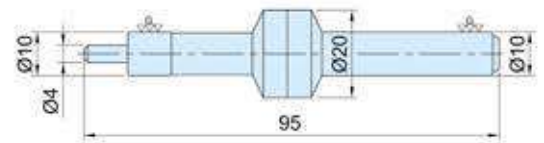
VPS-301C CERAMIC TYPE



NEW



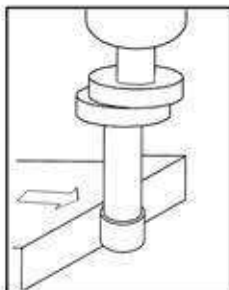
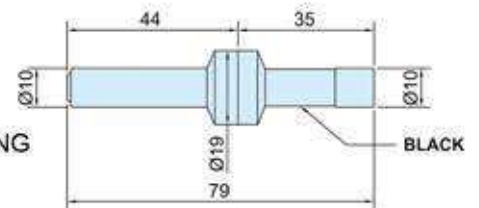
VPS-302C CERAMIC TYPE



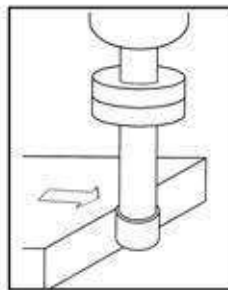
NEW



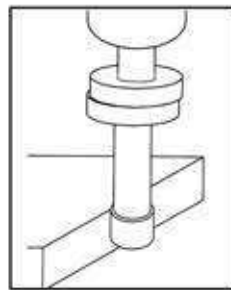
VPS-303 NON-MAGNETIC COATING



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 |
| VPS-303 | NON-Magnetic Coating | HRC 56° | 0.06 | 3402-106 |



Height Presetter



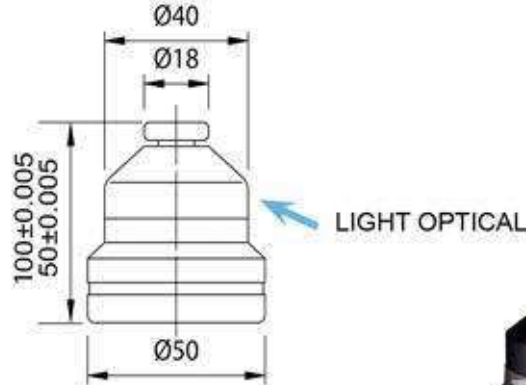
OPTICAL TYPE

HP-50Z



MODEL For NEXT

- Height 50 mm and 100 mm.
- With Magnetic base.
- The red lamp will be lighted up when touched.
- Accuracy 0.005 mm.
- Combined vertical and horizontal in a unit.
- Weight:0.7 kgs



HP-50Z BATTERY
 LR4476AG13
 1SET/2PCS
 HP-50ZM
 LR44
 1SET/2PCS



HP-100ZM

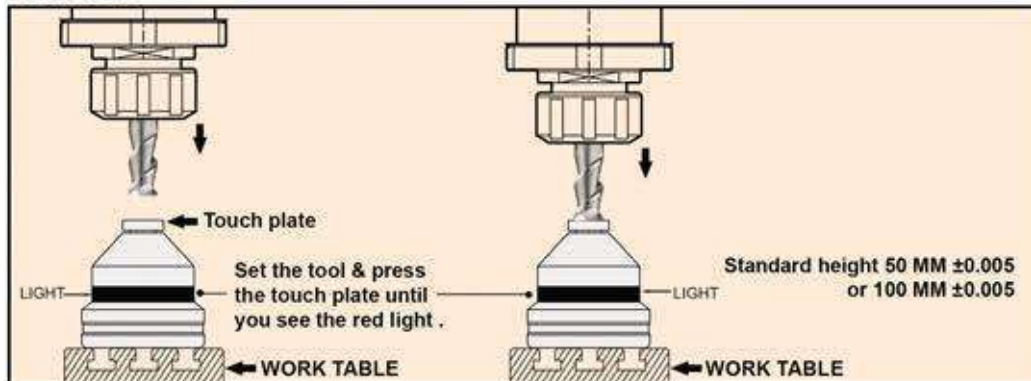
HP-100Z

- A. HP-50 / 100 / ZM / EM SERIES BUILT-IN MEGNETS FOR EASIER SETUP. VERTICAL & HORIZONTAL !
 B. STANDARD HEIGHT : 50 OR 100 MM
 C. WEIGHT ABOUT 0.7-1.2 KGS
 D. WHEN TOUCHED, THE RED LAMP LIGHTS ON.
 E. ACCURACY : WITHIN 0.005 MM
 F. BATTERY TYPE : LR44 / A76 / G13 X 2 PCS

MANUAL:

1. THERE IS A MECHNISM BELOW THE TOUCH PLATE CAN BE ADJUSTED BY GAUGE BLOCK.
 2. WHEN MACHINE SPEED IS HIGH, PLEASE REDUCE THE SPEED & GO UP /DOWNWARD UNTIL THE RED LIGHT IS OFF.
 3. PROCEED AGAIN IN LOWER SPEED.
 4. HORIZONTAL POSITION (HPXXX-XXEM/ZM SERIES-MAGNETIC FUNC.ONLY)
 PLEASE USE THE TOP TIP OF THE CUTTER TO TOUCH THE TOUCH PLATE.
- ※ CAN NOT USE VERNIER TO CHECK / RE-SET

EXAMPLE



| ORDER NO. | H | STYLE | WEIGHT (kg) | | CODE NO. |
|-----------|-------|--------------------|-------------|------|----------|
| | | | N.W. | G.W. | |
| HP-50Z | 50mm | STANDARD TYPE | 0.32 | 0.7 | 3403-001 |
| HP-50ZM | 50mm | WITH MAGNETIC BASE | 0.32 | 0.7 | 3403-002 |
| HP-100Z | 100mm | STANDARD TYPE | 1.0 | 1.25 | 3403-003 |
| HP-100ZM | 100mm | WITH MAGNETIC BASE | 1.0 | 1.22 | 3403-004 |

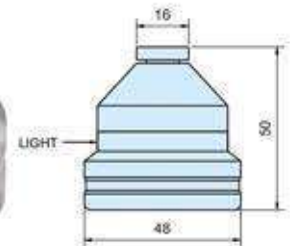
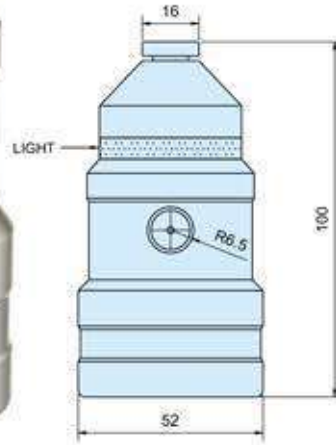
NEW



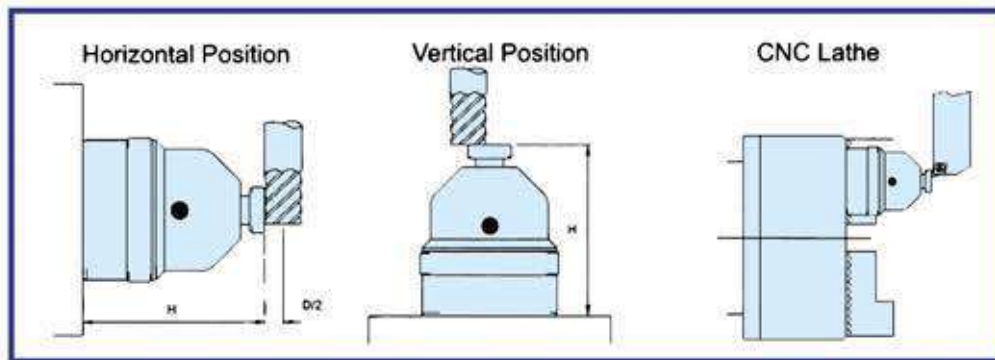
Electronic Tool Length Setter VERTEX®

STAINLESS STEEL BASE WITH MAGNET

سنج Z



EXAMPLE



- **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.

| ORDER NO. | H | STYLE | WEIGHT(kg) N.W. | CODE NO. |
|-----------|-------|--------------------|-----------------|----------|
| HP-50EM | 50mm | WITH MAGNETIC BASE | 0.32 | 3403-032 |
| HP-100EM | 100mm | | 1.0 | 3403-033 |

Stainless Steel Base With Magnet

TOOL PRE-SETTER FOR MACHINING CENTERS,
CNC & STANDARD MILLING MACHINES AND
CNC & STANDARD LATHES



Z-Zero-Setter



Z سنج

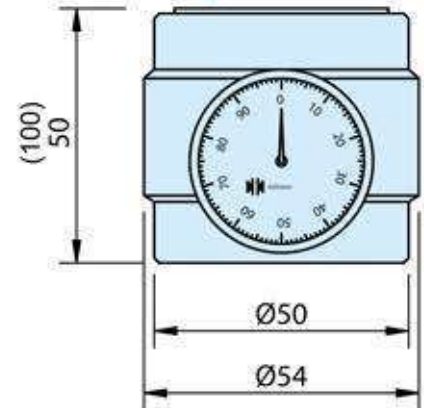
COMPENSATION
PLAIN SURFACE



HP-50A



HP-100AM

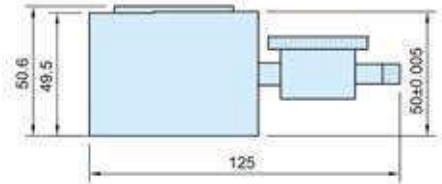
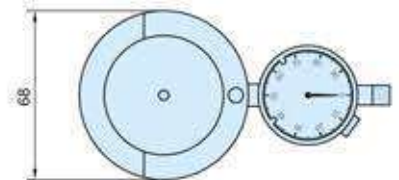
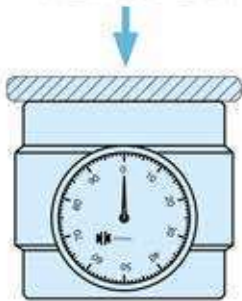


CHECKING BAR FOR
50 OR 100 MM POSITION
AT ZERO POINT



HP-50B

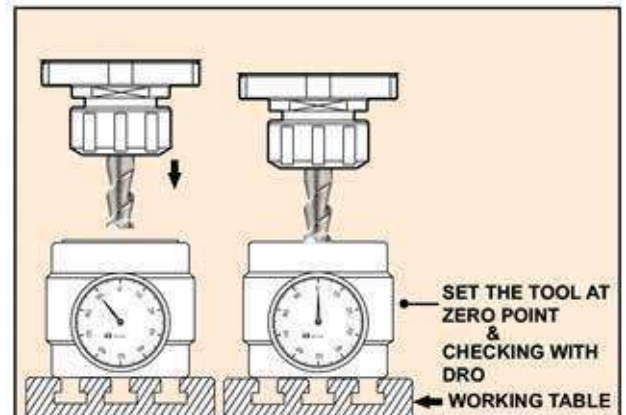
CHECKING BAR



CHECKING BAR FOR
50 OR 100 MM POSITION
AT ZERO POINT

- 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 , 100 mm, ± 0.005 .

EXAMPLE

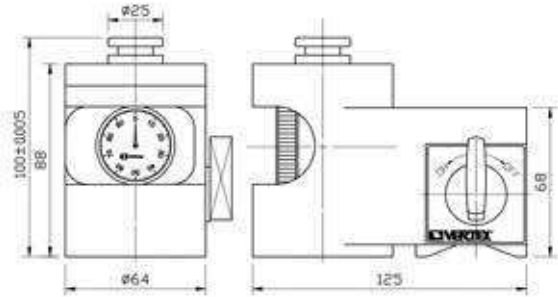


| ORDER NO. | H | STYLE | WEIGHT (kg) | CODE NO. |
|-----------|-------|--------------------|-------------|----------|
| HP-50A | 50mm | STANDARD TYPE | 1.1 | 3403-020 |
| HP-50B | | | 1.7 | 3403-021 |
| HP-50AM | | WITH MAGNETIC BASE | 1.2 | 3403-022 |
| HP-50BM | | | 1.7 | 3403-023 |
| HP-100A | 100mm | STANDARD TYPE | 1.78 | 3403-024 |
| HP-100AM | | WITH MAGNETIC BASE | 1.77 | 3403-025 |

NEW

سنج هگنتی Z

| Height from reference surface | WEIGHT(kgs) |
|-------------------------------|-------------|
| 100mm | 2.6 |



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

 **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 | mm |
|-----------------|---------|-----|
| LENGTH | 170 | mm |
| INTERNAL | ø4~ø108 | mm |
| EXTERNAL | ø0~ø108 | mm |
| MIN. INDICATOR | 0.01 | mm |
| INDICATOR RANGE | 0~6 | mm |
| WEIGHT | 0.8 | kgs |



Reversible Tapping Attachment for Drilling & Milling Machine



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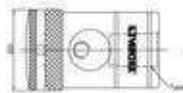
| ORDER NO. | TAPPING CAPACITY | SHANK | TO WORK WITH DRILLING MACHINE | WEIGHT (KG) | PACKING mm | SPEED | CODE NO. |
|-----------|------------------|-------|--|-------------|-------------|-------|----------|
| K1-1/2 | Ø3-8mm | 1/2" | DRILLING MACHINE MUST EQUIPPED WITH DRILL CHUCK CAPACITY 13M/M | 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 | Ø12-22mm | 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

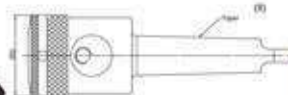
VTA13



lock anticlockwise tightly, and open when it is clockwise.
lock clockwise tightly, and open when it is anticlockwise.
fore sleeve
double-head screw

- 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 | Taper | N.W (kg) | CODE NO. |
|-------------|--------------------|-------------|------|-------|----------|-----------|
| | mm | inch | | | | |
| VTA13-1 I | | | 43 | J6 | 0.55 | 3404-000 |
| VTA13-2 I | M3-M12 | W1/8"~W1/2" | 43 | B16 | 0.76 | 3404-007 |
| VTA13-3 II | | | 47 | MT2 | 0.76 | 3404-008 |
| VTA16-1 I | | | 54 | J3 | 1 | 3404-016 |
| VTA16-2 I | | | 54 | B18 | 1 | 3404-017 |
| VTA16-3 II | M3-M16 | W1/8"~W5/8" | 48.5 | MT2 | 0.9 | 3404-018 |
| VTA16-4 II | | | 48.5 | MT3 | 1.1 | 3404-019 |
| VTA18-2 II | | | 51 | MT2 | 0.924 | 3404-019A |
| VTA18-3 III | M9-M18 | W3/8"~W3/4" | 51 | MT3 | 1.074 | 3404-019B |

Drill Tapper

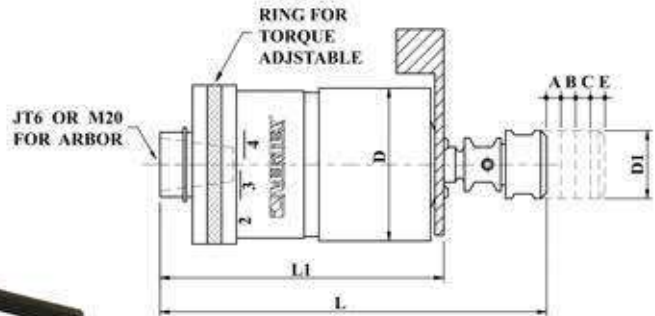
Including shank, full set of collets, wrench and case.
(Used for radial drilling, lathe and tapping machines.
1 Main body, 6 Tap Collet, 1 Drill Chuck Holder
Optional in Collets & Tapper Sleeves.)0.6CUFT.

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, | 33-MT1 | 33-JT6 With 1/2" Drill Chuck | 11.9 | 0.6 | 3404-010 |
| | MT-4 | 18, 20, 22, 24, 27, 30, 33(MM) | 33-MT2 33-MT3 | | 12 | | 3404-011 |
| | MT-5 | 1, 1-1/8, 1-1/4(INCH) PT1/8, 1/4, 3/8, 1/2, 3/4, 1(INCH) | 33-MT4 | | 12.8 | | 3404-012 |

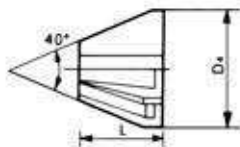
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- Radial Float is SELF-CENTERING to compensate for hole center misalignment.
- Unique Double Spring Mechanism produces Automatic Feed and Cushion Drive. There are two springs for the feed and two springs for the reversal. Each set gives you double 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 - Ø 10 | 21.5 | 13 | 3404-033 |
| FC-30 | Ø 5.36 - Ø 9 | 26.5 | 15 | 3404-034 |
| FC-31 | Ø 10.38 - Ø 14 | 26.5 | 15 | 3404-035 |

| CONNECTING ARBOR FOR VTA20-M20 | |
|--------------------------------|-----------|
| MT3-M20 | 3404-036A |
| MT4-M20 | 3404-037A |

ARBOR EXAMPLE :



please see page C46





Tap Chuck



قلاویز زن دستگاه فرز



- 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.

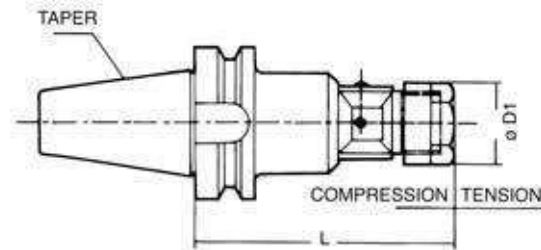
Unit:mm

| 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



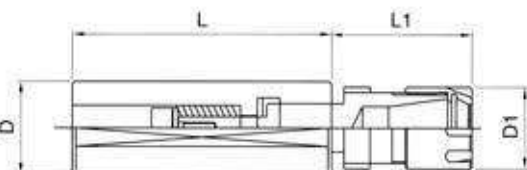
HOLDER-BT-TYPE

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 | 0.2 | 3404-036 |
| VET-261 | ER16 | ER16M 25X70 | 35 | 22 | 1/8"-3/8" | 0.2 | 3404-037 |



Quick Change Tapping Chuck VERTEX®

European Type

SPECIAL!

**SAFETY!
QUICK!**

انواع قلاویز زن



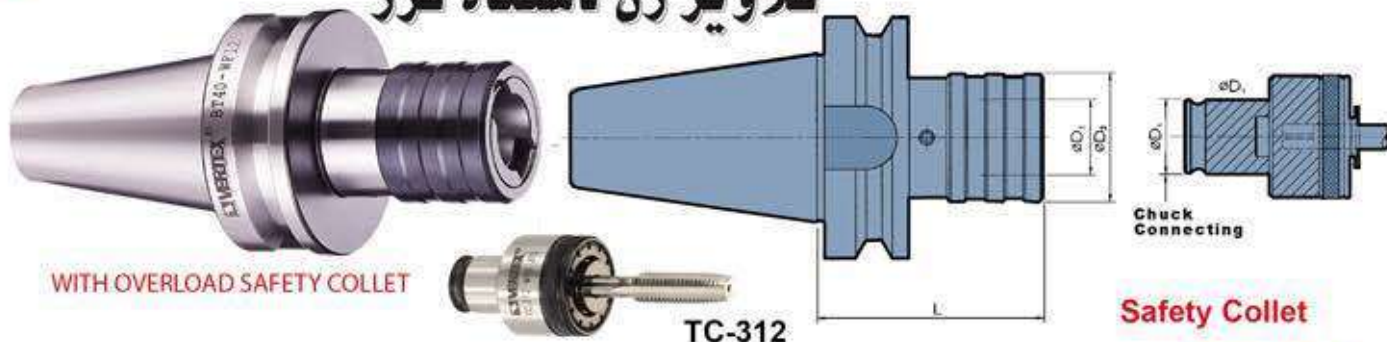
QUICK CHANGE TAPPING CHUCKS (with length compensation)
MAS-BT-30, 40, 50 Shank / DIN69871A SK-40, 50 / ST-20, 32 / MT-2, 3, 4

- Tension and compression feature allows taps to follow their own thread lead.
- With extreme light compression compression and tension operated by ball cage.



Quick Change Tapping Chucks VERTEX®

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- Tension and compression feature allows taps to follow their own thread lead.
- With extreme light compensation compression and tension operated by ball cage.



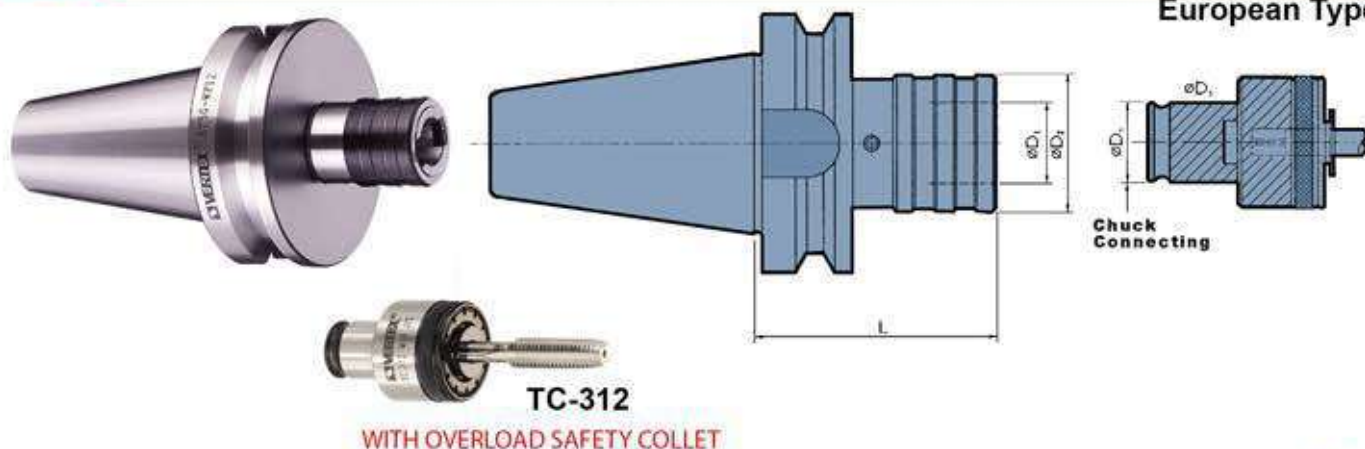
WF-BT30/BT40/SK30/SK40 LENGTH COMPENSATION TYPE

| ORDER NO. | Thread Size | L | ØD1 Chuck Connecting DIA. | ØD2 | Length Compensation | | Tapping Collets | WEIGHT (kg) | CODE NO. |
|-----------|-------------|----|---------------------------|-----|---------------------|---------|-----------------|-------------|-----------|
| | | | | | Compression | Tension | | | |
| BT30-WF12 | M2-M14 | 70 | Ø19 | 36 | 7.5 | 7.5 | TC-312 | 0.8 | 3404-050A |
| BT40-WF12 | M2-M14 | 75 | Ø19 | 36 | 7.5 | 7.5 | TC-312 | 1.3 | 3404-050 |
| SK40-WF12 | | | | | | | | 1.3 | 3404-051 |
| BT30-WF20 | M5-M24 | 94 | Ø31 | 53 | 12.5 | 12.5 | TC-820 | 1.3 | 3404-052A |
| BT40-WF20 | M5-M24 | 95 | Ø31 | 53 | 12.5 | 12.5 | TC-820 | 1.8 | 3404-052 |
| SK40-WF20 | M5-M24 | 95 | Ø32 | 53 | 12.5 | 12.5 | TC-820 | 1.8 | 3404-053 |

※Tapping Collet Reducer Adapter : TC820 / TC312-AD

Quick Change Tapping Chucks

European Type



- Tension and compression feature allows taps to follow their own thread lead.
- With extreme light compensation compression and tension operated by ball cage.



WF-BT50/SK50 LENGTH COMPENSATION TYPE

| ORDER NO. | Thread Size | L | ØD1 Chuck Connecting DIA. | ØD2 | Length Compensation | | Collets | WEIGHT (kg) | CODE NO. |
|-----------|-------------|-----|---------------------------|-----|---------------------|---------|---------|-------------|----------|
| | | | | | Compression | Tension | | | |
| BT50-WF12 | M2-M14 | 85 | Ø19 | 36 | 7.5 | 7.5 | TC-312 | 4 | 3404-060 |
| SK50-WF12 | | | | | | | | 4 | 3404-061 |
| BT50-WF20 | M5-M24 | 105 | Ø31 | 53 | 12.5 | 12.5 | TC-820 | 4.1 | 3404-062 |
| SK50-WF20 | | | | | | | | 4.1 | 3404-063 |
| BT50-WF33 | M14-M36 | 142 | Ø48 | 78 | 20 | 20 | TC-1433 | 5.8 | 3404-064 |

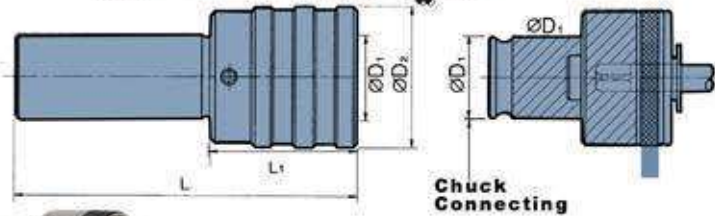
※Tapping Collet Reducer Adapter : TC820 / TC312-AD TC1433 / TC820-AD



Quick Change Tapping Chucks

QUICK CHANGE TAPPING CHUCKS (with length compensation)
STRAIGHT SHANK

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WITH OVERLOAD SAFETY COLLET



TC-312

- Tension and compression feature allows taps to follow their own thread lead.
- With extreme light compensation compression and tension operated by ball cage.



WF-ST LENGTH COMPENSATION TYPE

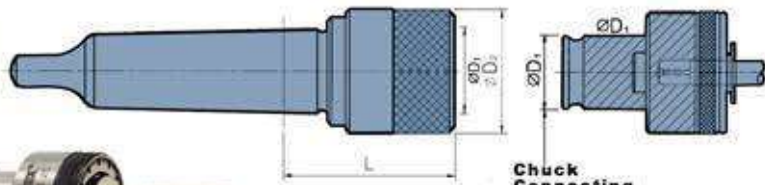
| ORDER NO. | Thread Size | L | L1 | ØD1 Chuck Connecting DIA. | ØD2 | Length Compensation | | Collets | WEIGHT (kg) | CODE NO. |
|-----------|-------------|-----|----|------------------------------------|-----|---------------------|---------|---------|----------------|----------|
| | | | | | | Compression | Tension | | | |
| ST20-WF12 | M2-M14 | 105 | 40 | Ø19 | 36 | 7.5 | 7.5 | TC-312 | 0.4 | 3404-087 |
| ST32-WF12 | | | | | | | | | 0.6 | 3404-088 |
| ST20-WF20 | M5-M24 | 120 | 65 | Ø31 | 53 | 12.5 | 12.5 | TC-820 | 1 | 3404-089 |
| ST32-WF33 | M14-M36 | 183 | 80 | Ø48 | 78 | 20 | 15 | TC-1433 | 2.7 | 3404-092 |

※Tapping Collet Reducer Adapter : TC820 / TC312-AD TC1433 / TC820-AD



Quick Change Tapping Chucks

Solid Type



WITH OVERLOAD SAFETY COLLET



TC-312

- Tension and compression feature allows taps to follow their own thread lead.
- With extreme light compensation compression and tension operated by ball cage.



WF-MT LENGTH COMPENSATION TYPE

| ORDER NO. | Thread Size | Morse Taper MT | L | ØD1 Chuck Connecting DIA. | ØD2 | Length Compensation | | Collets | WEIGHT (kg) | CODE NO. |
|-----------|-------------|-------------------|------|------------------------------------|-----|---------------------|---------|---------|----------------|-----------|
| | | | | | | Compression | Tension | | | |
| MT2-WF12 | M2-M14 | MT2 | 47.5 | Ø19 | 36 | 7.5 | 7.5 | TC-312 | 0.4 | 3404-123 |
| MT3-WF12 | | MT3 | | | | | | | 0.56 | 3404-123A |
| MT4-WF12 | | MT4 | 49 | | | | | | 0.86 | 3404-123B |
| MT2-WF20 | | MT2 | 70 | | | | | | Ø31 | 53 |
| MT3-WF20 | MT3 | 0.96 | | 3404-124A | | | | | | |
| MT4-WF20 | MT4 | 1.5 | | 3404-124B | | | | | | |
| MT3-WF33 | M14-M36 | MT3 | 103 | Ø48 | 78 | 20 | 15 | TC-1433 | 2.2 | 3404-125 |
| MT4-WF33 | | MT4 | | | | | | | 2.76 | |

※Tapping Collet Reducer Adapter : TC820 / TC312-AD TC1433 / TC820-AD

Quick Change Tapping Chucks VERTEX®

QUICK CHANGE TAPPING CHUCKS
MORSE TAPER SHANK

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Solid Type

- Tension and compression feature allows taps to follow their own thread lead.
- With extreme light compensation compression and tension operated by ball cage.



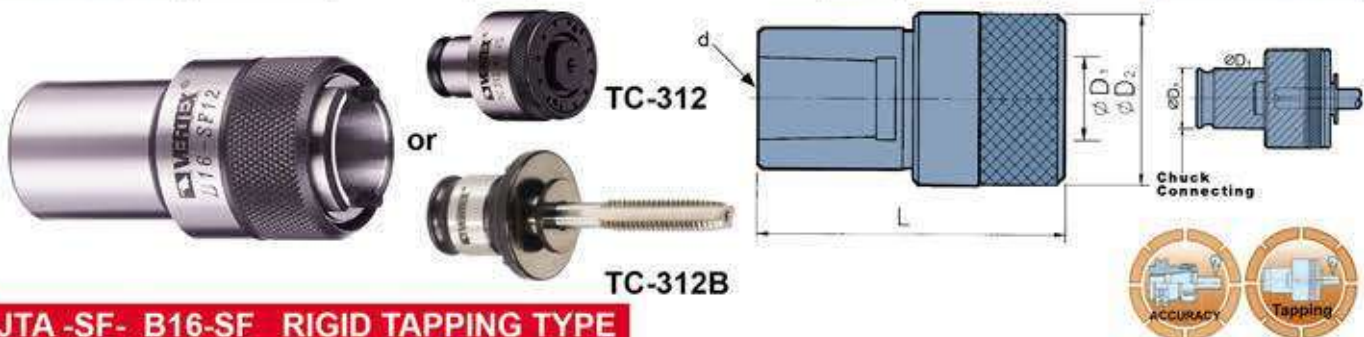
ST-SF- TYPE SOLID RIGID TAPPING TYPE

| ORDER NO. | Thread Size | L | L1 | ØD ₁ Chuck Connecting DIA. | ØD ₂ | Collets | WEIGHT (kg) | CODE NO. |
|-----------|-------------|-----|-----|---------------------------------------|---------------------|---------|-------------|-----------|
| ST20-SF12 | M2-M14 | 104 | 70 | Ø19 | 34 | TC-312 | 0.3 | 3404-140 |
| ST32-SF12 | | 106 | | Ø19 | | TC-312B | 0.66 | 3404-140A |
| ST20-SF20 | M5-M24 | 105 | | Ø31 | 50 | TC-820 | 0.74 | 3404-141 |
| ST32-SF20 | | | | Ø31 | | TC-820B | 1.02 | 3404-141A |
| ST32-SF33 | M14-M36 | 169 | Ø48 | 76 | TC-1433 TC-1433B | 2.86 | 3404-142A | |



MT-SF- TYPE SOLID RIGID TAPPING TYPE, NO LENGTH COMPENSATION

| ORDER NO. | Thread Size | Morse Taper MT | L | ØD ₁ Chuck Connecting DIA. | ØD ₂ | Collets | WEIGHT (kg) | CODE NO. |
|-----------|-------------|----------------|----|---------------------------------------|-----------------|---------------------|-------------|-----------|
| MT2-SF12 | M2-M14 | MT2 | 45 | Ø19 | 34 | TC-312 TC-312B | 0.3 | 3404-120 |
| MT3-SF12 | | MT3 | | | | | 0.8 | 3404-120A |
| MT4-SF12 | | MT4 | | | | | 0.8 | 3404-120B |
| MT2-SF20 | M5-M24 | MT2 | 70 | Ø31 | 50 | TC-820 TC-820B | 0.6 | 3404-121A |
| MT3-SF20 | | MT3 | | | | | 0.8 | 3404-121 |
| MT4-SF20 | | MT4 | | | | | 1.18 | 3404-121B |
| MT3-SF33 | M14-M36 | MT3 | 99 | Ø48 | 74 | TC-1433 TC-1433B | 0.84 | 3404-122A |
| MT4-SF33 | | MT4 | 99 | | | | 2.2 | 3404-122 |



JTA-SF- B16-SF RIGID TAPPING TYPE

| ORDER NO. | Thread Size | L | ØD ₁ Chuck Connecting DIA. | ØD ₂ | d | Collets | WEIGHT (kg) | CODE NO. |
|-----------|-------------|----|---------------------------------------|-----------------|-----|-------------------|-------------|-----------|
| JTA6-SF12 | M2-M14 | 66 | Ø19 | 32 | JT6 | TC-312 TC-312B | 0.3 | 3404-130 |
| B16-SF12 | | | | | B16 | | 0.22 | 3404-130A |
| B12-SF12 | | | | | B12 | | 0.2 | 3404-130B |

※Tapping Collet Reducer Adapter : TC820 / TC312 AD, TC1433 / TC820 AD

Tapping Collet Reducer Adapter



This adapter is for transforming
This adapter allows the tapping chuck to use smaller size.
Transforming the big tapping size to smaller one.
large range type for tap M3-M24, TC312, TC820, TC1433
COST SAVING!

SIZE CONVERTER

| ORDER NO. | TRANSFORMING SIZE | WIGHT | CODE NO. |
|-----------------|-------------------|-------|----------|
| TC820/TC312-AD | TC820 TO TC312 | 0.2 | 3404-461 |
| TC1433/TC820-AD | TC1433 TO TC820 | 0.6 | 3404-462 |

※Every tap needs a match size tapping collet.

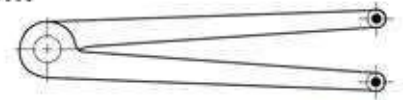
Adjustable Wrenches

For Tapping Collet's Torque Force Adjustment

NEW



- Tool for Setting
- Time Saving



EXAMPLE



| ORDER NO. | SIZE | ØD | COLLETS | WEIGHT | CODE NO. |
|-----------|-------|-----|---------|----------|----------|
| VWR-40 | 7-40 | 2.5 | TC-820 | 0.15 kgs | 3404-150 |
| VWR-60 | 11-60 | 4 | TC1433 | 0.15 kgs | 3404-151 |

Quick Change Tapping Collet TC312 8PCS/SET

ORDER NO. TC-312-DIN371-A

CODE NO. 3404-175

NEW



QUICK CHANGE TAP COLLETS
(with overload safety collet)

TC-312 DIN371 8PCS/SET
(M1, M2, M3, M3.5, M4, M4.5, M8, M10)

| NO. | ØD X □ SIZE SAME AS DIN371 TC312 |
|-----|----------------------------------|
| 1 | M1, M1.1~M1.8 |
| 2 | M2, M2.5, M2~M2.5 |
| 3 | M3 |
| 4 | M3.5 |
| 5 | M4 |
| 6 | M4.5, M5, M6 |
| 7 | M8 |
| 8 | M10 |

Quick Change Tapping Collet TC312 8PCS/SET

ORDER NO. TC-312-DIN376-B

CODE NO. 3404-176

NEW



QUICK CHANGE TAP COLLETS
(with overload safety collet)

TC-312 DIN376 8PCS/SET
(M4, M5, M6, M7, M8, M10, M12 M14)

| NO. | ØD X □ SIZE SAME AS DIN376 TC312 |
|-----|----------------------------------|
| 1 | M4 |
| 2 | M5, M4.5 |
| 3 | M6 |
| 4 | M7 |
| 5 | M8 |
| 6 | M10 |
| 7 | M12 |
| 8 | M14 |



Quick Change Tapping Collet TC820 8PCS/SET

ORDER NO. TC820-DIN 376-C

CODE NO. 3404-177

NEW

ست فشنگی قلاویز زن **QUICK CHANGE TAP COLLETS**
(with overload safety collet)



TC-820 DIN376 8PCS/SET
(M8, M10, M12, M14, M16, M18, M20, M22)

| NO. | ØD X □ SIZE SAME AS DIN376 TC820 |
|-----|----------------------------------|
| 1 | M8 |
| 2 | M10 |
| 3 | M12 |
| 4 | M14 |
| 5 | M16 |
| 6 | M18 |
| 7 | M20 |
| 8 | M22, M24 |



Quick Change Tapping Collet TC820 4PCS/SET

ORDER NO. TC820-DIN 371-D

CODE NO. 3404-178

NEW

QUICK CHANGE TAP COLLETS
(with overload safety collet)



TC-820 DIN371 4PCS/SET
(M5, M6, M8, M10)

| NO. | ØD X □ SIZE SAME AS DIN371 TC820 |
|-----|----------------------------------|
| 1 | M5, M6 |
| 2 | M6, M5 |
| 3 | M8 |
| 4 | M10 |



Quick Change Tapping Collet TC820 8PCS/SET

ORDER NO. TC820-ISO2283-E

CODE NO. 3404-179

NEW

QUICK CHANGE TAP COLLETS
(with overload safety collet)



TC-820 ISO2283 8PCS/SET
(M8, M10, M12, M14, M16, M18, M22, M24)

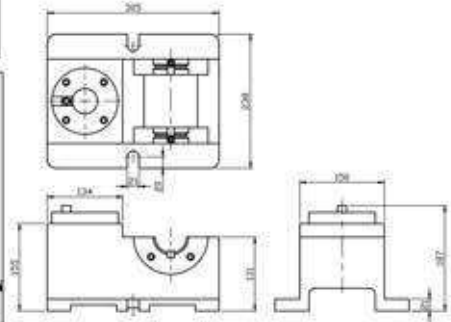
| NO. | ØD X □ SIZE SAME AS ISO2283 TC820 |
|-----|-----------------------------------|
| 1 | M8 |
| 2 | M10 |
| 3 | M12 |
| 4 | M14 |
| 5 | M16 |
| 6 | M18, M20 |
| 7 | M22 |
| 8 | M24 |



Deluxe Type Tool Setting Stand VERTEX®



پایه کلت

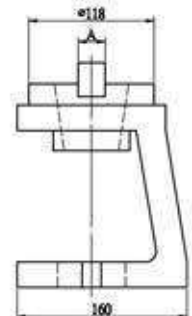
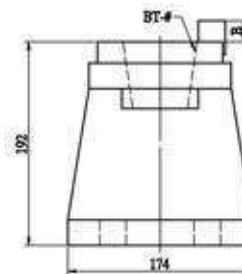
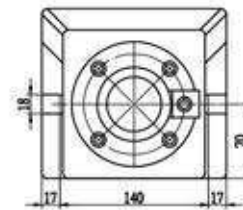


- This tool setting stand is one kind of subsidize tool for helping machine center to work efficiently. To be used fixing the tools on tool holder. It could avoid the method of using draw bar to fix (on machine center). It is safe, and doesn't effect the precision of machine's spindle.
- It's best for 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.

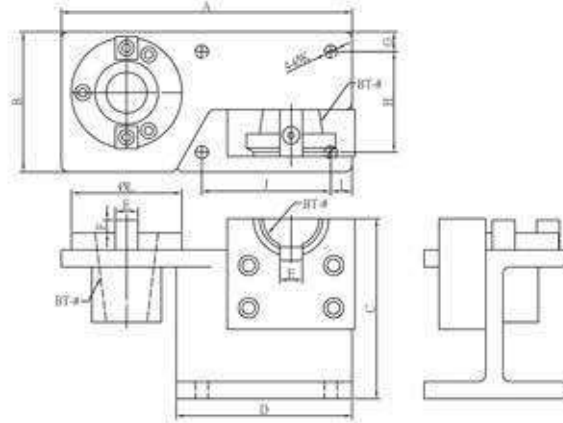
| ORDER NO. | SHANK TAPERS | STD | WEIGHT (kg) | CODE NO. |
|-----------|--------------|----------------|-------------|----------|
| VTS-BT-30 | 30 | BT ISO NT | 11.9 | 3405-010 |
| VTS-BT-40 | 40 | | 12.4 | 3405-011 |
| VTS-BT-50 | 50 | | 11.9 | 3405-012 |
| VTS-SK-30 | 30 | CAT DIN 69871A | 11.9 | 3405-013 |
| VTS-SK-40 | 40 | | 12.4 | 3405-014 |
| VTS-SK-50 | 50 | | 11.9 | 3405-015 |



Tool Holder Locking Device



پایه کلت



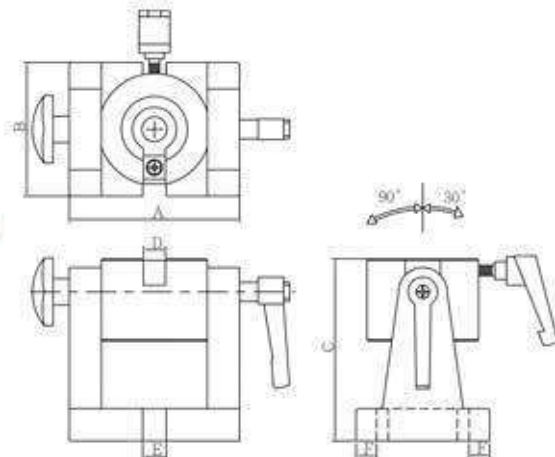
| ORDER NO. | STD | WEIGHT (KGS) | CODE NO. |
|-----------|---------------------|--------------|----------|
| VTG-BT30 | ISO BT | 4.1 | 3405-020 |
| VTG-BT40 | | 4.2 | 3405-021 |
| VTG-BT50 | | 11.8 | 3405-022 |
| VTG-SK30 | CAT SK DIN69871A | 3.7 | 3405-023 |
| VTG-SK40 | | 4 | 3405-024 |
| VTG-SK50 | | 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

| 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 |



Spindle Taper Wiper



تمیز کردن جا کلت



- 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 | 169mm | 0.07 | 3405-060 |
| VTW-40 | #40 | 187mm | 0.08 | 3405-061 |
| VTW-50 | #50 | 241mm | 0.02 | 3405-062 |



Spindle Taper Wiper

NEW



WITH REPLACE 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
- ECO Friendly

| 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 |

| ORDER NO. | CONTAINS SPARE | WEIGHT (kg) | CODE NO. |
|---------------|----------------|-------------|----------|
| VTW-30R-WIPER | 20pcs / box | 0.01 | 3405-530 |
| VTW-40R-WIPER | 20pcs / box | 0.02 | 3405-531 |
| VTW-50R-WIPER | 25pcs / box | 0.04 | 3405-532 |



Spindle Taper Wiper



H Type

| ORDER NO. | TAPER NO. | TOTAL LENGTH | WEIGHT (kg) | CODE NO. |
|-----------|-----------|--------------|-------------|----------|
| VTW-50H | HSK50 | 159mm | 0.1 | 3405-071 |
| VTW-63H | HSK63 | 167mm | 0.12 | 3405-072 |



Tooling Rack Stand



VTT-30

میزکت

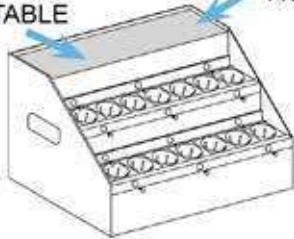
VTT-31

NEW



- Compact design
- Clear Storage
- Easy to clean
- Portable design
- Large tooling storage
- VTT-30 with Rubber mate
- Big size variety

VTT-30
FLAT TABLE RUBBER



LxWxH : 550x430x360 mm

CAPACITY VTT-30 WITH
 BT-30 16 SHEATH, 1FLAT TABLE
 BT-40 14 SHEATH, 1FLAT TABLE
 BT-50 10 SHEATH, 1FLAT TABLE
 HSK63 12 SHEATH, 1FLAT TABLE

LxWxH : 550x430x360 mm

VTT-31 WITH
 BT-30 24 SHEATH
 BT-40 21 SHEATH
 BT-50 15 SHEATH
 HSK63 18 SHEATH

| ORDER NO. | STD | TOOLING SHEATH CAPACITY | CODE NO. |
|--------------|------------------|-------------------------|----------|
| VTT-30-30 | BT-30, DIN69871A | 16 pcs/set | 3405-211 |
| VTT-30-40 | BT-40, DIN69871A | 14 pcs/set | 3405-212 |
| VTT-30-50 | BT-50, DIN69871A | 10 pcs/set | 3405-213 |
| VTT-30-HSK63 | HSK63 | 12 pcs/set | 3405-214 |
| VTT-31-30 | BT-30, DIN69871A | 24 pcs/set | 3405-215 |
| VTT-31-40 | BT-40, DIN69871A | 21 pcs/set | 3405-216 |
| VTT-31-50 | BT-50, DIN69871A | 15 pcs/set | 3405-217 |
| VTT-31-HSK63 | HSK63 | 18 pcs/set | 3405-218 |



Tooling Cart

FOR BT30,40,50 / SK30,40,50 / CAT30,40,50 / ISO30,40,50

NEW



TOOL LOCKING DEVICE



TOOL TRAY



WITH VTT-21-FOLDING HANDLE
TOOLING SHEATH RACK

VTT-21

OVERALL SIZE:626 X 655X 980 mm WEIGHT:43KGS

- LARGE CAPACITY,CAN PUT MORE SHANK TOOLING TROLLEY.
- TAPER ANGLE RACK STAND DESIGN,ERGONOMIC DESIGN,USER FRIENDLY SAVE YOU ENERGY & EASY TO TAKE OUT YOUR TOOL HOLDER.
- CAN TAKE OUT/PUT IN WHOLE SET OF THE NEW TOOLING SHEATH RACK (VTT-30/40/50 TR SERIES),CAN FOR SEPARATE USING.
- WITH FOLDING HANDLE CAN SAVE SPACE AND BETTER FREE ACTION MOVEMENT.
- CONVENIENT & SPEED INSTALLATION.
- STABLE & HEAVY DUTY.

| ORDER NO. | FOR STD | TOOL LOCKING DEVICE | TOOLING SHEATH CAPACITY | CODE NO. |
|-----------|--|--|-------------------------|----------|
| VTT-21-30 | BT-30 DIN 69871A SK30, CAT30, ISO30 | BT-30 DIN 69871A SK30, CAT30, ISO30 | 32PCS/SET | 3405-080 |
| VTT-21-40 | BT-40 DIN 69871A SK40, CAT40, ISO40 | BT-40 DIN 69871A SK40, CAT40, ISO40 | 28PCS/SET | 3405-081 |
| VTT-21-50 | BT-50 DIN 69871A SK50, CAT50, ISO50 | BT-50 DIN 69871A SK50, CAT50, ISO50 | 20PCS/SET | 3405-082 |



● HIGH ACCURACY AND HIGH RIGIDITY

Adoption of new double-lead worm gear--engagement between worm wheel and worm shaft has been improved, and tooth profile has been modified--has contributed greatly to increased dynamic accuracy. To remove the defect of single-lead worm gear. Close-tolerance taper roller bearing assembly is used, and the rotating slide part is finished in a super precision manner, which in turn, implements highly improved overall accuracy.

● SLEEVE TYPE CLAMPING MECHANISM

with this system, the Rotary Table is clamped by applying hydraulic pressure to the outer circumference of the turn table. Since the sleeve is positioned closest to the workpiece, the table clamp force is enlarged. This system is not only advantageous for heavy duty cutting but also helps improve the machining accuracy and extend the service life of the Rotary Table.

- This rotary table has been specifically developed to fulfill the requirements of a fully automatic machining process in association with a machine tool. They are used for milling, grinding and drilling of spindles, slots, plannes or bores in the radial or axial direction of the workpiece.
- Can be equipped with stepping motor or DC/AC servo motors.
- Carefully designed, rigid construction to assure high and constant indexing accuracy.
- Can operate as function M or as 4th axis or more, in machining units or numerically controlled machines, and are equally capable of being fitted to any other type of non-NC machine-tools.
- Hardened and ground steel worm, mounted on high precision combined radial-axial bearings.
- Worm mounted on an axial support system, which allows adjustment and suppression of any backlash existing between the worn and the worm-wheel after long-time service.
- High precision
Axial and radial runout within 0.01mm, Cumulative indexing

※ COLOR MAY VARY



DOUBLE LEAD WORM GEARS SYSTEM

● New design/special material



PROGRAMMABLE SERVO MOTOR



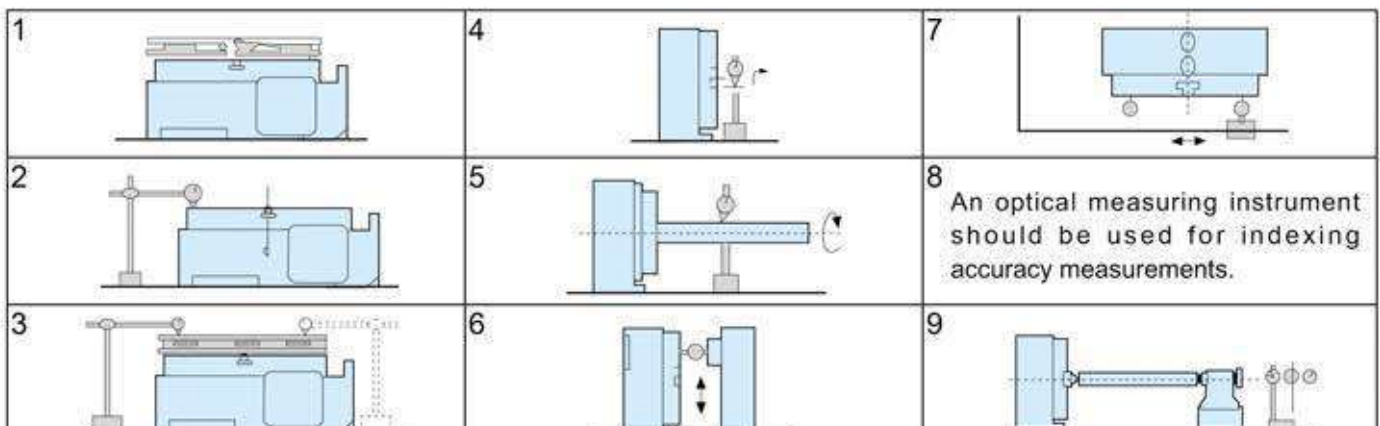
| ORDER NO. | VNCM-150 $\frac{L}{R}$ | VNCM-220 $\frac{L}{R}$ | VNCM-250 $\frac{L}{R}$ | VNCM-320 $\frac{L}{R}$ | VNCM-400 $\frac{L}{R}$ |
|--|---------------------------------------|--|--|--|---|
| Right-hand type | ○ | ○ | ○ | ○ | ○ |
| Left-hand type | ○ | ○ | ○ | ○ | ○ |
| Turntable diameter | Ø160 | Ø225 | Ø250 | Ø320 | Ø400 |
| Table height(Horizontal pos.) | 150 | 165 | 165 | 220 | 250 |
| Table center height(Vertical pos.) | 135 | 160 | 160 | 210 | 255 |
| Center bore diameter | Ø35H7 | Ø40H7 | Ø40H7 | Ø40H7 | Ø40H7 |
| T-slot size | 12H7 | 12H7 | 12H7 | 14H7 | 14H7 |
| Guide-block size | 14h7 | 14h7 | 14h7 | 18h7 | 18h7 |
| Number of worm wheel teeth | 72 | 72 | 72 | 72 | 72 |
| Servo motor type | FANUC α 3 | FANUC α 6 | FANUC α 6 | FANUC α 12 FANUC α 6 | FANUC α 12 |
| Speed reduction ratio | 1/90 | 1/180 | 1/180 | 1/180 1/360 | 1/180 |
| Table graduation angle per 1 pulse | 0.001° | 0.001° | 0.001° | 0.001° | 0.001° |
| Table rotation speed | 22.2r.p.m./ (Motor 2,000r.p.m.) | 11.1r.p.m./ (Motor 2,000r.p.m.) | 11.1r.p.m./ (Motor 2,000r.p.m.) | 11.1r.p.m./ (Motor 2,000r.p.m.) 5.5r.p.m./ (Motor 2,000r.p.m.) | 11.1r.p.m./ (Motor 2,000r.p.m.) |
| Clamp method & Clamp torque (kg-m) | 8/ (Air 5kg/cm ²) | 50/ (Hydraulic 35kg/cm ²) | 50/ (Hydraulic 35kg/cm ²) | 85/ (Hydraulic 35kg/cm ²) | 180/ (Hydraulic 35kg/cm ²) |
| Load capacity, horizontal(kg) | 150 | 250 | 250 | 350 | 500 |
| Load capacity, vertical(kg) | 75 | 100 | 100 | 150 | 200 |
| Inertia force (kg-cm-sec ²) | 4.3 | 12.3 | 12.3 | 38.5 | 99.8 |
| Max.torque capacity of worm gear (kg-m) | 15 | 48 | 48 | 78 | 170 |
| Max. workpiece diameter | 160 | 225 | 225 | 320 | 400 |
| Cumulative indexing accuracy sec. | 20" | 15" | 15" | 15" | 15" |
| Repeatability sec. | 4" | 4" | 4" | 4" | 4" |
| Inertia force(convert into motor shaft) kg-cm-sec ² X10 ⁻² | 0.2 | 0.24 | 0.34 | 1.85 1.35 | 1.94 |
| Net weight (kg) | 55 | 75 | 75 | 200 | 300 |
| CODE NO. | 4001-001 | 4001-002 | 4001-003 | 4001-004 | 4001-005 |

● Other makers' servo motors can be installed.

● ACCURACY STANDARD

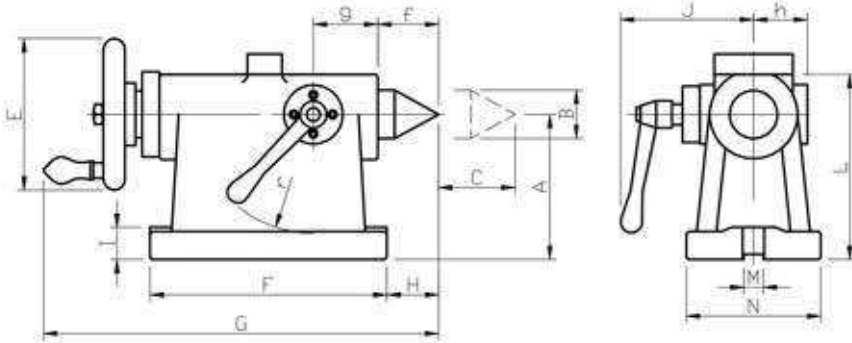
Unit:mm

| NO. | Inspection Item | Inspection Item |
|-----|--|-------------------------|
| 1 | Table top flatness (concave) | Per overall length 0.01 |
| 2 | Table top runout | 0.015 |
| 3 | Parallelism of table top and frame bottom | Per overall length 0.02 |
| 4 | Table spindle center runout | 0.01 |
| 5 | Center bore runout | Hole end 0.01 |
| | | Per 100mm 0.01 |
| 6 | Perpendicularity of table top to frame bottom | Per overall length 0.02 |
| 7 | Perpendicularity of table top to frame bottom guide block | Per overall length 0.02 |
| 8 | Cumulative indexing accuracy | 15" |
| 9 | Parallelism of center line between headstock and tailstock to frame bottom guide block | Per 300mm 0.02 |
| 10 | Height difference of both center lines of headstock (Tailstock center line should be higher) | 0.02 |



Tailstock For NC Rotary Table

مرغک محور چهارم



Unit:mm

| Main dimension | | Center height A | Center diameter B | Storke C | pointed end diameter D | Handle diameter E | Base dimensions FXM | G | H | I | J | K | L |
|----------------|---------------------------------|-----------------|-------------------|----------|------------------------|-------------------|---------------------|-----|----|----|-----|----|-----|
| ORDER NO. | For | | | | | | | | | | | | |
| TS-135 | VNCM-150 | 135 | ø45 MT#3 | 55 | ø14 | 125 | 215x120 | 332 | 25 | 25 | 109 | - | 164 |
| TS-135-MT3 | | | | | | | | | | | | | |
| TS-160 | VNCM-220 VNCX-10 VNCM-250 | 160 | ø45 MT#3 | 55 | ø18 | 140 | 230x130 | 356 | 30 | 30 | 129 | 53 | 193 |
| TS-160-MT3 | | | | | | | | | | | | | |
| TS-210 | VNCM-320 | 210 | ø45 MT#3 | 55 | ø18 | 140 | 230x146 | 356 | 30 | 30 | 129 | 53 | 243 |
| TS-210-MT3 | | | | | | | | | | | | | |

Unit:mm

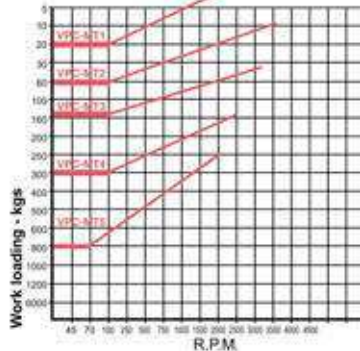
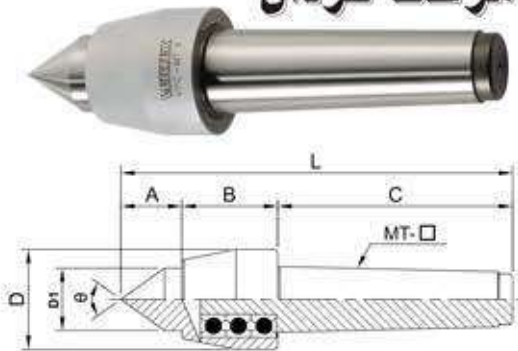
| Main dimension | | Guide block size M | c | u | f | g | h | j | r | Net weight (kgs) | CODE NO. |
|----------------|---------------------------------|--------------------|----|----|----|----|----|----|----|------------------|-----------|
| ORDER NO. | For | | | | | | | | | | |
| TS-135 | VNCM-150 | 18 | 42 | 19 | 40 | 69 | 44 | 70 | 80 | 20.6 | 4002-001 |
| TS-135-MT3 | | | 46 | | | | | | | | 4002-001A |
| | | | 46 | | | | | | | | |
| TS-160 | VNCM-220 VNCX-10 VNCM-250 | 18 | 49 | 19 | 45 | 70 | 52 | 80 | 95 | 23.1 | 4002-002 |
| TS-160-MT3 | | | 51 | | | | | | | | 4002-002A |
| TS-210 | VNCM-320 | 18 | 51 | 23 | 45 | 70 | 52 | 80 | 95 | 29.4 | 4002-003 |
| TS-210-MT3 | | | 57 | | | | | | | | 4002-003A |

Listed in the above table are examples of applicable models. Those not listed above should be selected so that the center height of the rotary table and dividing head in the same as that of the Tailstock.



Light Duty Live Center

مرکز گردان



- Center is made of SCM420 alloy steel by heat 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.

※Suggested tailstock pressure under 6 kg/cm²

FOR VPC-TYPE

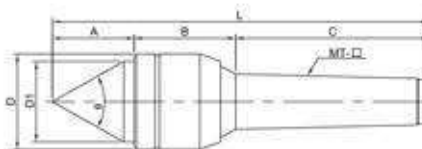
Unit:mm

| 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 |

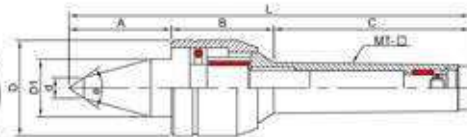
Live Lathe Center



A TYPE



B TYPE



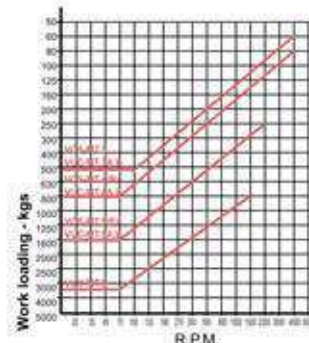
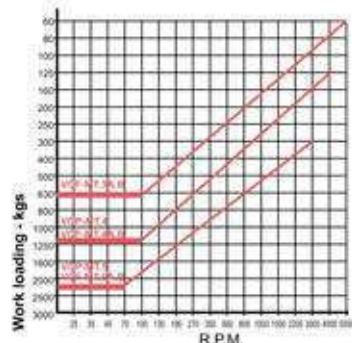
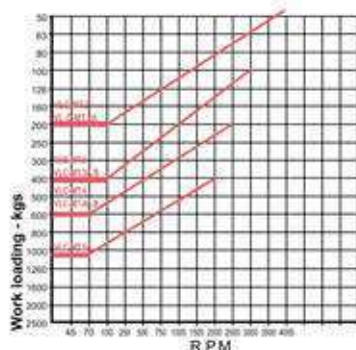
- Center shaft & main body is made of SCM420 alloy steel by heat treatment to provide higher rigidity (HRC60±2°) and satisfied wear-resistance.
- Center is constituted by thrust ball bearing, needle roller bearings & ball bearings assembly.
- Applicable to middle-speed & high-speed lathe with heavy load.
- ※ B TYPE SUITABLE FOR SMALL -WORKPIECE MACHINING.

※Suggested tailstock pressure under 6 kg/cm²

Unit:mm

| ORDER NO. | TYPE | A | B | C | D | D1 | d | L | 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 | 0.005 | 2500 | 60° | 1.5 | 240 x 70 x 61 | 5001-012 |
| VLC-215 | MT5A | 54 | 72 | 136 | 65 | 52 | - | 262 | 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 | 0.005 | 2500 | 60° | 1.5 | 240 x 70 x 61 | 5001-015 |

THE CHART FOR LOADING WEIGHT WITH R.P.M.





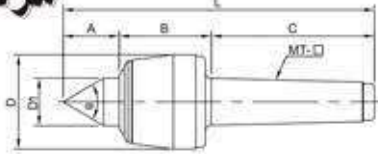
High-Speed NC Live Center



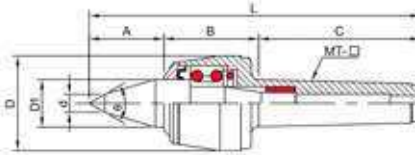
مرکز گردان سرعت بالا



A TYPE



B TYPE



WATER-PROOF TYPE

- Center shaft is made of SUJ2 material under vacuum heat 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 diameter workpieces.

※Suggested tailstock pressure under 6 kg/cm²

Unit:mm

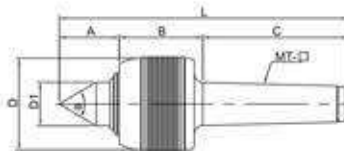
| ORDER NO. | TYPE | A | B | C | D | D1 | d | L | Accuracy | Speed Max R.P.M. | θ | G.W. weight kgs | PACKING LxWxH | CODE NO. |
|-----------|------|----|-----|-----|-----|----|----|-----|----------|------------------|-----|-----------------|-----------------|----------|
| VLC-MT3A | MT3A | 39 | 51 | 86 | 53 | 30 | - | 176 | 0.005 | 4000 | 60° | 1.3 | 240 x 70 x 61 | 5001-020 |
| VLC-MT4A | MT4A | 42 | 62 | 108 | 63 | 32 | - | 212 | 0.005 | 3000 | 60° | 2.2 | 253 x 92 x 80 | 5001-021 |
| VLC-MT5A | MT5A | 57 | 71 | 136 | 83 | 40 | - | 264 | 0.005 | 2500 | 60° | 4.5 | 303 x 108 x 101 | 5001-022 |
| VLC-MT6A | MT6A | 80 | 111 | 189 | 128 | 70 | - | 380 | 0.008 | 1500 | 60° | 15.6 | 410 x 177 x 168 | 5001-023 |
| VLC-MT3B | MT3B | 48 | 52 | 86 | 53 | 30 | 10 | 186 | 0.005 | 4000 | 60° | 1.4 | 240 x 70 x 61 | 5001-024 |
| VLC-MT4B | MT4B | 52 | 62 | 108 | 63 | 32 | 12 | 218 | 0.005 | 3000 | 60° | 2.2 | 253 x 92 x 80 | 5001-025 |
| VLC-MT5B | MT5B | 67 | 71 | 136 | 83 | 40 | 14 | 274 | 0.005 | 2500 | 60° | 4.5 | 303 x 108 x 101 | 5001-026 |



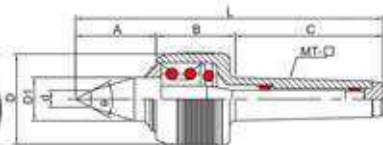
High-Load NC Live Center



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 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.

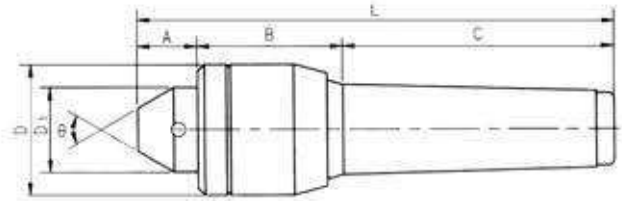
※Suggested tailstock pressure under 6 kg/cm²

Unit:mm

| ORDER NO. | A | B | C | D | D1 | d | L | Accuracy | Speed Max R.P.M. | θ | G.W. weight kgs | PACKING LxWxH | CODE NO. |
|-----------|----|----|-----|----|----|----|-----|----------|------------------|-----|-----------------|-----------------|----------|
| VCF-MT3A | 38 | 50 | 86 | 53 | 30 | - | 174 | 0.003 | 5000 | 60° | 1.3 | 240 x 70 x 61 | 5001-030 |
| VCF-MT4A | 45 | 60 | 108 | 68 | 32 | - | 213 | 0.003 | 4500 | 60° | 2.4 | 253 x 92 x 80 | 5001-031 |
| VCF-MT5A | 52 | 70 | 136 | 87 | 40 | - | 258 | 0.003 | 3000 | 60° | 5 | 303 x 108 x 101 | 5001-032 |
| VCF-MT3B | 52 | 50 | 86 | 53 | 25 | 10 | 188 | 0.003 | 5000 | 60° | 1.3 | 240 x 70 x 61 | 5001-033 |
| VCF-MT4B | 55 | 60 | 108 | 68 | 32 | 12 | 223 | 0.003 | 4500 | 60° | 2.4 | 253 x 92 x 80 | 5001-034 |
| VCF-MT5B | 67 | 70 | 136 | 87 | 40 | 14 | 273 | 0.003 | 3000 | 60° | 5 | 303 x 108 x 101 | 5001-035 |

Inter-changeable Points Live Center

مرغک گردان سر تعویض شو



- Complete set with 7 Interchangeable Points for various processing.
- Packed in case.
- 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.

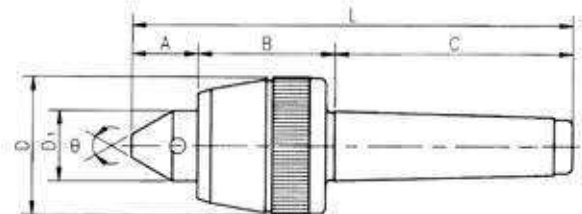


※Suggested tailstock pressure under 6 kg/cm²

Unit:mm

| ORDER NO. | TYPE | A | B | C | D | D1 | L | 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



VCS-MT3, MT4



VCS-MT4P, MT5P



- Center shaft is made of SUJ2 material under vacuum heat treatment to provide higher rigidity (HRC60°±2°) and satisfied wear-resistance.
- Center is constituted by dual ball bearing. Thrust bearing & needle roller bearing assembly.
- Suit for to high-speed lathe & NC leathe with heavy load, water-proof.

※Suggested tailstock pressure under 6 kg/cm²

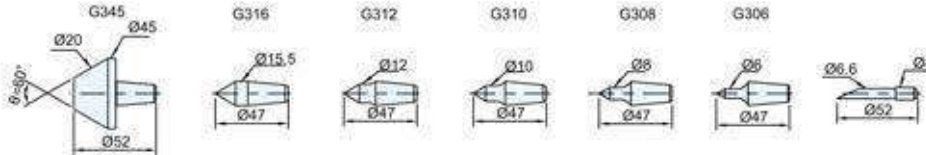
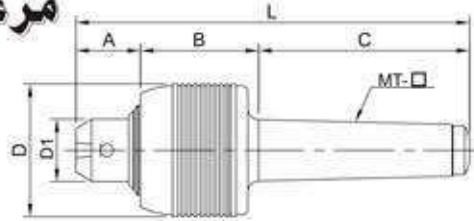
Unit:mm

| ORDER NO. | A | B | C | D | D1 | L | Accuracy | Speed Max. R.P.M. | θ | G.W. weight kgs | PACKING LxWxH | CODE NO. |
|-----------|----|----|-----|----|----|-----|----------|-------------------|-----|-----------------|-----------------|----------|
| VCS-MT3 | 28 | 51 | 86 | 53 | 30 | 165 | 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

مرکز گردان سر تعویض شو



- 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.

※Suggested tailstock pressure under 6 kg/cm²

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. |
|-----------|----|----|-----|----|----|-----|----------|-------------------|-----|-----------------|----------------|----------|
| VCP-MT4 | 30 | 64 | 108 | 68 | 32 | 202 | 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 |

High Speed Live Center

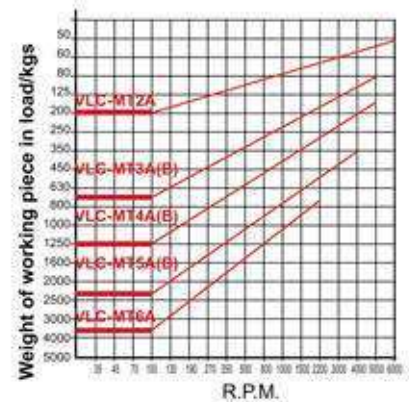
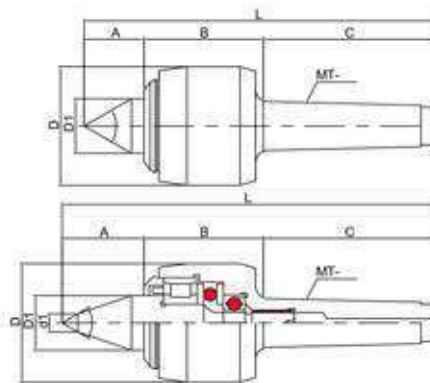
NEW EURO STYLE



A TYPE



B TYPE



- Suit for 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 has 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.

※Suggested tailstock pressure under 6 kg/cm²

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 | 46 | 69 | 32 | 13 | 135 | - | 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 | 67 | 114 | 76 | 35 | 225 | - | 0.003 | 5000 | 60° | 3.2 | 290x92x80 | 5001-064 |
| VLC-515 | MT5A | 55 | 88 | 142 | 95 | 45 | 285 | - | 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 | 67 | 114 | 76 | 35 | 236 | 12 | 0.003 | 5000 | 60° | 3.2 | 253x92x80 | 5001-068 |
| VLC-515B | MT5B | 67 | 88 | 142 | 95 | 45 | 297 | 14 | 0.003 | 3500 | 60° | 6.0 | 303x108x101 | 5001-069 |



Bull Nose Pipe Center

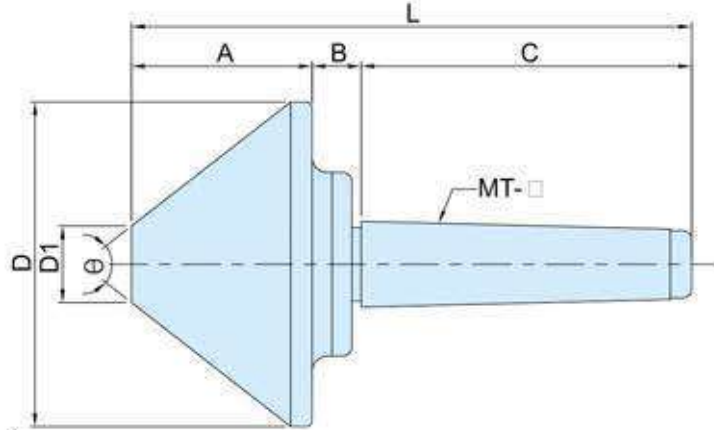


Pipe Live Center

مرغک لوله



HARDEN PROCESS : HRC50°
CONCENTRICITY : 0.005mm
ROUNDNESS : 0.005mm
MATERIAL : STEEL



※Suggested tailstock pressure under 6 kg/cm²

Unit:mm

| ORDER NO. | SIZE MTxD | 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-422 | MT2×2 1/2" | 48 | 12 | 69 | 63.5 | 12 | 128 | 3000 | 60° | 200 | 0.9 | 5001-070A |
| VLC-423 | MT2×3" | 56 | 12 | 69 | 78 | 19 | 138 | 2500 | 60° | 400 | 1.3 | 5001-070B |
| VLC-424 | MT2×4" | 58 | 12 | 69 | 106 | 32 | 141 | 2000 | 70° | 640 | 2.3 | 5001-070C |
| VLC-433 | MT3×3" | 52 | 18 | 86 | 78 | 19 | 156 | 3300 | 60° | 400 | 1.6 | 5001-070 |
| VLC-434 | MT3×4" | 59 | 16 | 86 | 106 | 32 | 161 | 3000 | 70° | 500 | 2.8 | 5001-071 |
| VLC-435 | MT3×5" | 71 | 12 | 89 | 128 | 35 | 173 | 1900 | 70° | 960 | 4.2 | 5001-071A |
| VLC-436 | MT3×6" | 81 | 12 | 89 | 156 | 50 | 183 | 1900 | 70° | 1200 | 7.3 | 5001-071B |
| VLC-443 | MT4×3" | 52 | 18 | 108 | 78 | 19 | 178 | 3300 | 60° | 400 | 1.8 | 5001-072 |
| VLC-444 | MT4×4" | 59 | 16 | 108 | 106 | 32 | 183 | 3000 | 70° | 500 | 3.1 | 5001-073 |
| VLC-445 | MT4×5" | 73 | 12 | 108 | 128 | 35 | 193 | 2000 | 70° | 650 | 4.9 | 5001-074 |
| VLC-446 | MT4×6" | 88 | 12 | 108 | 156 | 50 | 208 | 1900 | 70° | 800 | 7.7 | 5001-075 |
| VLC-448 | MT4×8" | 98 | 12 | 108 | 206 | 54 | 218 | 1500 | 75° | 1300 | 15.4 | 5001-076 |
| VLC-4410 | MT4×10" | 107 | 13 | 110 | 258 | 92 | 236 | 1000 | 80° | 2000 | 24 | 5001-076A |
| VLC-454 | MT5×4" | 58 | 12 | 143 | 106 | 32 | 214 | 2000 | 70° | 640 | 4 | 5001-077A |
| VLC-455 | MT5×5" | 73 | 12 | 136 | 128 | 35 | 221 | 2000 | 70° | 650 | 5.8 | 5001-077 |
| VLC-456 | MT5×6" | 88 | 12 | 136 | 156 | 50 | 236 | 1900 | 70° | 800 | 8.6 | 5001-078 |
| VLC-458 | MT5×8" | 98 | 12 | 136 | 206 | 54 | 246 | 1500 | 75° | 1600 | 15.7 | 5001-079 |
| VLC-4510 | MT5×10" | 107 | 13 | 143 | 258 | 92 | 264 | 1000 | 80° | 2200 | 25.5 | 5001-079A |
| VLC-4512 | MT5×12" | 110 | 25 | 143 | 306 | 120 | 281 | 1000 | 90° | 3000 | 37.5 | 5001-079B |
| VLC-466 | MT6×6" | 81 | 12 | 185 | 156 | 50 | 281 | 1900 | 70° | 1200 | 12 | 5001-080A |
| VLC-468 | MT6×8" | 103 | 13 | 185 | 206 | 54 | 298 | 1500 | 75° | 2000 | 15.8 | 5001-080 |
| VLC-4610 | MT6×10" | 107 | 13 | 185 | 258 | 92 | 306 | 1000 | 80° | 2500 | 28 | 5001-081 |
| VLC-4612 | MT6×12" | 110 | 25 | 185 | 306 | 120 | 323 | 1000 | 90° | 3000 | 40 | 5001-082 |



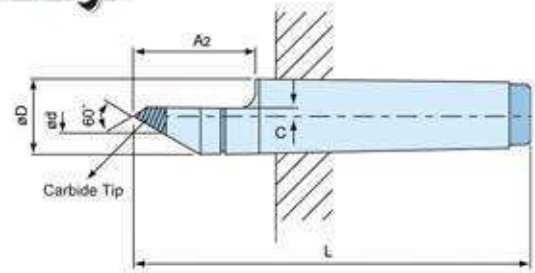
Lathe Center



- Half diameter
- High precision
- Carbide tip
- DIN 806

مرکز ثابت

NEW

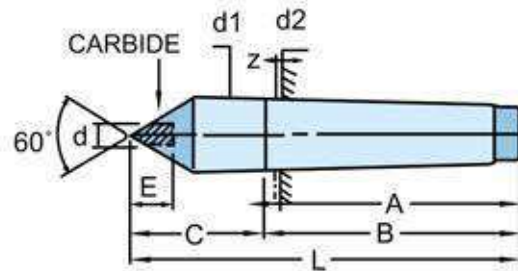


※Suggested tailstock pressure under 6 kg/cm²

| ORDER NO. | SIZE | A2 | C | ØD | Ød | L | Weight (kgs) | CODE NO |
|-----------|------|----|-----|------|------|-----|--------------|----------|
| VLC-117 | MT3 | 41 | 3 | 24 | 9 | 124 | 0.33 | 5001-086 |
| VLC-118 | MT4 | 54 | 4 | 31.3 | 11.5 | 158 | 0.72 | 5001-087 |
| VLC-119 | MT5 | 69 | 4.5 | 44.5 | 13 | 198 | 1.73 | 5001-088 |

Lathe Center

- K20 Carbide tipped-HRC 70°
- Hardened & precision ground.
- Concentricity within .0002" (0.005mm)
- DIN806



※Suggested tailstock pressure under 6 kg/cm²

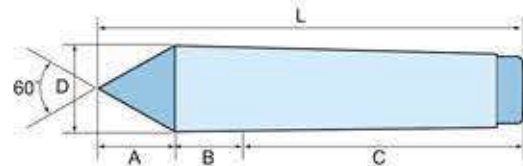
| ORDER NO. | SIZE | A | B | C | E | L | d2 | d1 | d | Weight (kgs) | CODE NO. |
|-----------|------|-----|-------|----|----|-----|--------|------|----|--------------|----------|
| VLC-112 | MT-2 | 69 | 67 | 31 | 8 | 100 | 17.780 | 18.0 | 6 | 0.2 | 5001-090 |
| VLC-113 | MT-3 | 89 | 81 | 39 | 10 | 125 | 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 |

Unit:mm

Dead Center

- Suit for lathe & grinding machine
- Hardened & precision ground
- DIN806

NEW



※Suggested tailstock pressure under 6 kg/cm²

| 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 |



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 by heat 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.

※Suggested tailstock pressure under 6 kg/cm²

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

مرنگ شاخدار سر تعویض شو



SET STYLE



TAPER SLEEVE



STOPPER



CENTER

※Suggested tailstock pressure under 6 kg/cm²

Unit:mm

| ORDER NO. | Center Shaft Size | Stopper Outer Dia | Working Range | Weight (KGS) | CODE NO. |
|------------|-------------------|-------------------|---------------|--------------|----------|
| VDC 20-MT4 | 6ø, 8ø, 10ø | 16ø, 23ø, 30ø | 15ø-45ø | 2.62 | 5001-106 |

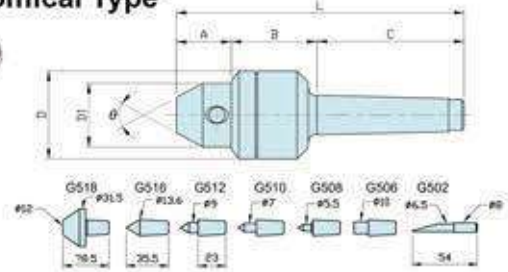


Inter-Changeable Point Rolling Center VERTEX®

Economical Type

NEW

مرنگ سر تعویض شو



- 7 points / set
- Concentricity : $\pm 0.008\text{mm}$
- With high grade bearing

※Suggested tailstock pressure under 6 kg/cm^2

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

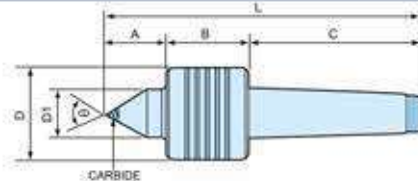
NEW

LIGHT DUTY



CARBIDE

※Suggested tailstock pressure under 6 kg/cm^2



- K20 carbide tipped, HRC 70°
- Hardened & precision ground
- Concentricity : $0.0002^\circ (\pm 0.005\text{mm})$

| ORDER NO. | TYPE | A | B | C | D | D1 | L | SPEED MAX. R.P.M. | θ | WORK LOADING-KGS | G.W. weight kgs | CODE NO |
|-----------|------|----|----|-----|----|----|-----|-------------------|------------|------------------|-----------------|----------|
| VLC-172 | MT2 | 32 | 40 | 72 | 41 | 25 | 144 | 2300 | 60° | 60 | 0.55 | 5001-131 |
| VLC-173 | MT3 | 34 | 45 | 88 | 45 | 30 | 167 | 2000 | 60° | 160 | 0.84 | 5001-132 |
| VLC-174 | MT4 | 34 | 45 | 109 | 45 | 30 | 188 | 1800 | 60° | 300 | 1.15 | 5001-133 |
| VLC-175 | MT5 | 50 | 61 | 134 | 68 | 45 | 245 | 1500 | 60° | 800 | 3.3 | 5001-134 |

Drill Chucks Arbor



SLEEVE

MT3.4.5
-JT-

ARBOR

SLEEVE Please see page C43,C44,C56,C57

| ORDER NO. | I.D.xO.D. | D | d | L | I1 | I2 | kg | CODE NO. |
|-----------|-----------|--------|--------|-----|------|-----|------|----------|
| 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-104 | MT2xMT6 | | | | | | | 3210-004 |
| 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 |
| 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 |

| ORDER NO. | TAPER | JT NO. | C | H | kg | CODE NO. |
|-----------|-------|--------|--------|----|------|-----------|
| VJ-126 | MT2 | JT3 | 20.6 | 34 | 0.24 | 3209-006 |
| 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-130 | MT2 | JT6 | 17.17 | 28 | 0.22 | 3209-029 |
| VJ-130-2 | MT2 | JT5 | 35.89 | 50 | 0.5 | 3209-029A |
| VJ-130-4 | MT2 | JT4 | 28.55 | 45 | 0.4 | 3209-029B |
| VJ-137 | MT2 | JT2 | 14.2 | 25 | 0.2 | 3209-056 |
| VJ-131 | MT3 | JT6 | 17.17 | 26 | 0.4 | 3209-030 |
| VJ-131-2 | MT3 | JT5 | 35.89 | 50 | 0.7 | 3209-030A |
| 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-138-1 | MT3 | JT3 | 20.60 | 34 | 0.35 | 3209-034 |
| VJ-131-2 | MT3 | JT5 | 35.89 | 50 | 0.7 | 3209-030A |
| VJ-138-2 | MT3 | JT4 | 28.55 | 45 | 0.5 | 3209-035 |
| VJ-132 | MT4 | JT6 | 17.17 | 26 | 0.7 | 3209-031 |
| 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-132-5 | MT4 | JT2 | 14.2 | 25 | | 3209-031D |
| VJ-132-6 | MT4 | JT33 | 15.85 | 28 | 0.65 | 3209-031E |
| VJ-132-8 | MT4 | B18 | 17.78 | 37 | 0.7 | 3209-031F |
| VJ-135 | MT4 | B16 | 15.733 | 29 | 0.7 | 3209-036 |
| VJ-133 | MT5 | JT6 | 17.17 | 26 | 1.6 | 3209-032 |
| 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-133-4 | MT5 | JT2 | 14.2 | 26 | 1.6 | 3209-032D |
| VJ-133-5 | MT5 | JT33 | 15.85 | 29 | 1.6 | 3209-032E |

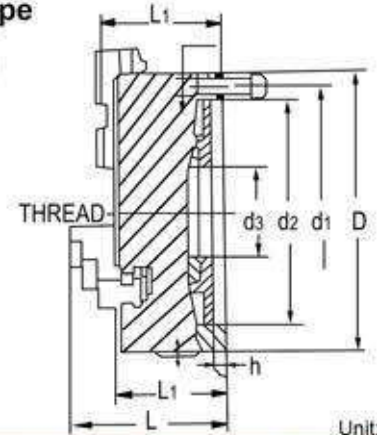
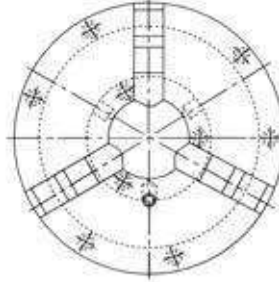


3 Jaw Self Centering Chuck VERTEX®

2 Set of Solid Jaw. Plain Back

Normal Type

سه نظام دستگاه تراش



Unit:mm

SPECIFICATIONS

| 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 | Ø24-Ø64 | 2 | 5002-020A |
| VSC-4A | 100mm(4") | 84 | 72 | 22 | 74.5 | 55 | 3.5 | 3-M8 | Ø3-Ø90 | Ø32-Ø84 | 3.3 | 5002-021A |
| VSC-5A | 130mm(5") | 115 | 100 | 30 | 78 | 55 | 3.5 | 3-M8 | Ø3-Ø110 | Ø35-Ø100 | 5.8 | 5002-022A |
| VSC-6A | 160mm(6") | 142 | 130 | 45 | 95 | 65 | 5 | 3-M8 | Ø3-Ø160 | Ø48-Ø150 | 9 | 5002-023A |
| VSC-7A | 190mm(7 1/2") | 172 | 155 | 55 | 105 | 75 | 5 | 3-M10 | Ø4-Ø180 | Ø56-Ø170 | 15.1 | 5002-024A |
| VSC-8A | 200mm(8") | 180 | 165 | 70 | 109 | 75 | 5 | 3-M10 | Ø4-Ø180 | Ø56-Ø170 | 15.6 | 5002-025A |
| VSC-9A | 240mm(9 1/2") | 215 | 195 | 70 | 122.5 | 80 | 5 | 3-M12 | Ø5-Ø220 | Ø62-Ø210 | 26 | 5002-026A |
| VSC-10A | 250mm(10") | 226 | 206 | 80 | 120 | 80 | 5 | 3-M12 | Ø6-Ø220 | Ø70-Ø250 | 26.5 | 5002-027A |
| VSC-12A | 315mm(12") | 285 | 260 | 100 | 147.5 | 90 | 6 | 3-M16 | Ø10-Ø300 | Ø86-Ø290 | 47 | 5002-028A |
| VSC-16A | 400mm(16") | 368 | 340 | 130 | 173.5 | 100 | 6 | 3-M16 | Ø14-Ø400 | Ø100-Ø380 | 73 | 5002-029A |
| VSC-20A | 500mm(20") | 465 | 440 | 210 | 202 | 115 | 6 | 3-M16 | Ø25-Ø500 | Ø150-Ø500 | 131 | 5002-030A |
| VSC-25A | 630mm(25") | 595 | 560 | 260 | 194 | 130 | 6 | 3-M16 | Ø50-Ø630 | Ø170-Ø630 | 200 | 5002-031A |

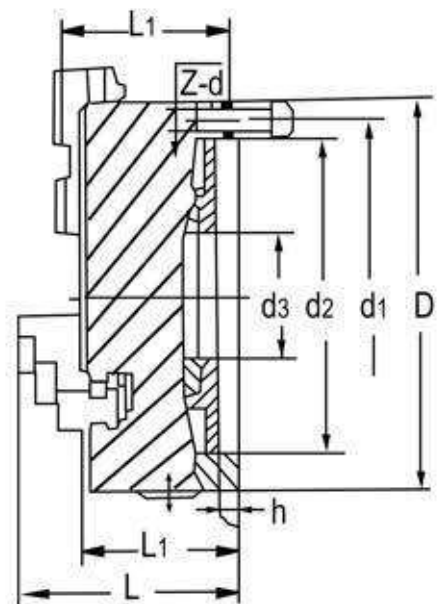
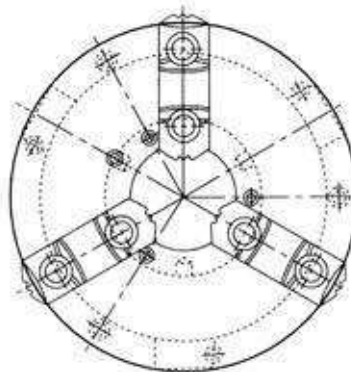


3 Jaw Powerful Self Centering Chuck

Reversible Top Jaws. Plain Back

Normal Type

سه نظام فك آلنی دستگاه تراش



Unit:mm

3 JAW SELF CENTERING CHUCK REVERSIBLE TOP JAWS. PLAIN BACK SPECIFICATIONS

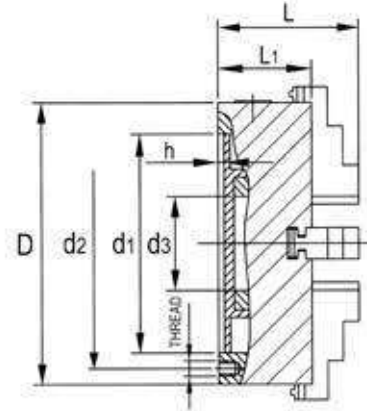
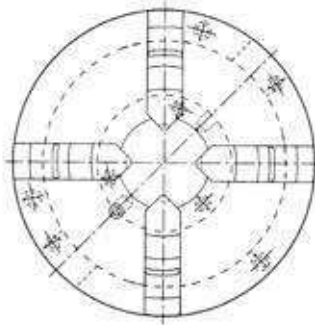
| ORDER NO. | D-Size | d1 | d2 | d3 | L | L1 | h | THREAD | GRIPPING RANGE | | WEIGHT (kgs) | CODE NO. |
|-----------|------------|-----|-----|-----|-------|-------|---|--------|----------------|------------|--------------|-----------|
| | | | | | | | | | O.D. RANGE | I.D. RANGE | | |
| VSK-6A | 160mm(6") | 142 | 130 | 45 | 95 | 71 | 5 | 3-M8 | Ø8-Ø160 | Ø55-Ø150 | 8.3 | 5002-040A |
| VSK-8A | 200mm(8") | 180 | 165 | 65 | 109 | 78 | 5 | 3-M12 | Ø8-Ø180 | Ø62-Ø170 | 16 | 5002-042A |
| VSK-10A | 250mm(10") | 226 | 206 | 80 | 120 | 84 | 5 | 3-M12 | Ø12-Ø260 | Ø80-Ø250 | 21.7 | 5002-043A |
| VSK-12A | 315mm(12") | 285 | 260 | 100 | 156.5 | 102.5 | 6 | 3-M16 | Ø15-Ø300 | Ø90-Ø290 | 41 | 5002-043B |
| VSK-13A | 325mm(13") | 296 | 272 | 100 | 154.5 | 102.5 | 6 | 3-M16 | Ø11.5-Ø350 | Ø110-Ø340 | 45.8 | 5002-044A |
| VSK-15A | 380mm(15") | 350 | 325 | 130 | 156.5 | 104.5 | 6 | 3-M16 | Ø11.5-Ø400 | Ø110-Ø400 | 64.7 | 5002-045A |
| VSK-16A | 400mm(16") | 368 | 340 | 130 | 173.5 | 100 | 6 | 3-M16 | Ø20-Ø470 | Ø110-Ø380 | 75.5 | 5002-046A |



4 Jaw Self Centering Chucks



چهار نظام منظم



SPECIFICATIONS

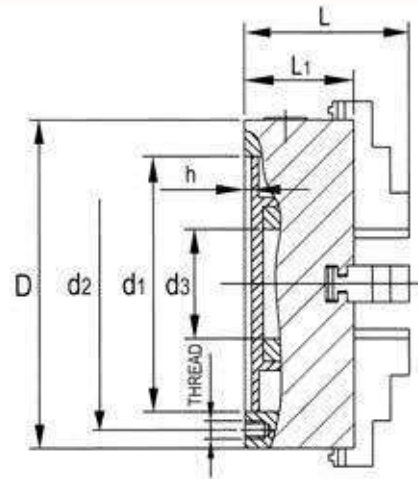
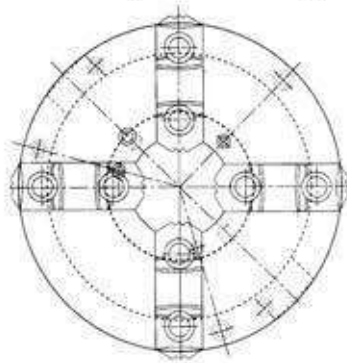
Unit:mm

| 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-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)

چهار نظام فك آلى



SPECIFICATIONS

Unit:mm

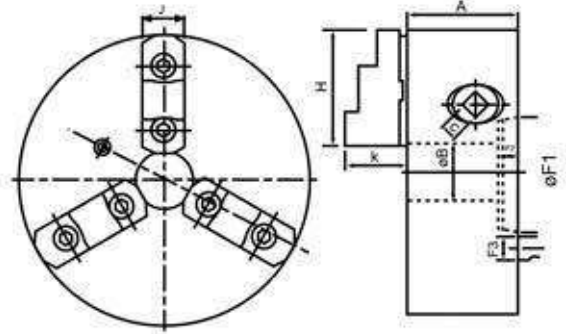
| ORDER NO. | D | d1 | d2 | d3 | L | L1 | h | THREAD | GRIPPING RANGE | | WEIGHT (kgs) | CODE NO. |
|-----------|-----|-----|-----|-----|-------|----|---|--------|----------------|------------|--------------|----------|
| | | | | | | | | | O.D. RANGE | I.D. RANGE | | |
| VPS-6AK | 165 | 130 | 145 | 45 | 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 Scroll Chucks D1 Camlock Direct Mounting VERTEX®

سه نظام فك آلى



BACK SAMPLE



(ASA spindle nose D1-4, D1-5, D1-6, D1-8)

American standard camlock type with 2-piece reversible hard top jaws.

- Gripping accuracy of 0.03mm(0.002inch)T.I.R.
- Standard accessories A chuck wrench and hex. key One set of mounting bolts.(UNC-bolts)
- 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. | Spindle Size | Chuck Size | A | B | C | H | J | K | Mounting Dimensions | | | | Gripping Range | | Weight (kg) | Allowable Handle Torque (kgf.m) | Gripping Force (kgf) | I (kgf.M ²) | Max. Speed (r.p.m.) | CODE NO. |
|-----------|--------------|------------|----|----|----|----|----|----|---------------------|------|----|--------|----------------|------------|-------------|---------------------------------|----------------------|-------------------------|---------------------|----------|
| | | | | | | | | | F1 | F2 | F3 | F4 | O.D. Range | I.D. Range | | | | | | |
| KD5-8" | D1-5 | 200 | 77 | 46 | 11 | 82 | 28 | 42 | 82.563 | 14.3 | 19 | 104.78 | Ø8-Ø180 | Ø62-Ø170 | 18 | 11.5 | 3600 | 0.07 | 3200 | 5002-061 |
| KD6-8" | D1-6 | 200 | 77 | 58 | 11 | 82 | 28 | 42 | 106.375 | 16 | 22 | 133.35 | Ø8-Ø180 | Ø62-Ø170 | 17 | 17 | 3600 | 0.07 | 3200 | 5002-063 |

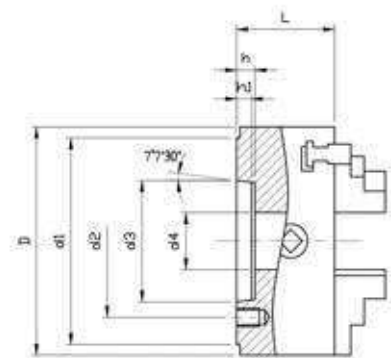
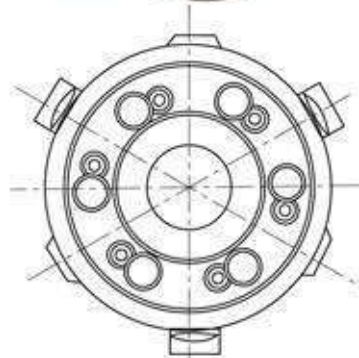
3-Jaw Powerful Camlock Type Self-Centering Chuck

NEW



SAMPLE

| Ød4 | |
|-------|---------|
| D1-5 | 82.563 |
| D1-6 | 106.375 |
| D1-8 | 106.375 |
| D1-11 | 106.357 |



SPECIFICATIONS

| 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 |

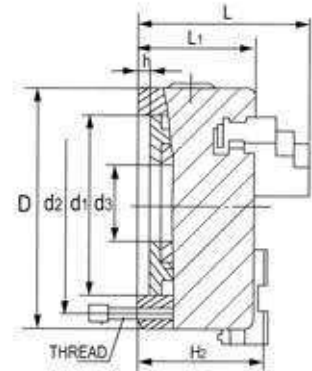
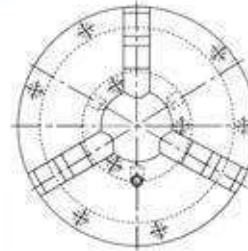


DIN-Type 3-Jaw Self-Centering Chucks



SIMILAR DIN6350

سه نظام دور بالا



It have front mounting type as well.

SPECIFICATIONS

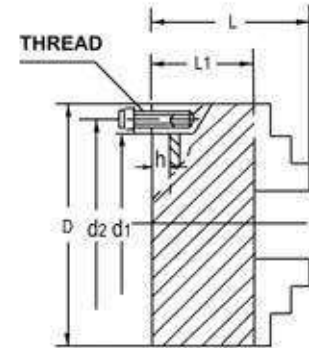
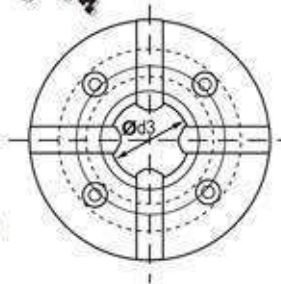
Unit:mm

| 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

چهار نظام نامنظم



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 | 3.5 | 4-M8 | 2300 | Ø6-Ø45 | Ø40-Ø100 | 3.5 | 5002-220 |
| VKC-5 | 125mm(5") | 95 | 108 | 30 | 78 | 56 | 4.5 | | 1900 | Ø7-Ø57 | Ø48-Ø125 | 5.1 | 5002-221 |
| VKC-6 | 160mm(6") | 65 | 95 | 45 | 93 | 75 | 5 | 4-M10 | 1500 | Ø8-Ø80 | Ø50-Ø160 | 8.3 | 5002-222 |
| VKC-8 | 200mm(8") | 80 | 112 | 56 | 107 | 80 | 6 | | 1350 | Ø10-Ø100 | Ø63-Ø200 | 15.9 | 5002-223 |
| VKC-10 | 250mm(10") | 110 | 130 | 75 | 120 | 90 | | 8 | 1100 | Ø15-Ø130 | Ø80-Ø250 | 21.8 | 5002-224 |
| VKC-12B | 320mm(12") | 140 | 165 | 95 | 134 | 90 | 6 | | 850 | Ø20-Ø176 | Ø100-Ø315 | 41 | 5002-226 |
| VKC-14 | 350mm(14") | 130 | 168 | 110 | | 8 | | 90 | 4-M16 | 550 | Ø20-Ø206 | Ø100-Ø350 | 53.6 |
| VKC-16 | 400mm(16") | 160 | 185 | 125 | 143 | | 95 | | | 550 | Ø25-Ø250 | Ø118-Ø400 | 56 |
| VKC-20 | 500mm(21") | 200 | 236 | 160 | 161 | 106 | 10 | 4-M20 | 350 | Ø35-Ø300 | Ø125-Ø500 | 105 | 5002-229 |
| VKC-25 | 630mm(25") | 220 | 258 | 180 | 175 | 118 | | | 280 | Ø50-Ø400 | Ø160-Ø630 | 162 | 5002-230 |
| VKC-32 | 800mm(32") | 250 | 300 | 210 | 202 | 132 | 12 | 8-M20 | 200 | Ø70-Ø540 | Ø200-Ø800 | 265 | 5002-231 |
| VKC-40 | 1000mm(40") | 320 | 370 | 260 | 241 | 150 | 15 | 8-M20 | 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 |

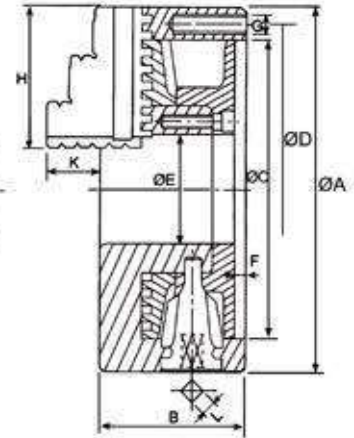
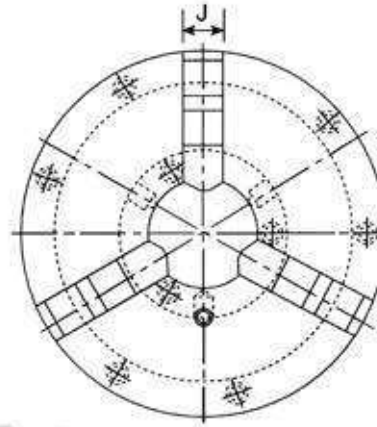


3-Jaw Scroll Chuck



JIS STANDARD Accuracy Type

سه نظام دستگاه تراش



- 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

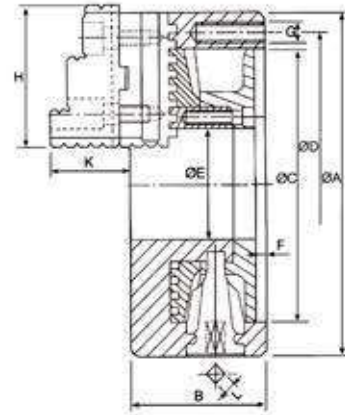
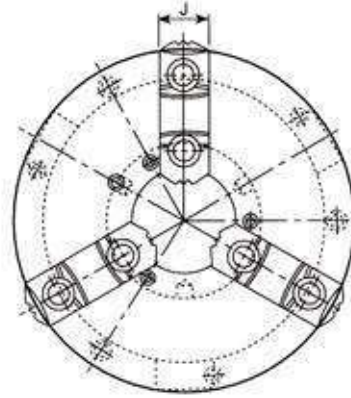
| ORDER NO. | Dim | | | | | | | | | | | Allowable Handle Torque (kgf.m) | Gripping Force (kgf) | I (kgf.m) | Weight (kgs) | Max. Speed (r.p.m.) | Gripping Range | | CODE NO. |
|-----------|-----|------|-----|-----|-----|-----|-------|-----|------|------|----|---------------------------------|----------------------|-----------|--------------|---------------------|----------------|------------|-----------|
| | 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 | 4.6 | 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 | 7.6 | 2000 | Ø4-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 | 12 | 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 | 13.3 | 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 | 19.3 | 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 | 26.2 | 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 | 37.6 | 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 | 160 | 8.5 | 3-M14 | 146 | 42 | 56 | 15 | 23.0 | 4500 | 1.75 | 80.7 | 1500 | Ø14-Ø400 | Ø100-Ø380 | 5002-010 |



3-Jaw Powerful Scroll Chuck

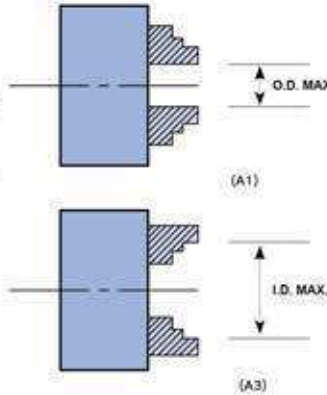


JIS STANDARD Accuracy Type



سه نظام فك آلى

- 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.



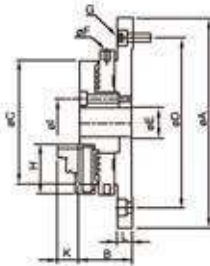
SPECIFICATIONS

Unit:mm

| ORDER NO. | Gripping Range | |
|-----------|--------------------------|--------------------------|
| | External Gripping ØA1 | Internal Gripping ØA3 |
| VSK-4 | 3-36 | 69-100 |
| VSK-5 | 3-47 | 84-123 |
| VSK-6 | 8-74 | 107-160 |
| VSK-7 | 8-88 | 125-180 |
| VSK-8 | 8-88 | 125-180 |
| VSK-9 | 11-118 | 144-220 |
| VSK-10 | 12-142 | 152-260 |
| VSK-12 | 15-166 | 184-300 |
| VSK-14 | 25-202 | 212-350 |
| VSK-16 | 30-238 | 228-400 |
| VSK-20 | 25-366 | 207-480 |

SPECIFICATIONS VSK reversible type

| 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 | 12.8 | 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 | 5.5 | 3-M12 | 96 | 32 | 50 | 12 | 15.0 | 3900 | 0.16 | 20.4 | 2000 | Ø11-Ø220 | Ø70-Ø210 | 5002-033 | | |
| VSK-10 | 273 | 87 | 230 | 250 | 87 | 5.5 | 3-M12 | 100 | 35 | 54.5 | 12 | 19.5 | 4800 | 0.26 | 26.7 | 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 | 39.3 | 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-Ø320 | 5002-035A | | |
| VSK-16 | 405 | 122 | 345 | 375 | 160 | 8 | 6-M14 | 150 | 50 | 75 | 15 | 23.0 | 4500 | 1.72 | 82.3 | 1500 | Ø30-Ø400 | Ø110-Ø380 | 5002-037 | | |
| VSK-20 | 500 | 140 | 420 | 458 | 205 | 5.5 | 6M-14 | 140 | 55 | 84 | 19 | - | - | - | 145.5 | 1000 | Ø25-Ø480 | Ø125-Ø460 | 5002-038 | | |



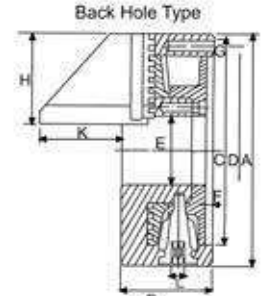
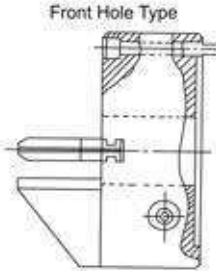
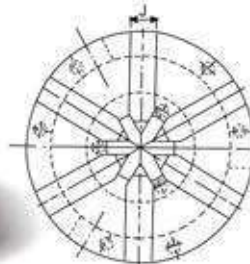
- Compact, Small And Light Weight
- No Wrench Required, Turn To Loose & Lock By Fixing Ring
- Steel Made Body
- Reversible Jaws
- VLBK-Series Is Latest Vertical Clamping Design For CNC, Milling Machine And Machining Center.

DIMENSIONS

| ORDER NO. | A | B | C | D | E | F | G | H | I | J | K | L | Gripping Range | | Weight (kgs) | CODE NO. |
|-----------|-----|----|-----|-----|----|---|------------|----|----|----|----|------|----------------|------------|--------------|----------|
| | | | | | | | | | | | | | O.D. Range | I.D. Range | | |
| VLBK-2 | 118 | 28 | 63 | 100 | 16 | 4 | 4-M5X0.8P | 27 | 26 | 8 | 13 | 8 | ø0.8~ø63 | ø23~ø58 | 1.2 | 5002-130 |
| VLBK-3 | 143 | 37 | 85 | 116 | 20 | 4 | 4-M6X1.0P | 35 | 32 | 11 | 15 | 10.5 | ø1~ø81 | ø31~ø70 | 2.9 | 5002-131 |
| VLBK-4 | 168 | 39 | 110 | 140 | 26 | 5 | 4-M6X1.0P | 42 | 40 | 14 | 19 | 10 | ø1~ø100 | ø36~ø90 | 4.6 | 5002-132 |
| VLBK-5 | 202 | 45 | 130 | 168 | 32 | 6 | 4-M8X1.25P | 50 | 49 | 16 | 21 | 11.5 | ø1.5~ø116 | ø43~ø106 | 6.2 | 5002-133 |
| VLBK-6 | 248 | 52 | 160 | 208 | 50 | 8 | 4-M10X1.5P | 65 | 70 | 19 | 26 | 15 | ø1.5~ø160 | ø52~ø148 | 11 | 5002-134 |

6-Jaw Awl Type Chucks

شش نظام



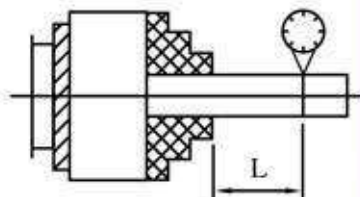
SPECIFICATIONS

Unit:mm

| 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 |

Quality standard For Lathe Chuck

Accuracy



| ORDER NO. | VSC-3,4,5,6,7,8,9,10,12,14,16 VSK-4,5,6,7,8,9,10,12,14,16 VMJ-6,8,10,12,150,200,250,300 VNBK-6,8,10,12 | VSC-3A,4A,5A,6A,7A,8A,9A,10A VSC-12A,16A,20A,25A VSK-6A,8A,10A,12A,13A,16A VPS-6A,8A,10A,12A,6AK,8AK VPS-10AK,12AK VSKC-6A,8A,10A,12A VSC-3D,4D,5D,6D,8D,10D VKC-4,5,6,8,10,12B,14,16,20,25 VKC-32,40,50 |
|---------------|---|--|
| TEST ITEM | L | L |
| RADIAL RUNOUT | 0.05 / 50 mm | 0.10 / 50 mm |



Machining Jaw Chuck



- 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

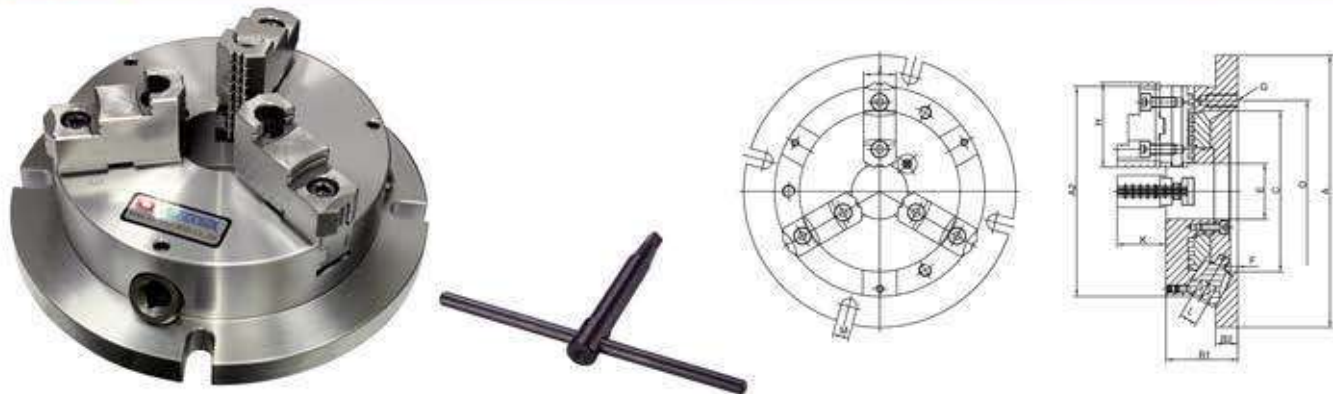
Unit:mm

| ORDER NO. | A | B | C | D | E | G | H | I | J | K | L | M | N | MAX. GRIPPING DIAMETER | | Gripping Force (kgf) | 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 | 900 | 13.5 | 5002-240 |
| VMJ-8 | 200 | 250 | 174 | 18 | 25 | 28 | 160 | 55 | 20 | 65 | 108 | 43 | 4-M12 | Ø5-Ø162 | Ø62-Ø162 | 1620 | 21.5 | 5002-241 |
| VMJ-10 | 250 | 310 | 218 | 18 | 30 | 32 | 200 | 70 | 22 | 72 | 122 | 50 | 4-M14 | Ø6-Ø200 | Ø72-Ø200 | 1800 | 36.1 | 5002-242 |
| VMJ-12 | 310 | 380 | 274 | 22 | 35 | 40 | 260 | 100 | 25 | 85 | 141 | 56 | 4-M16 | Ø10-Ø265 | Ø90-Ø265 | 2250 | 62.8 | 5002-243 |



Super Thin Chucks

سه نظام تخت دستگاه فرز



- 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. Four locate position 90°.
- "POWERFUL TYPE" design.

SPECIFICATIONS

Unit:mm

| ORDER NO. | Dim | | | | | | | | | | | | | Gripping Force (kgf) | 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 | 1800 | 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 | 2250 | 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 | 3150 | 30.5 | Ø12-250 | Ø72-240 | 5002-072 |



Vertical Machining Chucks



سه نظام تخت دستگاه فرز

VMJ-150, 200, 250, 300

NEW



● VSK REVERSIBLE TYPE



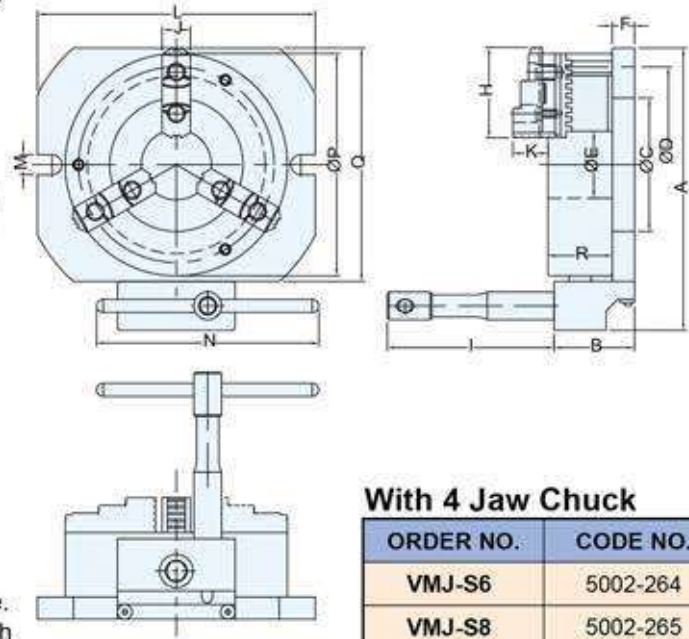
NEW TYPE 3 JAW CHUCK CHANGEABLE

NEW

VMJ-B150, B200, B250, B300



● VSC REVERSIBLE TYPE



- Convert 3/4 Jaws chuck into clamping chuck.
- Vertical cutting / locking.
- Large workpieces can be held tight with the low profile vise body.
- 3 Jaws can for round workpiece.
- 4 Jaws can for square workpiece & round workpiece.
- The handle is set on the face and does not interfere with the table. A number of chucks can be used together.
- Suit for MC center, Milling & Boring machine.
- Easy to exchange 3/4 Jaws chuck.

With 4 Jaw Chuck

| ORDER NO. | CODE NO. |
|-----------|----------|
| VMJ-S6 | 5002-264 |
| VMJ-S8 | 5002-265 |
| VMJ-S10 | 5002-266 |
| VMJ-S12 | 5002-267 |

SPECIFICATIONS VSK TYPE

Unit:mm

| ORDER NO. | A | B | C | D | E | F | H | I | J | K | L | M | N | P | Q | R | Gnpping Range | | Weight (kgs) | CODE NO. |
|-----------|-----|----|-----|-----|-----|----|-----|-----|----|----|-----|----|-----|-----|-----|------|---------------|-----------|--------------|----------|
| | | | | | | | | | | | | | | | | | O.D Range | I.D Range | | |
| VMJ-150 | 219 | 83 | 90 | 147 | 45 | 20 | 72 | 150 | 26 | 39 | 215 | 18 | 200 | 165 | 175 | 67 | Ø8-Ø160 | Ø55-Ø150 | 17.7 | 5002-260 |
| VMJ-200 | 254 | 83 | 120 | 176 | 58 | 20 | 82 | 150 | 28 | 43 | 250 | 18 | 200 | 200 | 200 | 76.5 | Ø8-Ø180 | Ø62-Ø170 | 24.4 | 5002-261 |
| VMJ-250 | 327 | 83 | 190 | 250 | 87 | 24 | 100 | 150 | 35 | 50 | 324 | 18 | 200 | 273 | 283 | 87 | Ø12-Ø260 | Ø80-Ø250 | 48.7 | 5002-262 |
| VMJ-300 | 364 | 83 | 220 | 285 | 105 | 24 | 114 | 150 | 40 | 56 | 360 | 18 | 200 | 310 | 320 | 96 | Ø15-Ø300 | Ø90-Ø290 | 63.7 | 5002-263 |

SPECIFICATIONS VSC TYPE

Unit:mm

| ORDER NO. | A | B | C | D | E | F | H | I | J | K | L | M | N | P | Q | R | Gnpping Range | | Weight (kgs) | CODE NO. |
|-----------|-----|----|-----|-----|-----|----|-----|-----|------|----|-----|----|-----|-----|-----|------|---------------|-----------|--------------|----------|
| | | | | | | | | | | | | | | | | | O.D Range | I.D Range | | |
| VMJ-B150 | 219 | 83 | 90 | 147 | 45 | 20 | 72 | 150 | 19 | 39 | 215 | 18 | 200 | 165 | 175 | 67 | Ø3-Ø160 | Ø48-Ø150 | 17.7 | 5002-275 |
| VMJ-B200 | 254 | 83 | 120 | 176 | 58 | 20 | 82 | 150 | 21.5 | 43 | 250 | 18 | 200 | 200 | 200 | 76.5 | Ø4-Ø180 | Ø56-Ø170 | 24.9 | 5002-276 |
| VMJ-B250 | 327 | 83 | 190 | 250 | 87 | 24 | 100 | 150 | 28 | 50 | 324 | 18 | 200 | 273 | 283 | 87 | Ø6-Ø260 | Ø70-Ø250 | 50 | 5002-277 |
| VMJ-B300 | 364 | 83 | 220 | 285 | 105 | 24 | 114 | 150 | 30 | 56 | 360 | 18 | 200 | 310 | 320 | 96 | Ø10-Ø300 | Ø86-Ø290 | 66.5 | 5002-278 |



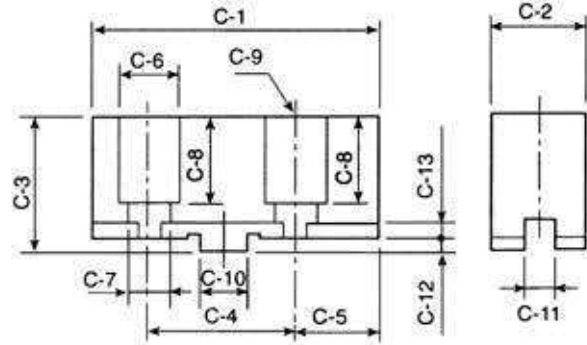
Soft Jaw For SK-Type Chuck

1. Soft jaw for SK-type chuck. 2. Manufactured in specification
Can for Japanese brand 3 jaw chuck KITAGAWA, HOWA, VICTOR

فک نرم سه نظام



3 PCS/SET



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 | 48 | 53.98 | 28 | 19 | 13 | 36 | M12 | 19.03 | 12.7 | 3 | 3.5 | 3.7 | 5002-303 |
| VSJ-10 | 110 | 37 | 48 | 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-6-9 | VSJ-6 | 90H | 5002-3009 |
| 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-8-9 | VSJ-7 VSJ-8 | 90H | 5002-3029 |
| 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 |
| VSJ-9-10 | VSJ-9 | 100H | 5002-30310 |
| VSJ-9-12 | VSJ-9 | 120H | 5002-30312 |

| ORDER NO. | MODEL | HEIGHT | CODE NO. |
|-----------|--------|--------|------------|
| 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-10-12 | VSJ-10 | 120H | 5002-30412 |
| VSJ-10-13 | VSJ-10 | 130H | 5002-30413 |
| 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 |
| VSJ-12-12 | VSJ-12 | 120H | 5002-30512 |
| VSJ-12-13 | VSJ-12 | 130H | 5002-30513 |
| VSJ-12-15 | VSJ-12 | 150H | 5002-30515 |
| VSJ-16-10 | VSJ-16 | 100H | 5002-30610 |
| VSJ-16-12 | VSJ-16 | 120H | 5002-30612 |



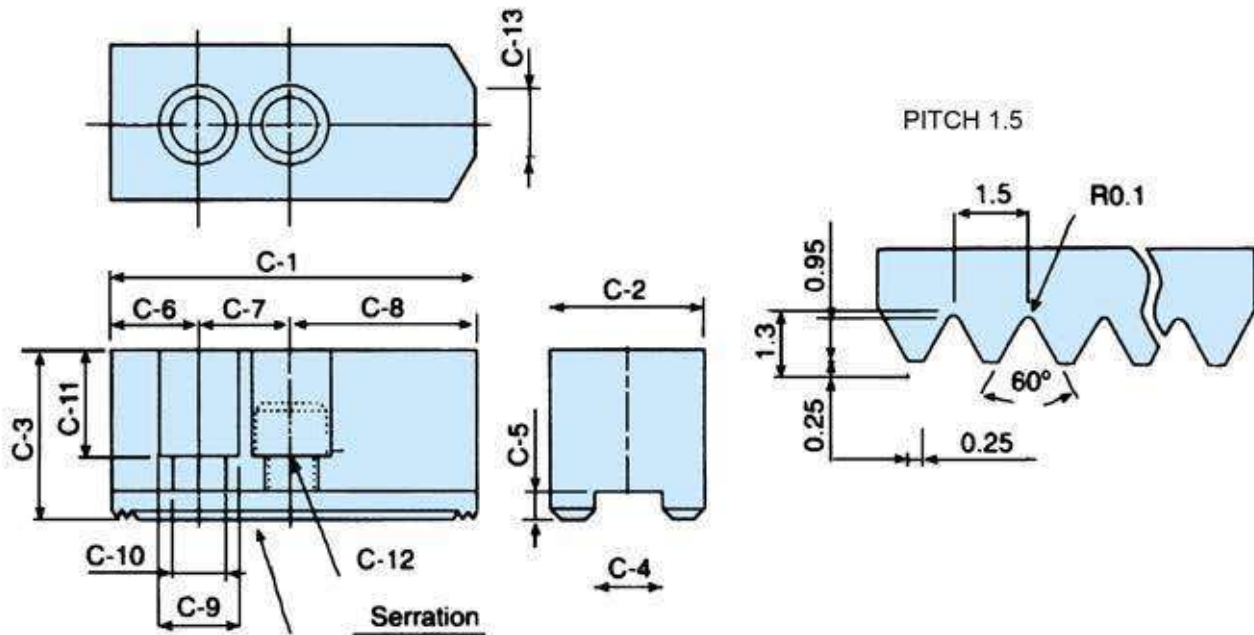
Soft Jaw For Hydraulic Power Chucks VERTEX®

For Japanese brand JIS & KITAGAWA

فک نرم سه نظام هیدرولیک

STANDARD
3 PCS/SET

ALUMINIUM



MATERIAL: STEEL

| Dim | 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 |

MATERIAL: ALUMINIUM

| Dim | 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-8A | 95 | 35 | 37 | 14 | 5 | 24 | 25 | 46 | 19 | 13 | 22 | M12 | 16 | 0.84 | 5002-250A |
| VHC-10A | 110 | 40 | 42 | 16 | 5 | 30 | 30 | 50 | 19 | 13 | 27 | M12 | 18 | 1.31 | 5002-251A |



Soft Jaw For Hydraulic Power Chucks VERTEX®

For Japanese brand JIS & KITAGAWA

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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-06-9 | VHC-06 | 90H | 5002-3319 |
| VHC-06-10 | VHC-06 | 100H | 5002-3320 |
| VHC-06-11 | VHC-06 | 110H | 5002-3321 |
| VHC-06-12 | VHC-06 | 120H | 5002-3322 |
| VHC-06-13 | VHC-06 | 130H | 5002-3323 |
| VHC-06-15 | VHC-06 | 150H | 5002-3324 |
| 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-08-9 | VHC-08 | 90H | 5002-3329 |
| VHC-08-10 | VHC-08 | 100H | 5002-3330 |
| VHC-08-11 | VHC-08 | 110H | 5002-3331 |
| VHC-08-12 | VHC-08 | 120H | 5002-3332 |
| VHC-08-13 | VHC-08 | 130H | 5002-3333 |
| VHC-08-14 | VHC-08 | 140H | 5002-3334 |
| VHC-08-15 | VHC-08 | 150H | 5002-3334A |
| VHC-08-16 | VHC-08 | 160H | 5002-3334B |
| VHC-08-18 | VHC-08 | 180H | 5002-3334C |
| VHC-08-20 | VHC-08 | 200H | 5002-3334D |
| 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 |
| VHC-10-9 | VHC-10 | 90H | 5002-3339 |
| VHC-10-10 | VHC-10 | 100H | 5002-33310 |
| VHC-10-11 | VHC-10 | 110H | 5002-33311 |

| ORDER NO. | MODEL | HEIGHT | CODE NO. |
|------------|---------------|--------|------------|
| VHC-10-12 | VHC-10 | 120H | 5002-33312 |
| VHC-10-13 | VHC-10 | 130H | 5002-33313 |
| VHC-10-14 | VHC-10 | 140H | 5002-33314 |
| VHC-10-15 | VHC-10 | 150H | 5002-33315 |
| VHC-10-16 | VHC-10 | 160H | 5002-33316 |
| VHC-10-18 | VHC-10 | 180H | 5002-33318 |
| VHC-10-20 | VHC-10 | 200H | 5002-33320 |
| VHC-10-22 | VHC-10 | 220H | 5002-33322 |
| VHC-12-6A | VHC-12 18SLOT | 60H | 5002-3366 |
| VHC-12-7A | VHC-12 18SLOT | 70H | 5002-3367 |
| VHC-12-8A | VHC-12 18SLOT | 80H | 5002-3368 |
| VHC-12-9A | VHC-12 18SLOT | 90H | 5002-3369 |
| VHC-12-10A | VHC-12 18SLOT | 100H | 5002-33610 |
| VHC-12-6 | VHC-12 21SLOT | 60H | 5002-3346 |
| VHC-12-8 | VHC-12 21SLOT | 80H | 5002-3348 |
| VHC-12-10 | VHC-12 21SLOT | 100H | 5002-33410 |
| VHC-12-11 | VHC-12 21SLOT | 110H | 5002-33411 |
| VHC-12-12 | VHC-12 21SLOT | 120H | 5002-33412 |
| VHC-12-13 | VHC-12 21SLOT | 130H | 5002-33413 |
| VHC-12-14 | VHC-12 21SLOT | 140H | 5002-33414 |
| VHC-12-15 | VHC-12 21SLOT | 150H | 5002-33415 |
| VHC-12-16 | VHC-12 21SLOT | 160H | 5002-33416 |
| VHC-12-17 | VHC-12 21SLOT | 170H | 5002-33417 |
| VHC-12-18 | VHC-12 21SLOT | 180H | 5002-33418 |
| VHC-12-19 | VHC-12 21SLOT | 190H | 5002-33419 |
| VHC-12-20 | VHC-12 21SLOT | 200H | 5002-33420 |
| VHC-15-7 | VHC-15 | 70H | 5002-3357 |
| VHC-15-8 | VHC-15 | 80H | 5002-3358 |
| VHC-15-9 | VHC-15 | 90H | 5002-3359 |
| VHC-15-10 | VHC-15 | 100H | 5002-33510 |
| VHC-15-12 | VHC-15 | 120H | 5002-33512 |
| VHC-15-15 | VHC-15 | 150H | 5002-33515 |
| VHC-15-18 | VHC-15 | 180H | 5002-33518 |
| VHC-15-20 | VHC-15 | 200H | 5002-33520 |

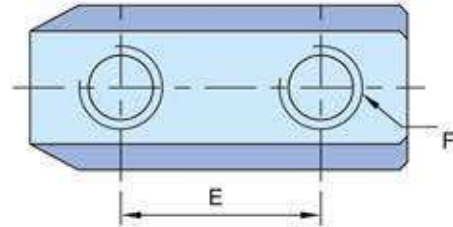
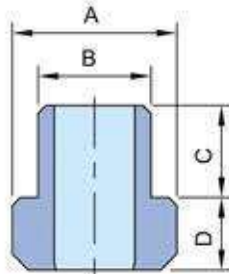


T Nut For Hydraulic Chuck



مهره آسه نظام هیدروئیک

NEW



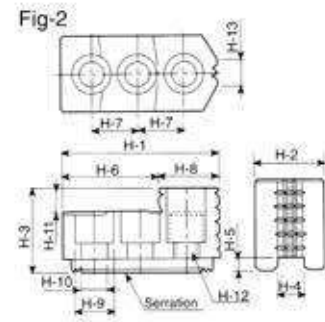
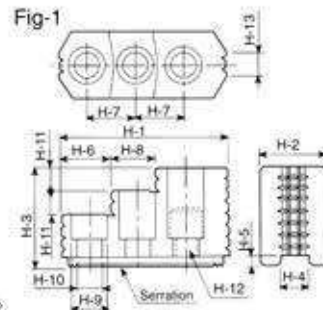
- For connect power chuck and soft jaws, suit for JAPANESE & TAIWANNES brands chuck.

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



DIMENSIONS

فک سخت سه نظام

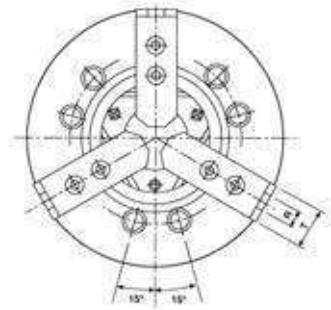
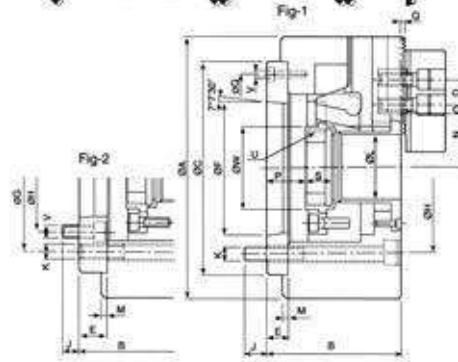
Unit:mm

| 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 | 39.5 | 20 | 27.5 | 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) VERTEX®

سه نظام هیدرو لیکی راه به در



- 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 |
| Gripping Range | | Ø10~135 | Ø13~169 | Ø13~210 | Ø13~210 | Ø30~254 | Ø30~254 | Ø35~304 | Ø35~381 | Ø35~381 |
| 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

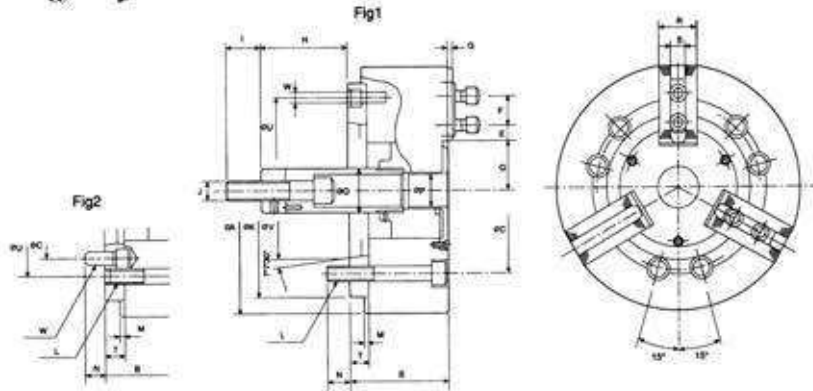
| Dim | ORDER NO. | N-205A4 | N-206A5 | N-208A5 | N-208A6 | N-210A6 | N-210A8 | N-212A8 | N-215A8 | N-215A11 |
|--------|-----------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| A | | 135 | 169 | 210 | 210 | 254 | 254 | 304 | 381 | 381 |
| B | | 71 | 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 |



3-Jaw Wedge Type Non Through-hole Power Chuck (Without Adaptor)



سه نظام هیدرولیک



- 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 |

کلت هیدرو لیک

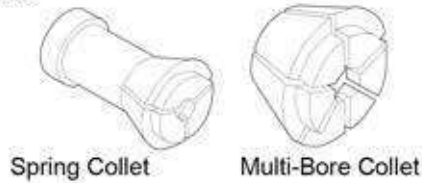
NEW



Lathe Collets
Please See E25

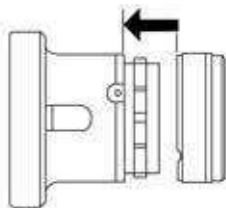
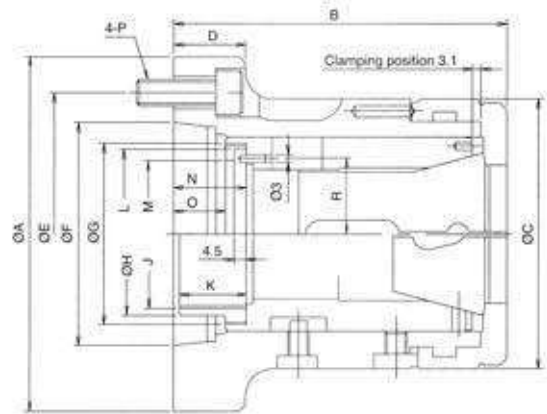
Please use
DIN6343 collets

collet illustration

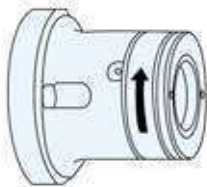


Spring Collet

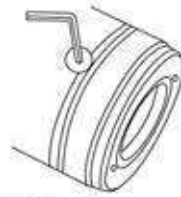
Multi-Bore Collet



Push the cover



Turn the cover



Tighten the cover anti rotation screws

Holding Range

| CHUCK NO. | MULTIBORE CAT NO. | MULTIBORE | | | SPRING COLLET CAT NO. | SPRING COLLET | | |
|-----------|-------------------|-----------|----|----|-----------------------|---------------|----|----|
| | | ○ | ◇ | □ | | ○ | ◇ | □ |
| CR42 | M-673 | 42 | 36 | 30 | 173E/4728 | 42 | 36 | 30 |
| CR60 | M-677 | 60 | 52 | 42 | 185E/4291 | 60 | 52 | 42 |

DIMENSIONS

| ORDER NO. | A | B | C | D | E | F | G | H | J Max. | K | L | M | N | O | P | R |
|-----------|-----|-----|-----|----|--------|---------|----------|------|---------|----|------|----|------|------|-----|------|
| CR42A5 | 135 | 124 | 100 | 27 | 104.78 | 82.563 | M66xP1.5 | 60 | M55xP20 | 25 | 62.5 | 54 | 27.4 | 19.4 | M10 | 28 |
| CR42A6 | 170 | 124 | 100 | 32 | 133.35 | 106.375 | M66xP1.5 | 66 | M60xP20 | 25 | 62.5 | 54 | 27.4 | 19.4 | M12 | 28 |
| CR60A6 | 170 | 145 | 130 | 27 | 133.35 | 106.375 | M90xP1.5 | 67.5 | M60xP20 | 30 | 83 | 77 | 29.9 | 21.9 | M12 | 39.5 |

SPECIFICATIONS

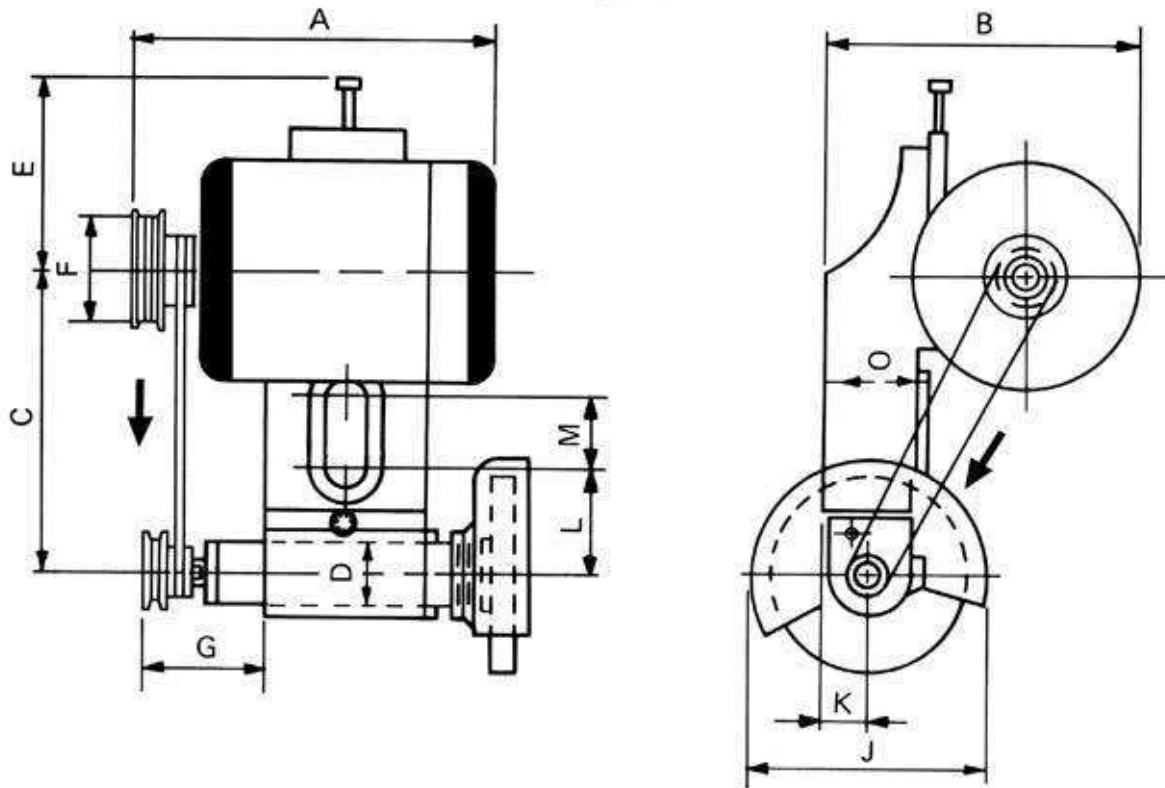
| ORDER NO. | Diameter of Shank | Material Diameter (mm) | Collet Travel Distance (mm) | Weight (kgs) | Maximum Bearing KN (kgf) | Maximum Holding Power KN (kgf) | Maximum Speed (r.p.m.) | CODE NO. |
|-----------|-------------------|------------------------|-----------------------------|--------------|--------------------------|--------------------------------|------------------------|----------|
| CR42A5 | A2-5 | 42 | 7 | 6.2 | 25(2549) | 55(5608) | 6,000 | 5003-040 |
| CR42A6 | A2-6 | 42 | 7 | 8.2 | 25(2549) | 55(5608) | 6,000 | 5003-041 |
| CR60A6 | A2-6 | 60 | 7 | 13 | 33(3365) | 59(6016) | 5,000 | 5003-042 |



Tool Post Grinder ON Lathe



سنگ دستگاه تراش



- ※ CLOCR MAY VARY
- ※ NOT FOR HIGH PRECISION GRINDING

| ORDER NO. | Main Dimension. (mm) | | | | | | | | | | | | Net Weight (kgs) | Packing Size (mm) |
|-----------|----------------------|-----|---------|----|-----|-----|----|-----|-------|-----|----|----|------------------|-------------------|
| | A | B | C | D | E | F | G | J | K | L | M | O | | |
| VGR-165 | 280 | 275 | 260-310 | 50 | 160 | 110 | 65 | 230 | 40-65 | 105 | 40 | 85 | 48 | 520x430x350 |
| VGR-150 | 280 | 275 | 250-300 | 48 | 160 | 110 | 65 | 150 | 40-65 | 105 | 40 | 85 | 38 | 520x430x350 |
| VGR-125 | 270 | 230 | 230-280 | 48 | - | 110 | 65 | 150 | 34-58 | 90 | 15 | 75 | 35 | 520x430x350 |
| VGR-100 | 235 | 200 | 170 | 40 | - | 110 | 50 | 150 | 28 | 45 | 10 | 64 | 24 | 450x320x340 |

| ORDER NO. | HP | External Spindle | | Internal Spindle | | | | Grinder on Lathe (Length of Bed of Lathe) Ft. | For 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-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



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

ابزار گیر تراش CNC



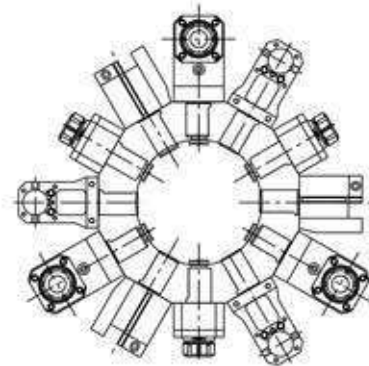
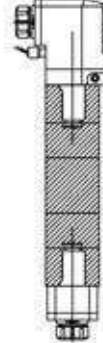
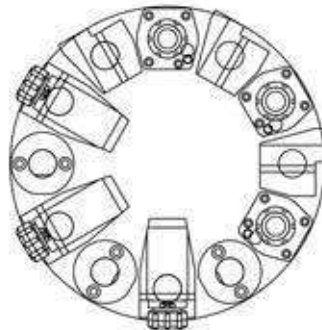
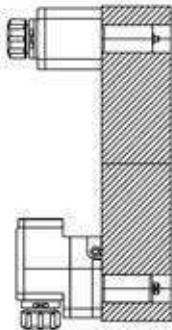
VDI Tool Holders

Tool Holders Direction System

DIN69880

A: Axial Direction

B: Radial Direction (Star Turret)



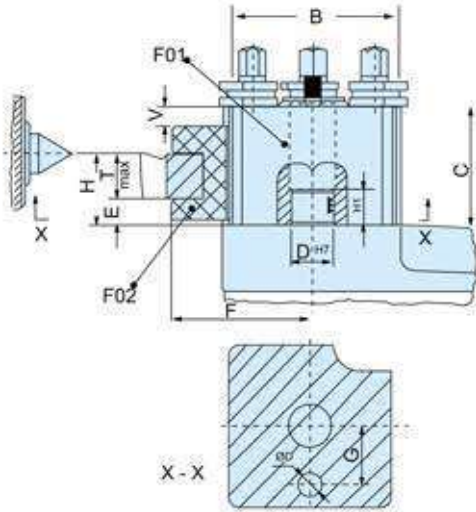
NEW

ابزار گیر تراش



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 |



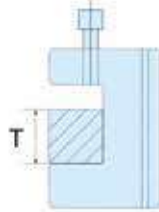
Individually Piece Italian Style VERTEX®

ابزار گیر تراش

Tool Post



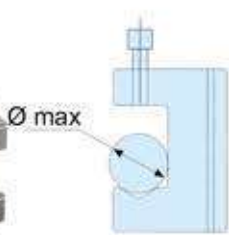
| ORDER NO. | Centre Height (mm) | Lathe Swing (mm) | CODE NO. |
|---------------|--------------------|------------------|----------|
| VTP-F01-M | 120 | 240 | 5006-900 |
| VTP-F01-AR-AP | 140 | 280 | 5006-901 |
| VTP-F01-A | 170 | 340 | 5006-902 |
| VTP-F01-BR-BP | 200 | 400 | 5006-903 |
| VTP-F01-B | 230 | 460 | 5006-904 |
| VTP-F01-C | 280 | 560 | 5006-905 |



● Turning Holders

Turning Holder

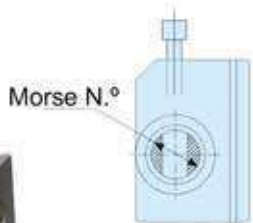
| ORDER NO. | Centre Height (mm) | Max. Square & Rectangular Tool (mm) | CODE NO. |
|---------------|--------------------|-------------------------------------|----------|
| VTP-F02-M | 120 | 16 | 5006-906 |
| VTP-F02-AR-AP | 140 | 16 | 5006-907 |
| VTP-F02-A | 170 | 20 | 5006-908 |
| VTP-F02-BR-BP | 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 |



Quick Change Tool Post & Holders-40 **VERTEX**[®]

Positioning European Style

ابزار گیر تراش



European Style

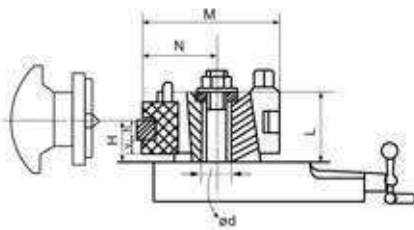
Tool post and tool holders are precisely grounded with 40 tool-bit positions. Easy to operate and can be fitted with many different tool-holders. Locking and loosening of any tool-holders are performed by a simple eccentric clamping. The simplicity and fast tool changing increases the lathe turning production. 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"

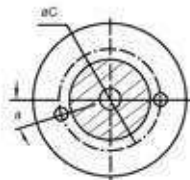
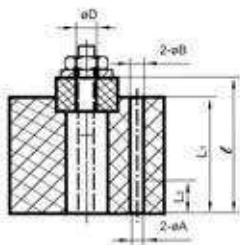
| ORDER NO. | 5-PIECE SETS EACH SET INCLUDES (5 pcs/set) | G.W. kgs | CODE NO. |
|-----------|---|----------|-----------|
| VTP-V-A0 | 1 x tool post F40-0(A0), 2 x F40-010(A0D12x50) and 1 x F40-020(A0B12x50) and 1 x F40-040(A0A2.7x10x50) | 1.5 | 5006-955A |
| VTP-V-A1 | 1 x tool post F40-1(A1), 2 x F40-111(A1D16x75) 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 |



Quick Change Tool Post & Holders-40 VERTEX®

Positioning European Style ابزار گیر تراش

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 |

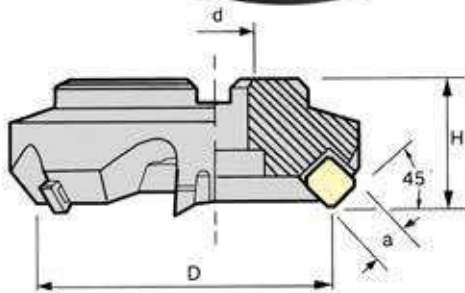


Face Milling Cutter 45°



کفتراش

45°



※All inserts are floating price.
Contact us before ordering from F1-F49

| ORDER NO. | D | dØ | INCH METRIC | H | BLADE | WEIGHT(kg) | CODE NO. |
|-----------|-----|--------|-------------|----|-------|------------|----------|
| SE545-3 | 80 | 25.4 | 50 | 5 | 2.1 | 6001-001I | |
| | | 27 | | | | 6001-001M | |
| SE545-4 | 100 | 31.75 | 55 | 5 | 3.5 | 6001-002I | |
| | | 32 | | | | 6001-002M | |
| SE545-5 | 125 | 38.1 | 60 | 6 | 5.1 | 6001-003I | |
| | | 40 | | | | 6001-003M | |
| SE545-6 | 160 | 50.8 | 60 | 8 | 7.1 | 6001-004I | |
| | | 40 | | | | 6001-004M | |
| SE545-8 | 200 | 47.625 | 60 | 10 | 10.4 | 6001-005I | |
| | | 60 | | | | 6001-005M | |
| SE545-10 | 250 | 47.625 | 60 | 12 | 16.8 | 6001-006I | |
| | | 60 | | | | 6001-006M | |
| SE545-12 | 300 | 47.625 | 60 | 14 | 27 | 6001-007I | |
| | | 60 | | | | 6001-007M | |
| SE445-3 | 80 | 25.4 | 50 | 5 | 2.1 | 6001-020I | |
| | | 27 | | | | 6001-020M | |
| SE445-4 | 100 | 31.75 | 55 | 5 | 3.2 | 6001-021I | |
| | | 32 | | | | 6001-021M | |
| SE445-5 | 125 | 38.1 | 60 | 6 | 4.7 | 6001-022I | |
| | | 40 | | | | 6001-022M | |
| SE445-6 | 160 | 50.8 | 60 | 8 | 7.3 | 6001-023I | |
| | | 40 | | | | 6001-023M | |
| SE445-8 | 200 | 47.625 | 60 | 10 | 9.6 | 6001-024I | |
| | | 60 | | | | 6001-024M | |
| SE445-10 | 250 | 47.625 | 60 | 12 | 16.7 | 6001-025I | |
| | | 60 | | | | 6001-025M | |
| SE445-12 | 300 | 47.625 | 60 | 14 | 25.8 | 6001-026I | |
| | | 60 | | | | 6001-026M | |

PARTS

| | | | | |
|------------|------|-----------|------|---------|
| | | | | |
| SCR-CL5/16 | CL-S | SCR-ST-S4 | ST-S | WRN-M4T |

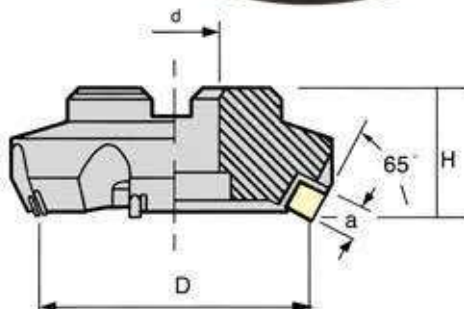
INSERT

| | | | |
|-------------------|--|-------------------|--|
| 545 HEAVY DUTY | | 445 LIGHT DUTY | |
| SEKN-1504 | | SEKN-1203 | |



Face Milling Cutter 65°

65°



| ORDER NO. | D | dØ | INCH METRIC | H | BLADE | WEIGHT(kg) | CODE NO. |
|-----------|-----|--------|-------------|----|-------|------------|----------|
| SP535-3 | 80 | 25.4 | 50 | 5 | 2.1 | 6001-040I | |
| | | 27 | | | | 6001-040M | |
| SP535-4 | 100 | 31.75 | 55 | 5 | 3.3 | 6001-041I | |
| | | 32 | | | | 6001-041M | |
| SP535-5 | 125 | 38.1 | 60 | 6 | 5.6 | 6001-042I | |
| | | 40 | | | | 6001-042M | |
| SP535-6 | 160 | 50.8 | 60 | 8 | 7.4 | 6001-043I | |
| | | 40 | | | | 6001-043M | |
| SP535-8 | 200 | 47.625 | 60 | 10 | 10.2 | 6001-044I | |
| | | 60 | | | | 6001-044M | |
| SP535-10 | 250 | 47.625 | 60 | 12 | 17.5 | 6001-045I | |
| | | 60 | | | | 6001-045M | |
| SP535-12 | 300 | 47.625 | 60 | 14 | 26.8 | 6001-046I | |
| | | 60 | | | | 6001-046M | |
| SP435-3 | 80 | 25.4 | 50 | 5 | 2.1 | 6001-070I | |
| | | 27 | | | | 6001-070M | |
| SP435-4 | 100 | 31.75 | 55 | 5 | 3.3 | 6001-071I | |
| | | 32 | | | | 6001-071M | |
| SP435-5 | 125 | 38.1 | 60 | 6 | 5.5 | 6001-072I | |
| | | 40 | | | | 6001-072M | |
| SP435-6 | 160 | 50.8 | 60 | 8 | 7.8 | 6001-073I | |
| | | 40 | | | | 6001-073M | |
| SP435-8 | 200 | 47.625 | 60 | 10 | 10.1 | 6001-074I | |
| | | 60 | | | | 6001-074M | |
| SP435-10 | 250 | 47.625 | 60 | 12 | 17.5 | 6001-075I | |
| | | 60 | | | | 6001-075M | |
| SP435-12 | 300 | 47.625 | 60 | 14 | 26.8 | 6001-076I | |
| | | 60 | | | | 6001-076M | |

PARTS

| | | | | |
|------------|------|-----------|------|---------|
| | | | | |
| SCR-CL5/16 | CL-S | SCR-ST-S4 | ST-S | WRN-M4T |

INSERT

| | | | |
|-------------------|--|-------------------|--|
| 535 HEAVY DUTY | | 435 LIGHT DUTY | |
| SPKN-1504 | | SPKN-1204 | |

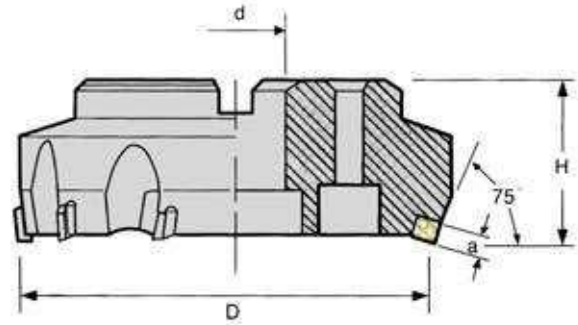


Face Milling Cutter 75°



کفتراش

75°

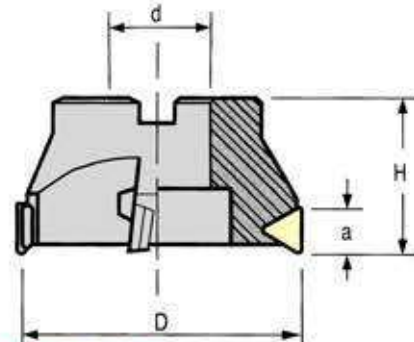


| ORDER NO. | D | d | INCH METRIC | H | BLADE | WEIGHT(kg) | CODE NO. |
|-----------|-----|--------|-------------|----|-------|------------|-----------|
| FP-3 | 80 | 25.4 | 27 | 50 | 5 | 2 | 6001-090I |
| | | | 27 | | | | 6001-090M |
| FP-4 | 100 | 31.75 | 32 | 55 | 6 | 3.1 | 6001-091I |
| | | | 32 | | | | 6001-091M |
| FP-5 | 125 | 38.1 | 40 | 60 | 8 | 5.3 | 6001-092I |
| | | | 40 | | | | 6001-092M |
| FP-6 | 160 | 50.8 | 40 | 60 | 10 | 6.5 | 6001-093I |
| | | | 40 | | | | 6001-093M |
| FP-8 | 200 | 47.625 | 60 | 60 | 12 | 9.6 | 6001-094I |
| | | | 60 | | | | 6001-094M |
| FP-10 | 250 | 47.625 | 60 | 60 | 16 | 17.1 | 6001-095I |
| | | | 60 | | | | 6001-095M |
| FP-12 | 300 | 47.625 | 60 | 60 | 20 | 29.3 | 6001-096I |
| | | | 60 | | | | 6001-096M |

| INSERT | PARTS | | | | |
|--------------------------------------|------------|------|-----------|------|---------|
| SPUN-120308 SPKN-120 3 1203EDR | | | | | |
| | SCR-CL5/16 | CL-S | SCR-ST-S4 | ST-S | WRN-M4T |

Face Milling Cutter 90°

90°



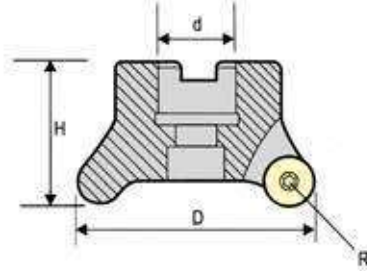
*All inserts are floating price.
Contact us before ordering from F1-F49

| ORDER NO. | D | d | INCH METRIC | H | a | BLADE | WEIGHT(kg) | INSERT | | | | | CODE NO. | | | | | | | | | | | | | | | | | | | | |
|-----------|-----|--------|-------------|----|----|-------|------------|-----------------|--|--|--|--|-----------------|--|--|--|--|-----------------|--|--|--|--|-----------------|--|--|--|--|--------------|--|--|--|--|-----------|
| TP-63 | 63 | 25.4 | 27 | 50 | 22 | 3 | 0.7 | TPMN 2204 | | | | | 6001-110I | | | | | | | | | | | | | | | | | | | | |
| | | | 27 | | | | | | | | | | 6001-110M | | | | | | | | | | | | | | | | | | | | |
| TP-80 | 80 | 25.4 | 27 | 50 | 22 | 4 | 1.1 | | | | | | TPKN 2204PPR | | | | | 6001-111I | | | | | | | | | | | | | | | |
| | | | 27 | | | | | | | | | | | | | | | 6001-111M | | | | | | | | | | | | | | | |
| TP-100 | 100 | 31.75 | 32 | 55 | 22 | 5 | 1.9 | | | | | | | | | | | TPMN 2204 | | | | | 6001-112I | | | | | | | | | | |
| | | | 32 | | | | | | | | | | | | | | | | | | | | 6001-112M | | | | | | | | | | |
| TP-125 | 125 | 38.1 | 40 | 60 | 22 | 6 | 3 | | | | | | | | | | | | | | | | TPKN 2204PPR | | | | | 6001-113I | | | | | |
| | | | 40 | | | | | | | | | | | | | | | | | | | | | | | | | 6001-113M | | | | | |
| TP-160 | 160 | 50.8 | 40 | 60 | 22 | 7 | 4.9 | | | | | | | | | | | | | | | | | | | | | TPMN 2204 | | | | | 6001-114I |
| | | | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6001-114M |
| TP-200 | 200 | 47.625 | 60 | 60 | 22 | 8 | 8.1 | TPKN 2204PPR | | | | | | | | | | | | | | | | | | | | | | | | | 6001-115I |
| | | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6001-115M |
| TP-250 | 250 | 47.625 | 60 | 60 | 22 | 9 | 15.9 | | | | | | TPMN 2204 | | | | | | | | | | | | | | | | | | | | 6001-116I |
| | | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6001-116M |
| TP-300 | 300 | 47.625 | 60 | 60 | 22 | 10 | 28 | | | | | | | | | | | TPKN 2204PPR | | | | | | | | | | | | | | | 6001-117I |
| | | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6001-117M |

Round Insert Milling Cutter



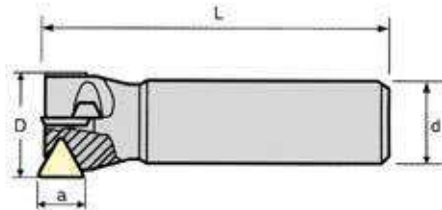
کفتراش



※ All inserts are floating price.
Contact us before ordering from F1~F49

| ORDER NO. | D | d | inch metrics | H | BLADE | R | HITACHI INSERT | SCREW FOR INSERT | FIXING UNIT FOR CLAMP | CLAMP | | CODE NO. |
|-----------|----|------|-----------------|----|-------|---|-------------------|------------------------|-----------------------------|-------|-----|------------------------|
| RM-5R50 | 50 | - | 22 | 45 | 4 | 5 | RDMT10T3 | SCR-CRS4 | SCR-DM3.5 | CL-5R | T15 | 6001-130M |
| RM-5R63 | 63 | 25.4 | 22 | 50 | 5 | 5 | RDMT10T3 | SCR-CRS4 | | CL-5R | T15 | 6001-131I 6001-131M |
| RM-8R50 | 50 | - | 22 | 45 | 3 | 8 | RDMT1604 | SCR-CRS5 | SCR-W 1/4S | | T20 | 6001-133M |
| RM-8R63 | 63 | 25.4 | 22 | 50 | 3,4 | 8 | RDMT1604 | SCR-CRS5 | | | T20 | 6001-134I 6001-134M |

Shoulder End Mills

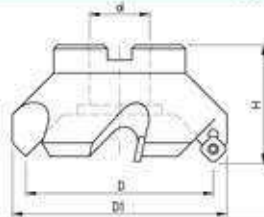


| ORDER NO. | D | d | L | BLADE | INSERT | | | WEIGHT (kg) | CODE NO. |
|-----------|----|----|-----|-------|------------|-----------|---------|----------------|----------|
| SAE-20 | 20 | 20 | 110 | 2 | TPMN110308 | SCR-W3/16 | WRN-M3L | 0.4 | 6001-150 |
| SAE-25 | 25 | 20 | 110 | 2 | TPMN110308 | SCR-W3/16 | WRN-M3L | 0.3 | 6001-151 |
| SAE-30 | 30 | 20 | 130 | 2 | TPMN160308 | SCR-W1/4 | WRN-M4L | 0.5 | 6001-152 |
| SAE-35 | 35 | 20 | 130 | 2 | TPMN160308 | SCR-W1/4 | WRN-M4L | 0.4 | 6001-153 |
| SAE-40 | 40 | 20 | 130 | 3 | TPMN160308 | SCR-W1/4 | WRN-M4L | 0.5 | 6001-154 |
| SAE-45 | 45 | 20 | 130 | 3 | TPMN160308 | SCR-W1/4 | WRN-M4L | 0.6 | 6001-155 |
| SAE-50 | 50 | 20 | 130 | 3 | TPMN160308 | SCR-W1/4 | WRN-M4L | 0.7 | 6001-156 |
| SAE-63 | 63 | 22 | 150 | 4 | TPMN160308 | SCR-W1/4 | WRN-M4L | 1.5 | 6001-157 |

High-Speed Face Milling Cutter 45° VERTEX®

45°

NEW



*All inserts are floating price.
Contact us before ordering from F1~F49

- Material : SNCM439
- Hardness : HRC42
- Accuracy : 0.03 mm

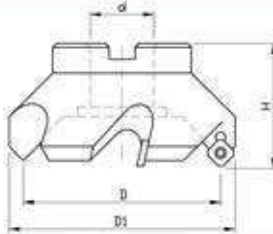
| ORDER NO. | D | D1 | d0 | INCH METRIC | H | BLADE | WEIGHT(kg) | INSERT | FIXING UNIT | WRENCH | CODE NO. |
|-----------|-----|-----|--------|-------------|----|-------|------------|----------|-------------|--------|------------------------|
| HCB-50 | 50 | 60 | - | 22 | 45 | 4 | 0.53 | SEKT1204 | SCR-SE5 | T20 | 6001-170M |
| HCB-63 | 63 | 75 | 25.4 | 27 | 50 | 5 | 0.83 | SEKT1204 | SCR-SE5 | T20 | 6001-171I 6001-171M |
| HCB-80 | 80 | 96 | 25.4 | 27 | 55 | 6 | 1.24 | SEKT1204 | SCR-SE5 | T20 | 6001-172I 6001-172M |
| HCB-100 | 100 | 116 | 31.75 | 32 | 55 | 6 | 1.83 | SEKT1204 | SCR-SE5 | T20 | 6001-173I 6001-173M |
| HCB-125 | 125 | 141 | 38.1 | 40 | 60 | 8 | 3.09 | SEKT1204 | SCR-SE5 | T20 | 6001-174I 6001-174M |
| HCB-150 | 150 | 158 | 50.8 | 40 | 60 | 10 | 4.06 | SEKT1204 | SCR-SE5 | T20 | 6001-175I 6001-175M |
| HCB-200 | 200 | 212 | 47.625 | 60 | 60 | 12 | 7.68 | SEKT1204 | SCR-SE5 | T20 | 6001-176I 6001-176M |

High-Speed Face Milling Cutter 45°

ZINC COATED

45°

NEW



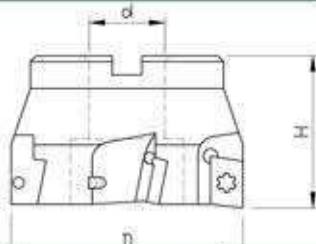
كفتراش الماس خور

- Material : SNCM439
- Hardness : HRC42
- Accuracy : 0.03 mm

| ORDER NO. | D | D1 | d0 | INCH METRIC | H | BLADE | WEIGHT(kg) | INCH METRIC | INSERT | FIXING UNIT | WRENCH | CODE NO. |
|-----------|-----|-----|--------|-------------|----|-------|------------|-------------|----------|-------------|--------|------------------------|
| HCN-63 | 63 | 175 | 25.4 | 22 | 50 | 5 | 0.87 | | SEMT13T3 | SCR-SE4 | T15 | 6001-190I 6001-190M |
| HCN-80 | 80 | 96 | 25.4 | 27 | 55 | 6 | 1.24 | | SEMT13T3 | SCR-SE4 | T15 | 6001-191I 6001-191M |
| HCN-100 | 100 | 116 | 31.75 | 32 | 55 | 6 | 1.83 | | SEMT13T3 | SCR-SE4 | T15 | 6001-192I 6001-192M |
| HCN-125 | 125 | 141 | 38.1 | 40 | 60 | 8 | | | SEMT13T3 | SCR-SE4 | T15 | 6001-193I 6001-193M |
| HCN-150 | 160 | 158 | 50.8 | 40 | 60 | 10 | 3.82 | | SEMT13T3 | SCR-SE4 | T15 | 6001-194I 6001-194M |
| HCN-200 | 200 | 212 | 47.625 | 60 | 60 | 12 | 7.88 | | SEMT13T3 | SCR-SE4 | T15 | 6001-195I 6001-195M |

High-Speed Face Milling Cutter

NEW



- Material : SNCM439
- Hardness : HRC42
- Accuracy : 0.03 mm

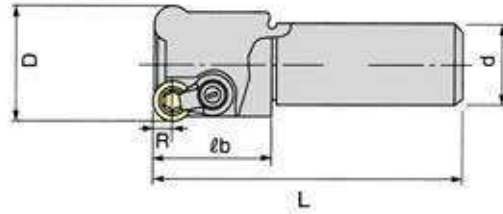
| ORDER NO. | D | d0 | INCH METRIC | H | BLADE | WEIGHT(kg) | INSERT | FIXING UNIT | WRENCH | CODE NO. |
|-----------|-----|-------|-------------|----|-------|------------|----------|-------------|--------|------------------------|
| FMC-50 | 50 | 25.4 | 22 | 40 | 4 | 0.34 | APMT1604 | SCR-CAP4 | T15 | 6001-200I 6001-200M |
| FMC-63 | 63 | 25.4 | 22 | 40 | 5 | 0.57 | APMT1604 | SCR-CAP4 | T15 | 6001-201I 6001-201M |
| FMC-80 | 80 | 25.4 | 27 | 50 | 6 | 1.15 | APMT1604 | SCR-CAP4 | T15 | 6001-202I 6001-202M |
| FMC-100 | 100 | 31.75 | 32 | 50 | 7 | 1.83 | APMT1604 | SCR-CAP4 | T15 | 6001-203I 6001-203M |
| FMC-125 | 125 | 38.1 | 40 | 50 | 8 | 2.99 | APMT1604 | SCR-CAP4 | T15 | 6001-204I 6001-204M |
| FMC-160 | 160 | 38.1 | 40 | 50 | 10 | 5.07 | APMT1604 | SCR-CAP4 | T15 | 6001-205I 6001-205M |



Round Insert End Mills



انگشتی الماس خور



※All inserts are floating price.

Contact us before ordering from F1-F49

| ORDER NO. | BLADE | D | L | d | lb | R | HITACHI INSERT | CLAMP | FIXING UNIT FOR CLAMP | FIXING UNIT FOR INSERT | CODE NO. | |
|--------------|-------|----|-----|----|-----|---|----------------|-------|-----------------------|------------------------|----------|----------|
| C20-4R20-150 | 2 | 20 | 150 | 20 | 50 | 4 | RDMT0802 | - | SCR-DM3.5 | SCR-CRS3 | T8 | 6002-001 |
| C25-5R25-150 | 2 | 25 | 150 | 25 | 60 | 5 | RDMT10T3 | CL-5R | | SCR-CRS4 | T15 | 6002-002 |
| C25-5R25-200 | 2 | 25 | 200 | 25 | 120 | 5 | RDMT10T3 | CL-5R | | SCR-CRS4 | T15 | 6002-003 |
| C25-5R30-150 | 2 | 30 | 150 | 25 | 50 | 5 | RDMT10T3 | CL-5R | | SCR-CRS4 | T15 | 6002-004 |
| C25-5R30-200 | 2 | 30 | 200 | 25 | 50 | 5 | RDMT10T3 | CL-5R | | SCR-CRS4 | T15 | 6002-005 |
| C32-5R32-150 | 3 | 32 | 150 | 32 | 70 | 5 | RDMT10T3 | CL-5R | | SCR-CRS4 | T15 | 6002-006 |
| C32-5R32-200 | 3 | 32 | 200 | 32 | 120 | 5 | RDMT10T3 | CL-5R | | SCR-CRS4 | T15 | 6002-007 |
| C32-5R35X150 | 3 | 35 | 150 | 32 | 50 | 5 | RDMT10T3 | CL-5R | | SCR-CRS4 | T15 | 6002-008 |
| C32-5R35X200 | 3 | 35 | 200 | 32 | 50 | 5 | RDMT10T3 | CL-5R | | SCR-CRS4 | T15 | 6002-009 |
| C32-5R40X150 | 3 | 40 | 150 | 32 | 50 | 5 | RDMT10T3 | CL-5R | | SCR-CRS4 | T15 | 6002-010 |
| C32-5R40X200 | 3 | 40 | 200 | 32 | 50 | 5 | RDMT10T3 | CL-5R | | SCR-CRS4 | T15 | 6002-011 |



Drilling & Milling Cutter



| ORDER NO. | BLADE | D | L | d | l | | | | | | CODE NO. |
|--------------|-------|----|-----|----|----|------------|-------------|------------|------------|--------|----------|
| C16-DM16-120 | 2 | 16 | 120 | 16 | 30 | CCMT060204 | CPMT080204Z | SCR-CJU2.5 | - | T8 | 6002-030 |
| C16-DM16-175 | 2 | 16 | 175 | 16 | 40 | CCMT060204 | CPMT080204Z | SCR-CJU2.5 | - | T8 | 6002-031 |
| C20-DM20-130 | 2 | 20 | 130 | 20 | 30 | CCMT060204 | CPMT090204Z | SCR-CJU2.5 | SCR-CJU3.5 | T8.T15 | 6002-032 |
| C20-DM20-185 | 2 | 20 | 185 | 20 | 50 | CCMT060204 | CPMT090204Z | SCR-CJU2.5 | SCR-CJU3.5 | T8.T15 | 6002-033 |
| C25-DM25-130 | 2 | 25 | 130 | 25 | 40 | CPMT090308 | CPMT120308Z | SCR-CJU4 | - | T15 | 6002-034 |
| C25-DM25-220 | 2 | 25 | 220 | 25 | 70 | CPMT090308 | CPMT120308Z | SCR-CJU4 | - | T15 | 6002-035 |
| C32-DM32-170 | 2 | 32 | 170 | 32 | 50 | CPMT120408 | CPMT160408Z | SCR-CJU5 | - | T20 | 6002-036 |



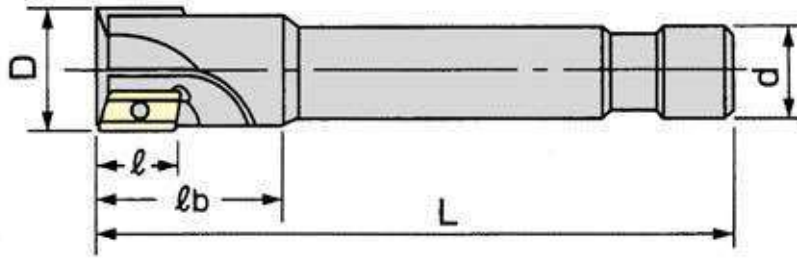
High Speed Shoulder Mills



انگشتی الماس خور



C16-SS16-120H



















C25-SS25-150M



※ All inserts are floating price.

Contact us before ordering from F1-F49

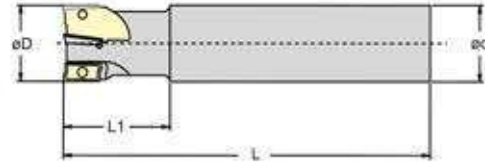
| ORDER NO. | BLADE | D | L | d | l | lb | HITACHI / MITSUBISHI |  |  |  | CODE NO. |
|---------------|-------|----|-----|----|----|----|-------------------------|---|---|---|----------|
| C16-SS16-120H | 1 | 16 | 120 | 16 | 12 | 30 | APET120204 HITACHI |  | SCR-CEX3.5 | T15 | 6002-060 |
| C20-SS20-120H | 2 | 20 | 120 | 20 | 12 | 30 | APET120204 HITACHI |  | SCR-CEX3.5 | T15 | 6002-062 |
| C20-SS20-200H | 2 | 20 | 200 | 20 | 15 | 30 | APET120204 HITACHI |  | SCR-CEX4 | T15 | 6002-063 |
| C25-SS25-130H | 2 | 25 | 130 | 25 | 15 | 35 | ADET160304 HITACHI |  | SCR-CEX4 | T15 | 6002-064 |
| C25-SS25-200H | 2 | 25 | 200 | 25 | 15 | 35 | ADET160304 HITACHI |  | SCR-CEX4 | T15 | 6002-065 |
| C32-SS32-150H | 3 | 32 | 150 | 32 | 15 | 45 | ADET160304 HITACHI |  | SCR-CEX4 | T15 | 6002-066 |
| C32-SS32-200H | 3 | 32 | 200 | 32 | 15 | 45 | ADET160304 HITACHI |  | SCR-CEX4 | T15 | 6002-067 |
| C25-SS25-150M | 2 | 25 | 150 | 25 | 14 | 35 | APMT1604PDER MITSUBISHI |  | SCR-CAP4 | T15 | 6002-069 |
| C25-SS30-150M | 2 | 30 | 150 | 25 | 14 | 45 | APMT1604PDER MITSUBISHI |  | SCR-CAP4 | T15 | 6002-070 |
| C32-SS32-150M | 3 | 32 | 150 | 32 | 14 | 45 | APMT1604PDER MITSUBISHI |  | SCR-CAP4 | T15 | 6002-080 |
| C32-SS32-250M | 3 | 32 | 250 | 32 | - | 60 | APMT1604PDER MITSUBISHI |  | SCR-CAP4 | T15 | 6002-081 |
| C32-SS35-150M | 3 | 35 | 150 | 32 | 14 | 45 | APMT1604PDER MITSUBISHI |  | SCR-CAP4 | T15 | 6002-082 |
| C32-SS40-150M | 4 | 40 | 150 | 32 | 14 | 45 | APMT1604PDER MITSUBISHI |  | SCR-CAP4 | T15 | 6002-083 |



High-Speed Rough End Mills VERTEX®

Mitsubishi inserts recommended

انگشتی الماس خور



※ All inserts are floating price.

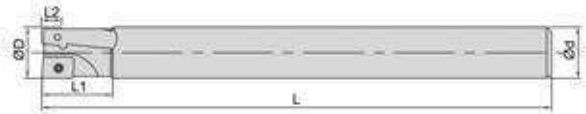
Contact us before ordering from F1~F49.

| ORDER NO. | BLADE | D | d | L | L1 | INSERT | FIXING UNIT | WRENCH | CODE NO. |
|-----------|-------|----|----|-----|----|------------------------------|----------------|--------|----------|
| VAPX-1616 | 2 | 16 | 16 | 120 | 24 | MITSUBISHI AOMT 123608 | SCR- APX2.5 | T8 | 6002-150 |
| VAPX-1716 | 2 | 17 | 16 | 150 | 24 | | | | 6002-151 |
| VAPX-2020 | 3 | 20 | 20 | 150 | 29 | | | | 6002-152 |
| VAPX-2120 | 3 | 21 | 20 | 150 | 29 | | | | 6002-153 |
| VAPX-2525 | 4 | 25 | 25 | 150 | 34 | | | | 6002-154 |
| VAPX-2625 | 4 | 26 | 25 | 200 | 34 | | | | 6002-155 |



High-Speed Rough End Mills

NEW



| ORDER NO. | BLADE | D | d | L | L1 | L2 | | | WRENCH | WEIGHT (KG) | CODE NO. |
|------------|-------|----|----|-----|----|----|-----------|------------|--------|-------------|----------|
| VHRE-21010 | 2 | 10 | 10 | 100 | 28 | 5 | XOMX-0602 | SCR-AXO1.8 | T6 | 0.07 | 6002-171 |
| VHRE-21110 | 2 | 11 | 10 | 100 | 28 | 5 | | | | 0.07 | 6002-172 |
| VHRE-21212 | 2 | 12 | 12 | 120 | 28 | 5 | | | | 0.11 | 6002-173 |
| VHRE-21312 | 2 | 13 | 12 | 120 | 33 | 5 | | | | 0.11 | 6002-174 |
| VHRE-31412 | 3 | 14 | 12 | 120 | 25 | 5 | | | | 0.11 | 6002-175 |
| VHRE-22085 | 2 | 20 | 20 | 85 | 26 | 11 | XOMX-1204 | SCR-AXO3.5 | T10 | 0.34 | 6002-181 |
| VHRE-22015 | 2 | 20 | 20 | 150 | 26 | 11 | | | | 0.36 | 6002-182 |
| VHRE-22020 | 2 | 20 | 20 | 200 | 26 | 11 | | | | 0.49 | 6002-183 |
| VHRE-22215 | 2 | 22 | 20 | 150 | 26 | 11 | | | | 0.37 | 6002-184 |
| VHRE-32595 | 3 | 25 | 25 | 95 | 32 | 11 | | | | 0.34 | 6002-185 |
| VHRE-32515 | 3 | 25 | 25 | 150 | 32 | 11 | | | | 0.54 | 6002-186 |
| VHRE-32520 | 3 | 25 | 25 | 200 | 32 | 11 | 0.75 | 6002-187 | | | |

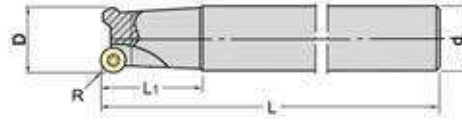


CRT Round Insert End Mills



Mitsubishi inserts recommended

انگشتی الماس خور



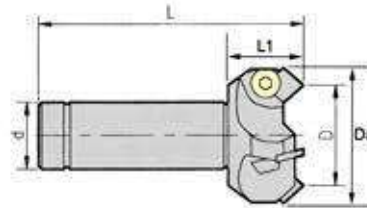
*All inserts are floating price.

Contact us before ordering from F1~F49

| ORDER NO. | D | d | R | L | BLADE | INSERT | | | CLAMP | WEIGHT (kg) | CODE NO. |
|--------------|----|----|---|-----|-------|------------|----------|----------|--------|-------------|----------|
| CRT-6R32X150 | 32 | 32 | 6 | 150 | 3 | RPMT1204MO | SCR-M3.5 | SCR-CRT4 | CL-CRT | 0.9 | 6003-051 |
| CRT-6R32X200 | 32 | 32 | 6 | 200 | 3 | RPMT1204MO | SCR-M3.5 | SCR-CRT4 | CL-CRT | 1.3 | 6003-052 |
| CRT-6R35X150 | 35 | 32 | 6 | 150 | 3 | RPMT1204MO | SCR-M3.5 | SCR-CRT4 | CL-CRT | 1.1 | 6003-053 |
| CRT-6R35X200 | 35 | 32 | 6 | 200 | 3 | RPMT1204MO | SCR-M3.5 | SCR-CRT4 | CL-CRT | 1.3 | 6003-054 |



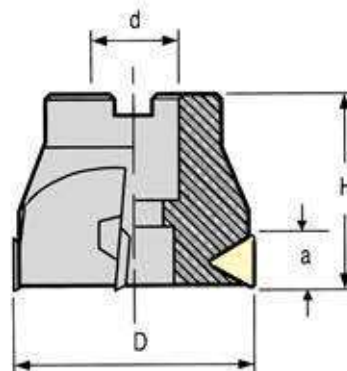
Face End Mills



| ORDER NO. | D | Da | d | L | L ₁ | BLADE | INSERT | | | WEIGHT (kg) | CODE NO. |
|---------------|----|----|----|-----|----------------|-------|----------|-----------|---------|-------------|----------|
| C-32-SE445-50 | 50 | 62 | 32 | 150 | 45 | 3 | SEKN1203 | SCR-W1/4L | WRN-M4T | 1.25 | 6003-060 |
| C-32-SE445-63 | 63 | 74 | 32 | 150 | 45 | 4 | SEKN1203 | SCR-W1/4L | WRN-M4T | 1.3 | 6003-061 |



Shoulder Face Milling Cutter



| ORDER NO. | D | d METRIC | H | a | BLADE | INSERT | | | CODE NO. |
|-----------|----|----------|----|----|-------|----------|----------|---------|----------|
| TPS-50 | 50 | 22 | 50 | 16 | 3 | TPMN1603 | SCR-W1/4 | WRN-M4L | 6003-065 |
| TPS-63 | 63 | 22 | 50 | 16 | 4 | TPMN1603 | SCR-W1/4 | WRN-M4L | 6003-066 |



45° Chamfering End Mills



خزينة الماس خور

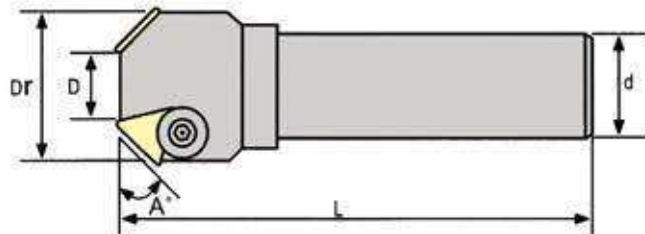
*All inserts are floating price.
Contact us before ordering from F1-F49



| ORDER NO. | Cutter Dia. | Shank Dia. | Length | Capacity | FIXING UNIT | Wrench | INSERT | WEIGHT (kg) | CODE NO. |
|-----------|-------------|------------|--------|----------|-------------|--------|------------|-------------|----------|
| TC12 | 25ø | 12ø | 110 | 8ø~25ø | M4 | T15 | TCMT16T304 | 0.2 | 6004-002 |
| TC40 | 40ø | 12ø | 100 | 20ø~36ø | M4 | T15 | TCMT16T304 | 0.34 | 6004-003 |

45° Chamfering End Mills

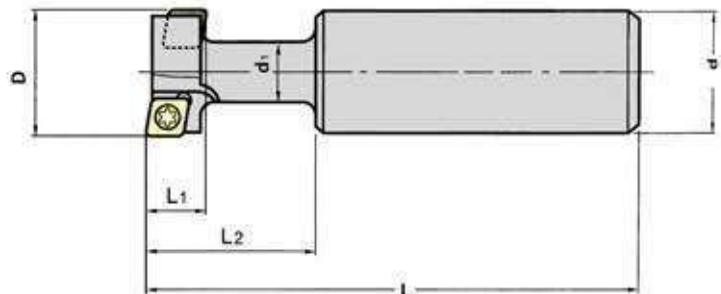
ISO CODE



| ORDER NO. | A° | D | Dr | d | L | BLADE | INSERT | FIXING UNIT | WRENCH | CODE NO. |
|-----------|----|----|----|----|-----|-------|----------|-------------|---------|----------|
| VCE-4521 | 45 | 5 | 21 | 16 | 120 | 1 | TPUN1603 | SCR-W1/4 | WRN-M4L | 6004-005 |
| VCE-4531 | 45 | 10 | 31 | 20 | 120 | 2 | | | | 6004-006 |
| VCE-4550 | 45 | 20 | 50 | 25 | 130 | 3 | TPUN2204 | SCR-W5/16 | WRN-M5L | 6004-007 |
| VCE-4532 | 45 | 6 | 32 | 32 | 150 | 1 | | | | 6004-008 |
| VCE-4563 | 45 | 35 | 63 | 25 | 150 | 3 | | | | 6004-009 |

T-Slot End Mills

ISO CODE



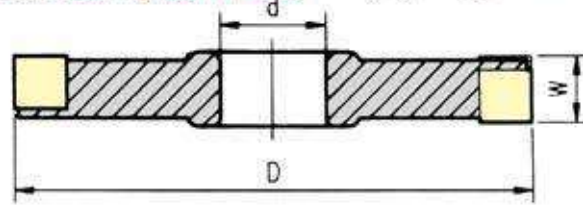
| ORDER NO. | D | L1 | d | d1 | L2 | L | BLADE | INSERT | FIXING UNIT | WRENCH | WEIGHT | CODE NO. |
|-----------|----|----|----|----|----|-----|-------|--------------|-------------|--------|--------|----------|
| VTE-2411 | 24 | 11 | 20 | 12 | 29 | 90 | 4 | CCMT-060204 | SCR-TS2.5 | T8 | 0.19 | 6004-015 |
| VTE-3114 | 31 | 14 | 25 | 15 | 42 | 110 | 4 | CPMT-080204Z | | | 0.36 | 6004-016 |
| VTE-3918 | 39 | 18 | 32 | 19 | 49 | 120 | 4 | CPMT-090308 | SCR-TS4 | T15 | 0.61 | 6004-017 |

Side Milling Cutter



*All inserts are floating price. ISO CODE
Contact us before ordering from F1-F49

پولکی الماس خور



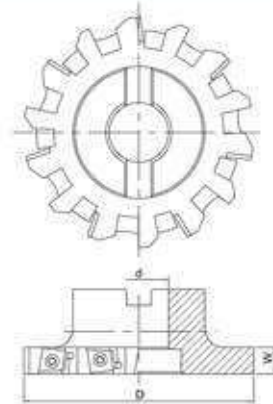
| ORDER NO. | D | d | W | BLADE | INSERT | CLAMP | FIXING UNIT | WRENCH | CODE NO. |
|-----------|-----|----|----|-------|----------------|---------------|----------------|---------|----------|
| VSM-1016 | 100 | 1" | 16 | 10 | SPUN 120304 | CL-S CL-SL | SCR- CL5/16 | WRN-M4T | 6004-020 |
| VSM-1216 | 125 | 1" | 16 | 14 | | | | | 6004-021 |
| VSM-1516 | 150 | 1" | 16 | 16 | | | | | 6004-022 |
| VSM-2016 | 200 | 1" | 16 | 20 | | | | | 6004-023 |

T-Side Milling Cutter

NEW



• Inserts : ISO Code

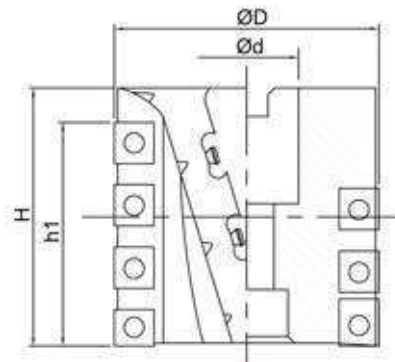


| ORDER NO. | BLADE | D | d | W | | | CLAMP | WRENCH | WEIGHT (kgs) | CODE NO. |
|-----------|-------|-----|-------|----|-----------|----------------|---------------|-------------|--------------|----------|
| VTSC-416 | 10 | 100 | 25.4 | 16 | SPUN-1203 | SCR- CL5/16 | CL-S CL-SL | WRN- M4T | 0.84 | 6004-161 |
| VTSC-516 | 14 | 125 | 31.75 | 16 | | | | | 1.64 | 6004-162 |
| VTSC-520 | 14 | 125 | 31.75 | 20 | SPUN-1504 | | | | 1.73 | 6004-163 |
| VTSC-616 | 16 | 150 | 31.75 | 16 | SPUN-1203 | | | | 2.20 | 6004-164 |
| VTSC-620 | 16 | 150 | 31.75 | 20 | SPUN-1504 | | | | 2.48 | 6004-165 |
| VTSC-820 | 20 | 200 | 31.75 | 20 | | | | | 4.38 | 6004-166 |
| VTSC-825 | 20 | 200 | 31.75 | 25 | | 5.23 | 6004-167 | | | |

Shell-Type Rough Milling Cutter

NEW

• Inserts : Walter / Hitachi



| ORDER NO. | FLUTE | D | d _o | INCH METRIC | H | h ₁ | INSERT | | INSERT | | WRENCH | WEIGHT (kgs) | CODE NO. |
|-----------|-------|----|----------------|-------------|----|----------------|--------|--------------|--------|--------------|--------|--------------|-----------|
| VSRC-3 | 6 | 80 | 31.75 | 80 | 67 | LPMT 1504 | 3 | SPMT 1204 | 18 | SCR- RGH5 | T20 | 1.85 | 6004-171I |
| VSRC-80 | | | 32 | | | | | | | | | 1.85 | 6004-171M |



Tap Wrenches With Ratchet



CLAMPING RANGE

NEW



دسته قلاویز

Unit : mm

| ORDER NO. | SIZE | METRIC | L | MAX. | MIN. | WEIGHT (kgs) | CODE NO. |
|-----------|------|--------|-----|------|------|--------------|----------|
| VPW-310 | 1 | M3~M10 | 85 | 5.5 | 3.0 | 0.18 | 6011-801 |
| VPW-512 | 2 | M5~M12 | 100 | 7.0 | 4.5 | 0.31 | 6011-802 |



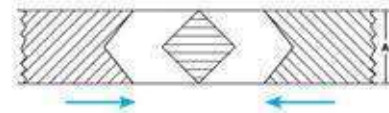
Tap Wrenches With Ratchet

CLAMPING RANGE

NEW



$$A = x \cdot 1.414$$



Unit : mm

| ORDER NO. | SIZE | FOR METRIC | A | MAX. B | MIN. B | PIPE PT/ PF- | L | WEIGHT (kgs) | CODE NO. |
|-----------|-------|------------|------|--------|--------|--------------|-----|--------------|----------|
| VPW-118 | 0 | M1~M8 | 7.3 | 5.0 | 2.5 | PT-1/16 | 125 | 0.06 | 6011-811 |
| VPW-110 | 1 | M1~M10 | 8.2 | 5.5 | 2.2 | PT-1/16 | 180 | 0.12 | 6011-812 |
| VPW-112 | 1-1/2 | M1~M12 | 8.3 | 6.5 | 2.2 | PT-1/8 | 200 | 0.11 | 6011-813 |
| VPW-412 | 2 | M4~M15 | 11.5 | 8.0 | 3.3 | PT-1/8 | 280 | 0.26 | 6011-814 |
| VPW-520 | 3 | M5~M20 | 17.5 | 12.0 | 4.1 | PT-3/8 | 375 | 0.58 | 6011-815 |
| VPW-927 | 4 | M9~M27 | 18.4 | 15.0 | 6.1 | PF-5/8 | 500 | 0.86 | 6011-816 |
| VPW-1332 | 5 | M13~M27 | 22.2 | 15.0 | 5.7 | PF-5/8 | 750 | 1.36 | 6011-817 |



Magnetic Tapper

قلاویز زن مگنتی

NEW

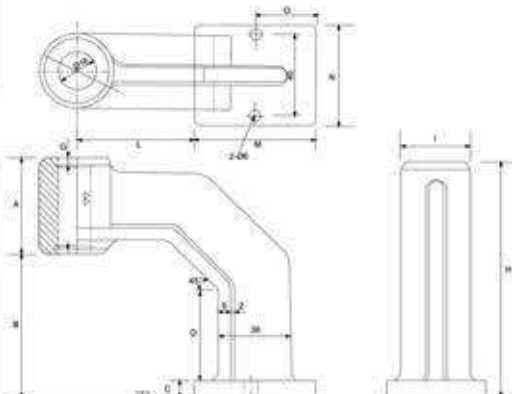


COST HIGHER



- Suit for large workpiece
- TAP thread capacity M3-M12
- MAX. stroke 60 mm
- Magnetic force 80 kgf
- Horizontal / Vertical
- Portable
- Great for machine case & thin plate tapping job.

EXAMPLE



Unit : mm

• Tap & work piece not included

| ORDER NO. | A | B | C | D | H | I | L | M | N | O | WEIGHT (kgs) | CODE NO. |
|-----------|----|----|----|----|-----|----|----|----|----|----|--------------|----------|
| VTM-13 | 50 | 72 | 10 | 45 | 122 | 36 | 60 | 60 | 50 | 30 | 3.10 | 2015-731 |

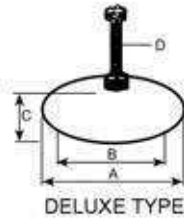


Shock Absorber



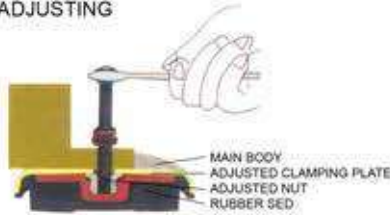
لرزه گیر

STANDARD TYPE



DELUXE TYPE

ADJUSTING



Special Features

Preventing shock & reducing noise. low bed design.
Easy installation. Simple adjustment. High durability.

Application

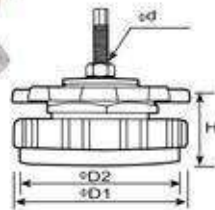
Various general working machines, metal work piece processing machine, production machine, special machine, measuring equipment, testing machine.
Electrical generator, air compressor, etc.
ADJUSTABLE RANGE 6-12 mm

Unit:mm

| ORDER NO. | A | B | C | Ø DxL | LOAD KGS | Adjustable HEIGH | WEIGHT KGS | CODE NO. |
|-----------|-----|-----|----|---------|----------|------------------|------------|----------|
| TK-90 | 90 | 50 | 32 | 12M-100 | 500kg | 5 mm | 0.8 | 7001-000 |
| TK-120 | 120 | 90 | 35 | 12M-100 | 1000kg | 5 mm | 1.4 | 7001-001 |
| TK-160 | 160 | 130 | 38 | 16M-110 | 1500kg | 6 mm | 2.8 | 7001-002 |
| TK-200 | 200 | 170 | 45 | 20M-120 | 3500kg | 6 mm | 4.4 | 7001-003 |

Features : Easy to operate. shock-absorbent, reduces machine noise includes adjustment, and assures production accuracy.

DELUXE TYPE



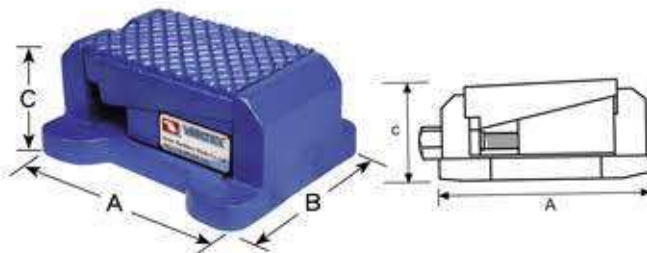
Unit:mm

| ORDER NO. | D1 | D2 | H | Ø dxL | LOAD KGS | Adjustable HEIGH | N.W. KGS | CODE NO. |
|-----------|-----|-----|-----|--------|----------|------------------|----------|----------|
| SB-4 | 100 | 90 | 60 | 12x50 | 500 | 25 | 2 | 7001-031 |
| SB-6 | 150 | 135 | 95 | 16x110 | 1000 | 40 | 5 | 7001-032 |
| SB-8 | 200 | 180 | 100 | 20x120 | 2500 | 40 | 8 | 7001-033 |
| SB-10 | 250 | 230 | 125 | 24x180 | 4000 | 40 | 12 | 7001-034 |

SUITABLE FOR : machine tools, molding machine, printing machine, CNC lathe, grinding machines, drilling machines, milling machines.

● FCD45

HEAVY DUTY TYPE



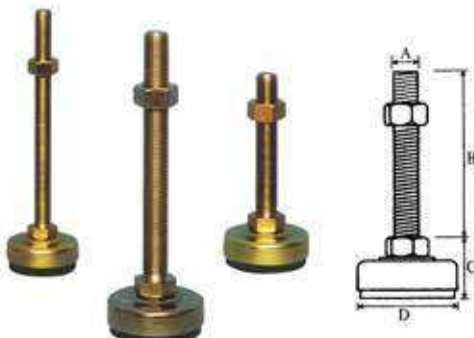
Unit:mm

| ORDER NO. | A | B | C | LOAD KGS | Adjustable HEIGH | N.W. KGS | CODE NO. |
|-----------|-----|-----|-----|----------|------------------|----------|----------|
| SC-1 | 130 | 96 | 66 | 700 | 4MM | 4 | 7001-060 |
| SC-2 | 174 | 143 | 80 | 1500 | 5MM | 8.8 | 7001-061 |
| SC-3 | 217 | 165 | 101 | 2500 | 6MM | 16 | 7001-062 |

SUITABLE FOR : CNC lathe, milling machines, cutting machines, grinding machines.

● FCD45

LIGHT DUTY TYPE



Unit:mm

| ORDER NO. | A | B | C | D | LOAD KGS | N.W. KGS | CODE NO. |
|-----------|-----------|-----|----|----|----------|----------|----------|
| SY-8 | M8X1.25P | 50 | 20 | 40 | 100 | 0.1 | 7001-080 |
| SY-12 | M12X1.25P | 75 | 30 | 50 | 200 | 0.28 | 7001-081 |
| SY-16 | M16X2.0P | 100 | 35 | 60 | 300 | 0.48 | 7001-082 |

● SS41



Shock Absorber Heavy Duty VERTEX®

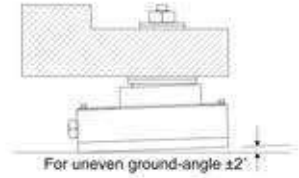
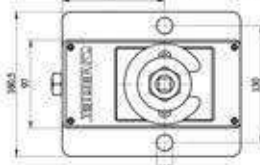
لرزه گیر

Machine Stand

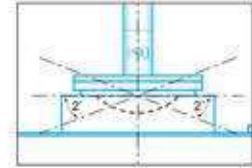
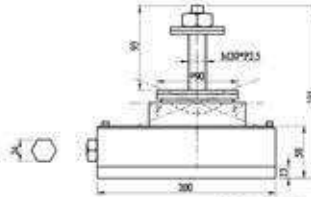
NEW



VSA-150H



For uneven ground-angle $\pm 2^\circ$



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

STEP

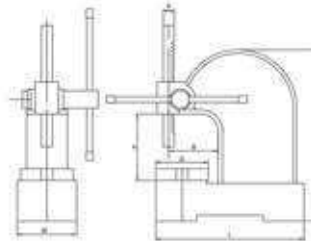
- Place shock absorbers under machine.
- When shock absorbers have full contact with machine base, you can start to adjust the leveling.

| ORDER NO. | L x W x H | THREAD | LOAD KGS | UNEVEN GROUND-ANGLE | ADJUSTMENT HEIGHT / FROM ADJUSTABLE SCREW | WEIGHT KGS | CODE NO. |
|-----------|-------------------|-----------|----------|---------------------|---|------------|----------|
| VSA-150K | 200 x 160.5 x 91 | M20 x 93L | 22500 | $\pm 2^\circ$ | 7 mm | 9.32 | 7001-180 |
| VSA-150H | 200 x 160.5 x 182 | M20 x 84L | 22500 | $\pm 2^\circ$ | 7 mm | 9.32 | 7001-190 |



Arbor Press

پرس دستی



STANDARD TYPE

- All main parts made of ductile cast iron. Adjustable handle gives convenient handle positioning.
- Ram finite control by smooth gears.
- 4-90 degree equally divided slotted round table.
- Color may vary. (Green)

| ORDER NO. | Base LxW(mm) | Height H(mm) | MAX Work Height A(mm) Stroke | Swing B | Table Diameter D | Ram Dimension RxR | Weight (kgs) | CODE NO. |
|-----------|--------------|--------------|------------------------------|---------|------------------|-------------------|--------------|----------|
| VAR-0 | 235x102mm | 254 | 114 | 85 | 90 | 19x19 | 8.5 | 7002-100 |
| VAR-1 | 270x127mm | 320 | 140 | 105 | 110 | 25.4x25.4 | 12 | 7002-101 |
| VAR-2 | 400x170mm | 445 | 215 | 135 | 170 | 31.7x31.7 | 29 | 7002-102 |
| VAR-3 | 470x200mm | 570 | 317 | 135 | 170 | 38.1x38.1 | 47 | 7002-103 |
| VAR-5 | 680x250mm | 800 | 470 | 245 | 250 | 50.8x50.8 | 140 | 7002-104 |

RATCHET LEVERS TYPE

This arbor press with all standard's feature. But operated with a ratchet device that will allow you to use the lever in the most convenient position, the lever has a counterweight for quick return after which the down stroke handwheel will return the ram to the work quickly.

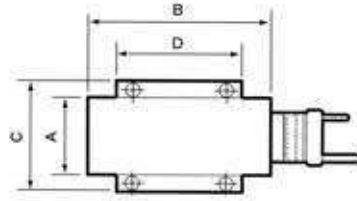
- Ratchet Type Arbor Press available-No. 3/5 only. The size is same as VAR-3, 5 Color may be varied. (Green)



| ORDER NO. | VARR-3 | VARR-5 |
|-----------|----------|----------|
| G.W. KGS | 65 kgs | 162 kgs |
| CODE NO. | 7002-131 | 7002-132 |



One Way Acme Thread Slide Table VERTEX®



- Material : FC-30
- Precision : $\pm 0.01 / 100\text{mm}$

میز یک طرفه



ST-75 ST-100 ST-125



STA-160 STA-165 STA-200
STA-205 STA-300 STA-305

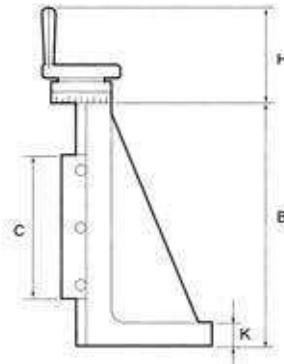
- Material : FC-30
- Precision : $\pm 0.01 / 100\text{mm}$
- FEATURE : The sliding surfaces are treated by heat-treatment & precision ground.

Specifications

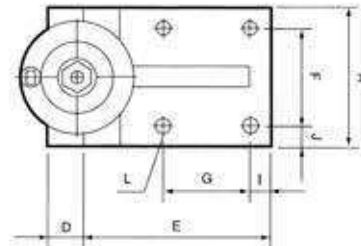
Unit: mm

| ORDER NO. | A x B Table surface | C x D Base area | Stroke | Total height | Dial graduation | WEIGHT kgs | CODE NO. |
|-----------|------------------------|--------------------|--------|--------------|-----------------|---------------|----------|
| ST-75 | 75 x 180 | 105 x 157 | 75 | 60 | 2.5 x 0.02 | 6.5 | 7002-540 |
| ST-100 | 100 x 235 | 140 x 160 | 100 | 70 | 2.5 x 0.02 | 9.5 | 7002-541 |
| ST-125 | 125 x 300 | 165 x 255 | 125 | 80 | 4.0 x 0.02 | 18.5 | 7002-542 |
| STA-160 | 160 x 200 | 160 x 300 | 100 | 90 | 4.0 x 0.02 | 20 | 7002-543 |
| STA-165 | 160 x 200 | 160 x 400 | 200 | 90 | 4.0 x 0.02 | 23.0 | 7002-544 |
| STA-200 | 200 x 300 | 200 x 400 | 100 | 120 | 4.0 x 0.02 | 38.0 | 7002-545 |
| STA-205 | 200 x 300 | 200 x 600 | 300 | 120 | 4.0 x 0.02 | 50.5 | 7002-546 |
| STA-300 | 300 x 350 | 300 x 500 | 150 | 188 | 4.0 x 0.02 | 98.0 | 7002-547 |

Vertical Dovetail Slide Table میز یک طرفه عمودی



- Material : FC-30
- Precision : $\pm 0.01 / 100\text{mm}$
- FEATURE : The sliding surfaces are treated by heat-treatment & precision ground
Dial graduation 4.0 x 0.02mm



Specifications

Unit: mm

| ORDER NO. | A | B | C | D | E | F | G | H | I | J | K | L | Weight kgs | CODE NO. |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|----|----|----|---------|---------------|----------|
| SE-100 | 100 | 255 | 150 | 35 | 130 | 70 | 60 | 120 | 30 | 15 | 26 | Ø10 x 4 | 15 | 7002-560 |
| SE-150 | 150 | 385 | 200 | 40 | 185 | 110 | 90 | 120 | 20 | 20 | 35 | Ø13 x 4 | 35 | 7002-561 |
| SE-200 | 200 | 510 | 250 | 60 | 240 | 160 | 140 | 135 | 20 | 20 | 40 | Ø17 x 4 | 67 | 7002-562 |
| SE-250 | 250 | 600 | 300 | 60 | 280 | 200 | 160 | 140 | 25 | 25 | 40 | Ø17 x 4 | 115 | 7002-563 |