

CUSTOM-MADE  
SUPPLY SPECIAL SIZES ACCORDING  
TO CUSTOMER'S REQUEST

## GRANITE SURFACE PLATES

**INSPECTION  
CERTIFICATE**



6900-132

### Grade 00

Code	Size (LxWxH)	Flatness	Weight	Max. load
6900-132*	300x200x60mm	2.7µm	11kg	30kg
6900-142*	400x250x60mm	2.9µm	18kg	50kg
6900-144*	400x400x60mm	3.1µm	29kg	60kg
6900-153*	500x315x70mm	3.2µm	33kg	60kg
6900-164*	630x400x80mm	3.5µm	60kg	65kg
6900-166*	630x630x100mm	3.8µm	119kg	75kg
6900-185*	800x500x100mm	3.9µm	120kg	100kg
6900-1106*	1000x630x140mm	4.4µm	265kg	200kg
6900-1101*	1000x1000x150mm	4.8µm	450kg	400kg
6900-1128*	1200x800x160mm	4.9µm	461kg	500kg
6900-1161*	1600x1000x180mm	5.8µm	864kg	600kg
6900-1201*	2000x1000x220mm	6.5µm	1320kg	650kg
6900-1202*	2000x1500x250mm	7.0µm	2250kg	750kg



### Grade 0

Code	Size (LxWxH)	Flatness	Weight	Max. load
6900-032*	300x200x60mm	5.4µm	11kg	60kg
6900-042*	400x250x60mm	5.9µm	18kg	100kg
6900-044*	400x400x60mm	6.3µm	29kg	120kg
6900-053*	500x315x70mm	6.4µm	33kg	120kg
6900-064*	630x400x80mm	7.0µm	60kg	130kg
6900-066*	630x630x100mm	7.6µm	119kg	150kg
6900-085*	800x500x100mm	7.8µm	120kg	200kg
6900-0106*	1000x630x140mm	8.7µm	265kg	400kg
6900-0101*	1000x1000x150mm	9.7µm	450kg	800kg
6900-0128*	1200x800x160mm	9.8µm	461kg	1000kg
6900-0161*	1600x1000x180mm	11.5µm	864kg	1200kg
6900-0201*	2000x1000x220mm	12.9µm	1320kg	1300kg
6900-0202*	2000x1500x250mm	14.0µm	2250kg	1500kg

\*Supplied with manufacturer inspection certificate

- Made of granite, free from deterioration or dimensional change over time, minimal changes in dimension due to temperature changes
- Meet DIN876, grade 00 is for inspection room or lab, grade 0 is for workshop
- Optional accessory:  
stand for granite surface plate (code **6902**),  
jack for granite surface plate (code **6903**)

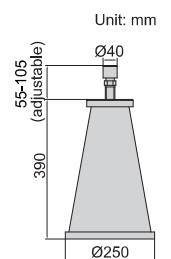
12

## JACK SET FOR GRANITE SURFACE PLATES

- 5 jacks per set
- Adjustable height
- For large granite surface plates:  
2000x1000x220mm  
(code **6900-0201** and **6900-1201**)  
2000x1500x250mm  
(code **6900-0202** and **6900-1202**)



6903-B

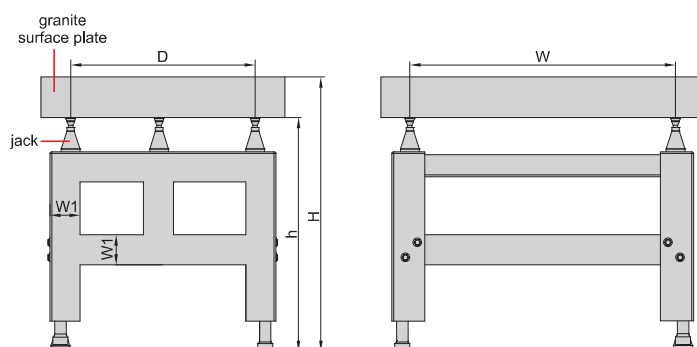


Code  
**6903-B**

## STANDS FOR GRANITE SURFACE PLATES



6902-64A



12

- For medium size granite surface plates
- 5 jacks are included
- Adjusting range of jacks: 25mm
- One foot on the bottom is adjustable

### Low stands

(mm)

Code	For granite surface plate	W	D	H (with granite surface plate)	h (without granite surface plate)	W1
6902-64A	630x400x80mm (code 6900-064 and 6900-164)	352	224	775-800	695-720	80
6902-66A	630x630x100mm (code 6900-066 and 6900-166)	352	352	775-800	675-700	80
6902-85A	800x500x100mm (code 6900-085 and 6900-185)	448	280	775-800	675-700	80
6902-106A	1000x630x140mm (code 6900-0106 and 6900-1106)	560	352	755-780	615-640	80
6902-101A	1000x1000x150mm (code 6900-0101 and 6900-1101)	560	560	755-780	605-630	80
6902-128A	1200x800x160mm (code 6900-0128 and 6900-1128)	672	448	755-780	595-620	80
6902-161A	1600x1000x180mm (code 6900-0161 and 6900-1161)	896	560	755-780	575-600	80
6902-201A	2000x1000x220mm (code 6900-0201 and 6900-1201)	1120	560	755-780	535-560	100
6902-202A	2000x1500x250mm (code 6900-0202 and 6900-1202)	1120	840	755-780	505-530	100

### High stands

(mm)

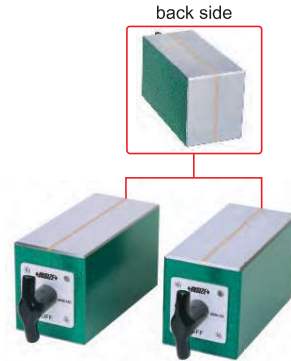
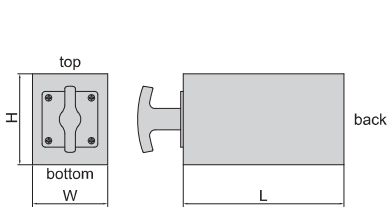
Code	For granite surface plate	W	D	H (with granite surface plate)	h (without granite surface plate)	W1
6902-64H	630x400x80mm (code 6900-064 and 6900-164)	352	224	1000-1025	920-945	80
6902-66H	630x630x100mm (code 6900-066 and 6900-166)	352	352	1000-1025	900-925	80
6902-85H	800x500x100mm (code 6900-085 and 6900-185)	448	280	1000-1025	900-925	80
6902-106H	1000x630x140mm (code 6900-0106 and 6900-1106)	560	352	1000-1025	860-885	80
6902-101H	1000x1000x150mm (code 6900-0101 and 6900-1101)	560	560	1000-1025	850-875	80
6902-128H	1200x800x160mm (code 6900-0128 and 6900-1128)	672	448	1000-1025	840-865	80
6902-161H	1600x1000x180mm (code 6900-0161 and 6900-1161)	896	560	1000-1025	820-845	80
6902-201H	2000x1000x220mm (code 6900-0201 and 6900-1201)	1120	560	1000-1025	780-805	100
6902-202H	2000x1500x250mm (code 6900-0202 and 6900-1202)	1120	840	1000-1025	750-775	100

HARDENED SURFACES

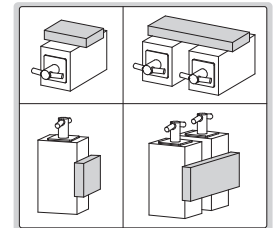
HIGH PRECISION

STRONG MAGNETIC FORCE

## MAGNETIC RECTANGULAR BLOCKS



6898-150



- For grinding, light milling, drilling and inspection of round and square jobs
- Hardened, high accuracy, strong magnetic force
- Working surfaces are hardened to HRC58-62
- Magnetic force on top, bottom and back sides
- Supplied in matched pair

Code	Size (LxWxH)	Magnetic force	Parallelism of top to bottom side	Squareness of top and bottom to back side	Height difference of a matched pair
6898-100	100x70x70mm	100kgf	5µm	5µm	5µm
6898-150	150x70x85mm	125kgf	5µm	5µm	5µm

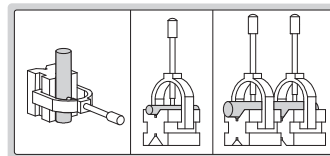
## V-BLOCK SETS



6896-10

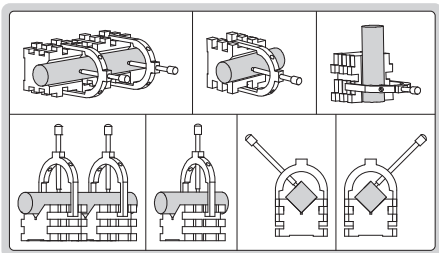
6896-11

- Hold cylindrical workpieces for inspection and machining
- Two V-blocks per set
- Made of alloy steel
- Hardened to HRC60±2
- V groove on the top for large shafts
- V groove on the bottom for small shafts (except 6896-10)

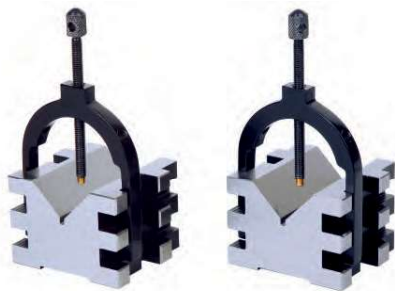


Code	Size (LxWxH)	Range of shafts (Ød)	Parallelism of both V grooves to top and bottom sides	Squareness of both V grooves to front and back sides	Height difference of a matched pair
6896-10	25x20x20mm	3-20mm	3µm	3µm	3µm
6896-11	50x40x40mm	5-30mm	5µm	5µm	5µm
6896-12	80x63x63mm	7-63mm	5µm	5µm	5µm
6896-13	100x80x80mm	7-80mm	5µm	5µm	5µm
6896-14	70x140x140mm	9-140mm	5µm	5µm	5µm

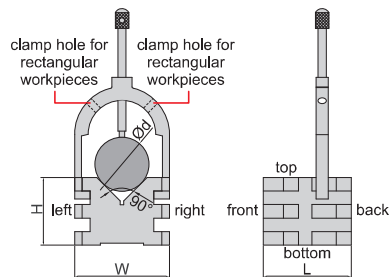
## V-BLOCK SET



- Hold cylindrical or rectangular workpieces for inspection and machining
- Two V-blocks per set
- Made of alloy steel
- Hardened to HRC60±2
- Applicable for cylinder with diameter (Ød): 5-50mm
- Applicable for rectangular workpieces with thickness: ≤35mm



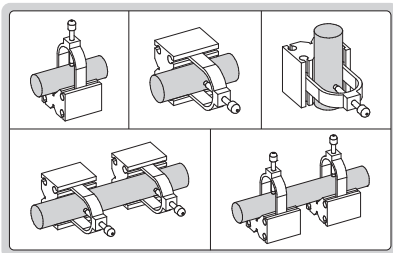
6802-1



SIDE LIE-DOWN USE IS POSSIBLE

Code	Size (LxWxH)	Parallelism of V groove to top, bottom, left, right sides	Squareness of V groove to front and back sides	Height difference of a matched pair
6802-1	65x70x50mm	5µm	5µm	5µm

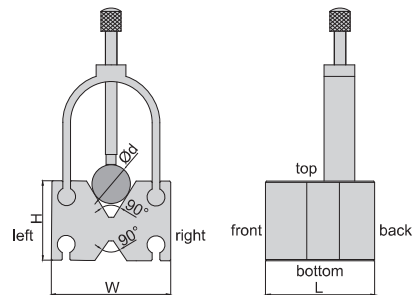
## V-BLOCK SETS



- Hold cylindrical workpieces for inspection and machining
- Two V-blocks per set
- Made of alloy steel
- Hardened to HRC60±2
- V groove on the top for large shafts
- V groove on the bottom for small shafts



6803-1



SIDE LIE-DOWN USE IS POSSIBLE

Code	Size (LxWxH)	Range of shafts (Ød)	Parallelism of both V grooves to top, bottom, left, right sides	Squareness of both V grooves to front and back sides	Height difference of a matched pair
6803-1	55x60x40mm	4-35mm	5µm	5µm	5µm
6803-2	65x70x45mm	4-47mm	5µm	5µm	5µm

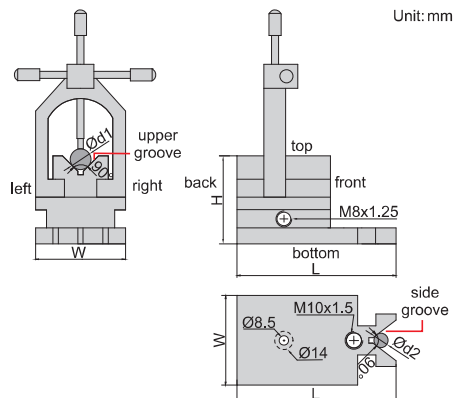
## V-BLOCK



- Hold cylindrical workpieces for inspection and machining
- Made of alloy steel
- Hardened to HRC60±2

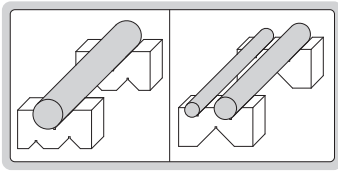


6804-M2

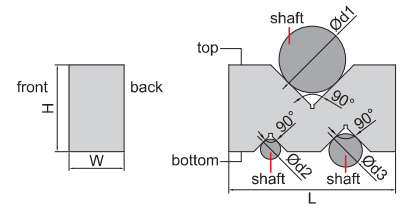


Code	Size (LxWxH)	Range of shafts (Ød1 and Ød2)	Parallelism of upper groove to bottom, left and right sides	Squareness of upper groove to front and back side	Parallelism of side groove to back side
6804-M2	90x48x48mm	5-33mm	5µm	5µm	5µm

## V-BLOCK SETS



6887-3

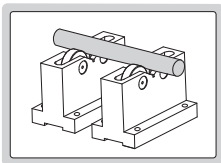


- Two V-blocks per set
- Made of hardened tool steel

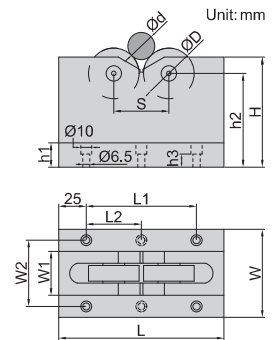
Code	Size (LxWxH)	Range of shafts (Ød1)	Range of shafts (Ød2)	Range of shafts (Ød3)
6887-1	50x19x24mm	3-32mm	3-16mm	3-22mm
6887-2	75x24x35mm	3-50mm	3-20mm	3-32mm
6887-3	100x33x52mm	3-68mm	3-26mm	3-40mm
6887-4	125x44x69mm	3-87mm	3-34mm	3-50mm

Code	Parallelism of three V grooves to top and bottom sides	Height difference of a matched pair
6887-1	5µm	5µm
6887-2	5µm	5µm
6887-3	5µm	5µm
6887-4	5µm	5µm

## ROLLER BEARING V-BLOCK SETS



6888-1

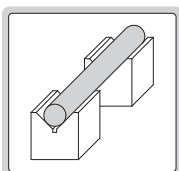


- Runout accuracy: 5µm
- Parallelism of bearings to bottom: 12µm
- Two V-blocks per set
- Workpieces don't get damaged due to bearings
- Suitable for heavy workpieces

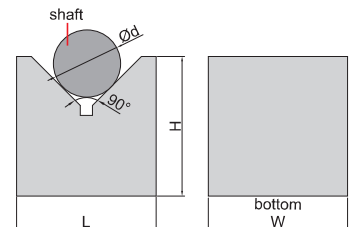
Code	Size (LxWxH)	Code of bearings	Diameter of bearings (ØD)	Range of shafts (Ød)	Load capacity
6888-1	150x60x100mm	16004 ZZ	42mm	25-70mm	500kg
6888-2	150x80x100mm	6303 ZZ	47mm	5-55mm	1000kg
6888-3	230x100x150mm	6306 ZZ	72mm	70-200mm	1000kg

Code	W1	W2	h1	h2	h3	L1	L2	S
6888-1	22	44	20	85	12	100	-	60
6888-2	40	60	22	85	12	100	-	50
6888-3	60	80	30	124	20	180	90	120

## GRANITE V-BLOCK SETS



6897-1



- Two V-blocks per set

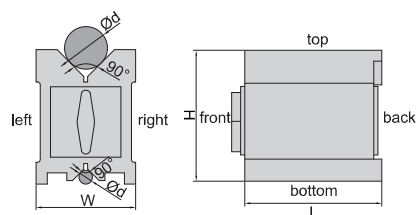
Code	Size (LxWxH)	Range of shafts (Ød)	Parallelism of V groove to bottom	Height difference of a matchet pair
6897-1	70x50x70mm	6-75mm	4µm	5µm
6897-2	100x50x70mm	6-99mm	4µm	5µm

## MAGNETIC V-BLOCKS (ADVANCED TYPE)

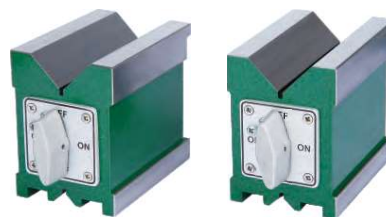
HARDENED SURFACES

HIGH PRECISION

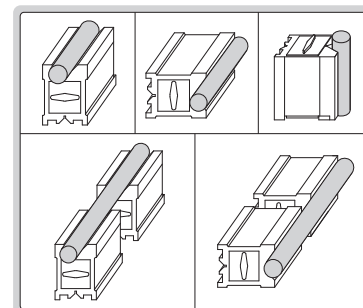
STRONG MAGNETIC FORCE



6889-11



6889-1



- Hardened, high accuracy, strong magnetic force, for grinding, light milling, drilling and inspection of round and square workpieces
- All working surfaces are hardened to HRC60±2
- Magnetic force on top, bottom and two V grooves
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Suitable for cast iron surface plates and granite surface plates

### Individual

Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force	Parallelism of V grooves to top, bottom, left, right sides	Squareness of V grooves to back side
6889-11	75x56x75mm	5-40mm	85kgf	5µm	5µm
6889-22	100x70x95mm	5-65mm	150kgf	5µm	5µm
6889-33	150x75x100mm	5-70mm	190kgf	6µm	6µm
6889-55	160x125x130mm	5-140mm	220kgf	12µm	12µm
6889-44	200x125x150mm	10-140mm	400kgf	12µm	12µm

### Matched pair

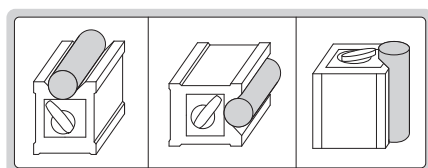
Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force	Parallelism of V grooves to top, bottom, left, right sides	Squareness of V grooves to back side	Height difference of a matched pair
6889-1	75x56x75mm	5-40mm	85kgf	5µm	5µm	5µm
6889-2	100x70x95mm	5-65mm	150kgf	5µm	5µm	5µm
6889-3	150x75x100mm	5-70mm	190kgf	6µm	6µm	6µm
6889-5	160x125x130mm	5-140mm	220kgf	12µm	12µm	12µm
6889-4	200x125x150mm	10-140mm	400kgf	12µm	12µm	12µm

## MAGNETIC V-BLOCK (ECONOMIC TYPE)

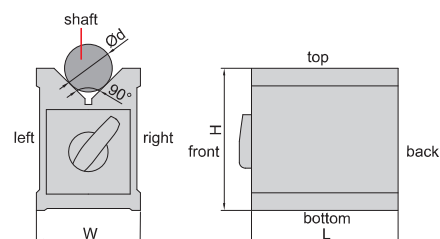
ATTENTION: NOT SUITABLE FOR STEEL OR IRON SURFACES, OTHERWISE THE MAGNETIC FORCE WILL BE REDUCED

ATTENTION: NOT HARDENED

- Hold cylindrical workpieces for inspection and machining
- Supplied in single piece
- Not hardened
- Not suitable for steel or iron surfaces, otherwise the magnetic force will be reduced



6890-702



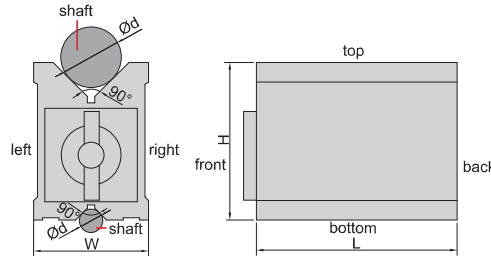
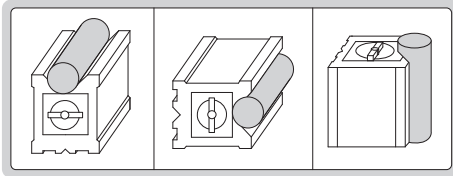
Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force	Parallelism of V groove to top, bottom, left and right sides	Squareness of V groove to back side
6890-702	70x60x73mm	6-44mm	56kgf	10µm	10µm

**ATTENTION: NOT SUITABLE FOR STEEL OR IRON SURFACES, OTHERWISE THE MAGNETIC FORCE WILL BE REDUCED**

**ATTENTION: NOT HARDENED**

## MAGNETIC V-BLOCKS (ECONOMIC TYPE)

- Hold cylindrical workpieces for inspection and machining
- Supplied in single piece
- Not hardened
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Not suitable for steel or iron surfaces, otherwise the magnetic force will be reduced



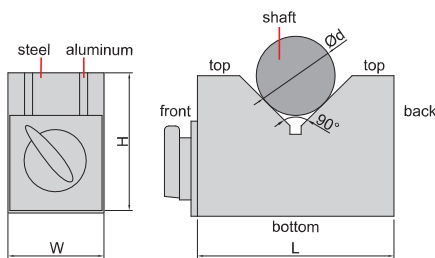
6801-1201

Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force	Parallelism of V grooves to top, bottom, left, right side	Squareness of V grooves to back side
6801-1201	80x70x95mm	6-67mm	64kgf	10µm	10µm
6801-1202	100x70x95mm	6-67mm	80kgf	10µm	10µm
6801-1203	120x70x95mm	6-67mm	96kgf	10µm	10µm

## MAGNETIC V-BLOCK SETS

**ATTENTION: NOT HARDENED, DO NOT ROTATE WORKPIECES ON V-BLOCKS**

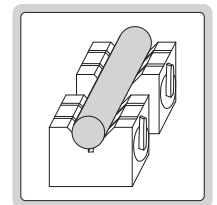
**ATTENTION: LOW MAGNETIC FORCE**



6891-1

- Hold cylindrical workpieces for inspection, not suitable for machining due to low magnetic force
- Two V-blocks per set
- Hardness HRB70

Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force	Parallelism of V groove to bottom and back sides	Height difference of a matched pair
6891-1	70x40x50mm	6-46mm	8kgf	10µm	10µm
6891-3	150x50x100mm	6-125mm	14kgf	10µm	10µm



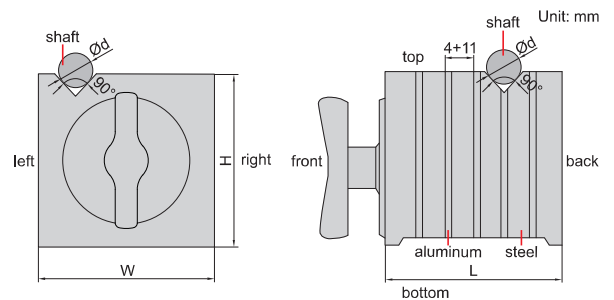
**ATTENTION: NOT HARDENED, DO NOT ROTATE WORKPIECES ON V-BLOCKS**

## MAGNETIC SQUARE WITH V GROOVE

- Hold flat and cylindrical workpieces for inspection and machining
- Magnetic force on top, left, right and V grooves
- Parallelism and squareness of top, bottom, left, right and back: 20µm
- Parallelism and squareness of V grooves to top, bottom, left, right and back: 20µm



6539-100



Code	Size (LxWxH)	Magnetic force of V grooves		Magnetic force of top, left and right sides		Range of shafts (Ød)
		On granite surface plate	On cast iron plate	On granite surface plate	On cast iron plate	
6539-100	100x100x100mm	30kgf	25kgf	50kgf	30kgf	5-35mm

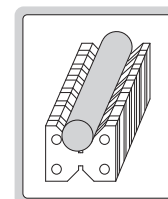
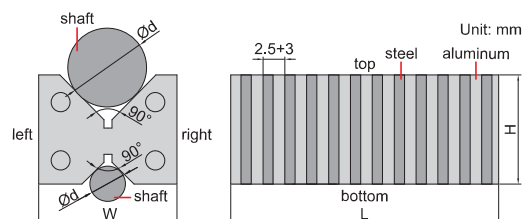
## MAGNETIC INDUCTION V-BLOCK

ATTENTION: NOT HARDENED, DO NOT ROTATE WORKPIECES ON V-BLOCKS

- Hold cylindrical workpieces for inspection and machining
- To be used on magnetic chucks
- Supplied in single piece
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Hardness HRB70



6892-1

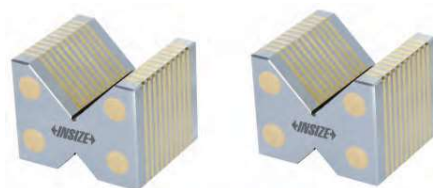


Code	Size (LxWxH)	Range of shafts ( $\varnothing d$ )	Pole pitch	Parallelism of both V grooves to top and bottom sides
6892-1	110x60x48mm	6-50mm	2.5+3mm	10 $\mu$ m

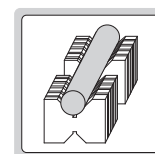
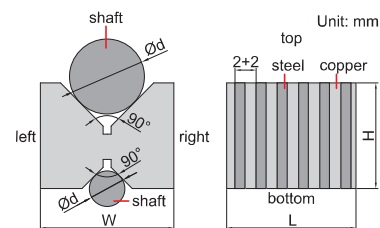
## MAGNETIC INDUCTION V-BLOCK SET

ATTENTION: NOT HARDENED, DO NOT ROTATE WORKPIECES ON V-BLOCKS

- Hold cylindrical workpieces for inspection and machining
- To be used on magnetic chucks
- Two V-blocks per set
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Hardness HRB70
- Copper magnetic strips



6878-1



Code	Size (LxWxH)	Range of shafts ( $\varnothing d$ )	Pole pitch	Parallelism of both V grooves to top and bottom sides	Height difference of a matched pair
6878-1	49x58x46mm	5-56mm	2+2mm	10 $\mu$ m	10 $\mu$ m

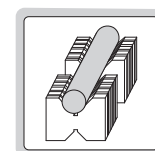
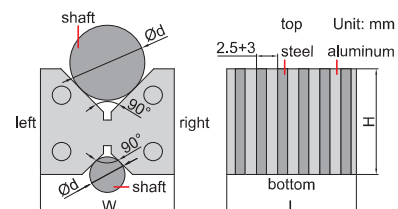
## MAGNETIC INDUCTION V-BLOCK SET (ECONOMIC TYPE)

ATTENTION: NOT HARDENED, DO NOT ROTATE WORKPIECES ON V-BLOCKS

- Hold cylindrical workpieces for inspection and machining
- To be used on magnetic chucks
- Two V-blocks per set
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Hardness HRB70



6899-1



Code	Size (LxWxH)	Range of shafts ( $\varnothing d$ )	Pole pitch	Parallelism of both V grooves to top and bottom sides	Height difference of a matched pair
6899-1	55x60x48mm	6-50mm	2.5+3mm	10 $\mu$ m	10 $\mu$ m

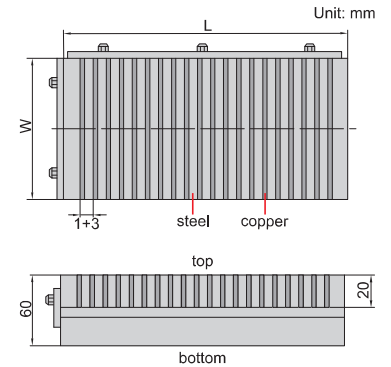


**ATTENTION:  
NOT HARDENED**

## PERMANENT MAGNETIC CHUCK



**6537-400**



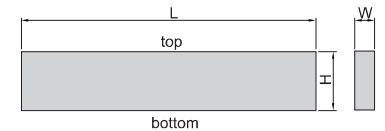
Code	Table size (L×W)	Magnetic force	Pole pitch	Parallelism of top to bottom
<b>6537-400</b>	400×200mm	16kgf/cm <sup>2</sup>	1+3mm	0,005mm/100mm

## PARALLEL SETS



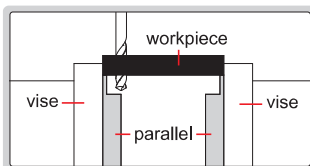
**6533-144**

- Parallelism between top and bottom: 5µm
- Height difference of a matched pair: 5µm
- Made of alloy tool steel
- Hardened to HRC55-60



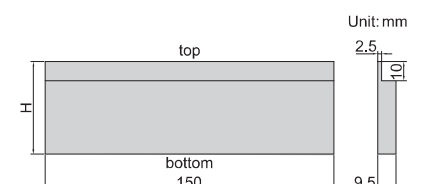
Code	Parallels per set	Length (L)	Thickness (W)	Height (H)
<b>6533-10</b>	10 pairs	150mm	3mm	13, 16, 19, 22, 25, 28, 31, 35, 38, 41mm
<b>6533-144</b>	14 pairs	150mm	10mm	14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 35, 40, 45, 50mm
<b>6533-6</b>	6 pairs	200mm	9.5mm	35, 40, 45, 50, 55, 58mm

## PARALLEL SET



**6534-6**

- Parallelism between top and bottom: 5µm
- Height difference of a matched pair: 5µm
- Made of alloy tool steel
- Hardened to HRC55-60



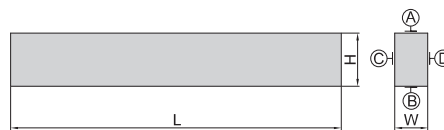
Code	Parallels per set	Height (H)
<b>6534-6</b>	6 pairs	25, 30, 35, 40, 45, 48mm

## GRANITE PARALLEL SET

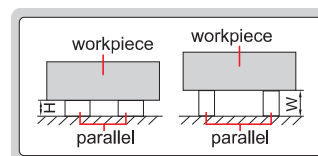
- Made of granite, hard and no rusty, no dimensional change over time or temperature change
- Two parallels per set



4143-250



Code	Size (LxWxH)	Parallelism between A and B	Parallelism between C and D	Height difference of a matched pair
4143-250	250x25x40mm	3µm	3µm	3µm

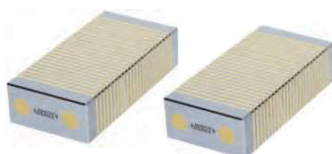


## MAGNETIC INDUCTION PARALLEL SET

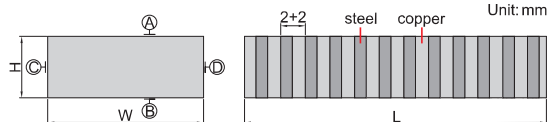
ATTENTION: NOT HARDENED

12

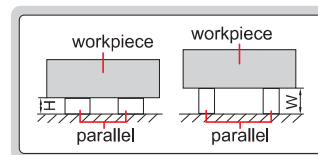
- To be used on magnetic chucks
- Two parallels per set
- Hardness HRB70
- Copper magnetic strips



6879-1

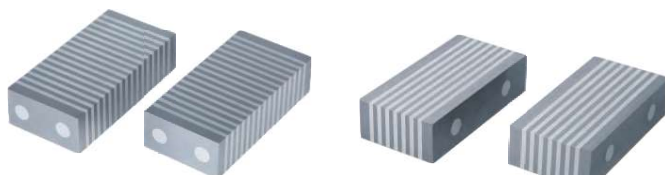


Code	Size (LxWxH)	Pole pitch	Parallelism between A and B	Parallelism between C and D	Height difference of a matched pair
6879-1	100x50x25mm	2+2mm	10µm	10µm	10µm



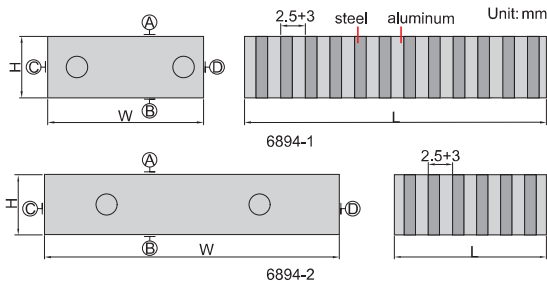
## MAGNETIC INDUCTION PARALLEL SETS (ECONOMIC TYPE)

ATTENTION: NOT HARDENED



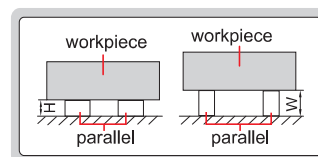
6894-1

6894-2



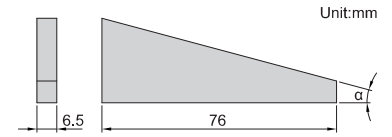
- To be used on magnetic chucks
- Two parallels per set
- Hardness HRB70

Code	Size (LxWxH)	Pole pitch	Parallelism between A and B	Parallelism between C and D	Height difference of a matched pair
6894-1	100x50x25mm	2,5+3mm	10µm	10µm	10µm
6894-2	50x100x25mm	2,5+3mm	10µm	10µm	10µm



## ANGLE PLATE SETS

- For angle set-up in tooling, production and inspection
- Made of tool steel
- Hardness HRC55

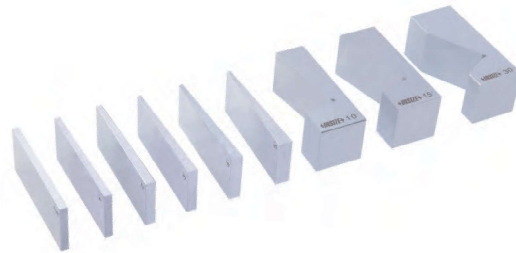


4003-12

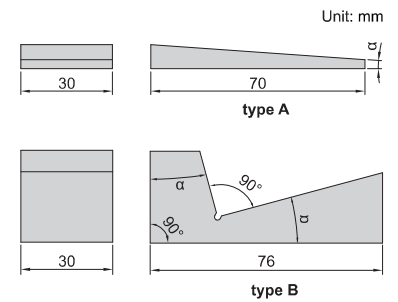
Code	Angle plates included	Angle $\alpha$	Accuracy
4003-10	10 pcs	1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°	±9 seconds
4003-12	12 pcs	1/4°, 1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°	±9 seconds

## ANGLE PLATE SET

- For angle set-up in tooling, production and inspection
- Made of tool steel
- Hardness HRC55



4004-9



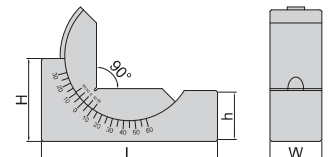
Code	Angle plates included	Angle $\alpha$	Type	Accuracy
4004-9	9 pcs	1/2°, 1°, 2°, 3°, 4°, 5°	type A	±30 seconds
		10°, 15°, 30°	type B	±50 seconds

## ADJUSTABLE ANGLE BLOCKS

- Made of hardened tool steel
- With locking screw
- Accuracy of angle: 10 minutes

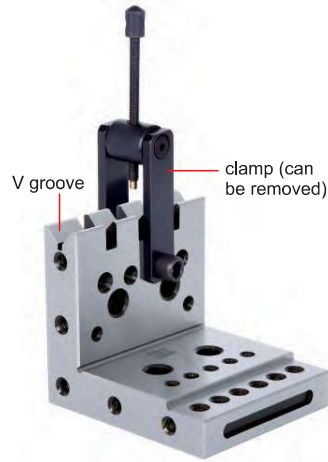


6535-30



Code	Size (LxWxH)	h	Adjustable angle	Graduation of angle
6535-25	75x25x36mm	25mm	30°~0°~60°	10 minutes
6535-30	102x30x49mm	30mm	30°~0°~60°	10 minutes

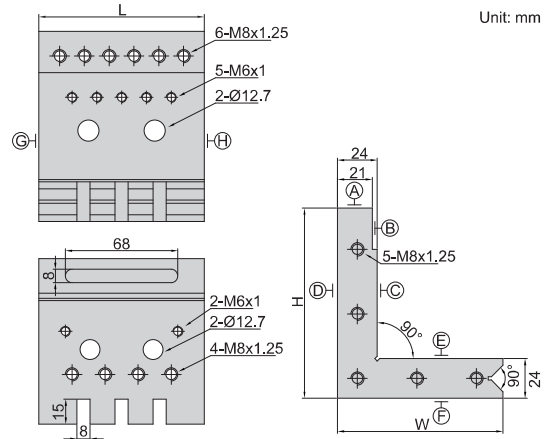
## RIGHT ANGLE PLATE



6547-1

- Made of alloy steel
- Hardened to HRC60±2
- V groove for cylinders
- Parallelism and squareness between A, B, C, D, E, F, G and H: 6µm
- Parallelism and squareness of V groove to A, B, C, D, E, F, G and H: 6µm

Code	Size (LxWxH)
6547-1	100x100x115mm



12

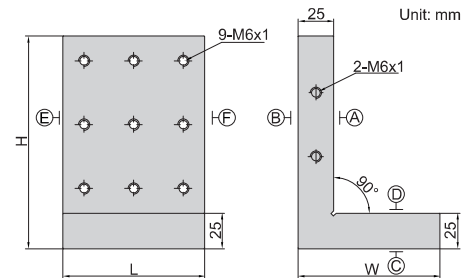
## RIGHT ANGLE PLATE



6548-1

- Made of tool steel
- Hardened to HRC60±2
- Squareness or parallelism between A, B, C, D, E and F : 5µm

Code	Size (LxWxH)
6548-1	100x100x150mm



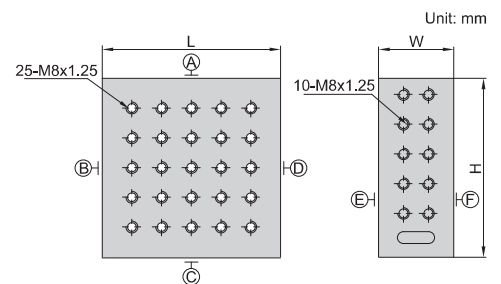
## RIGHT ANGLE PLATE



6549-1

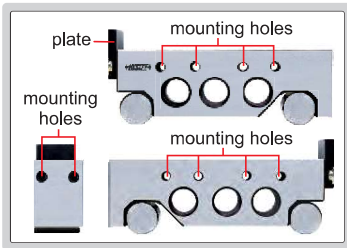
- Made of tool steel
- Hardened to HRC56-58
- Parallelism between A, B, C, D, E and F: 3µm
- Squareness between A, B, C, D, E and F: 5µm

Code	Size (LxWxH)
6549-1	150x63x150mm



## SINE BARS

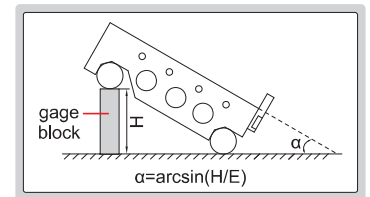
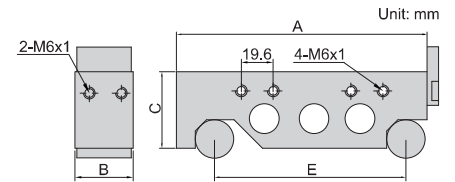
The front and back ends and two sides have mounting holes to install plate



4155-100

CAN BE CUSTOMIZED

HIGH PRECISION



- Made of alloy tool steel

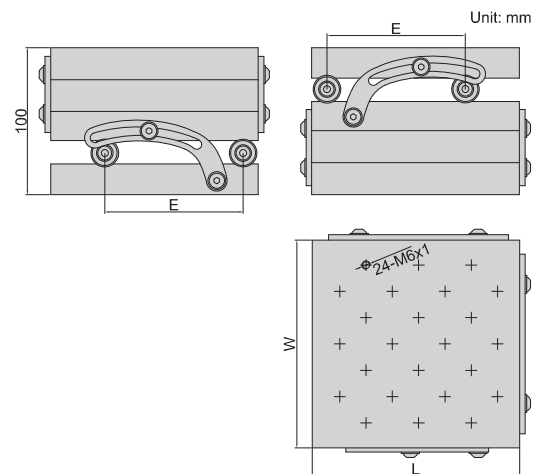
Code	Roller distance (E)	Table size (AxB)	C	Accuracy of $\alpha$ at 30°
4155-100	100mm	130x30mm	40mm	$\pm 5$ seconds
4155-200	200mm	230x30mm	40mm	$\pm 5$ seconds
4155-300	300mm	345x40mm	50mm	$\pm 8$ seconds

## COMPOUND SINE TABLE



6536-100

- Accuracy of angle:  $\pm 15$  seconds
- Made of alloy tool steel
- Hardness HRC58-60



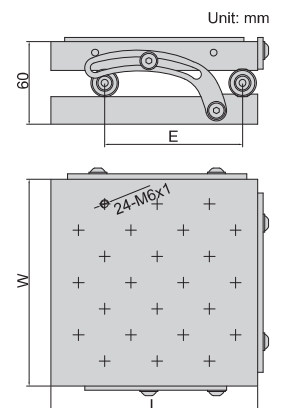
Code	Roller distance (E)	Table size (LxW)	Adjustable angle
6536-100	100mm	150x150mm	0-60°

## SINE TABLE



6527-100

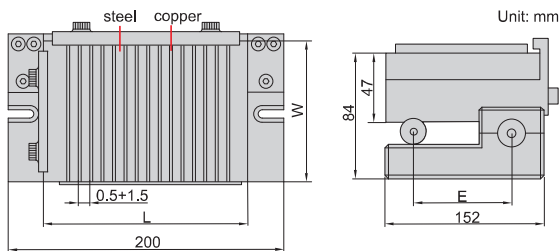
- Accuracy of angle:  $\pm 15$  seconds
- Made of alloy tool steel
- Hardness HRC58-60



Code	Roller distance (E)	Table size (LxW)	Adjustable angle
6527-100	100mm	150x150mm	0-60°

## MAGNETIC SINE TABLE

**ATTENTION:  
NOT HARDENED**



6538-100

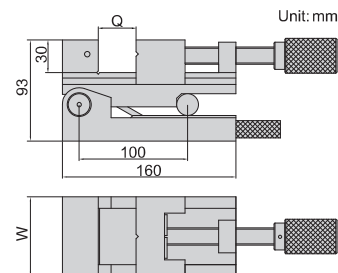
Code	Table size (L×W)	Roller distance (E)	Adjustable angle	Accuracy of angle
6538-100	150×150mm	100mm	0-60°	±15 seconds

## PRECISION SINE VISE



6522-80

There is a 1mm step (accuracy  $\pm 0.002\text{mm}$ ). Gage blocks smaller than 0.5mm are not available. If small gage blocks are needed (for example, 0.25mm), a gage block 1.25mm can be used in order to make  $1.25\text{mm} - 1\text{mm} = 0.25\text{mm}$ .

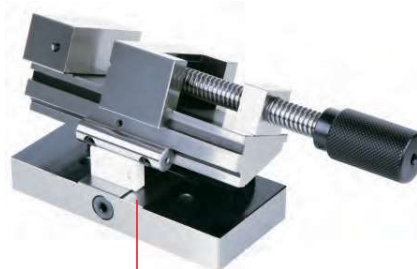


- Parallelism:  $3\mu\text{m}/100\text{mm}$
- Squareness:  $5\mu\text{m}/100\text{mm}$
- Accuracy of angle:  $\pm 15$  seconds
- Made of SKS tool steel, subzero treatment
- Hardness HRC58-60

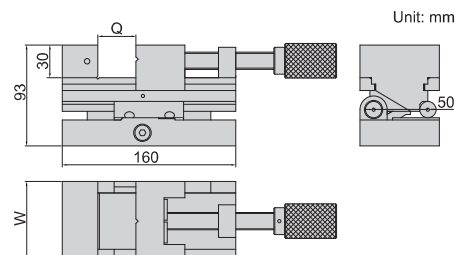
Code	Jaw opening (Q)	Jaw width (W)	Adjustable angle
6522-80	0-80mm	73mm	0-46°

## PRECISION SINE VISE

There is a 1mm step (accuracy  $\pm 0.002\text{mm}$ ). Gage blocks smaller than 0.5mm are not available. If small gage blocks are needed (for example, 0.25mm), a gage block 1.25mm can be used in order to make  $1.25\text{mm} - 1\text{mm} = 0.25\text{mm}$ .



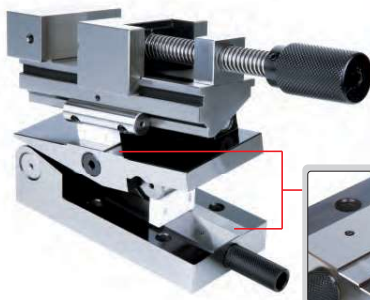
6523-80



- Parallelism:  $3\mu\text{m}/100\text{mm}$
- Squareness:  $5\mu\text{m}/100\text{mm}$
- Accuracy of angle:  $\pm 15$  seconds
- Made of SKS tool steel, subzero treatment
- Hardness HRC58-60

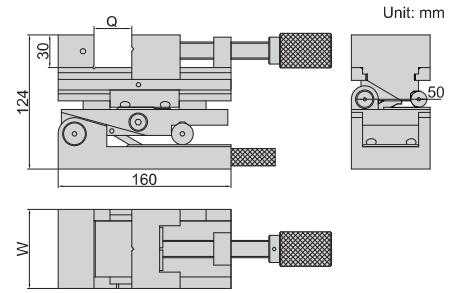
Code	Jaw opening (Q)	Jaw width (W)	Adjustable angle
6523-80	0-80mm	73mm	0-46°

## PRECISION COMPOUND SINE VISE



6524-80

There is a 1mm step (accuracy  $\pm 0.002\text{mm}$ ). Gage blocks smaller than 0.5mm are not available. If small gage blocks are needed (for example, 0.25mm), a gage block 1.25mm can be used in order to make  $1.25\text{mm} - 1\text{mm} = 0.25\text{mm}$ .



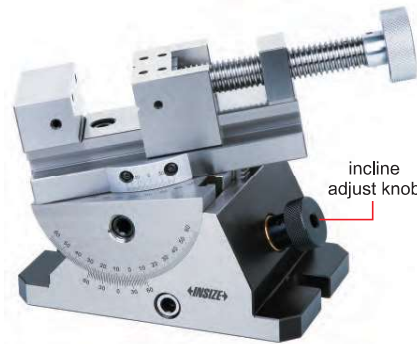
Unit: mm

- Parallelism:  $3\mu\text{m}/100\text{mm}$
- Squareness:  $5\mu\text{m}/100\text{mm}$
- Accuracy of angle:  $\pm 15$  seconds
- Made of SKS tool steel, subzero treatment
- Hardness HRC58-60

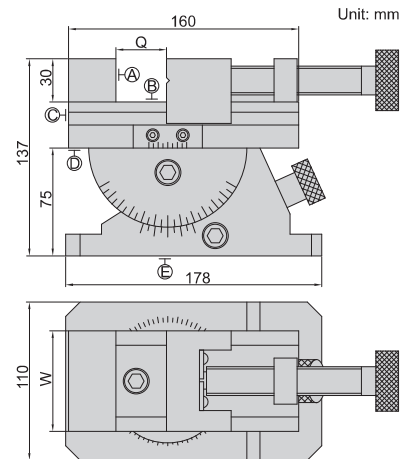
Code	Jaw opening (Q)	Jaw width (W)	Adjustable angle
6524-80	0-80mm	73mm	0-46°

## PRECISION UNIVERSAL VISE

- Horizontal rotary: range  $360^\circ$ , graduation  $0.05^\circ$
- Vertical incline: range  $45^\circ$ , graduation  $0.05^\circ$
- With incline adjust knob
- Parallelism and squareness between A, B, C and D:  $5\mu\text{m}/100\text{mm}$ , parallelism between D and E at  $0^\circ$ :  $10\mu\text{m}/100\text{mm}$
- Made of tool steel
- Hardness HRC56-58



6521-80

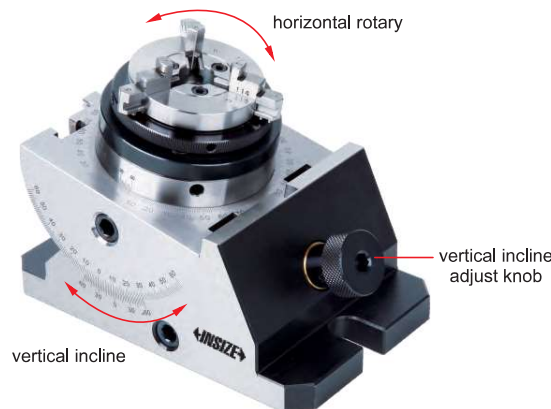


Unit: mm

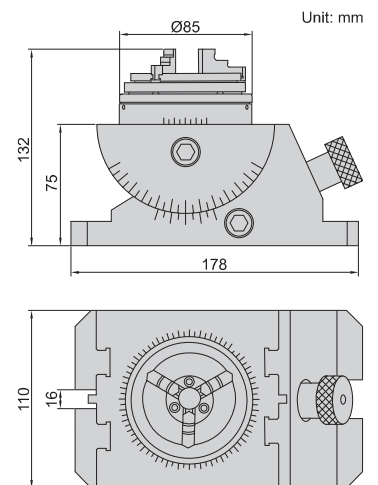
Code	Jaw opening (Q)	Jaw width (W)
6521-80	0-80mm	70mm

## PRECISION UNIVERSAL VISE WITH CHUCK

- Horizontal rotary: range  $360^\circ$ , graduation  $0.05^\circ$
- Vertical incline: range  $45^\circ$ , graduation  $0.05^\circ$
- With vertical incline adjust knob
- Runout of chuck is less than 0.05mm (test position is at less than 50mm from clamping jaws)
- The clamping jaws of chuck are reversible
- Made of tool steel
- Hardness HRC56-58



6528-85

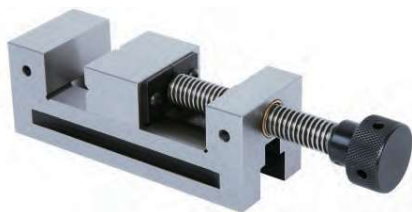


Unit: mm

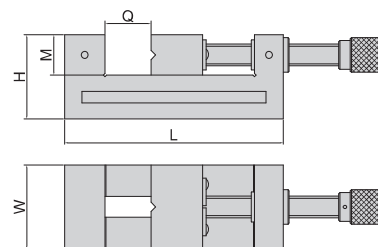
Code	Range of external clamping	Range of internal clamping
6528-85	$\varnothing 0.8\text{--}\varnothing 63\text{mm}$	$\varnothing 23\text{--}\varnothing 58\text{mm}$

## PRECISION VISES

- Parallelism: 8µm/100mm
- Squareness: 10µm/100mm
- Made of alloy steel
- Hardness HRC56-58



6520-73A



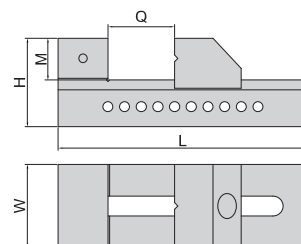
Code	Jaw opening (Q)	Jaw width (W)	L	H	M
6520-73A	0-73mm	63mm	176mm	63mm	30mm
6520-76A	0-76mm	73mm	190mm	73mm	35mm
6520-120A	0-120mm	98mm	255mm	82mm	40mm

## PRECISION VISES

- Parallelism: 3µm/100mm
- Squareness: 5µm/100mm
- Made of alloy steel
- Hardness HRC56-58

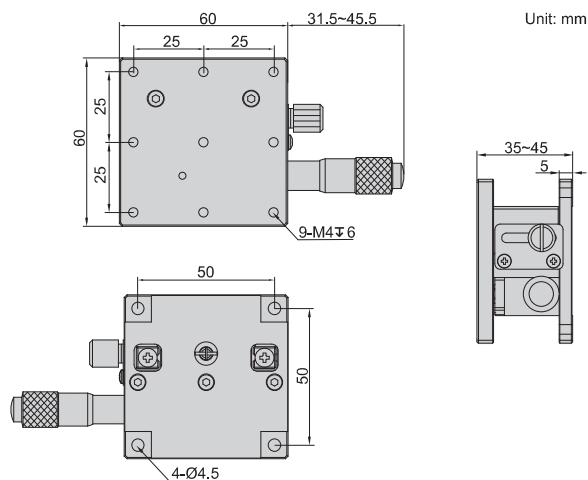


6526-80



Code	Jaw opening (Q)	Jaw width (W)	Overall length (L)	H	M
6526-80	0-80mm	50mm	150mm	53mm	25mm
6526-100	0-100mm	73mm	190mm	70mm	35mm

## Z-AXIS STAGE CODE 6586-60



- Cross roller guides, achieve high precision and smooth movement
- Stage made of aluminum alloy

### SPECIFICATION

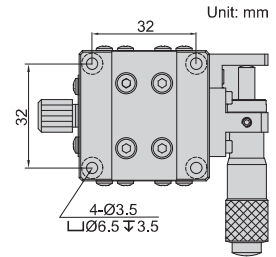
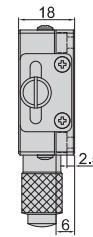
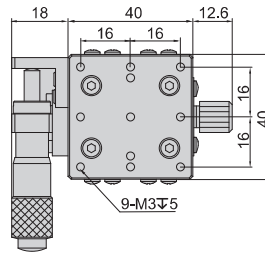
Code	Z-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Stage size	Weight
6586-60	10mm	0.05mm	0.01mm	0.02mm	20.4N (3kgf)	60x60mm	0.27kg



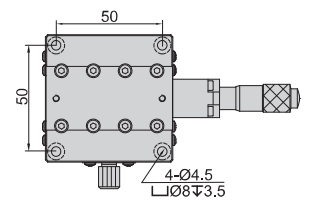
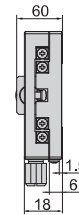
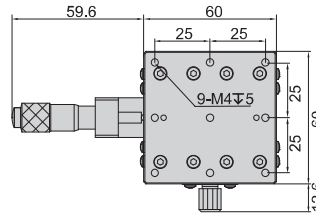
## X-AXIS STAGES



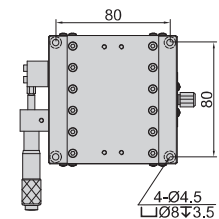
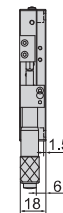
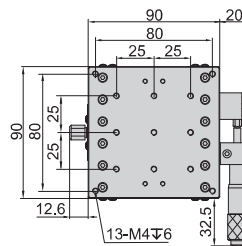
6582-401



6582-602



6582-903



- Cross roller guides, achieve high precision and smooth movement
- Stages made of aluminum alloy

### SPECIFICATION (micrometer on the left)

Code	X-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Weight
6582-401	±6.5mm	0.02mm	0.01mm	0.01mm	29.4N (3kgf)	left	40x40mm	0.14kg
6582-601	±6.5mm	0.03mm	0.01mm	0.01mm	49N (5kgf)	left	60x60mm	0.24kg
6582-901	±12.5mm	0.03mm	0.01mm	0.02mm	93.1N (9.5kgf)	left	90x90mm	0.47kg
6582-1251	±12.5mm	0.04mm	0.01mm	0.02mm	180N (18.4kgf)	left	125x125mm	1.40kg

### SPECIFICATION (micrometer in the middle)

Code	X-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Weight
6582-402	±6.5mm	0.02mm	0.01mm	0.01mm	29.4N (3kgf)	middle	40x40mm	0.14kg
6582-602	±6.5mm	0.03mm	0.01mm	0.01mm	49N (5kgf)	middle	60x60mm	0.24kg
6582-902	±12.5mm	0.03mm	0.01mm	0.02mm	93.1N (9.5kgf)	middle	90x90mm	0.47kg
6582-1252	±12.5mm	0.04mm	0.01mm	0.02mm	180N (18.4kgf)	middle	125x125mm	1.40kg

### SPECIFICATION (micrometer on the right)

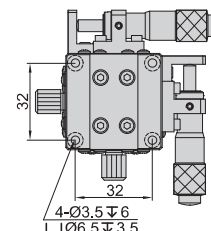
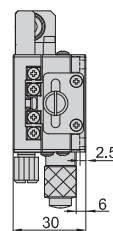
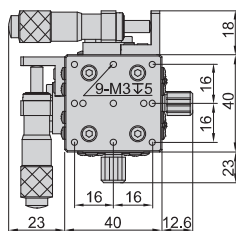
Code	X-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Weight
6582-403	±6.5mm	0.02mm	0.01mm	0.01mm	29.4N (3kgf)	right	40x40mm	0.14kg
6582-603	±6.5mm	0.03mm	0.01mm	0.01mm	49N (5kgf)	right	60x60mm	0.24kg
6582-903	±12.5mm	0.03mm	0.01mm	0.02mm	93.1N (9.5kgf)	right	90x90mm	0.47kg
6582-1253	±12.5mm	0.04mm	0.01mm	0.02mm	180N (18.4kgf)	right	125x125mm	1.40kg

## XY-AXIS STAGES

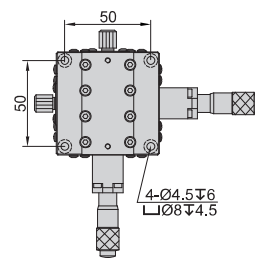
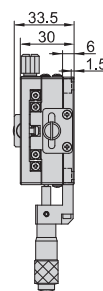
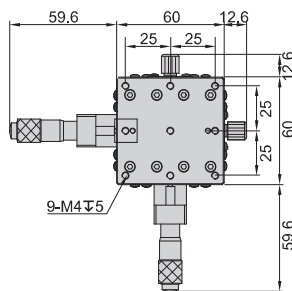
Unit: mm



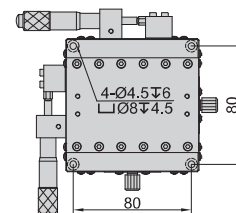
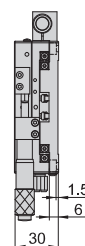
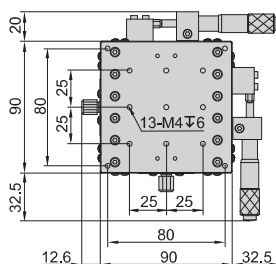
6584-401



6584-602



6584-903



- Cross roller guides, achieve high precision and smooth movement
- Stages made of aluminum alloy

### SPECIFICATION (micrometer on the left)

Code	XY-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Weight
6584-401	±6.5mm	0.04mm	0.01mm	0.01mm	29.4N (3kgf)	left	40x40mm	0.27kg
6584-601	±6.5mm	0.06mm	0.01mm	0.01mm	49N (5kgf)	left	60x60mm	0.48kg
6584-901	±12.5mm	0.06mm	0.01mm	0.02mm	93.1N (9.5kgf)	left	90x90mm	1kg
6584-1251	±12.5mm	0.08mm	0.01mm	0.02mm	180N (18.4kgf)	left	125x125mm	2.8kg

### SPECIFICATION (micrometer in the middle)

Code	XY-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Weight
6584-402	±6.5mm	0.04mm	0.01mm	0.01mm	29.4N (3kgf)	middle	40x40mm	0.27kg
6584-602	±6.5mm	0.06mm	0.01mm	0.01mm	49N (5kgf)	middle	60x60mm	0.48kg
6584-902	±12.5mm	0.06mm	0.01mm	0.02mm	93.1N (9.5kgf)	middle	90x90mm	1kg
6584-1252	±12.5mm	0.08mm	0.01mm	0.02mm	180N (18.4kgf)	middle	125x125mm	2.8kg

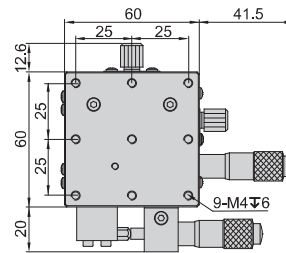
### SPECIFICATION (micrometer on the right)

Code	XY-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Weight
6584-403	±6.5mm	0.04mm	0.01mm	0.01mm	29.4N (3kgf)	right	40x40mm	0.27kg
6584-603	±6.5mm	0.06mm	0.01mm	0.01mm	49N (5kgf)	right	60x60mm	0.48kg
6584-903	±12.5mm	0.06mm	0.01mm	0.02mm	93.1N (9.5kgf)	right	90x90mm	1kg
6584-1253	±12.5mm	0.08mm	0.01mm	0.02mm	180N (18.4kgf)	right	125x125mm	2.8kg

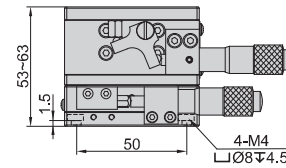
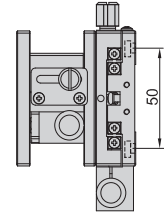
## XZ-AXIS STAGE CODE 6587-60



- Cross roller guides, achieve high precision and smooth movement
- Stage made of aluminum alloy



Unit: mm



### SPECIFICATION

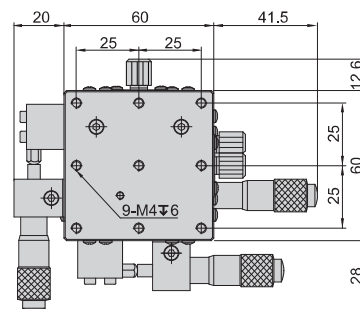
Code	X-axis displacement	Z-axis displacement	Micrometer graduation	Maximum load	Stage size	Weight
6587-60	±6.5mm	10mm	0.01mm	29.4N (3kgf)	60x60mm	0.51kg

12

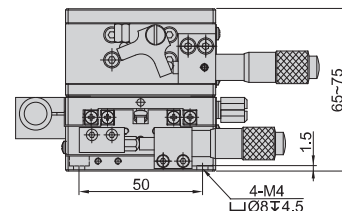
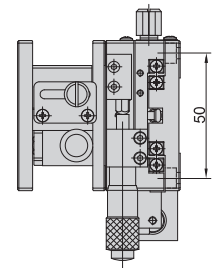
## XYZ-AXIS STAGE CODE 6585-60



- Cross roller guides, achieve high precision and smooth movement
- Stage made of aluminum alloy



Unit: mm



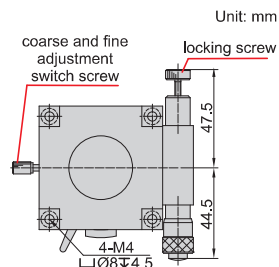
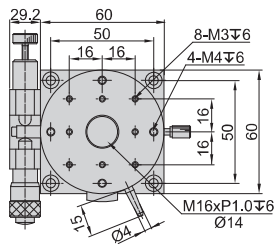
### SPECIFICATION

Code	XY-axis displacement	Z-axis displacement	Micrometer graduation	Maximum load	Stage size	Weight
6585-60	±6.5mm	10mm	0.01mm	29.4N (3kgf)	60x60mm	0.75kg

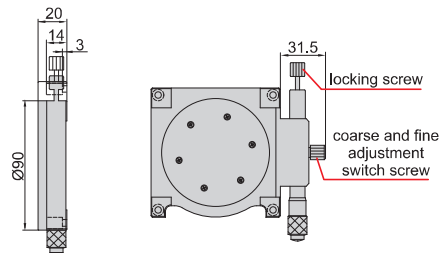
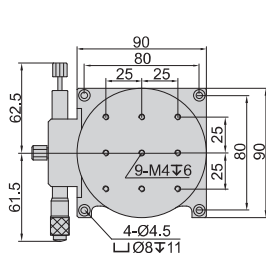
## ROTARY STAGES



6583-60H



6583-90



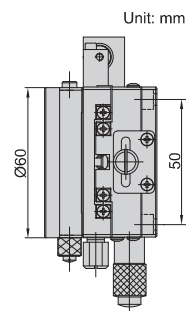
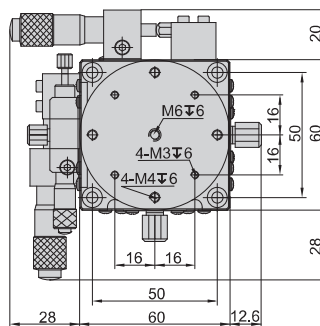
- Precise angle adjustment
- Coarse and fine adjustments
- Stages made of aluminum alloy

12

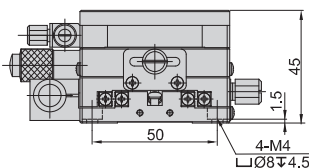
### SPECIFICATION

Code	Range	Parallelism of top to bottom surface	Concentricity	Rotation accuracy	Maximum load	Stage size	Weight
6583-60H	360° coarse, ±5° fine	0.03mm	0.03mm	12'	29.4N (3kgf)	Ø60mm	0.30kg
6583-90	360° coarse, ±5° fine	0.04mm	0.03mm	5'	29.4N (3kgf)	Ø90mm	0.50kg

## XY-AXIS ROTARY STAGE CODE 6588-60



- Cross roller guides, achieve high precision and smooth movement
- Coarse and fine adjustments
- Precise angle adjustment
- Stage made of aluminum alloy



### SPECIFICATION

Code	XY-axis displacement	Rotation range	Micrometer graduation	Rotation accuracy	Maximum load	Stage size	Weight
6588-60	±6.5mm	360° coarse, ±5° fine	0.01mm	10'	29.4N (3kgf)	60x60mm	0.64kg

## CENTERING INDICATOR



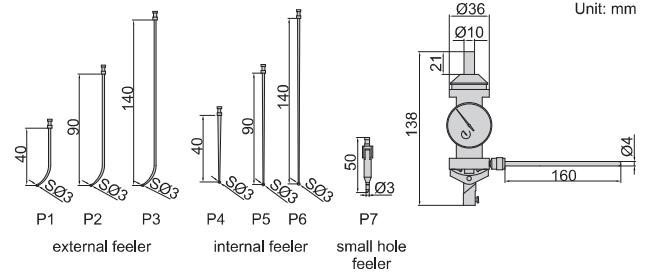
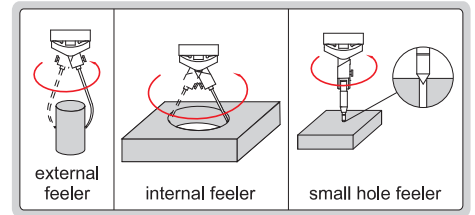
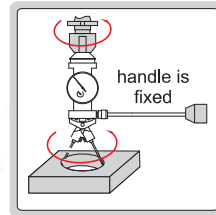
2385-3

- Provides quick and accurate centering in boring and milling set-up

Code  
2385-3



Feeler	Measuring diameter	Accuracy
P1	Ø0-60mm	0.015mm
P2	Ø0-160mm	0.02mm
P3	Ø0-250mm	0.03mm
P4	Ø3.2-80mm	0.015mm
P5	Ø3.2-180mm	0.02mm
P6	Ø3.2-280mm	0.03mm
P7	Ø0-2.8mm	0.015mm



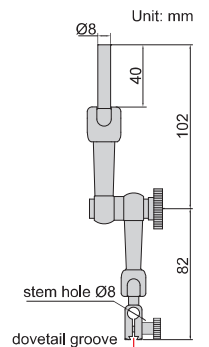
## DIAL TEST INDICATOR CENTERING HOLDER

- Center cylinders or holes on machine tools
- Can be used with dial test indicators

Code  
6295-1A



6295-1A



12

## INDICATOR CENTERING HOLDER

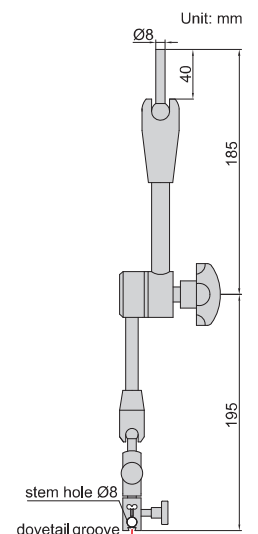


- Center cylinders or holes on machine tools
- Can be used with dial test indicators or dial indicators

Code  
6294-1A

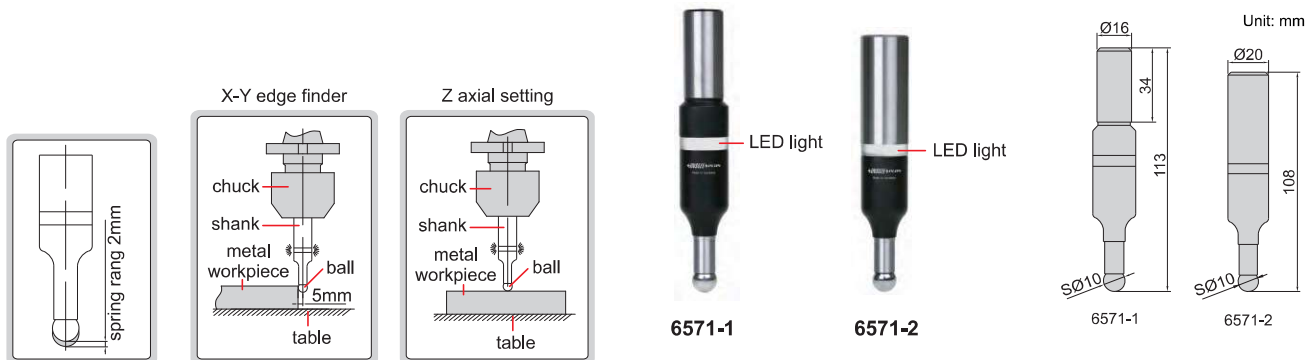


6294-1A



### 3D ELECTRONIC EDGE FINDERS

**INSIZE PLUS**  
MADE IN EUROPE



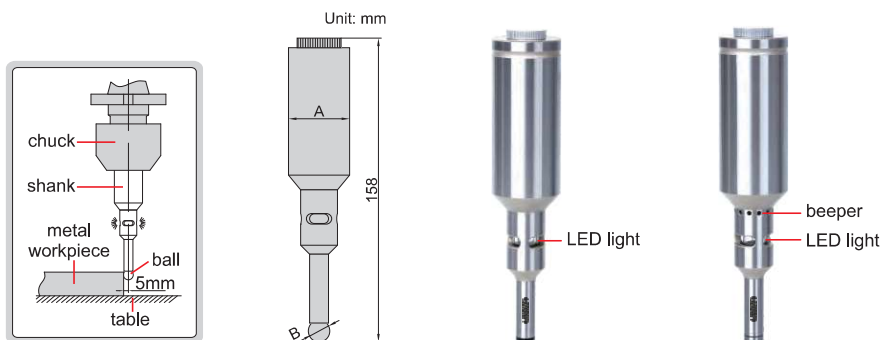
Code	Shank	Contact ball	Accuracy	Battery
6571-1	Ø16mm	SØ10mm	10µm	23A, 12Vx1 pc
6571-2	Ø20mm	SØ10mm	10µm	23A, 12Vx1 pc

- The shank is electrically conducted to the metal workpiece through the chuck and table. The LED lights up, when the ball touches the workpiece
- Not suitable for rotary use
- Hardened contact ball

### LARGE SHANK ELECTRONIC EDGE FINDERS

12

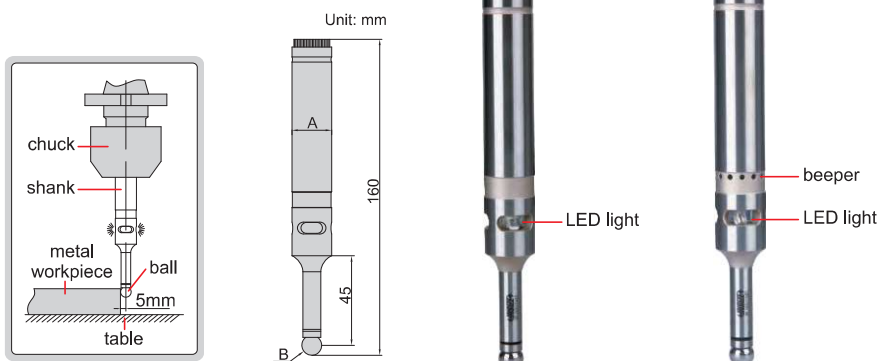
- The shank is electrically conducted to the metal workpiece through the chuck and table. The LED lights up and the beeper sounds (only for 6572-2), when the ball touches the workpiece
- Not suitable for rotary use
- Hardened shank and contact ball



Code	Shank (A)	Contact ball (B)	Accuracy	Beeper	Battery
6572-1	Ø32mm	SØ10mm	5µm	without	23A, 12Vx1 pc
6572-2	Ø32mm	SØ10mm	5µm	with	23A, 12Vx1 pc

### ELECTRONIC EDGE FINDERS

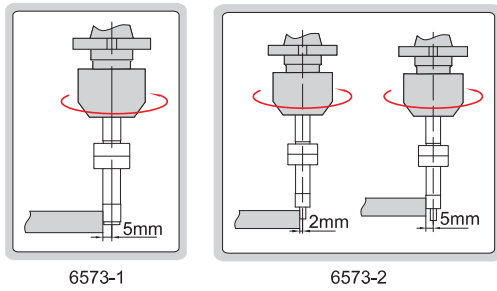
- The shank is electrically conducted to the metal workpiece through the chuck and table. The LED lights up and the beeper sounds (only for 6566-3), when the ball touches the workpiece
- Not suitable for rotary use
- Hardened shank and contact ball



Code	Shank (A)	Contact ball (B)	Accuracy	Beeper	Battery
6566-2	Ø20mm	SØ10mm	5µm	without	23A, 12Vx1 pc
6566-3	Ø20mm	SØ10mm	5µm	with	23A, 12Vx1 pc

## NON-MAGNETIC EDGE FINDERS

- TiAlN coating, non-magnetic, hardness HV2500, extremely wear resistance
- Suitable for machine speed 400~600rpm



6573-1

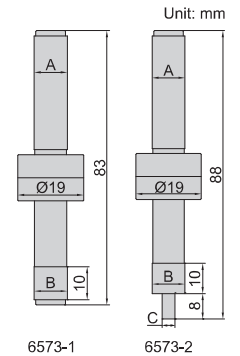
6573-2

Code	Shank (A)	Contact point (B)	Contact point (C)	Accuracy
6573-1	Ø10mm	Ø10mm	—	5µm
6573-2	Ø10mm	Ø10mm	Ø4mm	5µm



6573-1

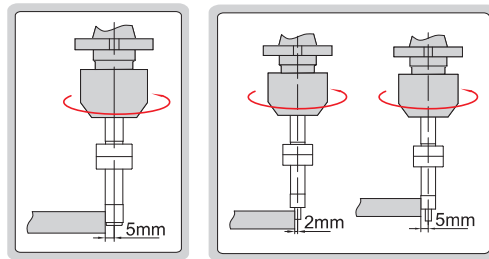
6573-2



6573-1

6573-2

- Hardened shank and contact point
- Suitable for machine speed 400~600rpm



6562-3

6562-4

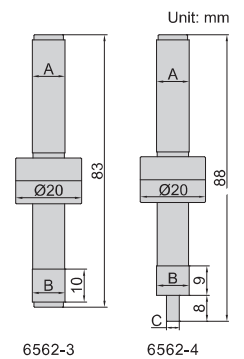
Code	Shank (A)	Contact point (B)	Contact point (C)	Accuracy
6562-3	Ø10mm	Ø10mm	—	5µm
6562-4	Ø10mm	Ø10mm	Ø4mm	5µm



6562-3

6562-4

## EDGE FINDERS

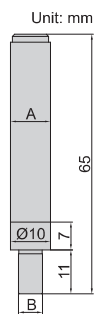


6562-3

6562-4

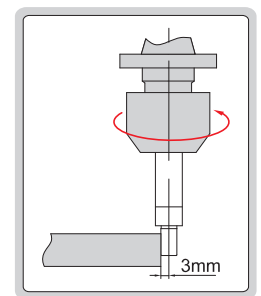
- Hardened shank and contact point
- Suitable for machine speed 400~600rpm

Code	Shank (A)	Contact point (B)	Accuracy
6567-1	Ø10mm	Ø6mm	8µm



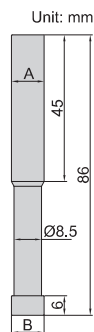
6567-1

## EDGE FINDER



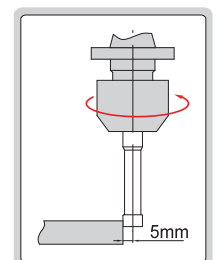
- Ceramic contact point, non magnetic
- Suitable for machine speed 400~600rpm

Code	Shank (A)	Contact point (B)	Accuracy
6568-1	Ø10mm	Ø10mm	8µm



6568-1

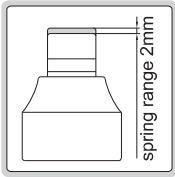
## CERAMIC EDGE FINDER



## ELECTRONIC ZERO SETTER

**INSIZE PLUS**  
MADE IN EUROPE

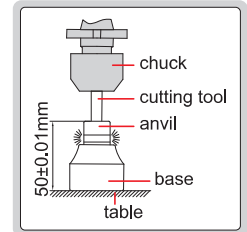
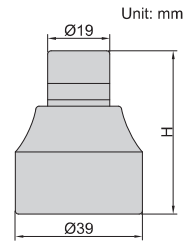
LOW TEST FORCE



- The base is electrically conducted to the cutting tools through the table and chuck. The LED lights up when the cutting tool touches the anvil
- Magnetic base
- Two batteries LR44



6553-50

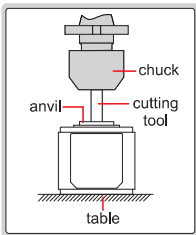


Code	Height (H)	Accuracy	Test force
6553-50	50mm	±10µm	7N (at 49mm)

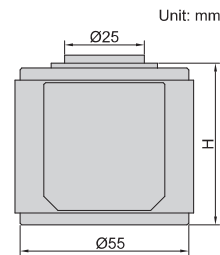
## DIGITAL ZERO SETTER

IP65 WATERPROOF

12



6557-50



- Resolution: 0.001mm/0.00005"
- IP65 dust/waterproof
- Buttons: on/off, mm/inch, zero
- CR2032 battery
- Automatic power off
- Magnetic base
- Automatic backlight at zero

Code	Height (H)	Anvil stroke	Accuracy *	Test force	Repeatability
6557-50	50mm	2.5mm	±10µm/0.0004"	4N (at 50mm)	2µm

\*The accuracy is ensured within Ø10mm of the center

automatic backlight at zero

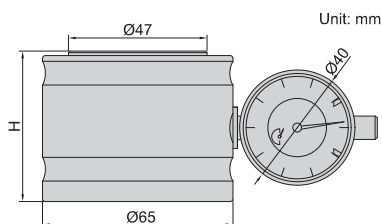


set zero

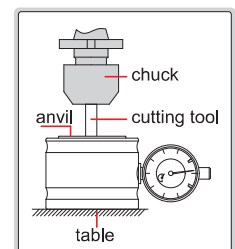


## ZERO SETTER

**INSIZE PLUS**  
MADE IN EUROPE



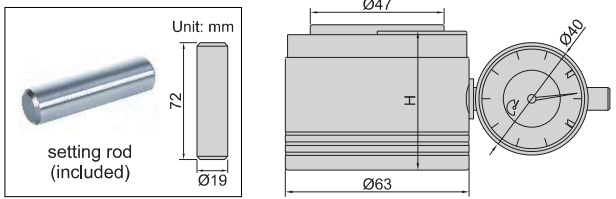
6554-50



Code	Height (H)	Accuracy	Test force
6554-50	50mm	±10µm	9N (at 50mm)



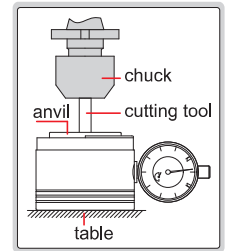
### ZERO SETTER



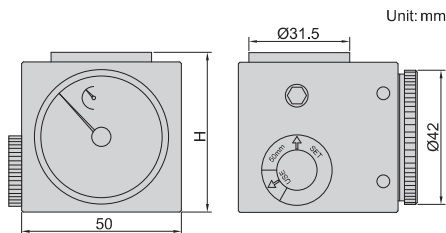
Code	Height (H)	Accuracy	Test force
6556-50	50mm	±10µm	10N (at 50mm)



6556-50



- Magnetic base

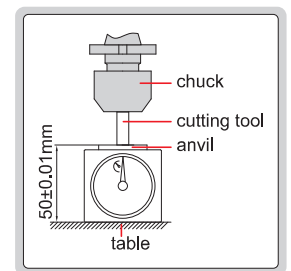


Code	Height (H)	Accuracy	Test force
2397-502A	50mm	±10µm	9N (at 50mm)

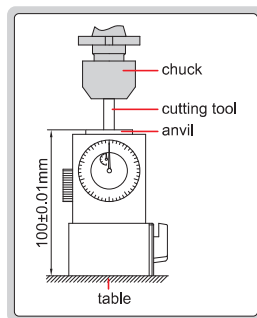


2397-502A

### ZERO SETTER



- Magnetic base with on-off switch

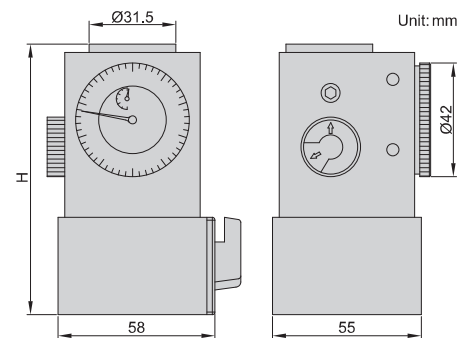


Code	Height (H)	Accuracy	Test force
2394-100A	100mm	±10µm	9N (at 100mm)



2394-100A

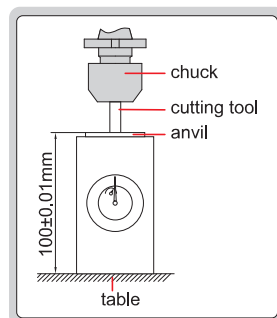
### ZERO SETTER



### LOW TEST FORCE ZERO SETTER

LOW TEST FORCE

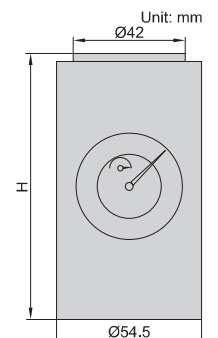
- Magnetic base
- Low test force, suitable for micro tools with minimum diameter Ø0.1mm



Code	Height (H)	Accuracy	Test force
6555-100B	100mm	±10µm	1N (at 100mm)



6555-100B



INSIZE PLUS  
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