

Milling Vise

Milling Accessories



G101-G188

Milling Machine Accessories

65000 LK LK Tool Machine Vise

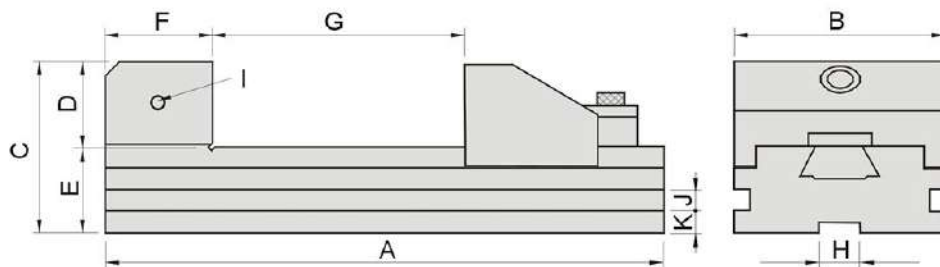
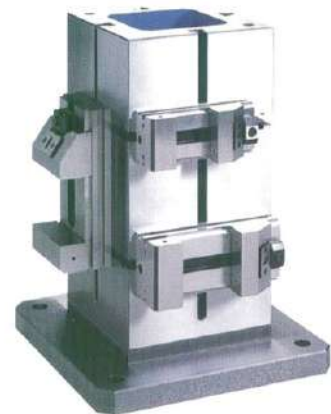
PAT: 170861
ZL 99 2 48851.6



Features:

- ▶ Adopting new structure and high rigidity design.
- ▶ Powerful clamping force.
- ▶ Suitable for CNC machines.
- ▶ Material: Tool Steel
- ▶ Hardness: HRC55°-60°
- ▶ Parallelism: 0.003mm/100mm
- ▶ Squareness: 0.004mm/100mm

Applications:



Order No.	Model	A	B	C	D	E	F	G	H	I	J	K	N.W.
65000-60	LK60	180	60	55	27	28	35	0-80	14	M6	6	7.5	3.0kg
65000-80	LK80	205	80	64	32	32	40	0-100	14	M6	8	8	4.9kg
65000-100	LK100	250	96	82	40	42	45	0-125	14	M6	10	12	9.7kg
65000-125	LK125	310	125	88	43	45	50	0-150	16	M6	12	12	16.5kg

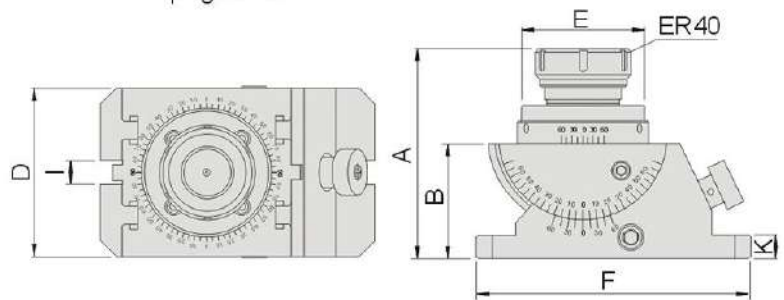
Unit:mm

65006 CHM-ER40 Precision Universal ER Chuck



Features:

- ▶ This fixture is composed of two parts: a precision ER collet chuck and a swivel angle plate base, ER collet chuck is capable of revolving 360°.
- ▶ Suitable for applying on milling, grinding and engraving...etc
- ▶ For more info on ER40 collet chuck, please refer to page F85.



Unit:mm

Order No.	Model	A	B	D	E	F	I	K	N.W.
65006	CHM-ER40	138	75	110	∅80	178	16	15	11kg

MILLING MACHINE ACCESSORIES

65008 CHM-SC Precision Universal 3-Jaws Chuck

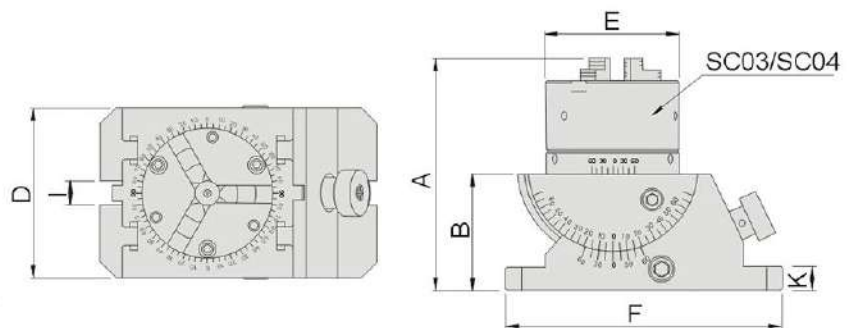
CHM-SC03



Features:

- ▶ This fixture is composed of two parts: a 3-Jaw chuck and a swivel angle plate base, 3-Jaw chuck is capable of revolving 360°.
- ▶ Suitable for applying on milling, grinding and engraving...etc
- ▶ For more info on 3-Jaw Chuck, please refer to page H01.

CHM-SC04

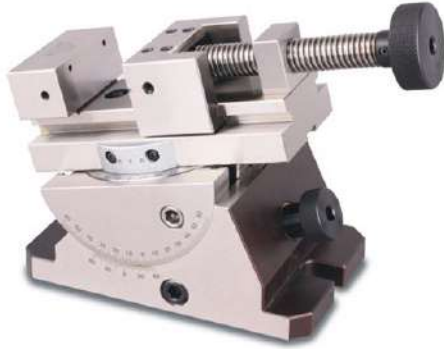


Unit:mm

Order No.	Model	A	B	D	E	F	I	K	N.W.
65008-01	CHM-SC03	151	75	110	∅85	178	16	15	12kg
65008-02	CHM-SC04	182	75	110	∅112	178	16	15	13kg

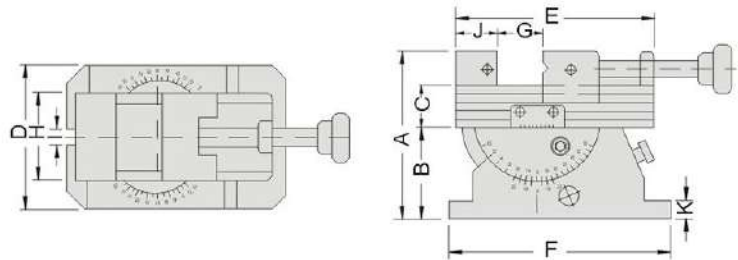
Milling Machine Accessories

65010-80 CHM80 Precision Universal Vise



Features:

- ▶ This fixture is composed of two parts: a precision vise and a swivel angle plate base, the vise is capable of revolving 360°.
- ▶ Tilting angle 45° vertically.
- ▶ Suitable for inclined surface, angular drilling
- ▶ machining on various machine applications.



Unit:mm

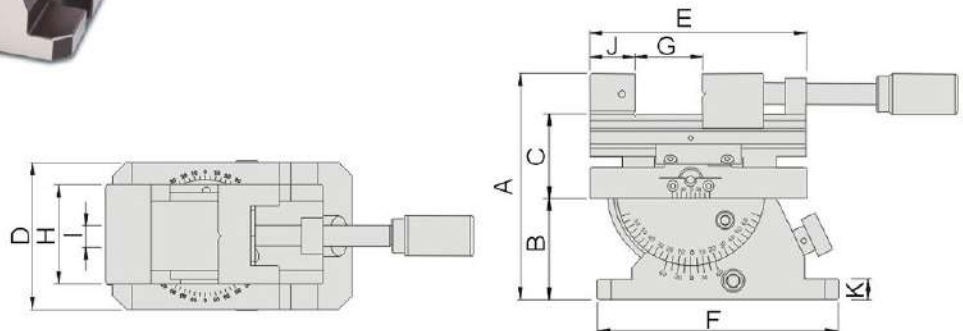
Order No.	Model	A	B	C	D	E	F	G	H	I	J	K	N.W.
65010-80	CHM80	138	75	32	110	160	178	0~80	70	16	33	15	14kg

65010-100 CHML50 Precision 3D Universal Vise



Features:

- ▶ This fixture is composed of two parts: a precision sine vise and a swivel angle plate base, the vise is capable of revolving 360°.
- ▶ Tilting angle 45° vertically.
- ▶ Suitable for inclined surface, angular drilling machining on various machine applications.
- ▶ With compound sine vise, it can be used for 3D machining.



Unit:mm

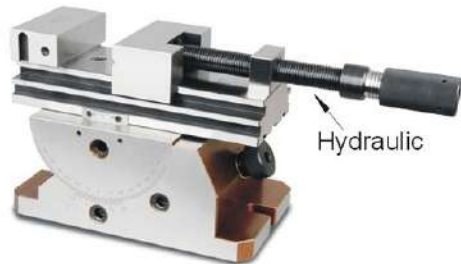
Order No.	Model	A	B	C	D	E	F	G	H	I	J	K	N.W.
65010-100	CHML50	169	75	63	110	160	178	0~80	73	16	33	15	16kg

65010-125 **CHM125** **Precision Universal Vise**

CHM125

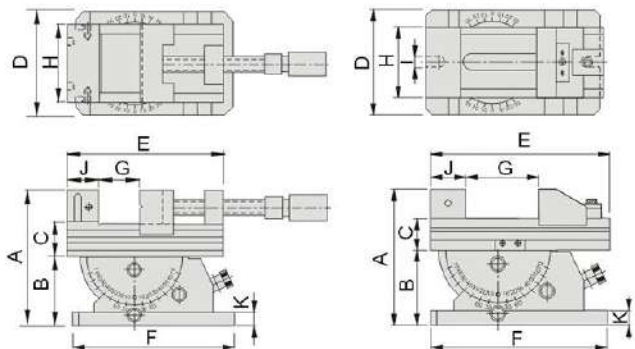


CHM-PGV125



Features :

- ▶ This fixture is composed of two parts: a precision vise and a swivel angle plate base, the vise is capable of revolving 360°.
- ▶ Tilting angle 45° vertically.
- ▶ Suitable for inclined surface, angular drilling
- ▶ machining on various machine applications.



Unit:mm

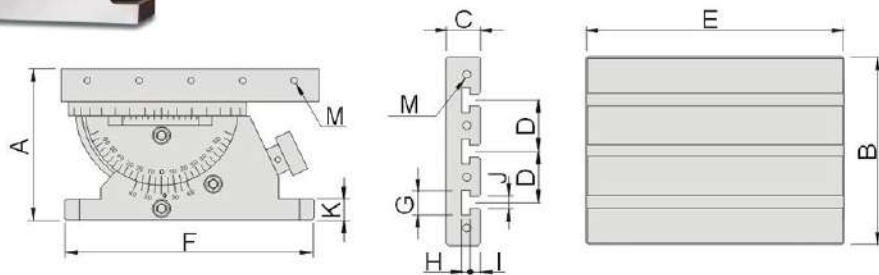
Order No.	Model	A	B	C	D	E	F	G	H	I	J	K	N.W.
65010-125	CHM125	216	128	45	180	310	300	0~150	125	18	50	25	53kg
65010-125A	CHM-PGV125	218	128	50	180	300	300	0~165	125	18	60	25	57kg

65010-300 **CHM-HT300** **Precision Universal Tilting Table**



Features :

- ▶ This fixture is composed of two parts: a table with T-slot and a swivel angle plate base, the table is capable of revolving 360°.
- ▶ Table with T-slot assembly with swivel base for rotation and angle adjustment.
- ▶ Suitable for inclined surface, angular drilling machining on various machine applications.



Unit:mm

Order No.	Model	A	B	C	D	E	F	G	H	I	J	K	M	Clamp	N.W.
65010-300	CHM-HT300	183	220	40	60	300	300	28	10	12	14	25	M8	M16	47kg

MILLING MACHINE ACCESSORIES

Milling Machine Accessories

65040

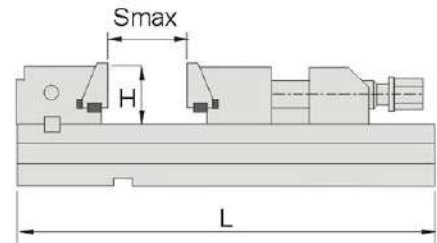
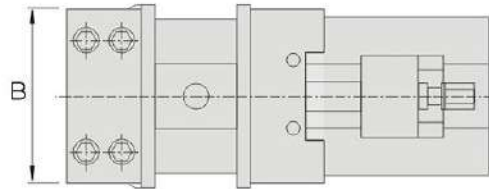
GL

Precision Modular Vice



Features:

- ▶ Modular design with quick change in components.
- ▶ Widely used in machining centers.
- ▶ Material : Alloy Steel, HRC58°-62°
- ▶ Parallelism: within 0.005/100mm
- ▶ Squareness: within 0.005/100mm
- ▶ Swivel base is optional.



Unit:mm

Order No.	Model	B	H	Smax	L	Clamping force (Kg)
65040-01	GL100-I	100	30	100	270	3000
65040-02	GL125-I	125	40	150	345	3000
65040-03	GL150A-I	150	50	200	420	5000
65040-04	GL150B-I	150	50	300	520	5000
65040-05	GL150C-I	150	50	400	620	5000
65040-06	GL175A-I	175	60	200	455	6000
65040-07	GL175B-I	175	60	300	555	6000
65040-08	GL175C-I	175	60	400	655	6000
65040-09	GL175D-I	175	60	500	755	6000
65040-10	GL175E-I	175	60	600	855	6000
65040-11	GL200A-I	200	65	200	495	10000
65040-12	GL200B-I	200	65	300	595	10000
65040-13	GL200C-I	200	65	400	695	10000
65040-14	GL200D-I	200	65	500	795	10000
65040-15	GL200E-I	200	65	600	895	10000
65040-16	GL300A-I	300	80	200	535	12000
65040-17	GL300B-I	300	80	300	635	12000
65040-18	GL300C-I	300	80	400	735	12000
65040-19	GL300D-I	300	80	500	835	12000
65040-20	GL300E-I	300	80	600	935	12000
65040-21	GL300F-I	300	80	700	1035	12000
65040-22	GL300G-I	300	80	800	1135	12000

Milling Machine Accessories

65080 SCV90 Self Centering Vise



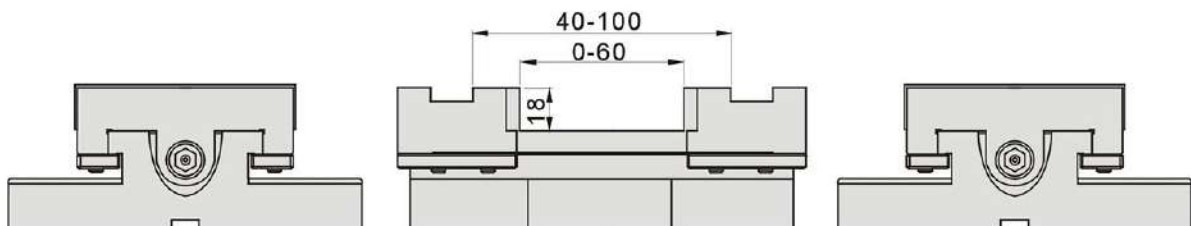
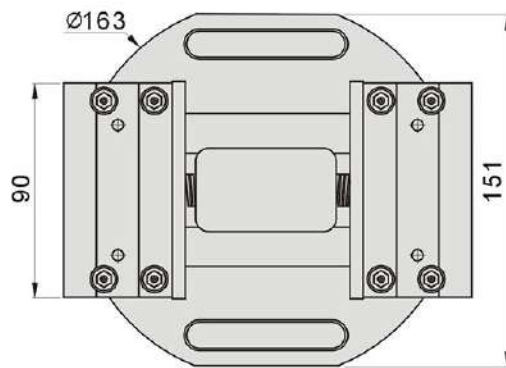
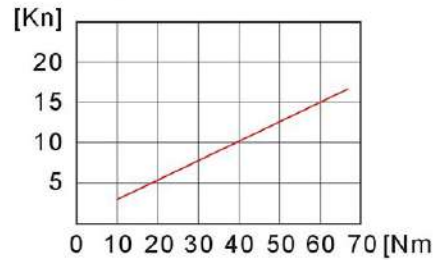
N.W.8kg

Features:

- ▶ Suitable for 4th, 5th axis, CNC rotary table and horizontal/vertical CNC milling machine.
- ▶ Repeating center accuracy is $\pm 0.01\text{mm}$.
- ▶ Body is made of alloy steel and the rail is with high frequency heat treatment above HRC45° which achieve high wear resistance.
- ▶ Jaw face adopting full steel with heat treatment reach over HRC 55°, interchangeability is flexible.
- ▶ Lock tight system to prevent floating for better efficiency.

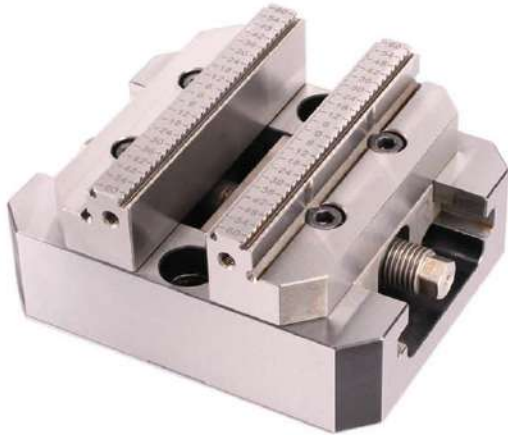


CLAMPING CURVE



MILLING MACHINE ACCESSORIES

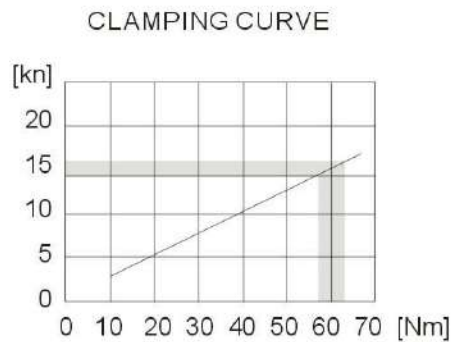
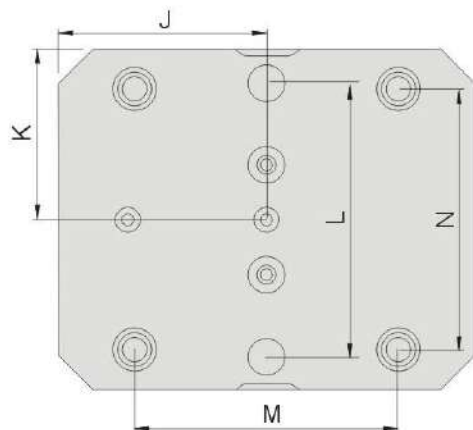
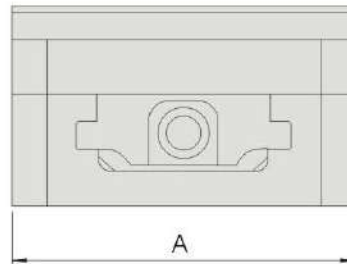
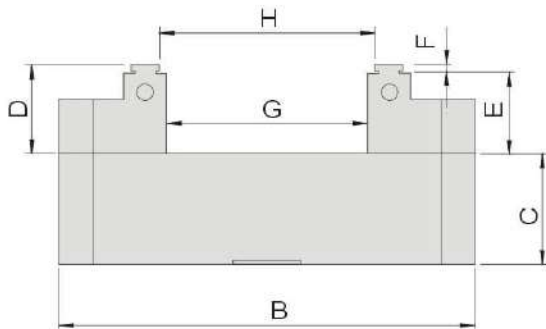
65085 SCV Self Centering Vise



Features:

- ▶ Suitable for 4th, 5th axis, CNC rotary table and horizontal/vertical CNC milling machine.
- ▶ Repeating center accuracy is ± 0.01 mm.
- ▶ Body is made of alloy steel and the rail is with high frequency heat treatment above HRC45° which achieve high wear resistance.
- ▶ Jaw face adopting full steel with heat treatment reach over HRC 55°, interchangeability is flexible.
- ▶ Lock tight system to prevent floating for better efficiency.

MILLING MACHINE ACCESSORIES



Order No.	Model	A	B	C	D	E	F	G	H	J	K	L	M	N	N.W.
65085-01	SCV1275	127	127	42	33	30	3	46	51	63.5	63.5	101	96	96	7kg
65085-02	SCV1276		153					72	79	76.5					8kg
65085-03	SCV1278		210					129	135	105					9kg
65085-04	SCV12710		255					175	182	127.5					10kg

Unit:mm

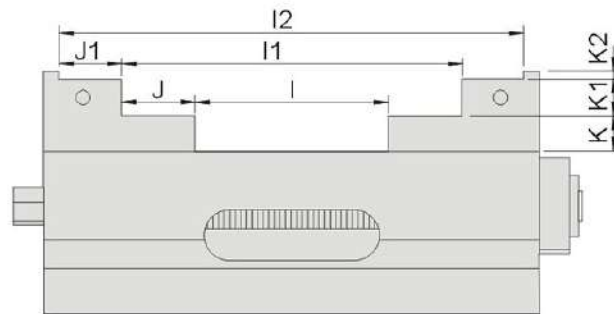
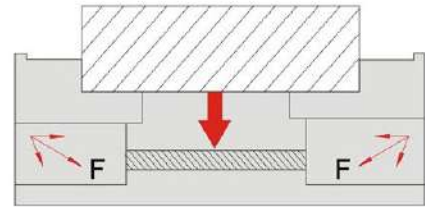
Milling Machine Accessories

65086 SCV Self Centering Vise

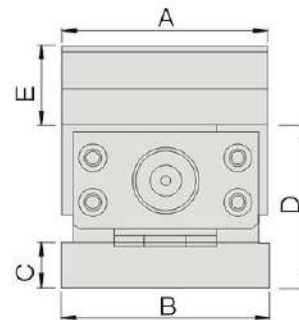
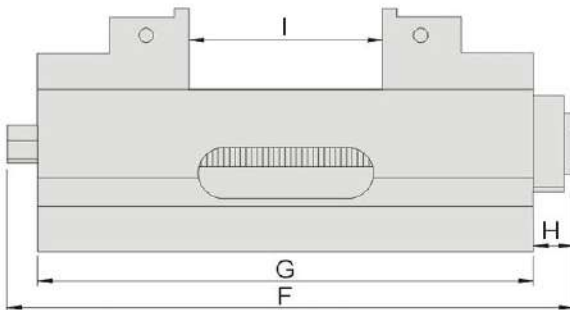
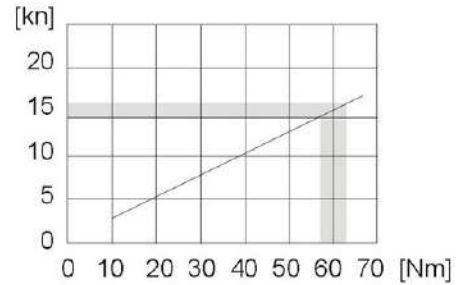


Features:

- ▶ Suitable for 4th, 5th axis, CNC rotary table and horizontal/vertical CNC milling machine.
- ▶ Repeating center accuracy is $\pm 0.01\text{mm}$.
- ▶ Body is made of FCD60 and the rail is with high frequency heat treatment above HRC45° which achieve high wear resistance.
- ▶ Jaw face adopting full steel with heat treatment reach over HRC 55°, interchangeability is flexible.
- ▶ Lock tight system to prevent floating for better efficiency.



CLAMPING CURVE



Order No.	Model	A	B	C	D	E	F	G	H	I	I1	I2	J	J1	K	K1	K2	N.W.
65086-01	SCV60	59	60	18	60	25	143	120	13	0~50	38~85	--	17.5	--	12.5	12.5	--	4.5kg
65086-02	SCV100	100	101	22	80	40	260	240	20	0~90	70~160	134~222	35	31	18	18	4	17.5kg
65086-03	SCV160	160	161	22	105	55	440	370	70	0~200	86~285	--	42.5	--	27.5	27.5	--	47.5kg

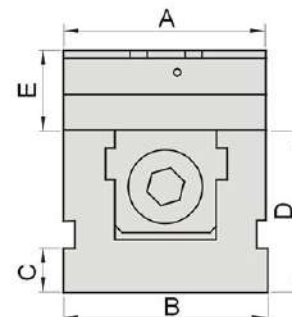
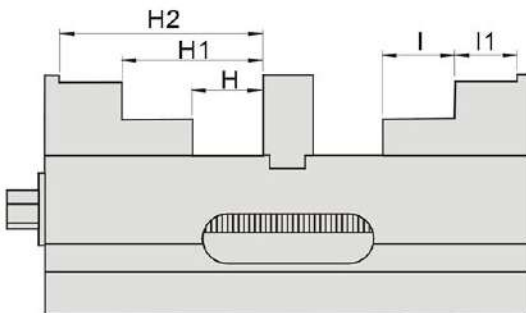
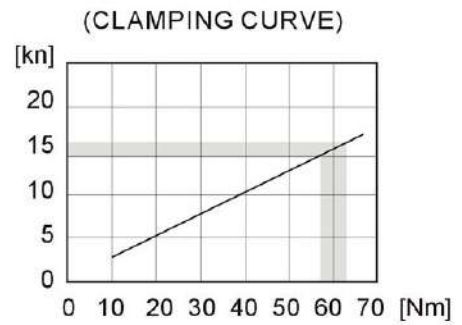
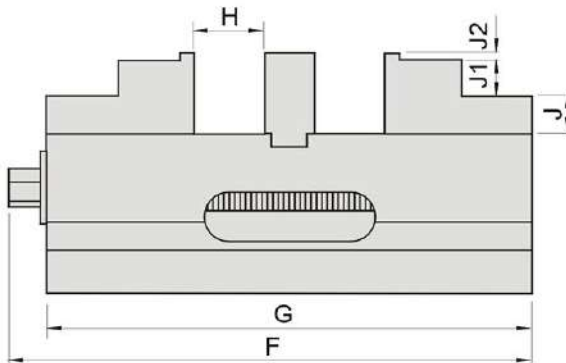
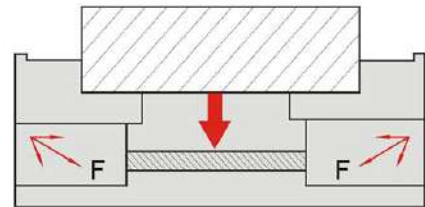
Unit:mm

65087 SDV100 Double-Lock Mechanical Vise



Features:

- ▶ Capable of clamping two different sizes workpieces at the same time.
- ▶ Fixed block in the middle can be dismantled for clamping larger workpiece.
- ▶ Suitable on small CNC machining center.
- ▶ Special angle lock design and effectively reduce the workpiece floating.
- ▶ Optional soft jaws are available on request.



Unit:mm

Order No.	Model	A	B	C	D	E	F	G	H	H1	H2	I	I1	J	J1	J2	N.W.
65087	SDV100	100	101	22	80	40	260	240	0~35	35~70	66~100	35	31	18	18	4	18.5kg

铣床附件
 MILLING MACHINE ACCESSORIES

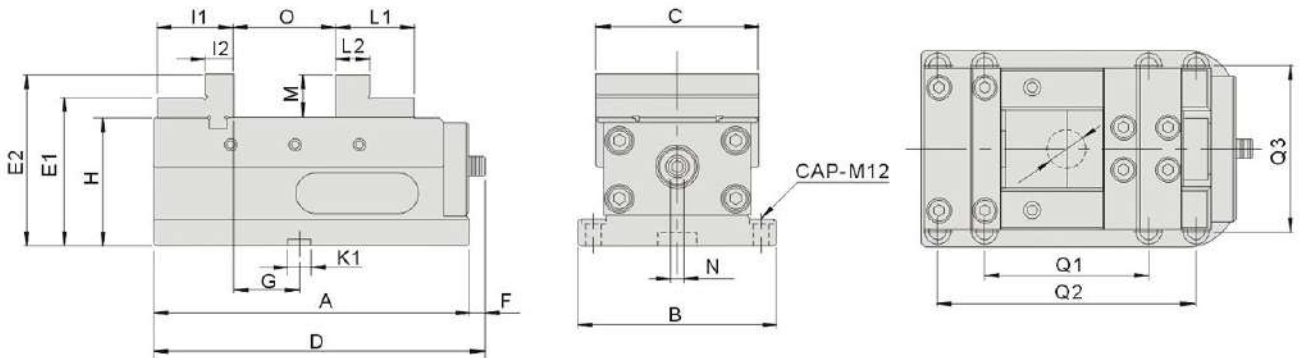
Milling Machine Accessories

65088 GEX-125 5-Axis Mechanical Power Vice



Features:

- ▶ Built-in mechanical booster, maximum steady clamping force up to 40KN, suitable for working on all kinds of hard and soft workpiece.
- ▶ Compact size well fit with 5-Axis MC machine center, horizontal and vertical machine center. It can also work with rotary device and relevant machine.
- ▶ Patented Mechanical Booster is fully sealed against dust, chips and cutting fluid for increasing durability.
- ▶ Unique Anti-Lift mechanism ensures the workpiece does not deflect and lift.
- ▶ SKS3 steel has applied to the body and the slide face is with high frequency heat treatment with above Hs60° in order to enhance the accuracy and the wear resistance.
- ▶ Jaw is made of S50C with carburising heat treated the hardness is above HRC54°.



Unit:mm

Order No.	Model	A	B	C	D	E	F	G	H	I1	I2	K1
65088	GEX-125	245	154	126	257	34	12	51	100	59	22	18

Order No.	Model	K2	L1	L2	N	O	Q1	Q2	Q2	Clamping Force	N.W.
65088	GEX-125	∅30	61	26	10	102	127	200	130	40KN	20kg

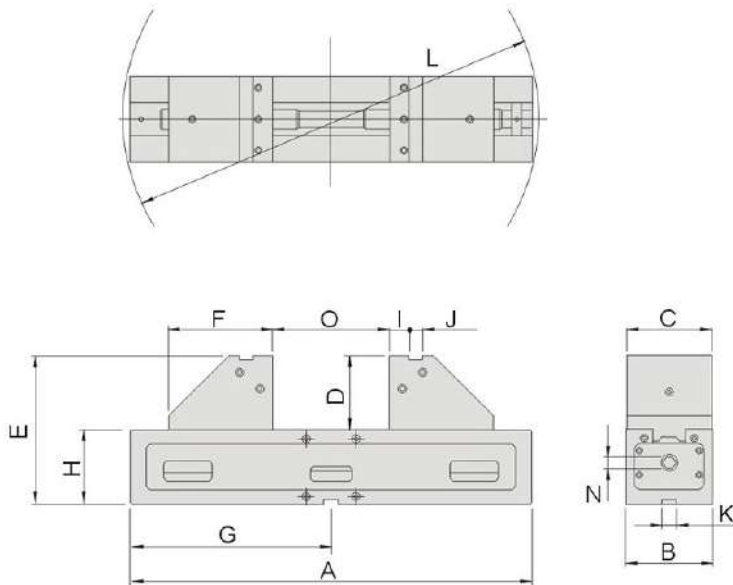
65089 ALT Anit-lift 5-Axis Machine Vise



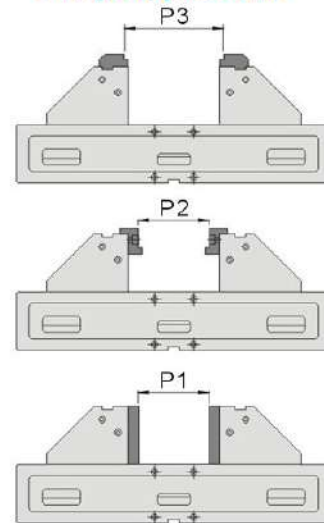
Features:

- ▶ Specially designed for 5-axis machining center and with higher structure to avoid interference of spindle.
- ▶ Anti-Lift mechanism & semi-spherical segment ensures workpiece does not lift and prevent workpiece loose from machining vibration.
- ▶ Both jaws are able to move simultaneously to shorten the distance.
- ▶ Rigid structure: FCD60 (vise body), & Alloy steel (Jaws) & slide surface is well hardened to maintain the accuracy as well as the wear resistance.
- ▶ Tolerance of center of workpiece clamp position and vise body within 0.01mm.

MILLING MACHINE ACCESSORIES



3 Ways Applications



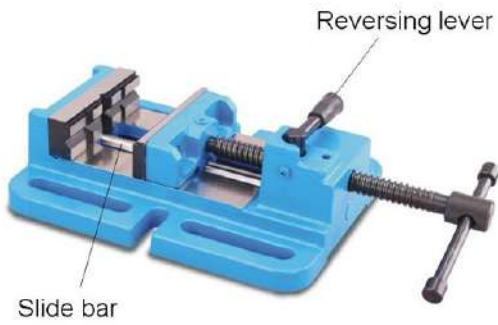
Model	P1	P2	P3
ALT-100S	-	-	10~40
ALT-100M	0~44	12~44	10~84
ALT-100L	0~200	12~200	10~210

Unit:mm

Order No.	Model	A	B	C	D	E	F	G	H	I	J	K	L	N	O	Force	N.W.
65089-01	ALT-100S	284				175		140	85				300		0~30	20KN	17kg
65089-02	ALT-100M	324	104	102	90	175	125	162	85	24	16	18	350	14	0~74	20KN	20kg
65089-03	ALT-100L	484				180		242	90				500		10~232		30kg

Milling Machine Accessories

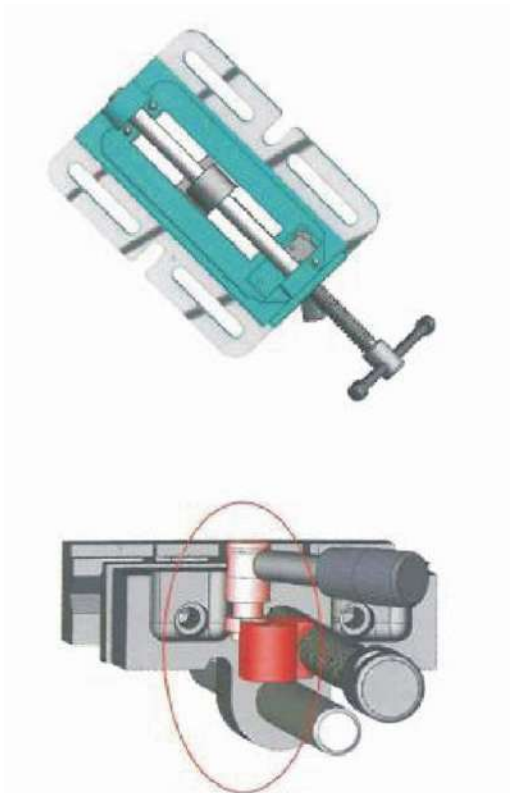
65118 HDC100 Super Quick Jaw Vise



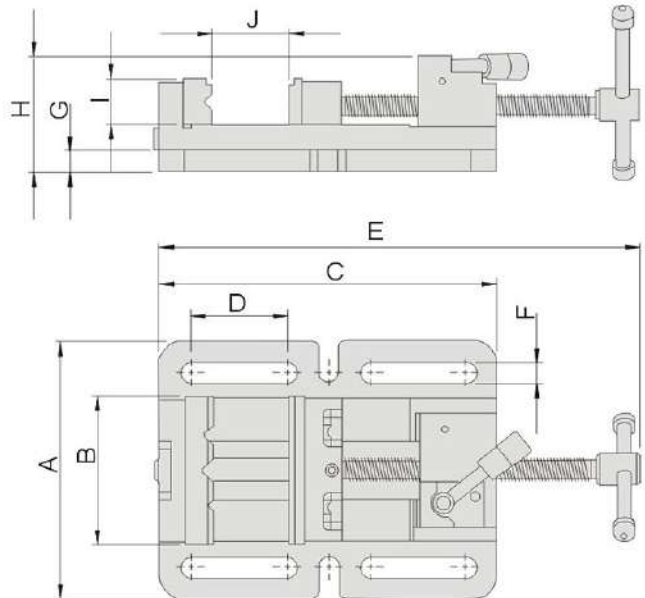
MILLING MACHINE ACCESSORIES

Features :

- ▶ Suitable for clamping work piece on drill press machine or milling machine.
- ▶ Quick motion mechanism design makes clamping and releasing work piece promptly by swiveling the reversing lever.
- ▶ Slide bar design makes work piece is firmly fixed by jaw pair without any inclined situation of the jaws.
- ▶ Designed with solid structure, main body is made of FC15, assemble a pair of heat treated steel jaws with hardness HRC45°~50°.
- ▶ Jaw pair and handle are surface treated by oxide finish.
- ▶ Front fixed prismatic jaw with cross V-grooves is designed for clamping work piece firmly in both vertical & horizontal directions.



Quick motion mechanism

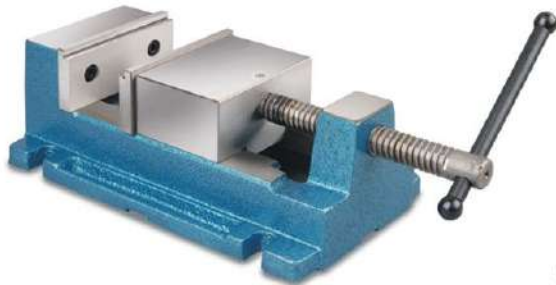


Order No.	Model	A	B	C	D	E	F	G	H	I	J	Max.clamping force	N.W.
65118	HDC100	180	104	235	66.5	390	14	16.5	73	32	105	1000kgs	6.5kg

Unit:mm

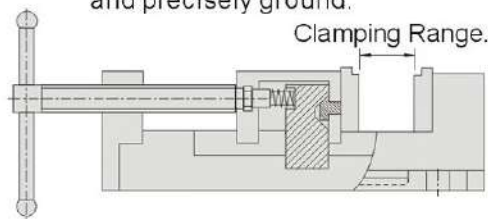
Milling Machine Accessories

65120 HDV Angle Lock Drill Press Vice



Features:

- ▶ Angle Lock Mechanism produces downward pressure on Jaw during clamping, ensuring that both jaws are parallel and workpiece is held accurately.
- ▶ Made of high tensile FCD55 Ductile Iron.
- ▶ Slideway and underside of vice are precisely ground.
- ▶ The Stepped Jaw Plates are hardened to HRC 50° and precisely ground.

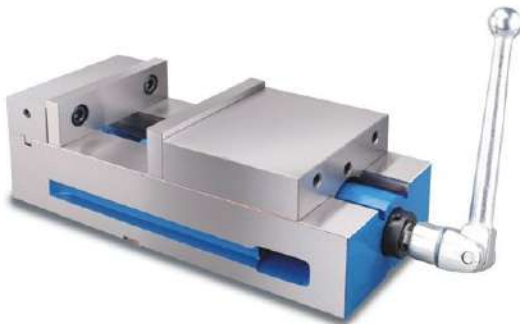


Unit:mm

Order No.	Model	Jaw Plate Height	Jaw Plate Width	Clamping Range.	N.W.
65120-100	HDV-100	43	100	0~90	6.6kg
65120-130	HDV-130	43	130	0~90	8.2kg

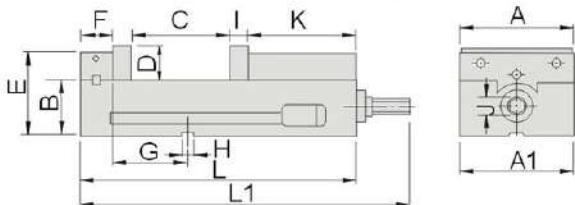
MILLING MACHINE ACCESSORIES

65130 HLG Lock-Tight Precision Machine Vice



Features:

- ▶ Lock-tight system ensures the workpiece does not lift.
- ▶ 80,000 PSI (FCD60) Ductile Iron body, HRC 45° hardened.
- ▶ Sealed bearing system reduces clamping pressure and increase bearings life.
- ▶ Clamping force reaches 8,200lbs (37800N)
- ▶ Angle Lock Mechanism produces downward pressure on Jaw during clamping, ensuring that both jaws are parallel and workpiece.
- ▶ Horizontal/Vertical dual-use type is optional.



Unit:mm

Order No.	Model	A	A1	B	C	D	E	F	G	H	I	J	K	L	L1	N.W.
65130-40	HLG40H	102	105	68	125	40	100	47	82.6	18	21	14	106	330	372	21kg
65130-50	HLG50H	127	128	70	158	38	104	45	73	18	17	19	117	360	410	26kg
65130-60	HLG60H	153	154	73	150	44.5	111	57	123	18	18	19	140	390	455	36.5kg
65130-60L	HLG60HL	150	152	92	280	44	138	46	84	18	18	19	125	485	540	41kg

Milling Machine Accessories

65136/38 HMG/HMR Versatile Milling Vise

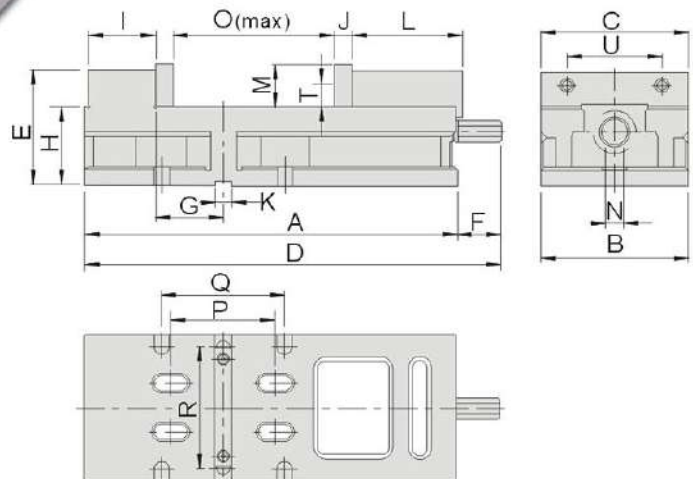
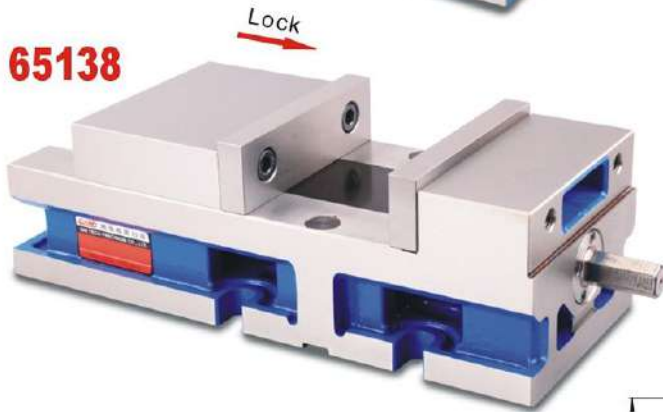
65136



Features:

- ▶ Prevents lift of workpiece and high accuracy.
- ▶ All faces are precisely ground and so triple usage; vertical & horizontal and side ways.
- ▶ Material of FCD60(80,000PSI) Ductile Iron body with hardened HRC45°.

65138



Order No.	Model
65136-40	HMG40
65136-60	HMG60
65138-40	HMR40
65138-60	HMR60

Unit:mm

Model	A	B	C	D	E	F	G	H	I	J
HMG / HMR40	316	104	102	344	91.5	28	63.5	63.5	50.8	15
HMG / HMR60	385	152.45	151	431.8	118.7	46.8	69.84	81	69.9	18

Model	K	L	M	N	O	P	Q	R	T	U	N.W.
HMG / HMR40	12.7	100	35	14	130	85	101.6	80	17.5	63.5	20kg
HMG / HMR60	18	114.3	44.5	19	163	107.95	127	127	23.8	98.4	31kg

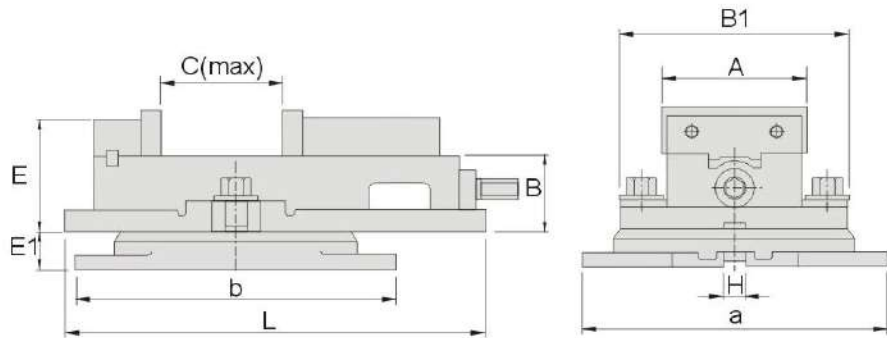
65140 HLV Precision Angle Lock Machine Vise



Features:

- ▶ Economic type.
- ▶ Jaw perpendicularity and parallelism with in 0.05mm
- ▶ Induction and Flame Hardening Processes, HRC40°-45°
- ▶ Angle design for the slide, 45° down force when clamped.
- ▶ Graduation reading on the base 360° swivel.
- ▶ Vise and base can be ordered separately.

MILLING MACHINE ACCESSORIES



Unit:mm

Order No.	Model					N.W.
65140-40	HLV40	107	154	220	271	19.0kg
65140-50	HLV50	110	163	249	304	28.9kg
65140-60	HLV60	150	220	305	368	38.0kg
65140-80	HLV80	198	264	402	476	69.5kg

Order No.	Model	A	a	B	B1	b	C	E	E1	H	L
65140-40	HLV40	103	230	58	172	242	107	87	30	14	318
65140-50	HLV50	133	256	66	210	280	110	98	32	14	355
65140-60	HLV60	150	300	72	238	326	150	110	39	24	418
65140-80	HLV80	210	380	85	301	420	200	136	45	24	555

Milling Machine Accessories

65150 HAT Precision Angle Lock Machine Vise

HAT-660

6.0" Opening

HAT-675

7.5" Opening

HAT-689

8.9" Opening

Spindle nut does not protrude over the end of body.

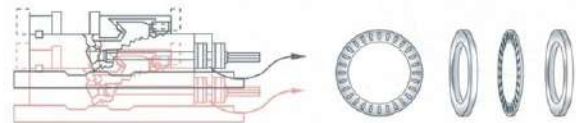
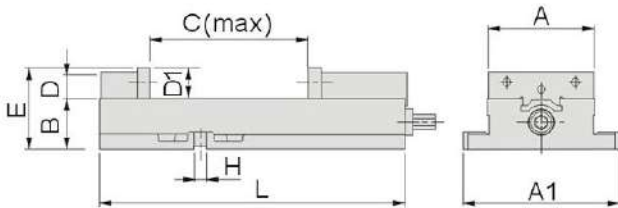
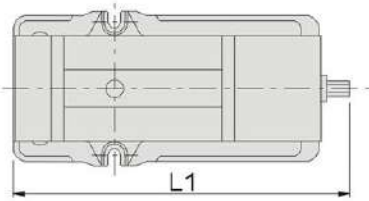
HAT-810

10" Opening

Clamping Force: 11,600IBS.

Features :

- ▶ Ultra-precision in datum sliding surface, parallelism and perpendicularity.
- ▶ Anti-floating structure, reduce the floating when clamping.
- ▶ 80,000PSI FCD-60 Ductile Iron body with hardened HRC45°.
- ▶ Standard distance from T-slot to fixed Jaw.
- ▶ Sealed bearing system reduces clamping force and increases bearings life.
- ▶ Fixed jaw has machined T-slot for alignment of the vise and in
- ▶ Clamping Force 8200lbs (37800N)
- ▶ Jaw plate perpendicularity and parallelism is within 0.03mm.



8200lbs Clamping Force

Anti-floating System

Sealed Bearing System

Ductile Iron Body.

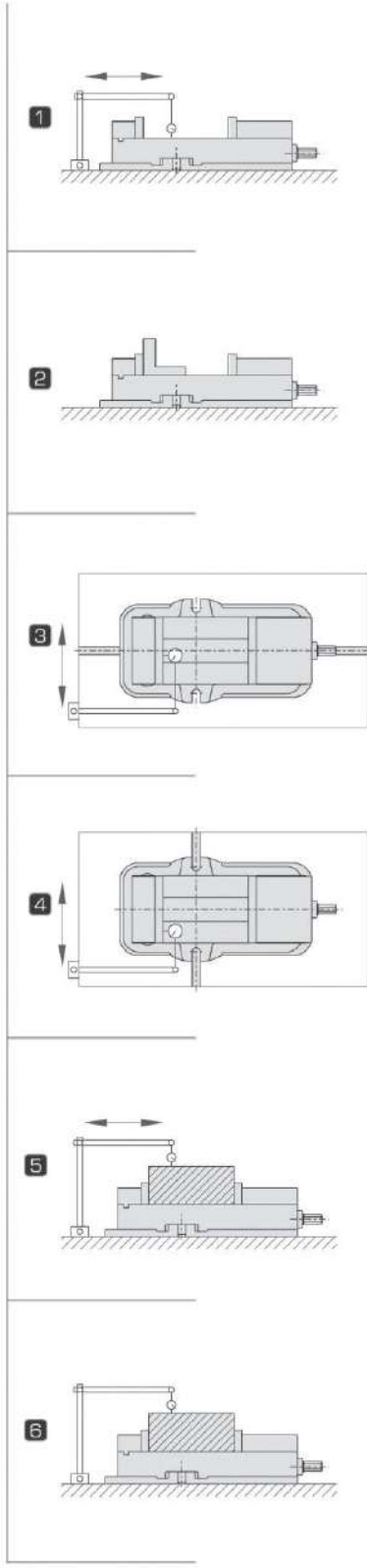


Order No.	Model	A	A1	B	C	D	D1	E	H	L	L1	N.W.
65150-660	HAT660	152	238	72	156	38	44.5	114.0	18	405	435	28.4kg
65150-675	HAT675	152	235	73.025	192	38	44.5	117.525	18	432	485	32.3kg
65150-689	HAT689	152	222	73.025	226	38	44.5	117.525	18	437	481	34.3kg
65150-810	HAT810	203	295	84.074	265	50	56	140.074	21	555	585	66.4kg

Unit:mm

65150 HAT Precision Angle Lock Machine Vise

Static



HAT660



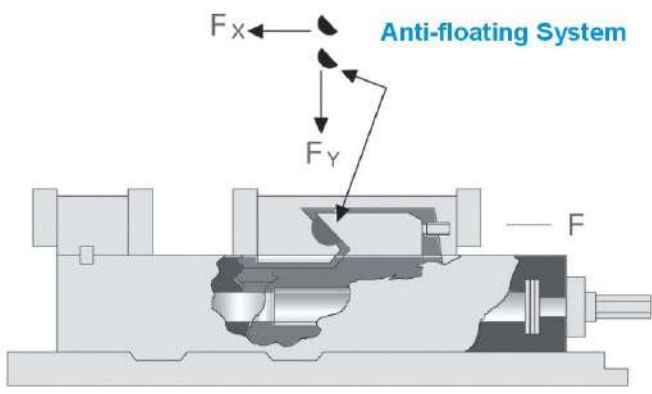
HAT675



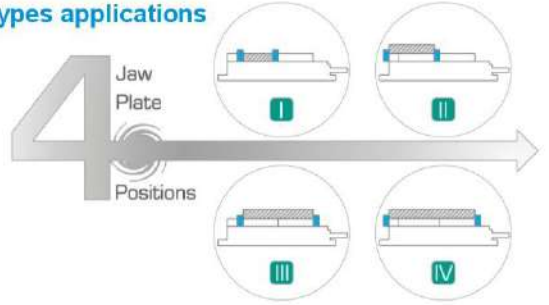
HAT689



HAT810



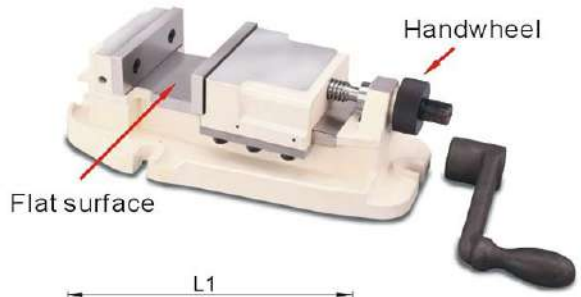
Four types applications



MILLING MACHINE ACCESSORIES

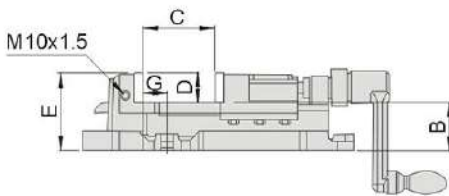
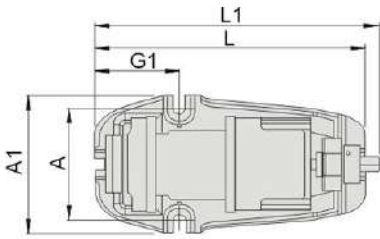
Milling Machine Accessories

65155 MBV Precision Machine Vise



Features:

- ▶ Flat surface no slot between slide guide rail preventing chip burr go inside.
- ▶ Material of 80,000PSI FCD-60 Ductile Iron body with hardened HRC45°.
- ▶ Special design of handwheel at the end of screw rod shaft for fast operation.



Order No.	Model	A	A1	B	C	D	E	G	G1	L	L1	N.W.
65155-125	MBV125	130	184	65	93.9	40	105	31	111	358	375.9	21kg
65155-150	MBV150	150	214	70	117	45	115	40	145	467	489	28kg

Unit:mm

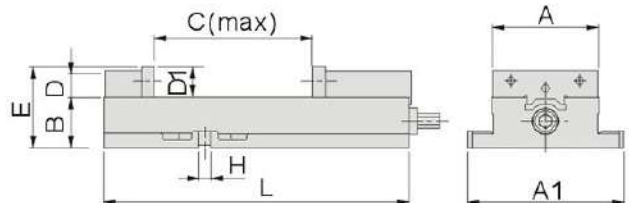
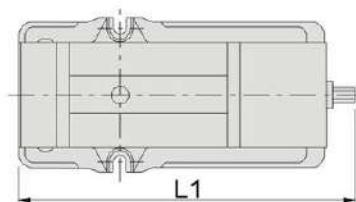
MILLING MACHINE ACCESSORIES

65158 EAT690 Precision Angle Lock Machine Vise



Features:

- ▶ Adopting high-frequency induction heating with HRC40°~45°.
- ▶ Angle lock design, it has clamping 45 downforce preventing workpiece lifting.
- ▶ Jaw plate perpendicularity and parallelism is within 0.05mm.



Order No.	Model	A	A1	B	C	D	D1	E	H	L	L1	N.W.
65158	EAT690	152	225	73	229	37	45	118	18	440	495	34.3kg

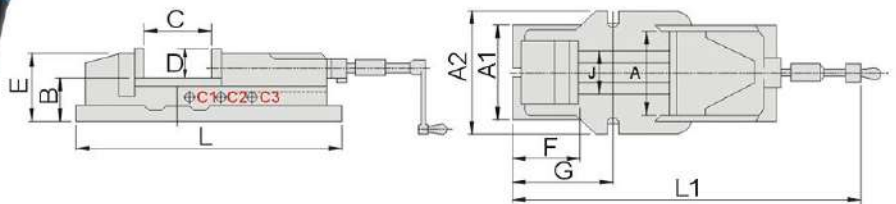
Unit:mm

65200 HVA Hydraulic Machine Vise



Features:

- ▶ Made of hardened Alloy Steel and precisely ground.
- ▶ With hydraulic system, workpieces are easily clamped.



Unit:mm

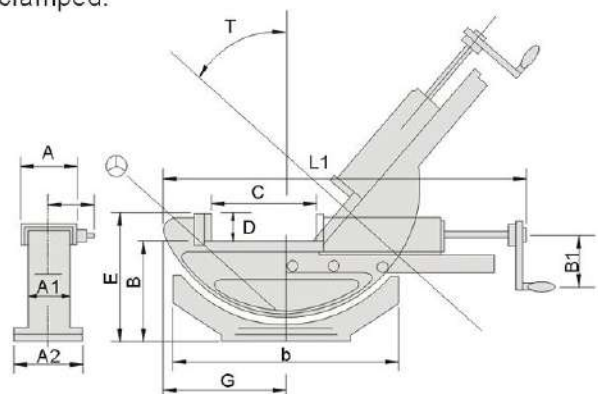
Order No.	Model	A	A1	A2	B	Clamping Range				D	E	F	G	J	L	L1	Force	Body (N.W.)	Base (N.W.)
						C	C1	C2	C3										
65200-100	HVA100	105	135	170	58	0-170	0-57	55-114	112-170	36	95	95	147	80	440	525	2500kgf	21kg	7kg
65200-125	HVA125	130	175	207	70.5	0-220	0-73	72-146	145-220	48	120	107	195	97	550	670	3000kgf	38kg	8kg
65200-150	HVA150	150	182	225	82.5	0-300	0-100	98-200	198-300	53	135	117	240	116	620	800	4500kgf	53kg	11kg
65200-200	HVA200	200	260	280	100	0-300	0-100	99-200	198-300	62	162	150	260	160	680	900	8000kgf	95kg	13kg

65210 HWV Tilting Hydraulic Machine Vise



Features:

- ▶ Tilt up and down with swivel base 360°.
- ▶ High quality casting with ground finish.
- ▶ With hydraulic system, workpieces are easily clamped.



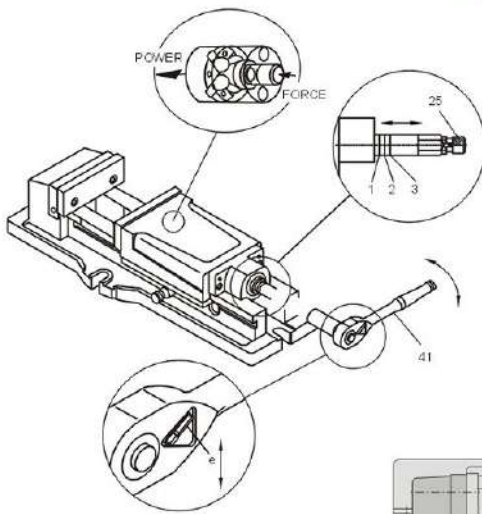
Unit:mm

Order No.	Model	A	A1	A2	B	B1	b	Clamping Range				D	E	G	L1	T	Body (N.W.)	Base (N.W.)
								C	C1	C2	C3							
65210-100	HWV100	100	65	160	141	80	325	0-170	0-57	55-114	110-170	36	177	170	505	50°	22.5kg	4.0kg
65210-150	HWV150	150	95	240	186	100	410	0-300	0-100	98-200	198-300	51	237	200	775	50°	68.5kg	10.0kg

MILLING MACHINE ACCESSORIES

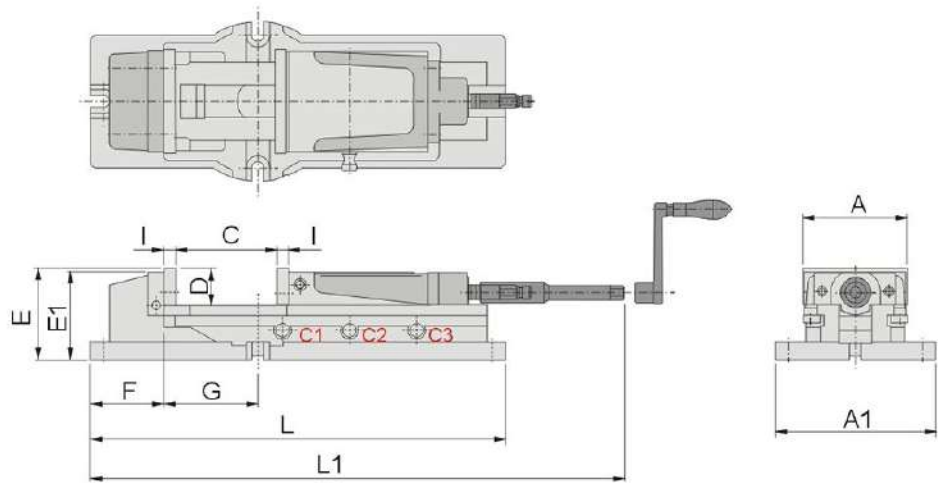
Milling Machine Accessories

65220 HMP Mechanical Power Machine Vise



Features :

- ▶ Unique ball design structure to provide superb clamping force with holding strength to enhance the processing accuracy.
- ▶ Many tones of pressure can be applied to workpieces with little effort while operating the
- ▶ HMP vise, which will never loosen the grip on a workpiece by itself. Loosen can be done manually.
- ▶ Suitable for milling, grinding, drilling, shaping and production as any other types of usage.



Unit:mm

Order No.	Model	Clamping Range			
		C	C1	C2	C3
65220-50	HMP50	0-220	0~72	70~140	135~220
65220-60	HMP60	0-300	0~100	98~200	195~300
65220-80	HMP80	0-300	0~100	98~200	195~300

Order No.	Model	A	A1	D	E	E1	F	G	I	L	L1	N.W.
65220-50	HMP50	130	185	46	118	117	105	82	15	538	670	37.9kg
65220-60	HMP60	154	225	54	133	132	100	140	17	620	800	56.8kg
65220-80	HMP80	206	280	62	162	160	135	118	21	700	900	96.3kg

65230 GPHV Hydraulic Power Machine Vise

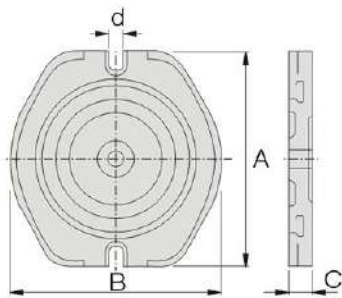
Features :

- ▶ Hydraulic power can be applied separately, both also can be used at the same time with max clamping force 6,000 kg
- ▶ Down thrust semi-sphere segment mechanism eliminates jaw lifting and work tilt.
- ▶ Slide and the surface are precision ground.
- ▶ Made of Ductile Iron FCD60.
- ▶ Vise bed flame hardened to HRC 45° to ensure long lasting wear-resistance and accuracy.
- ▶ Most suitable for milling processing, molding purposes.



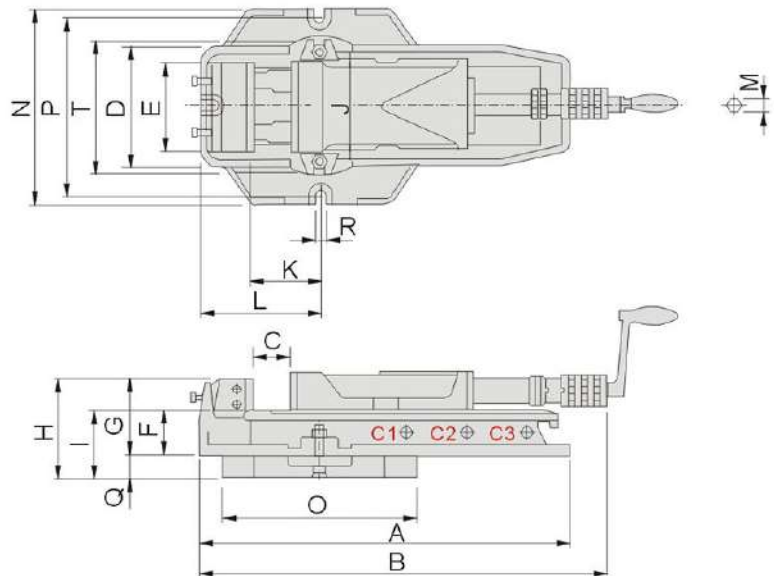
MILLING MACHINE ACCESSORIES

Swivel Base (Optional)



單位:mm

Order No.	A	B	C	Weight(kg)
GPHV-125	280	266	32	12
GPHV-160	330	310	35	16
GPHV-200	375	355	40	16



Order No.	Model	A	B		Clamping Range				D	E	F	G	H	I	J	L	M	N	O	P	Q	R	T	Force (kgf)	N.W.
			Min.	Max.	C	C1	C2	C3																	
65230-01	GPHV-125	505	570	795	0~220	0~72	70~140	135~220	170	130	72	127	160	106	75	180	14	280	266	260	32	16	190	3500	40kg
65230-02	GPHV-160	605	625	935	0~310	0~102	100~205	200~310	210	160	82	140	192	117	101	195	14	334	320	310	35	18	240	4000	70kg
65230-03	GPHV-200	700	725	1035	0~310	0~102	100~205	200~310	240	200	100	163	240	146	115	265	14	420	420	390	50	18	280	6000	115kg

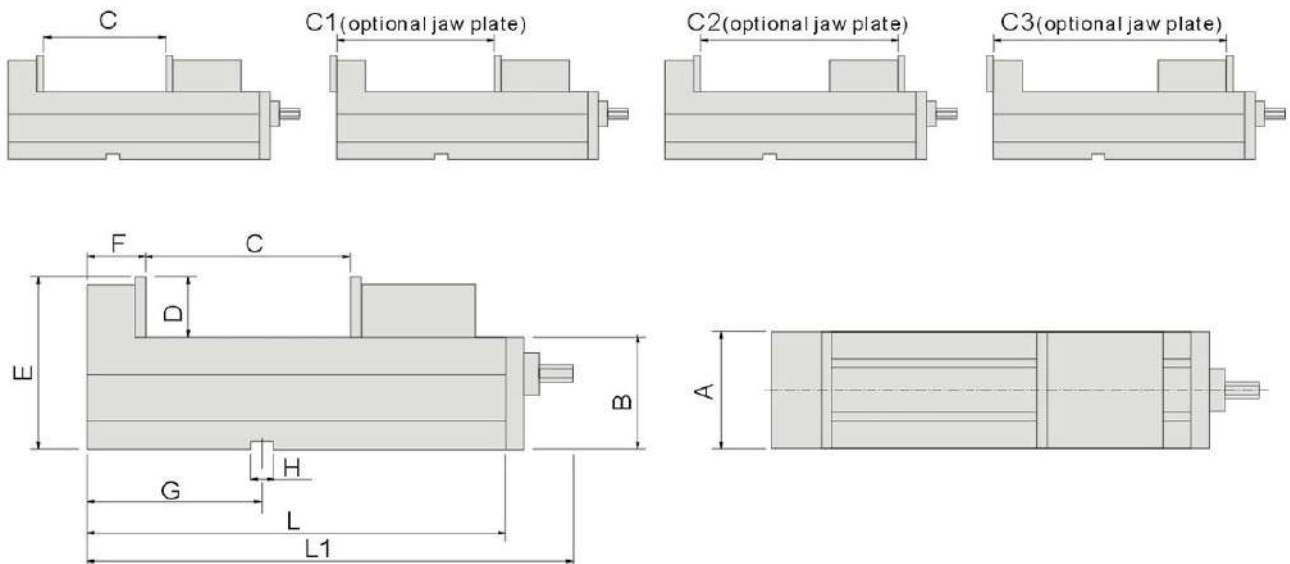
Unit:mm

Milling Machine Accessories

65270 GCV Precision Mechanical Machine Vise

Features:

- ▶ Mechanical constructure.
- ▶ Suitable for vertical/horizontal milling machine, can be applied parallel.
- ▶ Down thrust semi-sphere segment mechanism eliminates jaw lifting and work tilt.
- ▶ Slide and the surface are precision ground.
- ▶ Made of Ductile Iron FCD60 JIS (60kgs/mm² / 80000psi).
- ▶ Vise bed flame hardened to HRC 45° to ensure long lasting wear-resistance and accuracy.



Unit:mm

Order No.	Model	A	B	Clamping Range				D	E	F	G	H	L	L1	N.W.
				C	C1	C2	C3								
65270-01	GCV-100	101	85	125	190	230	320	48	133	80	125	16	340	470	26kg
65270-02	GCV-130	131	95	180	240	290	380	55	150	85	150	18	405	535	39kg
65270-03	GCV-160	161	105	240	320	360	470	58	163	100	165	18	495	625	57kg
65270-04	GCV-200	201	110	280	360	420	540	63	173	108	190	18	570	700	86kg

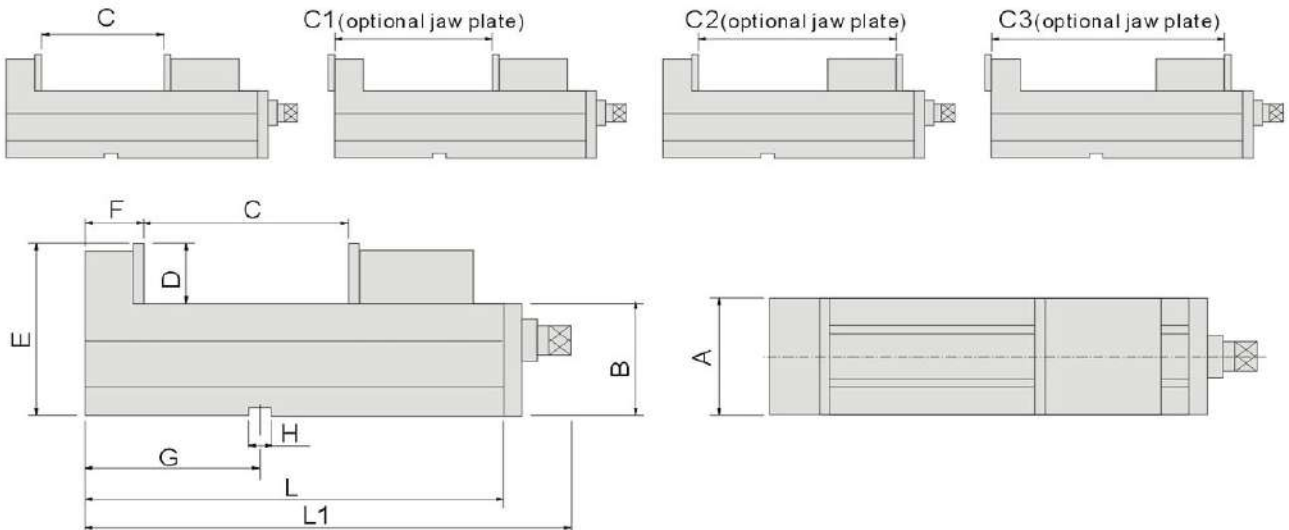
65280 GCHV Precision Hydraulic Machine Vise



Features:

- ▶ Hydraulic constructure.
- ▶ Suitable for vertical/horizontal milling machine, can be applied parallel.
- ▶ Down thrust semi-sphere segment mechanism eliminates jaw lifting and work tilt.
- ▶ Slide and the surface are precision ground.
- ▶ Made of Ductile Iron FCD60 JIS (60kgs/mm² / 80000psi).
- ▶ Vise bed flame hardened to HRC 45° to ensure long lasting wear-resistance and accuracy.

MILLING MACHINE ACCESSORIES



Order No.	Model	A	B	Clamping Range				D	E	F	G	H	L	L1	Force (kgf)	N.W.
				C	C1	C2	C3									
65280-01	GCHV-100	101	85	125	190	230	320	48	133	80	125	16	340	470	4000	27kg
65280-02	GCHV-130	131	95	180	240	290	380	55	150	85	150	18	405	535	4000	40kg
65280-03	GCHV-160	161	105	240	320	360	470	58	163	100	165	18	495	625	5500	58kg
65280-04	GCHV-200	201	110	280	360	420	540	63	173	108	190	18	570	700	6900	87kg

Unit:mm

Milling Machine Accessories

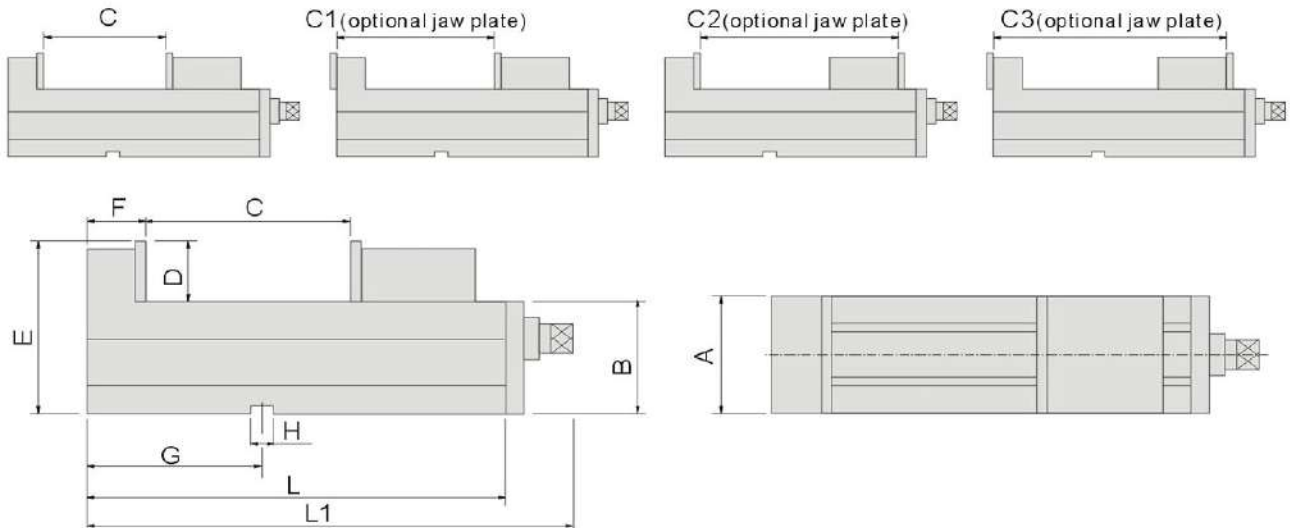
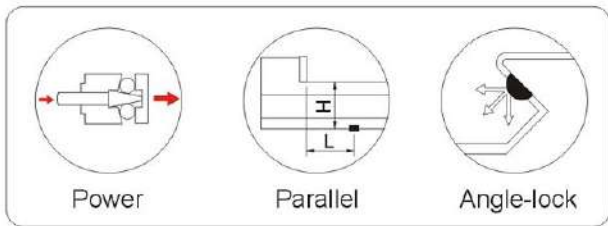
65290 GMV Precision Machine Vise



MILLING MACHINE ACCESSORIES

Features:

- ▶ Mechanical power can be applied separately, both also can be used at same time and can be applied in parallel.
- ▶ Down thrust semi-sphere segment mechanism eliminates jaw lifting and work tilt.
- ▶ Slide and the surface are precision ground.
- ▶ Made of Ductile Iron FCD60 JIS (60kgs/mm² / 80000psi).
- ▶ Vise bed flame hardened to HRC 45° to ensure long lasting wear-resistance and accuracy.



Unit:mm

Order No.	Model	A	B	Clamping Range				D	E	F	G	H	L	L1	Force (kgf)	N.W.
				C	C1	C2	C3									
65290-01	GMV-100	101	85	145	190	230	320	48	133	80	125	16	340	470	3500	27kg
65290-02	GMV-130	131	95	220	240	290	380	55	150	85	150	18	405	535	4000	40kg
65290-03	GMV-160	161	105	300	330	370	480	58	163	100	165	18	505	635	4000	58kg
65290-04	GMV-200	201	110	340	370	430	550	63	173	108	190	18	580	710	4500	87kg

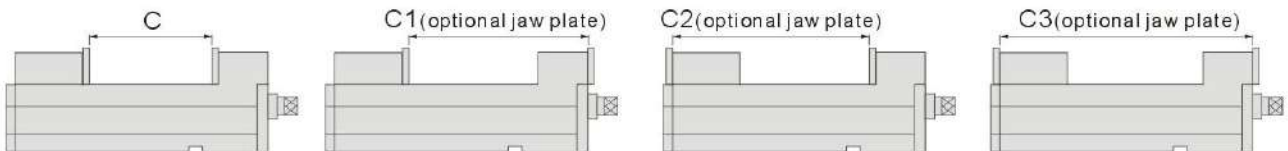
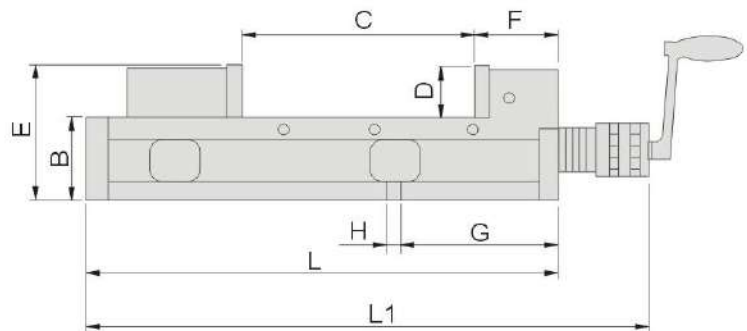
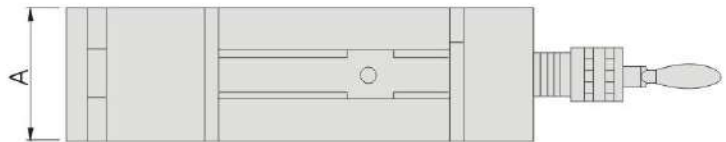
65320 GAHV Precision Hydraulic & Angle Look Vise

Features:

- ▶ Adopting fixed jaw on near side of the operator, makes easier for loading & unloading, increase efficiency and less fatigue.
- ▶ Made of Ductile Iron FCD60 JIS (60kgs/mm²). Anti-float structure, suitable for applying heavy duty milling job in machining center...



MILLING MACHINE ACCESSORIES



Unit:mm

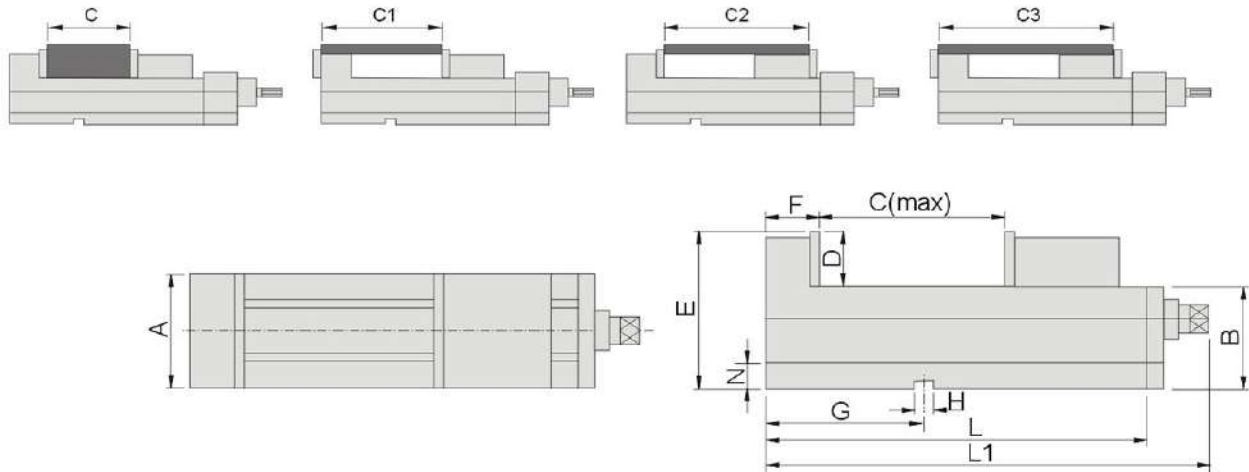
Order No.	Model	A	B	Clamping Range				D	E	F	G	H	L	L1	Force (kgf)	N.W.
				C	C1	C2	C3									
65320	GAHV-160	160	100	280	380	450	550	60	160	100	200	18	570	647	5000	90kg

Milling Machine Accessories

65330 MHV Precision Hydraulic Vise (Long Opening)

Features:

- ▶ Long opening design.
- ▶ Made of Ductile Iron FCD60 JIS (60kgs/mm²).



NOTE: Remove the dust cover to extend 90mm clamping range.

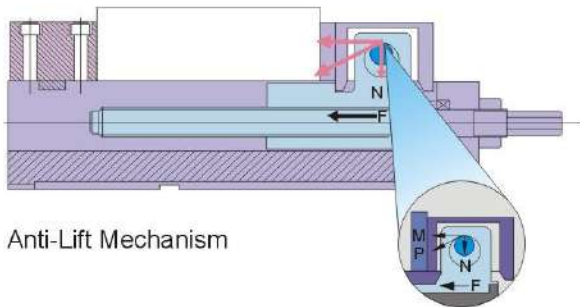
Unit:mm

Order No.	Model	Clamping Range			
		C	C1	C2	C3
65330-01	MHV-160LS	0~400	495	510	615
65330-02	MHV-200LS	0~490	590	605	715
65330-03	MHV-160L	300~650	745	760	865
65330-04	MHV-200L	400~730	830	845	955

Order No.	Model	A	B	D	E	F	G	H	L	L1	N	Force (kgf)	N.W.
65330-01	MHV-160LS	160	105	60	165	103	100	18	725	860	23	4400	80kg
65330-02	MHV-200LS	200	110	60	170	108	220	18	835	970	23	5500	100kg
65330-03	MHV-160L	160	105	60	165	103	100	18	1000	1130	23	4400	90kg
65330-04	MHV-200L	200	110	60	170	108	220	18	1100	1230	23	5500	130kg

Movable Jaw needs to be moved when clamping 0~400mm range for model 160L & 200L.

65340 HVL Precision Super Vise

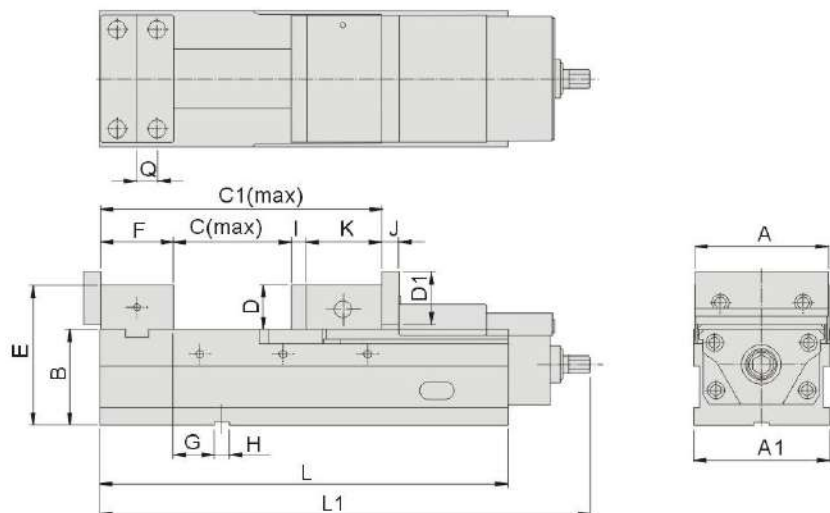


Anti-Lift Mechanism

Features:

- ▶ Specially made for milling and cutting machining, adopting Anti-Lift mechanism.
- ▶ Particularly design for workpiece that needs high precision.
- ▶ Max. clamping force 2000kg/cm².
- ▶ Bed height deviation: within ± 0.01 mm.
- ▶ Distance from keyway to fixed jaw deviation: within ± 0.01 mm
- ▶ Horizontal / Vertical dual usage, side use is capable, accuracy within ± 0.01 mm.

MILLING MACHINE ACCESSORIES



Unit:mm

Order No.	Model	A	A1	B	Clamping Range		D	D1	E	F	G	H	I	J	K	L	L1	Q	N.W.
					C	C1													
65340-40	HVL100	102	104	85	140	314.5	45	55	130	73	32	18	15	17	86.5	324	437	20	27kg
65340-50	HVL125	124.7	127	100	201	381.5	53	63	153	78	57	18	15	20	87.5	390	480	22.5	43kg
65340-60	HVL160	159.2	161	115	295	479	53	63	168	86	49	18	18	20	80	485	625	25	67kg

Milling Machine Accessories

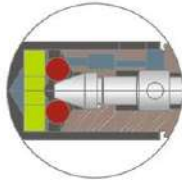
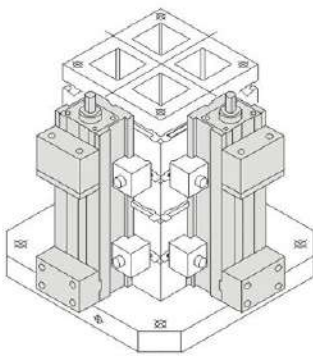
65350 HVQ Mechanical Power Machine Vise



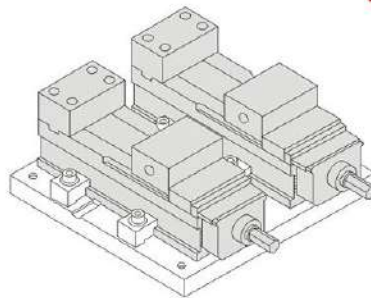
Features:

- ▶ Unique Out-Jaw design increase the clamping capacity.
- ▶ Anti-Lift mechanism to ensure the workpiece does not lift during processing.
- ▶ Mechanical booster provides a steady clamping force against shocks and vibrations during operation by using “Disc-spring” mounted inside.
- ▶ Improved dust and water resistance which increase durability.
- ▶ Bed height deviation: within ± 0.01 mm.
- ▶ Distance from keyway to fixed jaw deviation: within ± 0.01 mm
- ▶ Capable of vertical and lateral application and perform, accuracy within ± 0.01 mm.
- ▶ Made of Ductile Iron FCD60 JIS (80000psi).

MILLING MACHINE ACCESSORIES



Mechanical Booster



Jaw Opening:

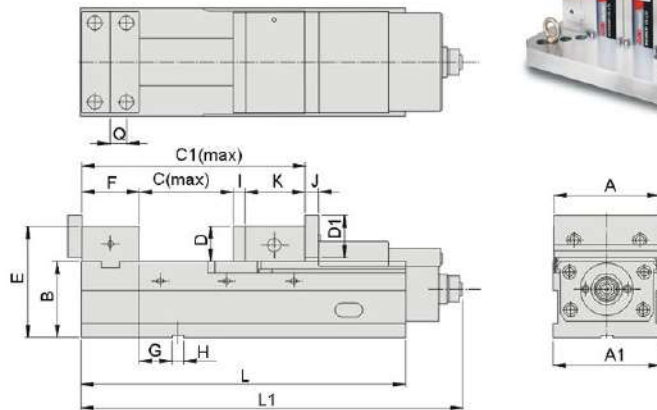
- HVQ100, max. 140mm
- HVQ125, max. 201mm
- HVQ160, max. 295mm
- HVQ200, max. 320mm

Extended Opening:

- HVQ160L, max. 330mm
- HVQ200L, max. 367.5mm

Clamping force is adjustable with graduation lines:

- HVQ100-4, max. 500kg/cm²
- HVQ125-5, max. 000kg/cm²
- HVQ160-5, max. 500kg/cm²
- HVQ200-6, max. 500kg/cm²



Unit:mm

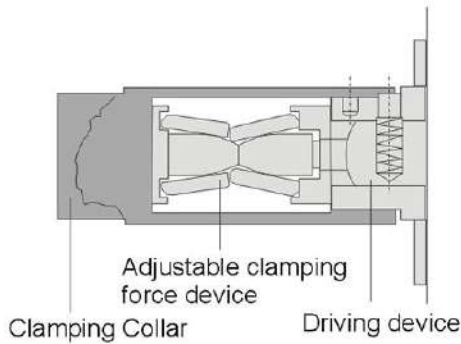
Order No.	Model	A	A1	B	Clamping Range		D	D1	E	F	G	H	I	J	K	L	L1	Q	N.W.
					C	C1													
65350-40	HVQ100	102	104	85	140	314.5	45	55	130	73	32	18	15	17	86.5	324	428	20	28.4kg
65350-50	HVQ125	124.7	127	100	201	381.5	53	63	153	78	57	18	15	20	87.5	390	495	22.5	46.0kg
65350-60	HVQ160	159.2	161	115	295	479	53	63	168	86	49	18	18	20	80	485	605	25	71.0kg
65350-60L	HVQ160L	159.2	161	115	330	514	53	63	168	86	67	18	18	20	80	515	635	25	76.0kg
65350-80	HVQ200	199.5	202	120	320	534	58	73	178	101	66	18	18	20	95	535	655	31	100kg
65350-80L	HVQ200L	200	202	120	367.5	581.5	58	73	178	101	84	18	18	20	95	585	713	31	108kg

65380 JQV Ultra-low Height Mechanical Power Vise

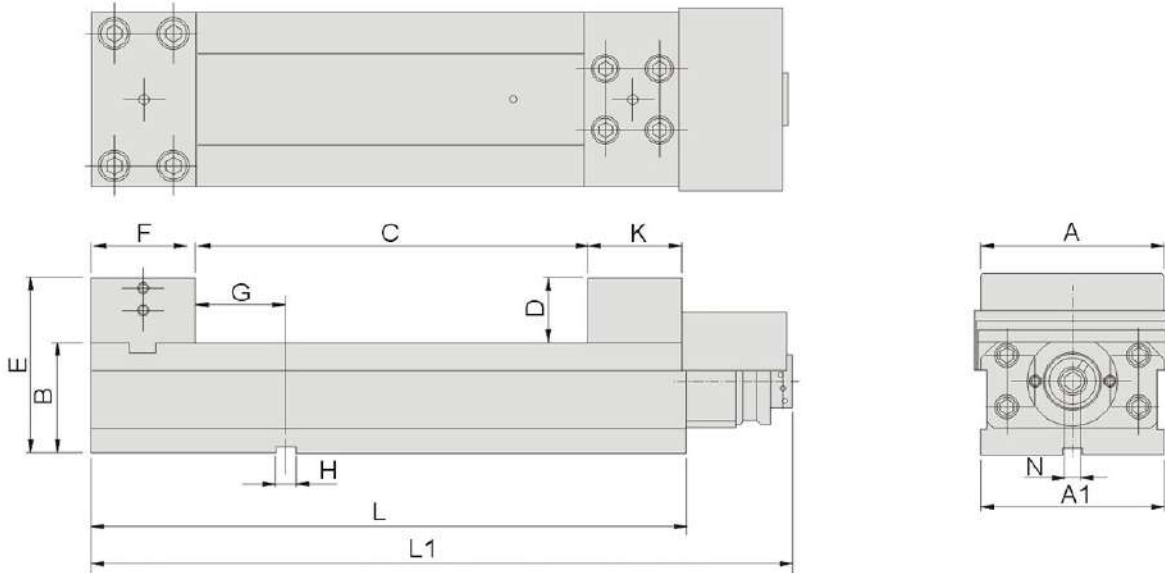


Features:

- ▶ Low bed height and large opening design. Made of Ductile Iron FCD60 JIS (80000psi) with one-piece body structure, the distortion volume is minimum.
- ▶ Slide way is high frequency inducted hardened HS65°.
- ▶ Special Anti-Lift mechanism, prevent any lifting while clamping.
- ▶ Jaw plate is made of S50C and hardened to HRC50° to enhance the wear-resistance and maintain same bed height each purchase.
- ▶ Angle-Lock design to ensure workpiece does not lift.
- ▶ The vise can be mounted both horizontally and vertically.
- ▶ Dust cover is provided for protection.



MILLING MACHINE ACCESSORIES

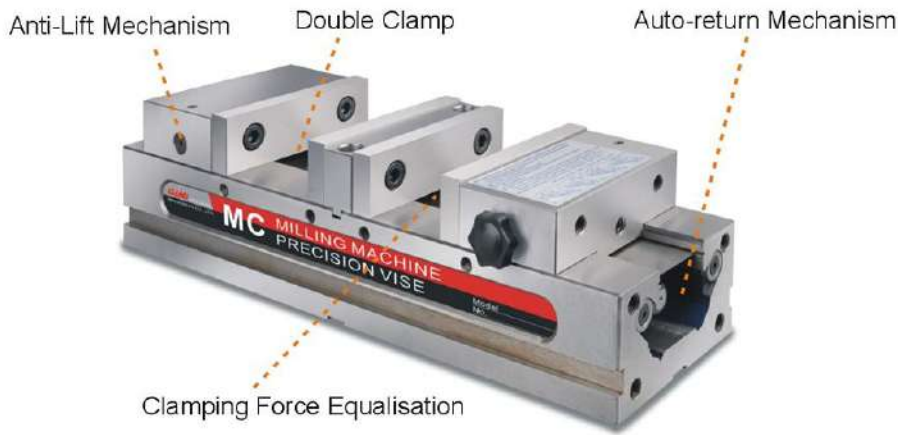


Order No.	Model	A	A1	B	C	D	E	F	G	H	K	L	L1	N	Force	N.W.
65380-01	JQV160S	159.5	161	105	235	60	165	86	59	18	86	416	515	14	5000kg	55kg
65380-02	JQV160M	159.5	161		275		165	86	59	18	86	456	555			57kg
65380-03	JQV160L	159.5	161	100	305		160	86	59	18	86	486	585			60kg

Unit:mm

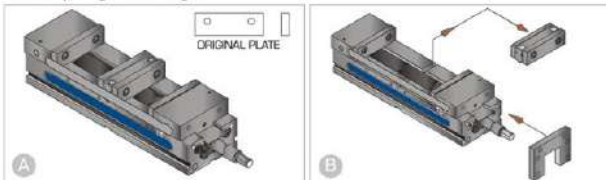
Milling Machine Accessories

65390 TLD Precision Super Vise



MILLING MACHINE ACCESSORIES

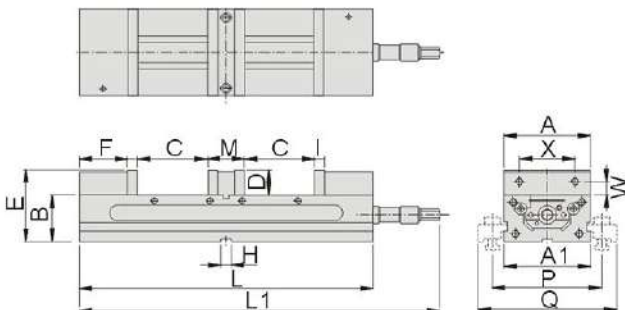
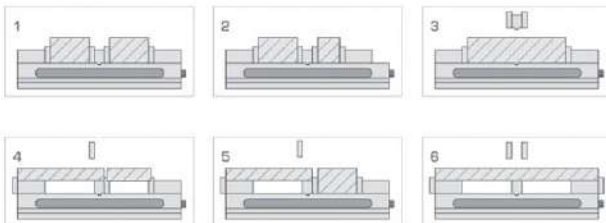
Clamping Change



Original clamp can hold 0-125mm & 0-90mm workpiece.

Remove the middle jaw and lock the plate to fixed one movable jaw, then the other movable jaw can hold workpiece 125-135mm.

Four types applications



Features:

- ▶ Clamping force equalisation: same force to two workpiece in different size.
- ▶ Anti-lift mechanism: ensure the workpiece does not lift during operation.
- ▶ Double clamp makes different size of workpieces can be clamped at the same time.
- ▶ Made of Ductile Iron FCD60 JIS (80,000psi), high-frequency flame hardened Hs65°.
- ▶ Jaw plate is made of S50C and hardened to HRC45° to enhance the wear-resistance.
- ▶ Repeat accuracy to $V1 \pm 0.015\text{mm}$

Unit:mm

Order No.	Model	A	A1	B	C	D	E	F	H	I	L	L1	M	P	Q	W	X	N.W.
65390-40	TLD40	102	104	63.5	0-90	38	101	69	18	15	405	459	55	143	195	17.5	63.5	20kg
65390-60	TLD60	152	154	82.55	0-125	44.5	127	86.5	18	18	520	536	66	193	245	23.8	98.4	52kg

65410 LY MC Pneumatic Power Vise

LY1212



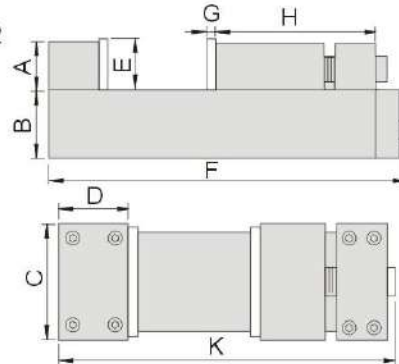
LY1621



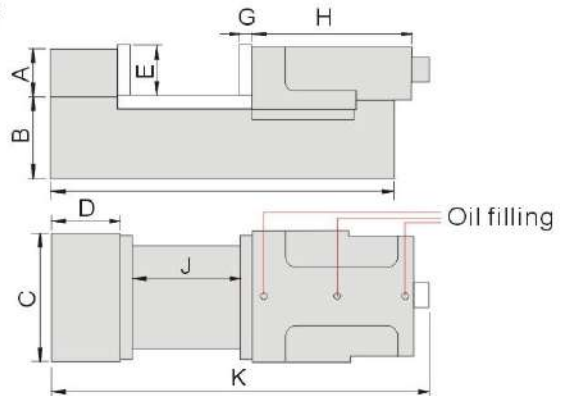
Features:

- ▶ Special 5 times booster with lever, only take 0.5 second to clamp off.
- ▶ Design with check valve design avoiding air pressure lost increasing safety.
- ▶ Flat surface no slot between slide guide rail preventing chip and burr go inside.
- ▶ Made of quality FCD-65 Ductile Iron body with hardened HRC50° and ground precisely with durability.

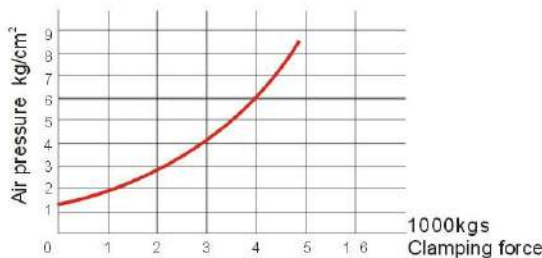
LY1212



LY1621



Air pressure 2~7kg/cm² Clamping force 400~4000kgs



Order No.	Model	A	B	C	D	E	F	G	H	J	K	Clamping force(kg)	Safety range	N.W.
65410-01	LY1212	50	105	120	60	53	453	15	190	127	424	200~3000	5mm	35kg
65410-02	LY1621	60	105	160	85	60	480	15	335	210	685	400~4000	5mm	55kg

Unit:mm

MILLING MACHINE ACCESSORIES

Milling Machine Accessories

65430 GPV MC Precision Super Hi-pressure Rapid Vice

MILLING MACHINE ACCESSORIES

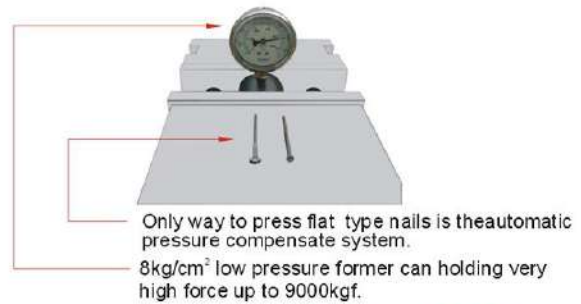


Features :

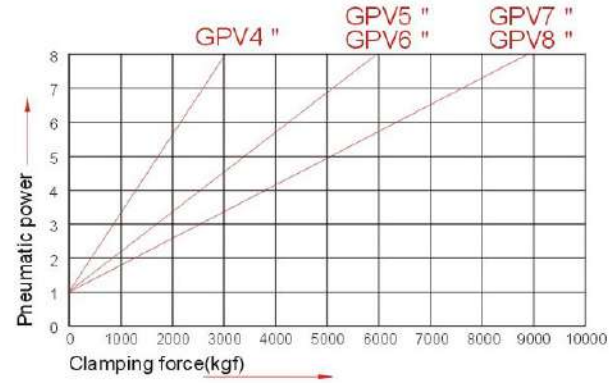
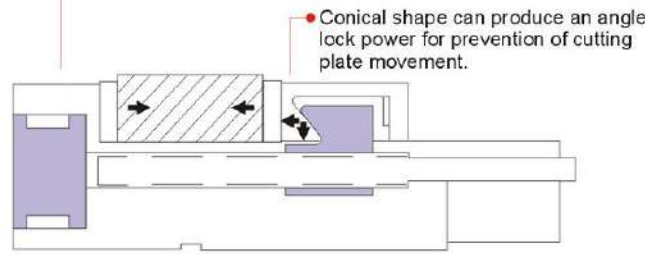
- ▶ The principle of this vice is adopting the reciprocating pneu. motor(pat. structure) which R&D by inhouse and that employs an air actuated cylinder. Circuited progressively to make automation, no need the R.F.L. unit to filter the moisture, The sole character is superior than any brand in domestic & international market.
- ▶ **Super hi-gripping force**
Even the air source at low pressure $8\text{kg}/\text{cm}^2$ which can be achieved super hi-gripping force 9000kgf. and the 0-9000kgf gripping force can be adjusted freely by pressure regulator.
- ▶ **Seeking the highest air source automatically.**
When processed copper, aluminium etc., non-iron workpiece or raw cast iron etc., making heavy cutting which can be made adaptable gripping force to ensure work piece clamping and with auto compensating & retaining pressure etc., functions.
- ▶ **The biggest safety clamping range:**
The shifting speed is only 1.5sec. with safety range: 8mm, and can be visible the clamped work piece safety range is exceeded or not.
- ▶ **Triple usage of vertical, side, horizontal:**
Six faces of vice body be super grinding & pre-setting holding slot, and can be processed vertically without jig fixture.
- ▶ **Super rugged material:**
The vice body is adopted hi-tensile graphite casting iron (FCD-60). On-piece design and harden heat-treatment (HRC 45) at two slideway which ensured hi-precision, hi-durability & hi-tensile.
- ▶ **Submersed angle fixed pressed down structure**



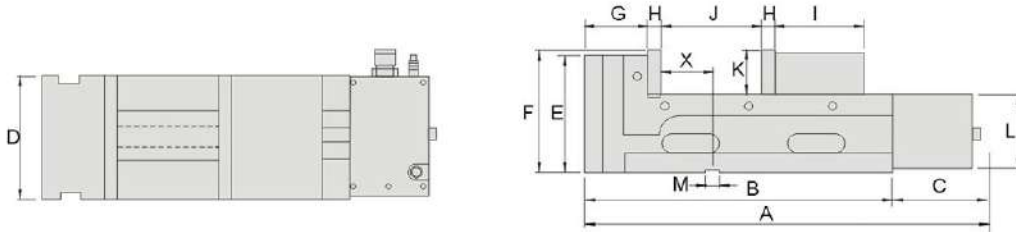
Booster



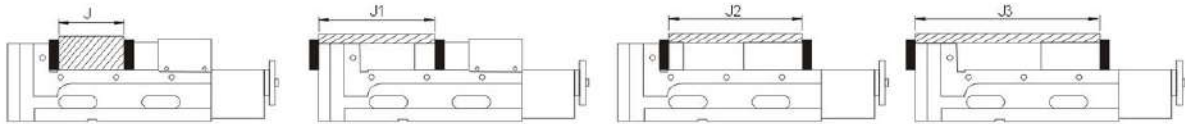
• Forward output pressure can product two-way power for reducing main body from becoming deformed and working parts will be more accurate.



65430 GPV MC Precision Super Hi-pressure Rapid Vice



FOUR DIFFERENT CLAMPING APPROACHES



No.	INSPECTION ITEMS	100mm	GUARANTEED
1	The levelness of this vice's bottom with sliding face.		0.015mm
2	The verticality of the end of clamp with bottom.		-0.02mm
3	The verticality of side with sliding face.		0.02mm
4	The level of vice opening with the T-type flute of this unit's bottom.		0.02mm
5	The verticality of vice opening with the T-type flute of this unit's bottom		0.02mm
6	The level of the top clamped test block with this unit's bottom.		0.02mm
7	The excess amount of clamped test block to this unit's bottom.		0.02mm
8	The right angle of this vertical unit to bottom of this unit.		0.02mm

1 0.015/100mm

5 0.02/100mm

2 -0.02/100mm

6 0.02/100mm

3 0.02/100mm

7 0.02

4 0.02/100mm

8 0.02/100mm

Order No.	Model	Unit:mm																	Gripping	N.W.
		A	B	C	D	E	F	G	H	I	J	J1	J2	J3	K	L	M	X		
65430-01	GPV4 "-100	435	320	125	100	145	148	85	15	100	0-100	95-220	100-200	200-300	48	100	16	45	3200	27kg
65430-02	GPV5 "-150	505	380	125	130	157	160	85	15	110	0-150	95-250	110-275	200-380	55	105	18	45	6000	38kg
65430-03	GPV6 "-180	525	400	125	160	160	163	85	15	120	0-160	95-260	120-295	210-400	58	105	18	45	6000	48kg
65430-04	GPV6 "-250	615	490	125	160	160	163	85	15	120	0-250	95-350	120-395	210-490	58	105	18	45	6000	52kg
65430-05	GPV7 "-200	585	460	125	180	170	173	90	18	130	0-200	100-300	130-350	220-460	63	110	18	72	9000	65kg
65430-06	GPV8 "-200	595	470	125	200	170	173	90	18	140	0-200	100-310	140-360	230-470	63	110	18	72	9000	70kg
65430-07	GPV8 "-300	695	570	125	200	170	173	90	18	140	0-300	100-410	140-460	230-570	63	110	18	72	9000	79kg

MILLING MACHINE ACCESSORIES

Milling Machine Accessories

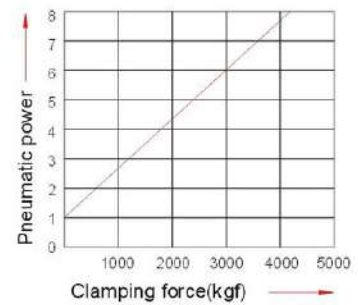
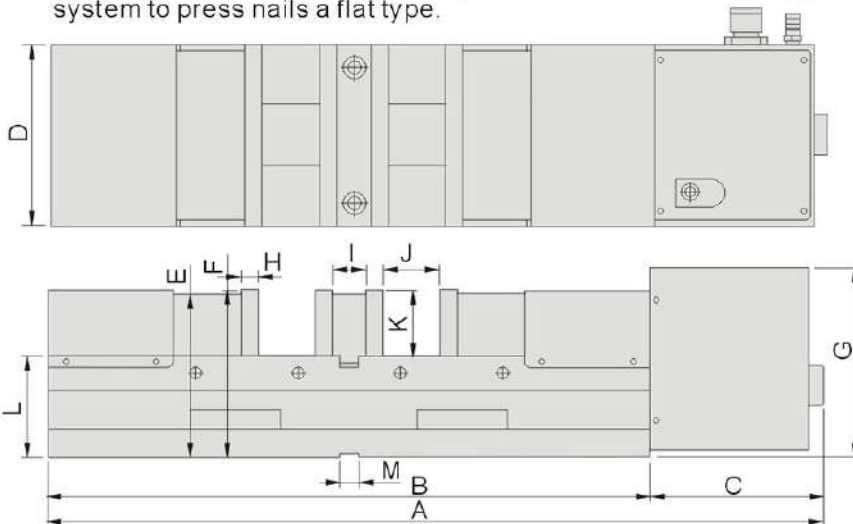
65440 GPS MC Super Hi-Pressure Double Vice



Only need 8kg/cm² of low air-pressure source to achieve 4000kgf of super hi-gripping force



By using automatic pressure compensate system to press nails a flat type.



Features :

- ▶ This outstanding vice is adopt the reciprocating pneu. Motor(pat.structure)which is researched and developed by ourselves to push oil circuit in an air.pressure actuating manner,thus obtaining automation without the R.F.L unit to filter the moisture. So,such a characteristic is unique and distinctive in domestic and international market.
- ▶ **Super hi-gripping force**
Only need 8kg/cm² of low air-pressure source to achieve 4000kgf of super hi-gripping force,and this gripping force can be adjusted within 0-4000kgf by using a pressure regulator.
- ▶ **Search the highest compressed air source automatically.**
When processed copper, aluminium or heav machining castiron workpiece or raw cast iron,the pressure regulator can be setat a desired pressure without losing pressure. Besides,the gripping force can be keptto clamp the workpiece securly in auto compensating and pressure stabilizing functions.
- ▶ **The biggest safety clamping range:**
The shifting speed is only 1.5sec.the double vise mechanism can be adjusted automatically and can simultaneously clamp two different workpieces in less than 5mm of size.
- ▶ **Super rugged material:**
The body of the vise is integrally made of hi-tensile graphite casting iron(FCD-60).and is harden heat-treatment (HRC 45)at its two slideway, therebyensured hi-precision,hi-durability & hi-tensile.
- ▶ **Submersed angle fixed pressed down structure**
Submersed angle pressed structure in a semi-sphere shape to produce an angle lock power,thus preventing the cutting plate from movement.

MILLING MACHINE ACCESSORIES

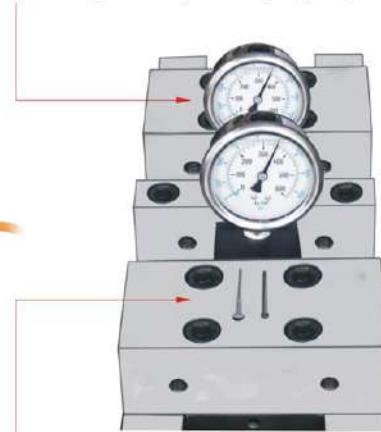
Order No.	Model	A	B	C	D	E	F	G	H	I	J	K	L	M	Gripping	N.W.
65440	GPS-6 " -100	682	530	152	160	145	148	168	15	30	0-100	58	90	18	4000	63kg

Unit:mm

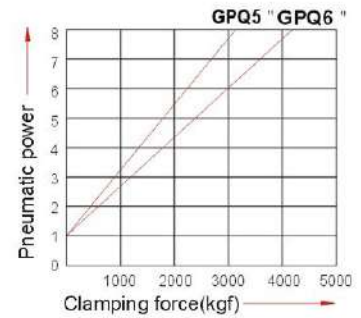
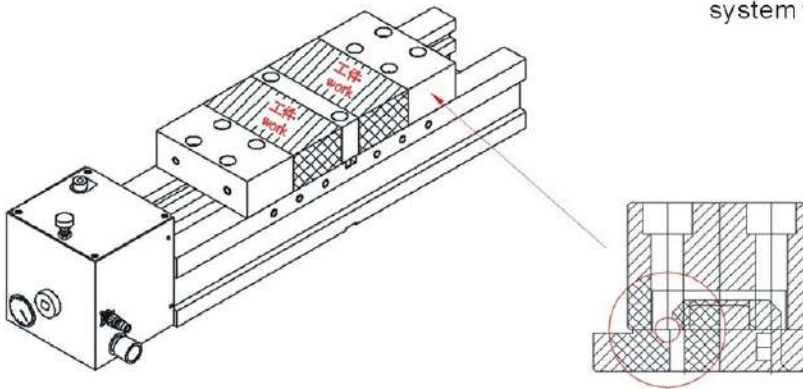
65450 GPQ MC Super Hi-pressure Double Vise



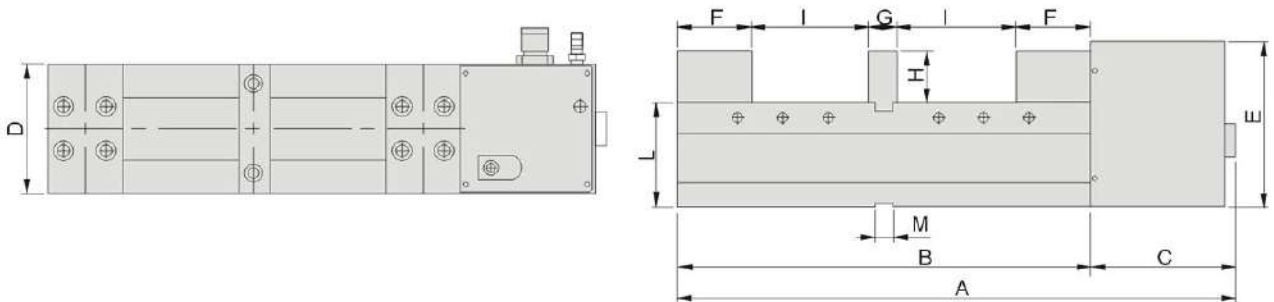
Only need 8kg/cm² of low air-pressure source to achieve 4000kgf of super hi-gripping force



By using automatic pressure compensate system to press nails a flat type.



Having built in floating pressing structure to provide downward lockce force to eliminate flotation of vise jaw and operational slope(patented structure)
(locking slidable block of vise from upper screw, and no pressing force occurs)



訂購編號 Order No.	型號 Model	A	B	C	D	E	F	G	H	I	L	M	夾持力 Gripping	重量 N.W.
65450-01	GPQ-5 " -110	556	410	146	130	166	74	30	52	0-115	105	18	3200	42kg
65450-02	GPQ-6 " -150	656	510	146	160	168	82	30	55	0-155	155	18	4000	67kg

單位:mm

MILLING MACHINE ACCESSORIES

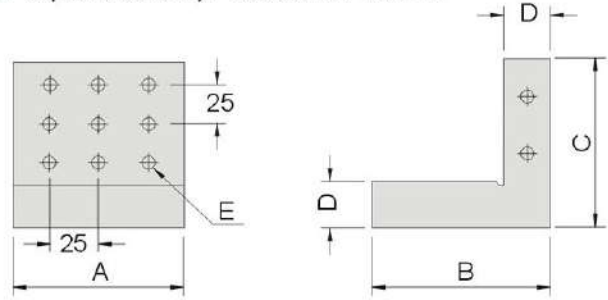
Milling Machine Accessories

65700 LA Right Angle Plates



Features :

- ▶ Precision ground and accurate angle.
- ▶ Material, YK30, HRC52°~58°
- ▶ Parallelism: 0.003mm/100mm
- ▶ Perpendicularity: 0.005mm/100mm



Unit:mm

Order No.	Model	A	B	C	D	E	N.W.
65700-34	LA34	75	75	100	25	M6x1.0	2.5kg
65700-44	LA44	100	100	100	25		3.4kg
65700-46	LA46	100	100	150	25		4.3kg
65700-62	LA62	200	120	200	40	M8x1.25	17.5kg
65700-65	LA65	300	150	300	50		45.5kg

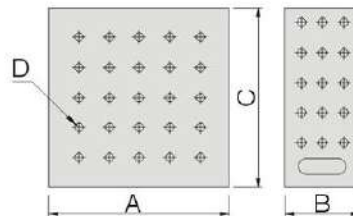
MILLING MACHINE ACCESSORIES

65710 LB Right Angle Plates



Features :

- ▶ Precision ground and accurate angle.
- ▶ Screw holes are made for fixing mold fixture.
- ▶ Material, SK2, HRC52°~58°
- ▶ Parallelism: 0.003mm/100mm
- ▶ Perpendicularity: 0.005mm/100mm



Unit:mm

Order No.	Model	A	B	C	D	N.W.
65710-150	LB150	150	63	150	M8XP1.25	10.5kg
65710-200	LB200	200	73	200		22.4kg
65710-250	LB250	250	83	250		39.7kg
65710-300	LB300	300	93	300		64.5kg

65720 GC10,12 >> **Angle Block Set**



Features :

- ▶ Suitable for inspection or calibrating angles.
- ▶ Light magnetized for better holding when measuring.
- ▶ Utilised as angle fixture on grinding machine.
- ▶ Accuracy: $\pm 10''$
- ▶ Material, S50C, HRC52°~55°
- ▶ Size: 3" long and 1/4" thick

Order No.	Model	Specification	Set	N.W.
65720-10	GC10	1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°	10pcs	0.5kg
65720-12	GC12	1/4°, 1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°	12pcs	0.6kg

65730 GC20 >> **Universal Angle Block Set**



Features :

- ▶ Suitable for inspection or calibrating angles.
- ▶ Utilised as angle fixture on grinding machine.
- ▶ Accuracy: $\pm 10''$
- ▶ Material, S50C, HRC52°~55°
- ▶ Size: 3" long and 1/4" thick

Order No.	Model	Specification	Set	N.W.
65730	GC20	1/2° 1° 2° 3° 4° 5° 10° 15° 30°	9pcs	1.5kg

65740 ZT02-10 >> **Universal Angle Block Set**



Features :

- ▶ Suitable for inspection or calibrating angles.
- ▶ Utilised as angle fixture on grinding and milling machine.
- ▶ Accuracy: $\pm 10''$
- ▶ Material, S50C, HRC52°~55°
- ▶ Size: 3" long and 1/4" thick

Order No.	Model	Specification	Set	N.W.
65740	ZT02-10	0° 1/4° 1/2° 1° 2° 3° 4° 5° 10° 15° 20° 25° 30° 35° 40° 45° 0°	17pcs	1.5kg

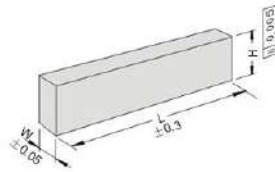
MILLING MACHINE ACCESSORIES

Milling Machine Accessories

65750

P85

Precision Parallel Set



N.W. 5.5kg

Features :

- ▲ Accuracy: H ± 0.01 mm Parallelism: H ± 0.005 mm
- ▲ Hardness: HRC52^o~58^o
- ▲ 9 pairs in a set.

Unit:mm

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

65760

P100

Precision Parallel Set



N.W. 10.3kg

Features :

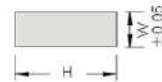
- ▲ Accuracy: H ± 0.01 mm Parallelism: H ± 0.005 mm
- ▲ Hardness: HRC52^o~58^o
- ▲ 9 pairs in a set.

Unit:mm

WxHxLxPCS
5x16x100x2
6x18x100x2
8x24x100x2
10x30x100x2
12x36x150x2
14x48x150x2
18x60x150x2
22x62x150x2

Unit:mm

WxHxCxLxPCS
15x31x2.5x200x2



65770

P150

Precision Parallel Set



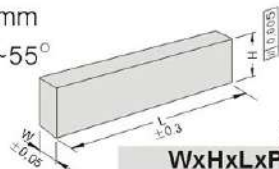
N.W. 9.2kg

Features :

- ▲ Accuracy: H ± 0.01 mm
- ▲ Hardness: HRC48^o~55^o
- ▲ 14 pairs in a set.

Unit:mm

WxHxLxPCS
10x14x150x2
10x16x150x2
10x18x150x2
10x20x150x2
10x22x150x2
10x24x150x2
10x26x150x2



Unit:mm

WxHxLxPCS
10x28x150x2
10x30x150x2
10x32x150x2
10x35x150x2
10x40x150x2
10x45x150x2
10x50x150x2

65771 P200 Precision Parallel Set



Features :

- ▲ Accuracy: H ± 0.01mm Parallelism: ± 0.005mm
- ▲ Hardness: HRC52°~58°
- ▲ Material: Alloy Tool Steel. 20 pairs in a set.

Unit:mm

Order No.	Model	WxHxL
65771	P200	2x(5,10,15,20)x100
		3x(6,11,16,21)x100
		4x(7,12,17,22)x100
		5x(8,13,18,23)x100
		6x(9,14,19,24)x100

N.W. 1.92kg

65772 P250 Precision Parallel Set



Features :

- ▲ Accuracy: H ± 0.01mm Parallelism: ± 0.005mm
- ▲ Hardness: HRC52°~58°
- ▲ Material: Alloy Tool Steel. 24 pairs in a set.

Unit:mm

Order No.	Model	WxHxL
65772-01	P250-1	8x(11,16,21,26,31,36)x125
		12x(15,20,25,30,35,40)x125
65772-02	P250-2	10x(13,18,23,28,33,38)x125
		14x(17,22,27,32,37,42)x125

P250-1+P250-2=P250

65773 P300 Precision Parallel Set



Features :

- ▲ Accuracy: H ± 0.01mm Parallelism: ± 0.005mm
- ▲ Hardness: HRC52°~58°
- ▲ Material: Alloy Tool Steel. 24 pairs in a set.

Unit:mm

Order No.	Model	WxHxL
65773-01	P300-1	8x(11,16,21,26,31,36)x150
		12x(15,20,25,30,35,40)x150
65773-02	P300-2	10x(13,18,23,28,33,38)x150
		14x(17,22,27,32,37,42)x150

P300-1+P300-2=P300

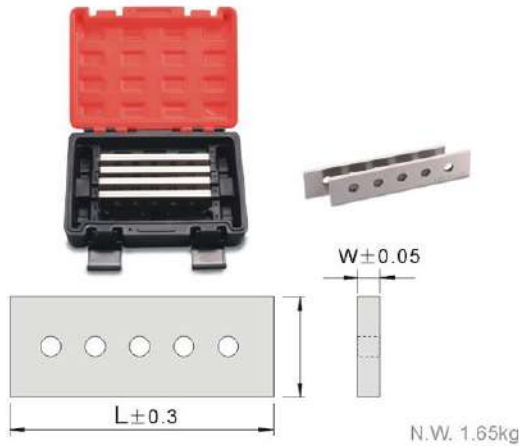
MILLING MACHINE ACCESSORIES

Milling Machine Accessories

65774

P30

Precision Parallel Set



Features :

- ▲ Accuracy: H ± 0.01 mm Parallelism: ± 0.005 mm
- ▲ Hardness: HRC52^o~58^o
- ▲ Material: Alloy Tool Steel. 4 pairs in a set.

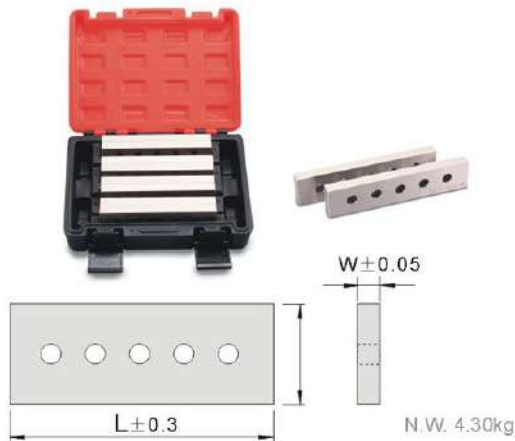
Unit:mm

Order No.	Model	WxHxL
65774	P30	4.6x25x150
		4.6x31x150
		4.6x38x150
		4.6x44x150

65776

P40

Precision Parallel Set



Features :

- ▲ Accuracy: H ± 0.01 mm Parallelism: ± 0.005 mm
- ▲ Hardness: HRC52^o~58^o
- ▲ Material: Alloy Tool Steel. 4 pairs in a set.

Unit:mm

Order No.	Model	WxHxL
65776	P40	12.5x25x150
		12.5x31x150
		12.5x38x150
		12.5x44x150

65778

P50

Precision Parallel Set



Features :

- ▲ Accuracy: H ± 0.01 mm Parallelism: ± 0.005 mm
- ▲ Hardness: HRC52^o~58^o
- ▲ Material: Alloy Tool Steel. 9 pairs in a set.

Unit:mm

Order No.	Model	WxHxL
65778	P50	6x19x150
		6x22x150
		6x25x150
		6x28x150
		6x31x150
		6x35x150
		6x38x150
		6x41x150
		6x44x150

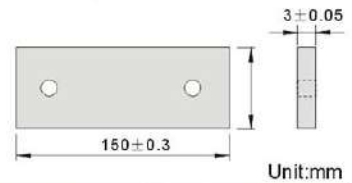
65780 P60 Precision Parallel Set



N.W. 2.2kg

Features :

- ▲ Accuracy: H ± 0.01 mm Parallelism: ± 0.005 mm
- ▲ Hardness: HRC52 $^{\circ}$ ~58 $^{\circ}$
- ▲ Material: Alloy Tool Steel. 10 pairs in a set.



Order No.	Model	Specification									
		H ± 0.01									
65780	P60	13	16	19	22	25	28	31	35	38	41

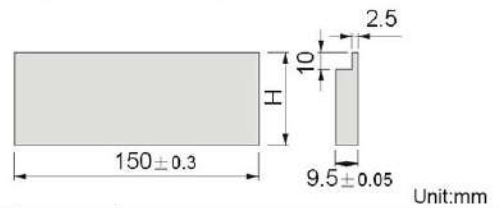
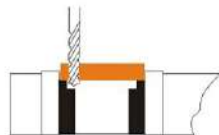
65790 P70 Precision Parallel Set



N.W. 4.06kg

Features :

- ▲ Accuracy: H ± 0.01 mm Parallelism: ± 0.005 mm
- ▲ Hardness: HRC52 $^{\circ}$ ~58 $^{\circ}$
- ▲ Material: Alloy Tool Steel. 6 pairs in a set.



Order No.	Model	Specification					
		H ± 0.01					
65790	P70	25	30	35	40	45	48

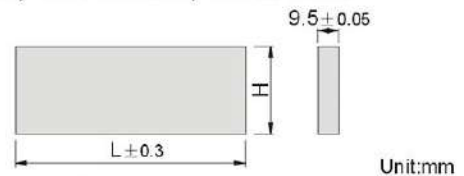
65800 P80 Precision Parallel Set



N.W. 4.95kg(P80-1)
N.W. 8.40kg(P80-2)

Features :

- ▲ Accuracy: H ± 0.01 mm Parallelism: ± 0.005 mm
- ▲ Hardness: HRC52 $^{\circ}$ ~58 $^{\circ}$
- ▲ Material: Alloy Tool Steel. 6 pairs in a set.



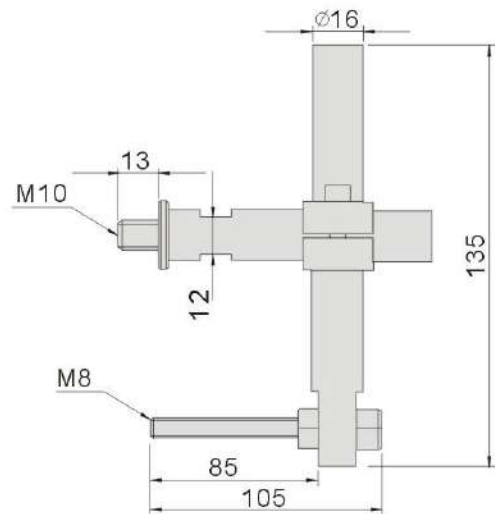
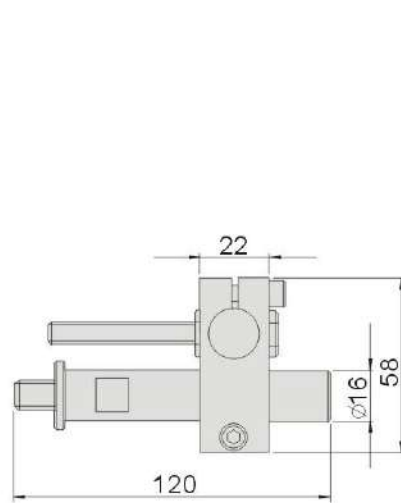
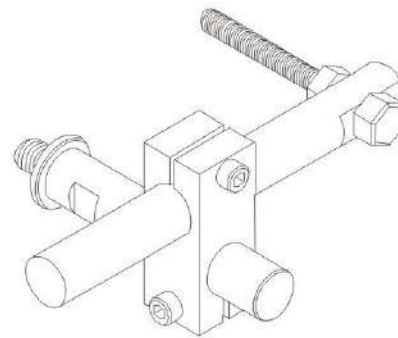
Order No.	Model	Specification						
		H ± 0.01						L
65800-01	P80-1	25	30	35	40	45	48	150
65800-02	P80-2	35	40	45	50	55	58	200

Machine Tool Fixture

65810 LT **Vise Work Stopper**

Features:

- Material: Iron with painted colour.



Application Examples:



65830 T Aluminum Slot Cover For Milling Table



Features:

- Effective item for saving cleaning time.

Application Examples:



Unit:mm

Order No.	Model	L	W	H	Pcs/Set	N.W.
65830-01	T-10	300	10	8	6	0.25kg
65830-02	T-12	400	12	8	6	0.50kg
65830-03	T-14	400	14	10	6	0.68kg
65830-04	T-16	400	16	10	6	0.90kg
65830-05	T-18	450	18	10	6	1.28kg
65830-06	T-20	1000	20	10	5	3.50kg
65830-07	T-22	1000	22	14	5	4.30kg
65830-08	T-24	1000	24	14	5	5.10kg
65830-09	T-28	1000	28	14	5	6.90kg
65830-10	T-36	1000	36	14	5	11.50kg

65840 AMS Work Stop Tool

Application Examples:



Typical Application

Features:

- Fast, accurate positioning on many positions.
- Suitable for locking in any general machines.
- Operation easy and freely adjusted height and direction.



Unit:mm

Order No.	Model	Compatible	N.W.	G.W.	Package Size
65840-160A	AMS-160A	All types machines	0.80kg	0.96kg	41x29.5x20cm
65840-160AH	AMS-160AH		0.90kg	1.06kg	41x29.5x20cm
65840-160B	AMS-160B		0.62kg	0.78kg	41x29.5x20cm
65840-160BH	AMS-160BH		0.72kg	0.88kg	41x29.5x20cm

MACHINE TOOL FIXTURE

Machine Tool Fixture

65845 EC Lateral Clamp

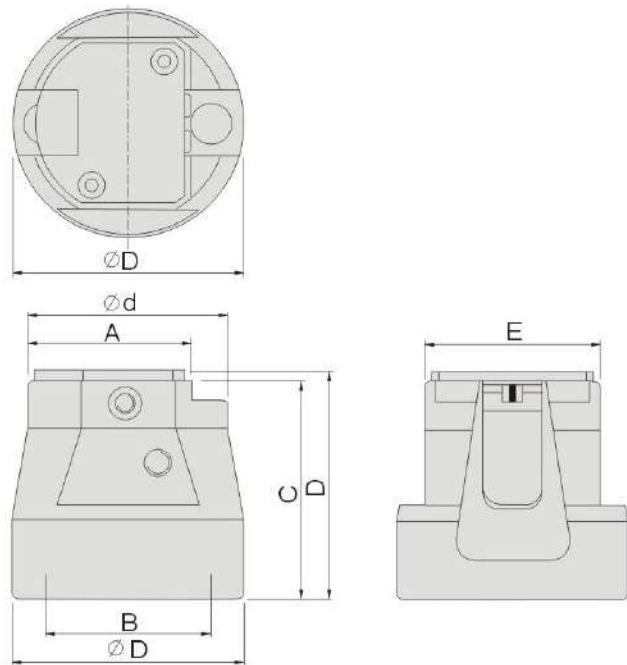


MACHINE TOOL
FIXTURE

Features:

- ▶ Suitable for machining center, milling, vertical lathe to clamp workpiece for side processing.
- ▶ Larger workpiece can apply jack support to eliminate the vibration generated while processing.
- ▶ Special clamping design, both lateral force and parallel force to clamp tight.
- ▶ Compact design for less interference with cutting tools.
- ▶ Easy loading and unloading workpieces, increase efficiency.

Application Examples:



Unit:mm

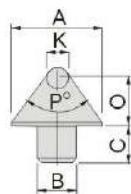
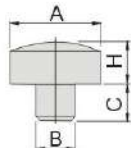
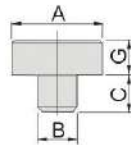
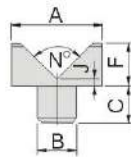
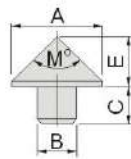
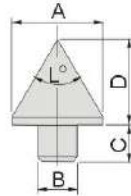
Order No.	Model	ØD	Ød	A	B	C	D	E	N.W.
65845	EC-65	Ø70	Ø60	49	50	67	70	53	1.6kg

Note:MOQ 4 pcs

65850 KT Tips for Support Jack

Features:

- ▶ Suitable for enlarging supporting area.
(Suitable for FS-S, MSS spec.)



Order No.	Model
65850-01-1	KT1A
65850-02-1	KT1B

Order No.	Model
65850-01-2	KT2A
65850-02-2	KT2B

Order No.	Model
65850-01-3	KT3A
65850-02-3	KT3B

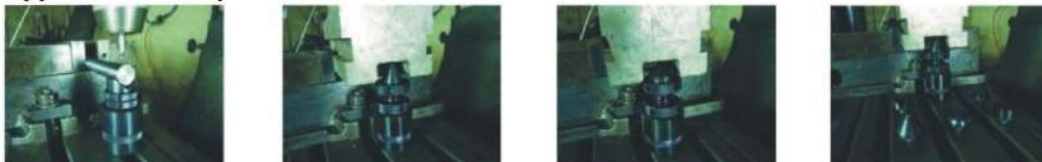
Order No.	Model
65850-01-4	KT4A
65850-02-4	KT4B

Order No.	Model
65850-01-5	KT5A
65850-02-5	KT5B

Order No.	Model
65850-01-6	KT6A
65850-02-6	KT6B

MACHINE TOOL
FIXTURE

Application Examples:



Unit:mm

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
KT1A to KT6A	25	11	10	24	14	12	10	12	2	6	60°	90°	90°	14.5	70°
KT1B to KT6B	30	11	10	31	20.5	14	14	14	2	8	60°	90°	90°	19	70°

Machine Tool Fixture

65852 PW Wrench for Support Jack

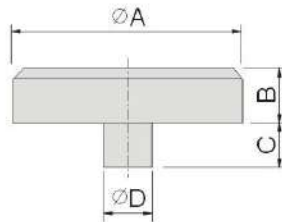


Application Examples:

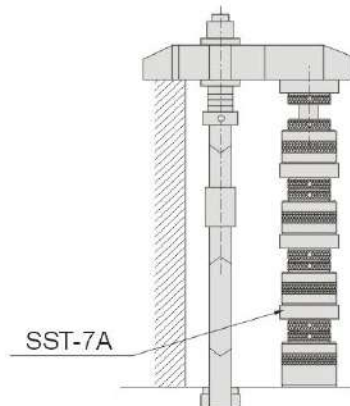


Order No.	Model	Compatibility
65852-01	PW-3505	MSS-85、FS-70S
65852-02	PW-4007	MSS-110、FS-100S
65852-03	PW-4507	MSS-165、FS-150S
65852-04	PW-5008	MSS-265、FS-250S

65854 SST7A~7D Supporter Holder



Examples:



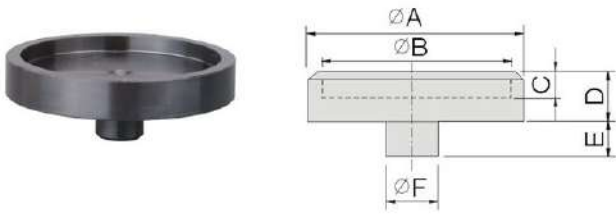
Features:

- ▶ Suitable for enlarge supporting surface... (Suitable for FS-S, MSS spec.).

Unit:mm

Order No.	Model	A	B	C	D	N.W.
65854-01	SST-7A	48	10	10	11	0.15kg
65854-02	SST-7B	54	12	10	11	0.26kg
65854-03	SST-7C	58	15	10	11	0.32kg
65854-04	SST-7D	64	20	10	11	0.45kg

65856 SST8A~8D Supporter Holder



Examples:



Features:

- ▶ Suitable for raising height support. (Suitable for FS-S & MSS models.).

Order No.	Model	A	B	C	D	E	F	N.W.
65856-01	SST-8A	46	40	4	8	10	11	0.08kg
65856-02	SST-8B	52	45	4	9	10	11	0.1kg
65856-03	SST-8C	58	50	5	10	10	11	0.14kg
65856-04	SST-8D	70	60	6	12	10	11	0.23kg

Unit:mm

MACHINE TOOL FIXTURE

65860 FK Spiral Type Support Jack



Features:

- ▶ Spiral shape surface design, workpiece is fixed steadily.

Applications:

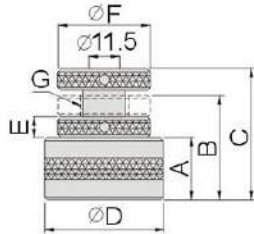


Order No.	Model	H stroke	D	G	Capacity (kn)	N.W.
65860-01	FK-40	40~50(10)	49	Tm32x3	60	0.47kg
65860-02	FK-50	50~62(12)	49	Tm32x3	80	0.65kg
65860-03	FK-60	60~78(18)	49	Tm32x3	100	0.73kg
65860-04	FK-80	80~105(25)	63	Tm40x4	160	1.60kg
65860-05	FK-100	100~145(45)	63	Tm40x4	160	1.90kg
65860-06	FK-130	130~200(70)	63	Tm40x4	160	2.68kg
65860-07	FK-160	160~260(100)	63	Tm40x4	160	3.28kg

Unit:mm

Machine Tool Fixture

65862 MSS Support Jack With Magnetics



Features:

- Can be applied laterally or vertically.
- Built-in magnets design, easy to clean chips
- Larger supporting area can apply support holder SST7A
- Higher supporting area can apply support holder SST8A

Examples:

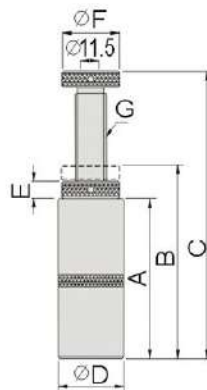


Note: MOQ 2 pcs

Unit:mm

Order No.	Model	A	B~C stroke	D	E	F	G	Capacity (kn)	N.W.
65862-01	MSS-50	24	40~50	45	8	35	Tr18x2	80	0.41kg
65862-02	MSS-65	34	50~65	45	8	35	Tr18x2	80	0.54kg
65862-03	MSS-85	49	65~85	45	8	35	Tr20x3	80	1.03kg
65862-04	MSS-110	63	85~110	45	12	40	Tr25x4	150	1.75kg
65862-05	MSS-165	85	110~165	50	12	45	Tr25x4	150	2.93kg
65862-06	MSS-265	135	165~265	60	15	50	Tr32x5	200	6.23kg
65862-07	MSS-300	170	265~300	60	15	50	Tr32x5	200	7.50kg

65864 FS-S Support Jack



Features:

- Larger supporting area can apply support holder SST7A
- Higher supporting area can apply support holder SST8A

Note: MOQ 2 pcs

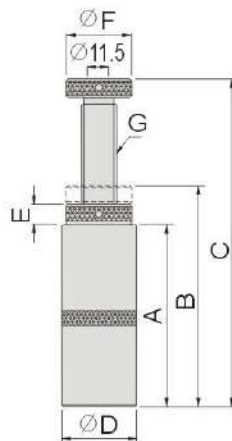
Unit:mm

Order No.	Model	A	B~C stroke	D	E	F	G	Capacity (kn)	N.W.
65864-01	FS-50S	21	37~50	40	8	35	Tr20x3	80	0.56kg
65864-02	FS-70S	32	50~70	40	8	35	Tr20x3	80	0.78kg
65864-03	FS-100S	46	70~100	45	12	40	Tr20x3	80	1.47kg
65864-04	FS-150S	70	100~150	50	12	45	Tr25x4	150	2.65kg
65864-05	FS-250S	120	150~250	60	15	50	Tr32x5	200	5.64kg
65864-06	FS-300S	170	200~300	60	15	50	Tr32x5	200	7.17kg

65870 FS400~1000T >> Large Support Jack

Features:

- ▶ Suitable for larger workpiece, convenient operation.



Application



MACHINE TOOL
FIXTURE

Note: MOQ 2 pcs

Unit:mm

Order No.	Model	A	B~C stroke	D	E	F	G	Capacity (kn)	N.W.
65870-01	FS-400T	270	300~400	70	15	60	M36x4	300	6.1kg
65870-02	FS-500T	370	400~500	70	15	60	M36x4	300	6.8kg
65870-03	FS-600T	470	500~600	70	15	60	M36x4	300	8.6kg
65870-04	FS-700T	570	600~700	70	15	60	M36x4	300	9.7kg
65870-05	FS-800T	670	700~800	70	15	60	M36x4	300	10.5kg
65870-06	FS-900T	770	800~900	70	15	60	M36x4	300	13.4kg
65870-07	FS-1000T	870	900~1000	70	15	60	M36x4	300	15kg

Machine Tool Fixture

65880 CK Assembly Clamping Kit



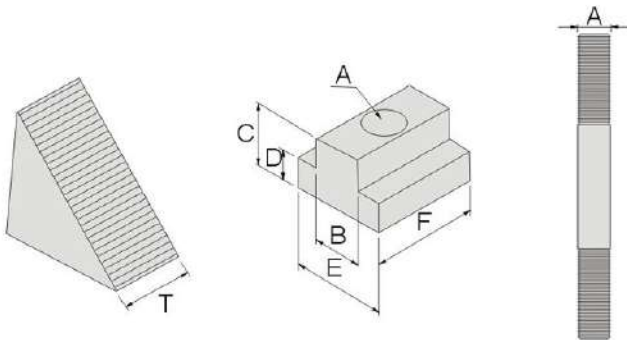
MACHINE TOOL
FIXTURE

Features:

- ▶ Suitable for applying any type of machines to clamp mold & fixtures.
- ▶ Material: S45C and Hardened HRC30°~35°. Surface Finish: Black Oxide
52 pcs / set

Clamp Stub:

Inch: L= 3", 4", 5", 6", 7", 8" x 4 pcs each
Metric: L= 75, 100, 125, 150, 175, 200mm x 4 pcs each



Package	52 pcs combination
Clamping Stub	24PCS
T-Slot Nut	6PCS
Flange Nut	6PCS
Extension Nut	4PCS
Step Clamp	3sets(6PCS)
Step Clamp	6sets(12PCS)

Unit:mm

Order No.	Model	A	B	C	D	E	F	T	Package
65880-01	CK-8P	M8X1.25	9.7	12	6	16	20	25	Plastic Rack
65880-02	CK-10P	M10X1.5	11.5	12	6.8	17.5	22	25	
65880-03	CK-12A1P	M12X1.75	13.8	15.9	8	22	28	25	
65880-04	CK-12A2P	M12X1.75	15.5	16	8	25	28	25	
65880-05	CK-12B1P	M12X1.75	13.8	15.9	8	22	28	32	
65880-06	CK-12B2P	M12X1.75	15.5	16	8	25	28	32	
65880-07	CK-14AP	M14X2.0	15.5	16	8	25	28	25	
65880-08	CK-14BP	M14X2.0	15.5	16	8	25	28	32	
65880-09	CK-16AP	M16X2.0	17.5	19	11	28	31	25	
65880-10	CK-16BP	M16X2.0	17.5	19	11	28	31	32	
65880-11	CK-18W	M18X2.5	19.5	24	12	32	38	38	Wooden Rack
65880-12	CK-20W	M20X2.5	21.7	28	14	35	38	38	
65880-13	CK-24C	M24X3.0	27.5	36	18	44	49	50	Wooden box

65882 MK Clamping Kits With Metal Racks



Features:

- ▶ Suitable for applying any type of machines to clamp mold & fixtures.
- ▶ Material: S45C and Hardened HRC30°~35°.
- ▶ Surface Finish: Black Oxide
- ▶ 58 pcs / set

Order No.	Model	Compatible T-slot	E	kg
65882-01	MK-1210	12	M10	8
65882-02	MK-1412	14	M12	9.5
65882-03	MK-1614	16	M14	10.5
65882-04	MK-1816	18	M16	19.0
65882-05	MK-2018	20	M18	21.0

Step Clamp	Step Block	Flange Nut	Extension Nut	T-slot Nut	Clamping Stud

Model	CP25	SU25	PT04	PT05	PT06	PT07
MK-1210	CP25-10063 CP25-10100 CP25-10150	SU25-25030 SU25-25045 SU25-25097	PT04-1017	PT05-1017	PT06-1210	PT07-10075 PT07-10100 PT07-10125 PT07-10150 PT07-10175 PT07-10200
MK-1412	CP25-12063 CP25-12100 CP25-12150	SU25-25030 SU25-25045 SU25-25097	PT04-1219	PT05-1219	PT06-1412	PT07-12075 PT07-12100 PT07-12125 PT07-12150 PT07-12175 PT07-12200
MK-1614	CP25-14063 CP25-14100 CP25-14150	SU25-25030 SU25-25045 SU25-25097	PT04-1422	PT05-1422	PT06-1614	PT07-14075 PT07-14100 PT07-14125 PT07-14150 PT07-14175 PT07-14200
MK-1816	CP25-16063 CP25-16100 CP25-16150	SU25-25059 SU25-25097 SU25-25139	PT04-1624	PT05-1624	PT06-1816	PT07-16075 PT07-16100 PT07-16125 PT07-16150 PT07-16175 PT07-16200
MK-2018	CP25-18063 CP25-18100 CP25-18150	SU25-25059 SU25-25097 SU25-25139	PT04-1827	PT05-1827	PT06-2018	PT07-18075 PT07-18100 PT07-18125 PT07-18150 PT07-18175 PT07-18200
Content	2 pcs each	2 pairs each	6 pcs	4 pcs	6 pcs	4 pcs each

※Sell as a set!

MACHINE TOOL
FIXTURE

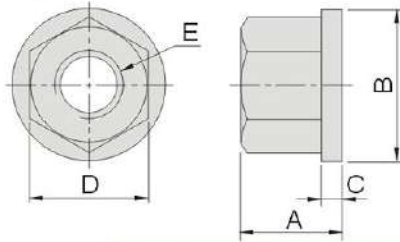
Machine Tool Fixture

65884 PT04 Flange Nut



- Material: S45C
- Hardened HRC30°~35°
- Surface Finish: Black Oxide

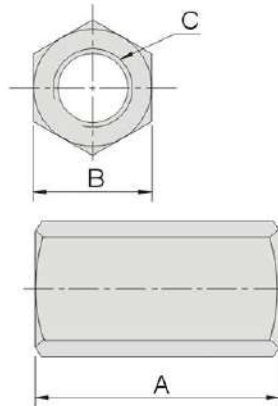
Unit: mm



Order No.	Model	A	B	C	D	E	kg
65884-01	PT04-0812	9	17	3	12	M8	0.010
65884-02	PT04-1017	13	22	3	17	M10	0.020
65884-03	PT04-1219	17	28	4	19	M12	0.040
65884-04	PT04-1422	17	28	4	22	M14	0.040
65884-05	PT04-1624	20	32	5	24	M16	0.060
65884-06	PT04-1827	20	35	5	27	M18	0.070
65884-07	PT04-2030	25	40	6	30	M20	0.110
65884-08	PT04-2232	28	45	6	32	M22	0.150
65884-09	PT04-2436	28	47	6	36	M24	0.185

MACHINE TOOL FIXTURE

65886 PT05 Extension Nut



- Material: S45C
- Hardened HRC30°~35°
- Surface Finish: Black Oxide

Unit: mm

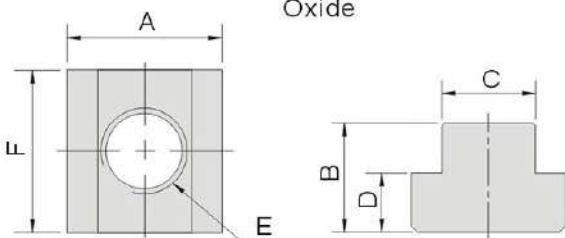
Order No.	Model	A	B	C	kg
65886-01	PT05-1017	30	17	M10	0.030
65886-02	PT05-1219	36	19	M12	0.046
65886-03	PT05-1422	42	22	M14	0.065
65886-04	PT05-1624	48	24	M16	0.110
65886-05	PT05-1827	54	27	M18	0.150
65886-06	PT05-2030	60	30	M20	0.220
65886-07	PT05-2232	66	32	M22	0.350
65886-08	PT05-2436	72	36	M24	0.350

65888 PT06 T-Slot Nut



- Material: S45C
- Hardened HRC30°~35°
- Surface Finish: Black Oxide

Unit: mm

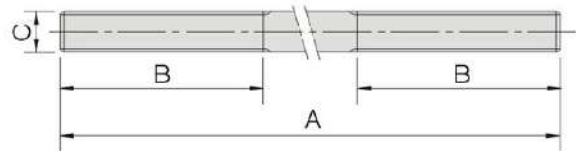


Order No.	Model	A	B	C	D	E	F	kg
65888-01	PT06-1008	15.0	13	10	6	M8	22	0.020
65888-02	PT06-1210	18.0	14	12	7	M10	22	0.022
65888-03	PT06-1410	22.0	16	14	8	M10	28	0.050
65888-04	PT06-1412	22.0	16	14	8	M12	28	0.048
65888-05	PT06-1612	25.0	16	16	8	M12	28	0.060
65888-06	PT06-1614	25.0	16	16	8	M14	28	0.057
65888-07	PT06-1810	28.0	20	18	10.5	M10	30	0.090
65888-08	PT06-1812	28.0	20	18	10.5	M12	30	0.090
65888-09	PT06-1814	28.0	20	18	10.5	M14	30	0.090
65888-10	PT06-1816	28.0	20	18	10.5	M16	30	0.085
65888-11	PT06-2016	32.0	19	20	11.9	M16	30	0.098
65888-12	PT06-2018	32.0	25	20	14.0	M18	38	0.110
65888-13	PT06-2218	36.0	25	22	14.0	M18	38	0.178
65888-14	PT06-2220	36.0	25	22	14.0	M20	38	0.190
65888-15	PT06-2418	38.0	25	24	14.0	M18	38	0.184
65888-16	PT06-2420	38.0	25	24	14.0	M20	38	0.250
65888-17	PT06-2620	41.3	25	26	15.8	M20	44	0.250
65888-18	PT06-2622	41.3	25	26	15.8	M22	44	0.240
65888-19	PT06-2822	44.0	28.5	28	17.5	M22	50	0.330
65888-20	PT06-2824	44.0	28.5	28	17.5	M24	50	0.312

65890 PT07 Clamping Stud



- ▶ Material: S45C
- ▶ Hardened HRC22°~28°
- ▶ Surface Finish: Black Oxide



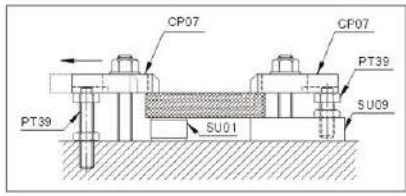
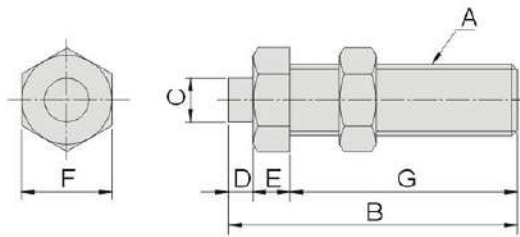
Unit: mm

Order No.	Model	A	B	C	kg	Order No.	Model	A	B	C	kg
65890-01	PT07-08050	50	22	M8 P=1.25	0.020	65890-43	PT07-18050	50	22	M18 P=2.5	0.100
65890-02	PT07-08075	75	22		0.030	65890-44	PT07-18075	75	30		0.150
65890-03	PT07-08100	100	38		0.040	65890-45	PT07-18100	100	38		0.200
65890-04	PT07-08125	125	38		0.050	65890-46	PT07-18125	125	38		0.220
65890-05	PT07-08150	150	50		0.060	65890-47	PT07-18150	150	50		0.300
65890-06	PT07-08175	175	50		0.0710	65890-48	PT07-18175	175	50		0.320
65890-07	PT07-08200	200	50		0.080	65890-49	PT07-18200	200	65		0.360
65890-08	PT07-08250	250	50		0.098	65890-50	PT07-18300	300	80		0.600
65890-09	PT07-10050	50	22	M10 P=1.5	0.030	65890-51	PT07-20050	50	22	M20 P=2.5	0.125
65890-10	PT07-10075	75	30		0.042	65890-52	PT07-20075	75	30		0.170
65890-11	PT07-10100	100	38		0.055	65890-53	PT07-20100	100	38		0.230
65890-12	PT07-10125	125	38		0.070	65890-54	PT07-20125	125	38		0.275
65890-13	PT07-10150	150	50		0.090	65890-55	PT07-20150	150	50		0.360
65890-14	PT07-10175	175	50		0.108	65890-56	PT07-20175	175	50		0.437
65890-15	PT07-10200	200	65		0.123	65890-57	PT07-20200	200	65		0.450
65890-16	PT07-10250	250	65		0.154	65890-58	PT07-20250	250	65		0.550
65890-17	PT07-12050	50	22	M12 P=1.75	0.040	65890-59	PT07-20300	300	80	M22 P=2.5	0.700
65890-18	PT07-12075	75	30		0.060	65890-60	PT07-20400	400	100		0.880
65890-19	PT07-12100	100	38		0.080	65890-61	PT07-20500	500	100		1.100
65890-20	PT07-12125	125	38		0.100	65890-62	PT07-22050	50	22		0.150
65890-21	PT07-12150	150	50		0.125	65890-63	PT07-22075	75	30		0.223
65890-22	PT07-12175	175	50		0.155	65890-64	PT07-22100	100	38		0.300
65890-23	PT07-12200	200	65		0.160	65890-65	PT07-22125	125	38		0.373
65890-24	PT07-12300	300	80		0.240	65890-66	PT07-22150	150	50		0.448
65890-25	PT07-14050	50	22	M14 P=2.0	0.060	65890-67	PT07-22175	175	50	0.522	
65890-26	PT07-14075	75	30		0.090	65890-68	PT07-22200	200	65	0.597	
65890-27	PT07-14100	100	38		0.120	65890-69	PT07-22250	250	65	0.746	
65890-28	PT07-14125	125	38		0.150	65890-70	PT07-22300	300	80	0.895	
65890-29	PT07-14150	150	50		0.180	65890-71	PT07-22400	400	100	1.194	
65890-30	PT07-14175	175	50		0.210	65890-72	PT07-22500	500	100	1.492	
65890-31	PT07-14200	200	65		0.240	65890-73	PT07-24050	50	22	0.177	
65890-32	PT07-16050	50	22		M16 P=2.0	0.078	65890-74	PT07-24075	75	30	0.266
65890-33	PT07-16075	75	30	0.120		65890-75	PT07-24100	100	38	0.355	
65890-34	PT07-16100	100	38	0.145		65890-76	PT07-24125	125	38	0.443	
65890-35	PT07-16125	125	38	0.180		65890-77	PT07-24150	150	50	0.533	
65890-36	PT07-16150	150	50	0.230		65890-78	PT07-24175	175	50	0.620	
65890-37	PT07-16175	175	50	0.276		65890-79	PT07-24200	200	65	0.710	
65890-38	PT07-16200	200	65	0.290		65890-80	PT07-24250	250	65	0.880	
65890-39	PT07-16250	250	65	0.350		65890-81	PT07-24300	300	80	1.065	
65890-40	PT07-16300	300	80	0.450	65890-82	PT07-24400	400	100	1.420		
65890-41	PT07-16400	400	100	0.580	65890-83	PT07-24500	500	100	1.775		
65890-42	PT07-16500	500	100	0.700							

MACHINE TOOL
FIXTURE

Machine Tool Fixture

65892 PT39 Clamp Rest



Unit: mm

- ▶ Material: S45C
- ▶ Hardened HRC30°~35°.
- ▶ Surface Finish: Black Oxide

Order No.	Model	A	B	C	D	E	F	G	kg
65892-01	PT39-1219	M12	75	9.5	6	9	19	60	0.09
65892-02	PT39-1624	M16	80	11	7	10	24	63	0.17
65892-03	PT39-2030	M20	100	12	8	12	30	80	0.35

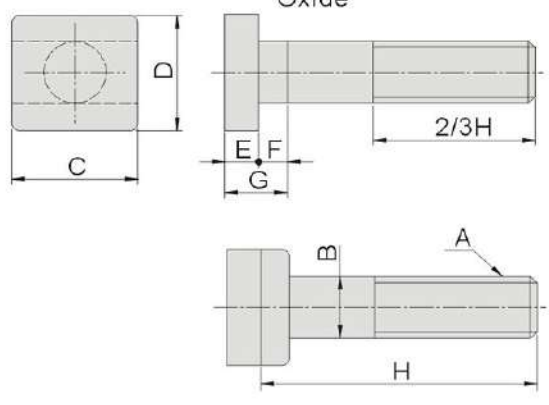
MACHINE TOOL FIXTURE

65894 PT40 T-Slot Bolt



Unit: mm

- ▶ Material: S45C
- ▶ Hardened HRC30°~35°.
- ▶ Surface Finish: Black Oxide



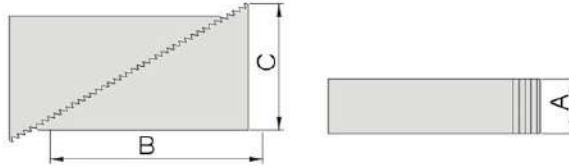
Order No.	Model	A	B	C	D	E	F	G	H	kg
65894-01	PT40-12050								50	0.054
65894-02	PT40-12075								75	0.057
65894-03	PT40-12100								100	0.110
65894-04	PT40-12125	M12	12	26	22	7	6	13	125	0.125
65894-05	PT40-12150								150	0.140
65894-06	PT40-12175								175	0.170
65894-07	PT40-12200								200	0.185
65894-08	PT40-16050								50	0.130
65894-09	PT40-16075								75	0.160
65894-10	PT40-16100								100	0.020
65894-11	PT40-16125	M16	16	32	27	8	8	16	125	0.230
65894-12	PT40-16150								150	0.270
65894-13	PT40-16175								175	0.305
65894-14	PT40-16200								200	0.325
65894-15	PT40-18075								75	0.270
65894-16	PT40-18100								100	0.320
65894-17	PT40-18125	M18	18	40	30	11	11	22	125	0.340
65894-18	PT40-18150								150	0.385
65894-19	PT40-18175								175	0.445
65894-20	PT40-18200								200	0.490
65894-21	PT40-20075								75	0.290
65894-22	PT40-20100								100	0.350
65894-23	PT40-20125								125	0.400
65894-24	PT40-20150	M20	20	40	30	11	11	22	150	0.455
65894-25	PT40-20175								175	0.505
65894-26	PT40-20200								200	0.560
65894-27	PT40-20250								250	0.66
65894-28	PT40-20315								315	1.00
65894-29	PT40-22100								100	0.450
65894-30	PT40-22125								125	0.510
65894-31	PT40-22150	M22	22	40	38	14	13	27	150	0.580
65894-32	PT40-22175								175	0.635
65894-33	PT40-22200								200	0.700
65894-34	PT40-24100								100	0.650
65894-35	PT40-24125								125	0.690
65894-36	PT40-24150	M24	24	50	44	16	15	31	150	0.775
65894-37	PT40-24175								175	0.855
65894-38	PT40-24200								200	0.925

65896 SU25 Step Block



Sold in pairs

- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°
- ▶ Surface Finish: Black Oxide
- ▶ Applied with CP25.



Unit: mm

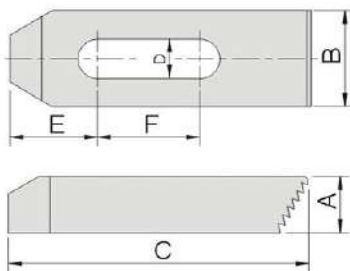
Order No.	Model	Supporting Height	A	B	C	kg
65896-01	SU25-25030	19-49	25	29	17	0.05
65896-02	SU25-25045	28-68		45	27	0.12
65896-03	SU25-25097	58-150		97.5	57	0.50
65896-04	SU25-32059	38-90	32	59	35	0.24
65896-05	SU25-32097	58-150		97.5	57	0.62
65896-06	SU25-32139	82-210		139	81	1.32
65896-07	SU25-38059	36-90	38	59	35	0.29
65896-08	SU25-38097	58-150		97.5	57	0.73
65896-09	SU25-38139	82-210		139	81	1.60
65896-10	SU25-50059	36-90	50	59	35	0.70
65896-11	SU25-50097	58-150		97.5	57	1.66
65896-12	SU25-50139	82-210		139	81	3.43

MACHINE TOOL
FIXTURE

65898 CP25 Step Clamp



- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°
- ▶ Surface Finish: Black Oxide
- ▶ Applied with SU25.



Unit: mm

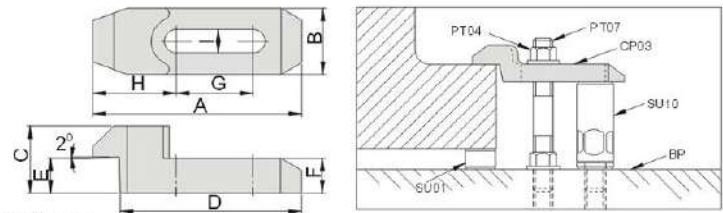
Order No.	Model	A	B	C	D	E	F	G	kg
65898-01	CP25-10063	13	25	63	11	18	19	M10	0.100
65898-02	CP25-10100	16	25	100		27	37		0.215
65898-03	CP25-10150	19	32	150		30	50		0.570
65898-04	CP25-12063	13	25	63	13	20	14	M12	0.100
65898-05	CP25-12100	19	32	100		29	34		0.320
65898-06	CP25-12150	22	32	150		32	50		0.650
65898-07	CP25-14063	13	25	63	15	20	14	M14	0.100
65898-08	CP25-14100	19	32	100		29	34		0.315
65898-09	CP25-14150	22	32	150		32	50		0.600
65898-10	CP25-16063	16	32	63	17	22	12	M16	0.160
65898-11	CP25-16100	19	38	100		31	26		0.400
65898-12	CP25-16150	22	38	150		40	47		0.710
65898-13	CP25-18063	16	32	63	20	22	12	M18	0.140
65898-14	CP25-18100	19	38	100		31	26		0.380
65898-15	CP25-18150	22	38	150		40	47		0.750
65898-16	CP25-20100	19	38	100	21	31	26	M20	0.360
65898-17	CP25-20150	25	38	150		43	44		0.750
65898-18	CP25-20200	25	50	200		55	65		1.500
65898-19	CP25-24150	32	50	150	26	43	38	M24	1.290
65898-20	CP25-24200	32	50	200		53	57		2.000
65898-21	CP25-24250	38	50	250		60	64		2.950

Machine Tool Fixture

65900 CP03 Goose Neck Clamp



- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°.
- ▶ Surface Finish: Black Oxide
- ▶ Features: Lower nut height and less cutting tool interference.



Unit: mm

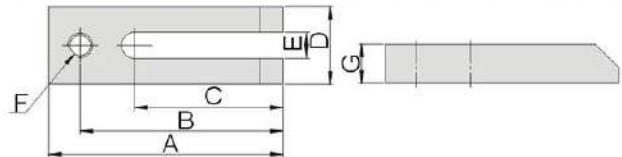
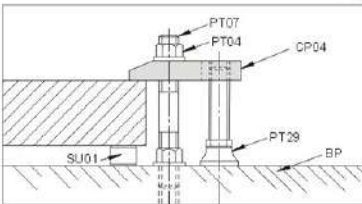
Order No.	Model	A	B	C	D	E	F	G	H	I	kg
65900-01	CP03-12120	120	36	30	102	16	17	50	45	13	0.49
65900-02	CP03-16150	150	48	48	130	25	25	55	60	17	1.30
65900-03	CP03-20175	175	60	60	150	30	30	65	70	21	2.26

MACHINE TOOL FIXTURE

65902 CP04 Tapped End U-Clamp



- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°.
- ▶ Surface Finish: Black Oxide
- ▶ Features: for normal clamp, no need to fully remove nut to loosen the workpiece.



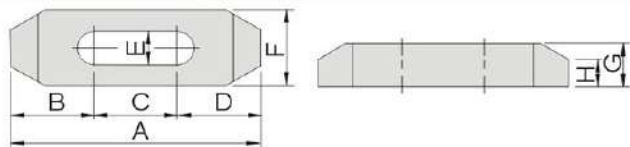
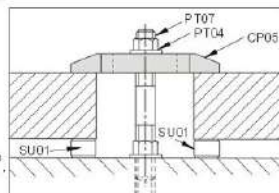
Unit: mm

Order No.	Model	A	B	C	D	E	F	G	kg
65902-01	CP04-12075	75	60	35	38	13	M12	19	0.310
65902-02	CP04-12100	100	85	60	38	13	M12	25	0.520
65902-03	CP04-12125	125	110	85	38	13	M12	25	0.640
65902-04	CP04-14100	100	84	64	38	15	M14	25	0.390
65902-05	CP04-14150	150	134	89	38	15	M14	25	0.620
65902-06	CP04-16100	100	80	45	50	17	M16	25	0.730
65902-07	CP04-16125	125	105	70	50	17	M16	25	0.900
65902-08	CP04-16150	150	130	95	50	17	M16	25	1.060
65902-09	CP04-18150	150	130	89	50	19	M18	32	1.050
65902-10	CP04-18200	200	180	127	50	19	M18	32	1.450
65902-11	CP04-20150	150	130	95	60	21	M20	32	1.460
65902-12	CP04-20200	200	180	145	60	21	M20	32	1.850

65904 CP05 Double Ended Clamp



- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°.
- ▶ Surface Finish: Black Oxide
- ▶ Features: for normal clamp,



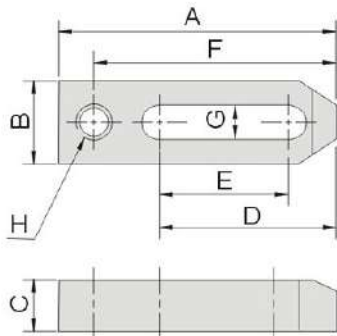
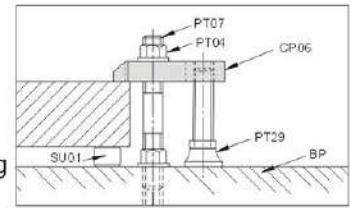
Unit: mm

Order No.	Model	A	B	C	D	E	F	G	H	kg
65904-01	CP05-12065	65	20	25	20	13	32	19	13	0.220
65904-02	CP05-12100	100	30	40	30	13	32	19	13	0.330
65904-03	CP05-12150	150	49.5	51	49.5	13	32	25	15	0.480
65904-04	CP05-16080	80	28	24	28	17	38	22	14	0.340
65904-05	CP05-16125	125	42	41	42	17	38	22	14	0.570
65904-06	CP05-16150	150	51	48	51	17	38	25	15	0.680
65904-07	CP05-20100	100	34	32	34	21	38	22	14	0.410
65904-08	CP05-20125	125	42.5	40	42.5	21	38	25	15	0.620
65904-09	CP05-20150	150	51	48	51	21	38	25	15	0.820

65906 CP06 Tapped Clamp Strap



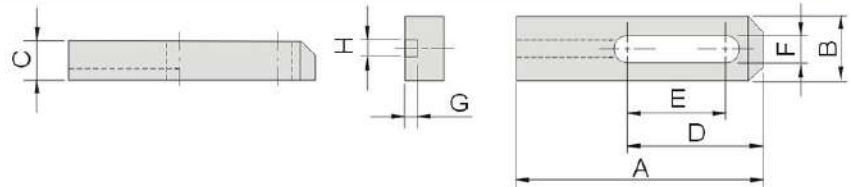
- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°.
- ▶ Surface Finish: Black Oxide
- ▶ Features: applied with PT29 supporting clamp for single way.



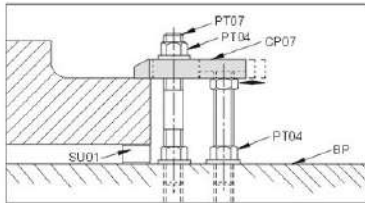
Unit: mm

Order No.	Model	A	B	C	D	E	F	G	H	kg
65906-01	CP06-12065	65	32	19	32	14	52	13	M12	0.22
65906-02	CP06-12080	80	32	19	48	25	69	13	M12	0.27
65906-03	CP06-12100	100	32	19	60	40	89	13	M12	0.33
65906-04	CP06-16080	80	38	19	40	17	65	17	M16	0.32
65906-05	CP06-16100	100	38	25	55	30	85	17	M16	0.53
65906-06	CP06-16125	125	38	25	70	45	110	17	M16	0.65
65906-07	CP06-20150	150	50	25	82	50	134	21	M20	1.10
65906-08	CP06-20200	200	50	32	112	80	184	21	M20	1.90

65908 CP07 Slotted End Clamp Strap



- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°.
- ▶ Surface Finish: Black Oxide
- ▶ Features: Locating slot keeps clamp properly oriented.



Unit: mm

Order No.	Model	A	B	C	D	E	F	G	H	kg
65908-01	CP07-12065	65	32	22	32	14	13	7	10	0.260
65908-02	CP07-12080	80	32	22	48	25	13	7	10	0.310
65908-03	CP07-12100	100	32	22	60	40	13	7	10	0.385
65908-04	CP07-16080	80	38	22	40	17	17	8	12	0.380
65908-05	CP07-16100	100	38	25	55	30	17	8	12	0.530
65908-06	CP07-16125	125	38	25	70	45	17	8	12	0.650
65908-07	CP07-20150	150	50	25	82	50	21	9	13	1.100
65908-08	CP07-20200	200	50	32	112	80	21	9	13	1.400

65910 U Free Clamp



- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°.
- ▶ Surface Finish: Black Oxide

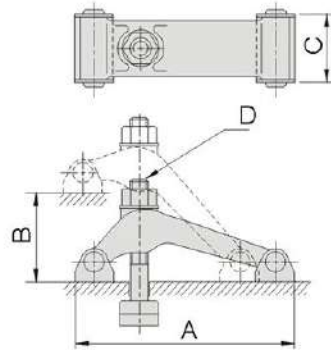
Unit: mm

Order No.	Model	Screw	Size	kg
65910-01	U-1/2"	1/2"	105x45x35mm	2.0
65910-02	U-5/8"	5/8"	126x54x40mm	3.0
65910-03	U-3/4"	3/4"	152x60x55mm	4.5

MACHINE TOOL
FIXTURE

Machine Tool Fixture

65912 CP19 Forged Swivel Clamp



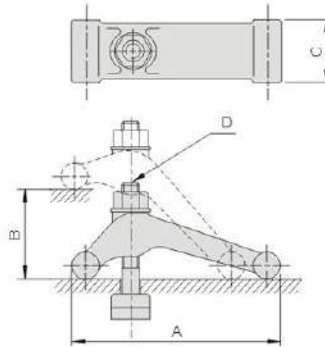
Unit: mm

- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°
- ▶ Surface Finish: Black Oxide

Order No.	Model	A	B	C	D	kg
65912-01	CP19-12125	131	75	46.5	M12-125	1.50
65912-02	CP19-16150	156	85	55	M16-150	2.64
65912-03	CP19-20194	201	105	62	M20-175	4.80

MACHINE TOOL FIXTURE

65914 CP20 Forged Swivel Clamp

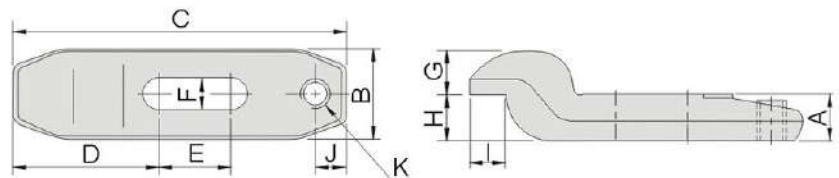


Unit: mm

- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°
- ▶ Surface Finish: Black Oxide

Order No.	Model	A	B	C	D	kg
65914-01	CP20-12125	125	75	45	M12-125	1.40
65914-02	CP20-16150	150	85	52	M16-150	2.42
65914-03	CP20-20194	194	105	58	M20-175	4.50

65916 CP27 Threaded Goose Neck Clamp

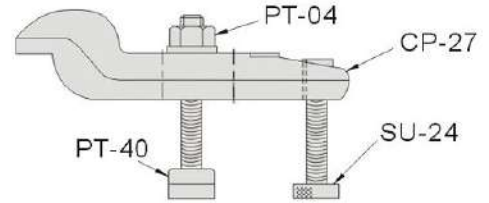
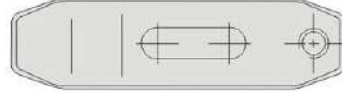


Unit: mm

- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°
- ▶ Surface Finish: Black Oxide

Order No.	Model	A	B	C	D	E	F	G	H	I	J	K	FITS BOLTS	CB	kg
65916-01	CP27-16100	19	35	100	46.5	7	17	14	21	14	10	M12x1.75	M14	CB-12	0.78
65916-02	CP27-16150	22	45	150	62.0	26	17	15	24	22	12	M16x2	M16	CB-16	1.70

65918 CP28 >> **Goose Neck Clamp**

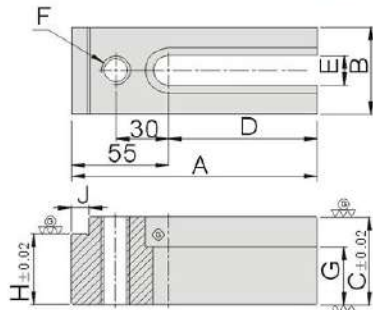


- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°
- ▶ Surface Finish: Black Oxide

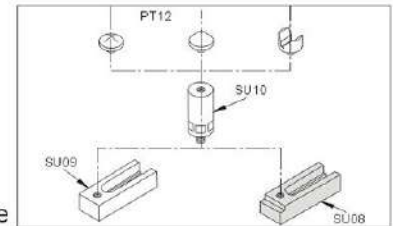
Unit: mm

Order No.	Model	CP27	PT40	PT04	SU24	kg
65918-01	CP28-ZC-40	16100	16100	1624	12060	1.50
65918-02	CP28-ZC-60	16150	16100	1624	16070	2.60

65920 SU08 >> **Extension Support**



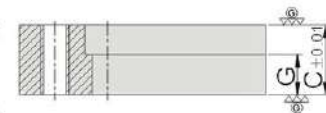
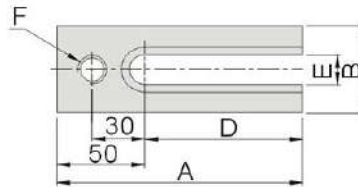
- ▶ Material: S45C
- ▶ Hardened HRC 40°
- ▶ Surface Finish: Black Oxide



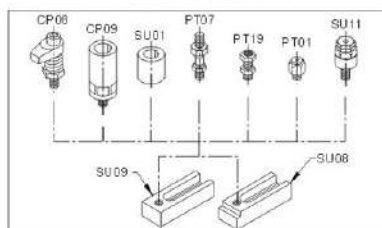
Unit: mm

Order No.	Model	A	B	C	D	E	F	G	H	J	kg
65920-01	SU08-12140-30	140	40	40	85	13	M12	26	30	10	1.3
65920-02	SU08-12140-40	140	40	50	85	13	M12	36	40	10	1.6
65920-03	SU08-16140-30	140	50	40	85	17	M16	22	30	10	1.5
65920-04	SU08-16140-40	140	50	50	85	17	M16	32	40	10	1.9

65922 SU09 >> **Extension Support**



- ▶ Material: S45C
- ▶ Hardened HRC 40°
- ▶ Surface Finish: Black Oxide



Unit: mm

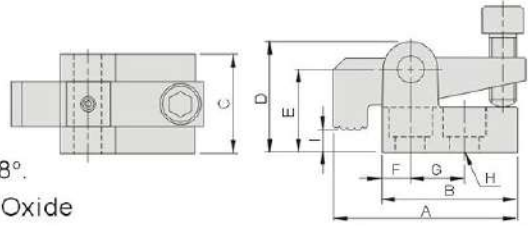
Order No.	Model	A	B	C	D	E	F	G	kg
65922-01	SU09-12120-30	120	40	30	70	13	M12	16	0.85
65922-02	SU09-12120-40	120	40	40	70	13	M12	26	1.10
65922-03	SU09-16140-30	140	50	30	90	17	M16	12	1.14
65922-04	SU09-16140-40	140	50	40	90	17	M16	22	1.52

Machine Tool Fixture

65924 CP14A Pivoting Side Clamp



- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°.
- ▶ Surface Finish: Black Oxide
- ▶ Features: suitable for castings and odd shaped workpieces. Pivoting nose has a serrated jaw that clamps forward and downward simultaneously.



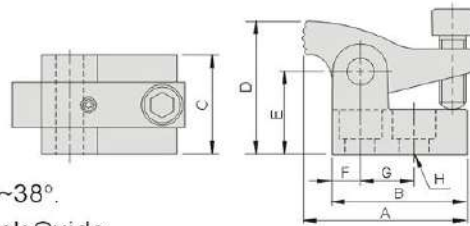
Unit: mm

Order No.	Model	A	B	C	D	E	F	G	H	I	kg
65924-01	CP14A-126045	81.5	60	44	49	37	12.5	24	13	5-15	0.78
65924-02	CP14A-169068	121	91	68	64	47	18	36	18	5-15	2.26

65926 CP14B Pivoting Side Clamp



- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°.
- ▶ Surface Finish: Black Oxide
- ▶ Features: suitable for castings and odd shaped workpieces. Pivoting nose has a serrated jaw that clamps forward and downward simultaneously.



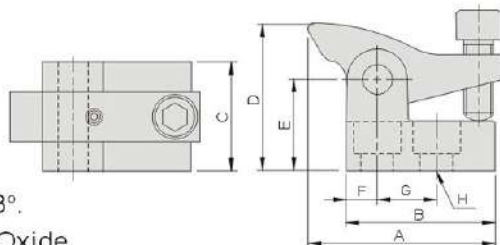
Unit: mm

Order No.	Model	A	B	C	D	E	F	G	H	kg
65926-01	CP14B-126045	72.5	60	44	59.5	37	12.5	24	13	0.73
65926-02	CP14B-169068	108	91	68	82	47	18	36	18	2.20

65928 CP14C Pivoting Side Clamp



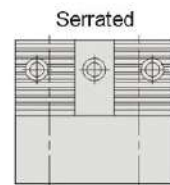
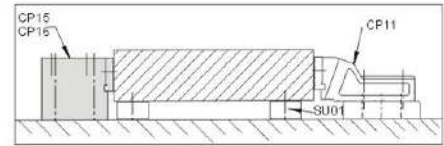
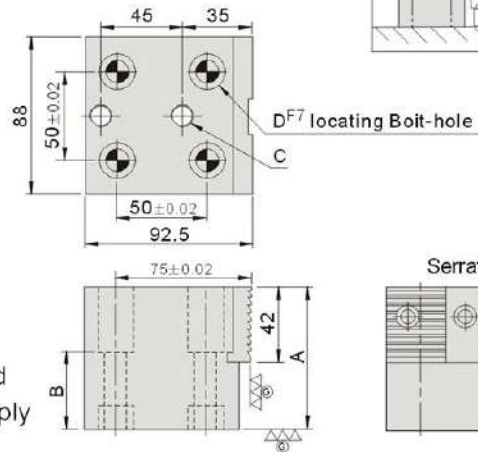
- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°.
- ▶ Surface Finish: Black Oxide
- ▶ Features: suitable for castings and odd shaped workpieces. Pivoting nose has a serrated jaw that clamps forward and downward simultaneously.



Unit: mm

Order No.	Model	A	B	C	D	E	F	G	H	kg
65928-01	CP14C-126045	75	60	44	59.5	37	12.5	24	13	0.73
65928-02	CP14C-169068	110	91	68	82	47	18	36	18	2.12

65930 CP15 Serrated Block Stop

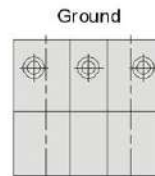
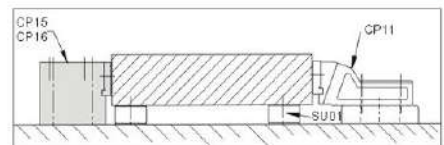
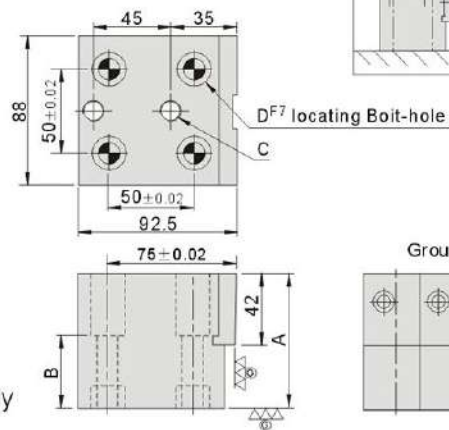


- ▶ Material: S45C (Body), YK30 (Jaw)
- ▶ Hardened HRC 40°(Body) / 58°(Jaw)
- ▶ Surface Finish: Black Oxide
- ▶ Features: suitable for castings and odd shaped workpieces. Can apply with CP11

Unit: mm

Order No.	Model	A	B	C	D (F7)	kg
65930-01	CP15-1265	65	43	M12	12	3.52
65930-02	CP15-1280	80	58	M12	12	4.22
65930-03	CP15-1665	65	38	M16	16	3.24
65930-04	CP15-1680	80	53	M16	16	3.78

65932 CP16 Ground Block Stop



- ▶ Material: S45C (Body), YK30 (Jaw)
- ▶ Hardened HRC 40°(Body) / 58°(Jaw)
- ▶ Surface Finish: Black Oxide
- ▶ Features: suitable for castings and odd shaped workpieces. Can apply with CP11

Unit: mm

Order No.	Model	A	B	C	D (F7)	kg
65932-01	CP16-1265	65	43	M12	12	3.54
65932-02	CP16-1280	80	58	M12	12	4.22
65932-03	CP16-1665	65	38	M16	16	3.28
65932-04	CP16-1680	80	53	M16	16	3.78

MACHINE TOOL FIXTURE

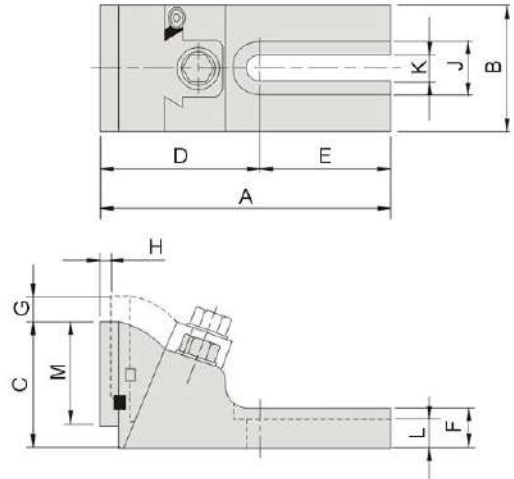
Machine Tool Fixture

65934 CP23 Free Vise



Sold in pairs

- ▶ Material: FCD45C (Body), YK30 (Jaw)
- ▶ Hardened HRC 40°(Body) / 55°(Jaw)
- ▶ Surface Finish: Black Oxide

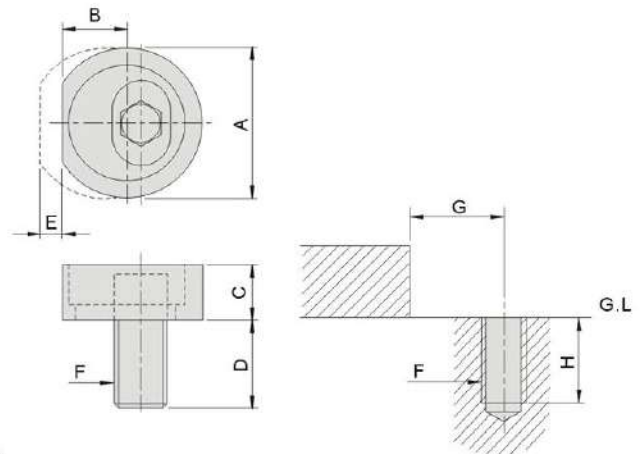


Unit: mm

Order No.	Model	A	B	C	D	E	F	G	H	J	K	L	M	kg
65934-01	CP23-12140	142	70	70	87	55	25	15	5	29	14.5	20.5	60	6.30
65934-02	CP23-16195	192	85	85	103	88	30	20	7	37	17	24	70	11.0
65934-03	CP23-20220	220	110	104	120	100	26	25	9	42	21	28	85	21.0

MACHINE TOOL FIXTURE

65936 CP24 Eccentric Cam Lock

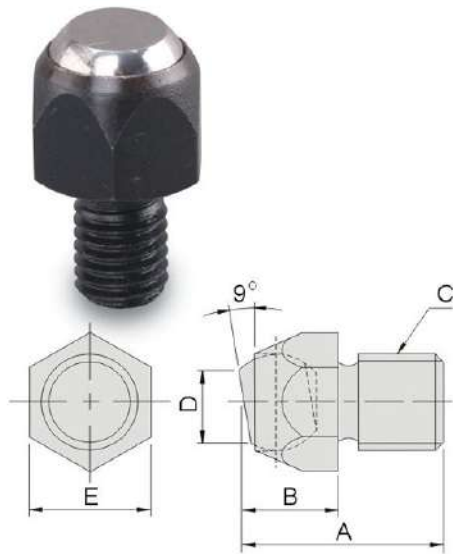


- ▶ Material: S45C
- ▶ Hardened HRC 32°~38°.
- ▶ Surface Finish: Black Oxide

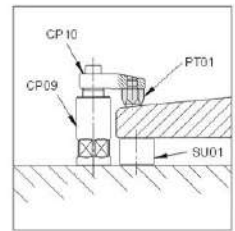
Unit: mm

Order No.	Model	A	B	C	D	E	F	G	H	kg
65936-01	CP24-0824	24	11	6	12.8	3	M8	11.5	17	0.020
65936-02	CP24-1026	26	11.8	8	14.3	4	M10	12.5	22	0.030
65936-03	CP24-1230	30	13.5	9	17.8	5	M12	14.5	22	0.050
65936-04	CP24-1638	38	16	12	20.8	6	M16	17.5	26	0.115

65946 PT01 Smooth Ball End Bolt



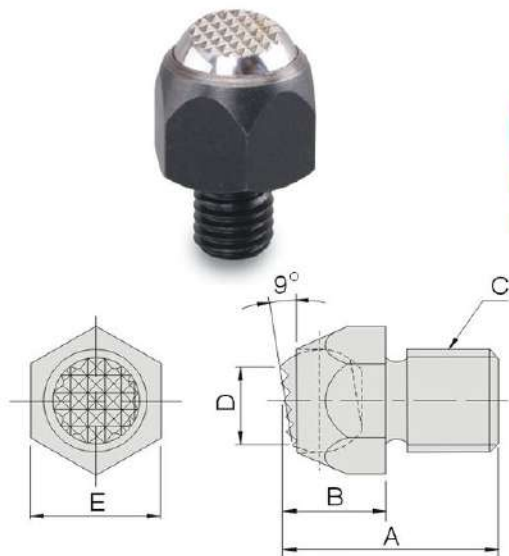
- ▶ Material: S45C (Bolt), SUJ2 (Ball)
- ▶ Hardened HRC 28°~32°(Bolt) / 62°(Ball)
- ▶ Surface Finish: Black Oxide
- ▶ Features: Precision ground top surface



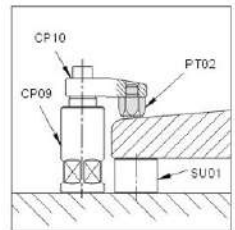
Unit: mm

Order No.	Model	A	B	C	D	E	kg
65946-01	PT01-0814	25	12	M8	8	14	0.015
65946-02	PT01-1017	30	16	M10	10	17	0.025
65946-03	PT01-1222	35	22	M12	12	22	0.070
65946-04	PT01-1627	42	26	M16	14	27	0.140
65946-05	PT01-2036	55	27	M20	14	36	0.28
65946-06	PT01-2436	65	32	M24	18	36	0.56
65946-07	PT01-3046	80	35	M30	21	46	0.88

65948 PT02 Serrated Ball End Bolt



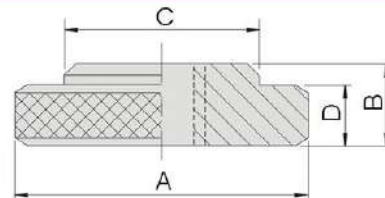
- ▶ Material: S45C (Bolt), SUJ2 (Ball)
- ▶ Hardened HRC 28°~32°(Bolt) / 62°(Ball)
- ▶ Surface Finish: Black Oxide
- ▶ Features: Serrated surface ideal for rough surface.



Unit: mm

Order No.	Model	A	B	C	D	E	kg
65948-01	PT02-0814	25	12	M8	8	14	0.015
65948-02	PT02-1017	30	16	M10	10	17	0.025
65948-03	PT02-1222	35	22	M12	12	22	0.070
65948-04	PT02-1627	42	26	M16	14	27	0.140
65948-05	PT02-2036	55	27	M20	14	36	0.28
65948-06	PT02-2436	65	32	M24	18	36	0.56
65948-07	PT02-3046	80	35	M30	21	46	0.88

65950 PT03 Knurled Nut



- ▶ Material: S45C
- ▶ Hardened HRC 30°~35°.
- ▶ Surface Finish: Black Oxide
- ▶ Features: For fixing on screw rod to clamp workpieces.

Unit: mm

Order No.	Model	A	B	C	D	E	kg
65950-01	PT03-0820	20	8	16	6	M8	0.015
65950-02	PT03-1025	25	10	20	8	M10	0.030
65950-03	PT03-1228	28	12	24	10	M12	0.040
65950-04	PT03-1630	30	12	25	10	M16	0.045

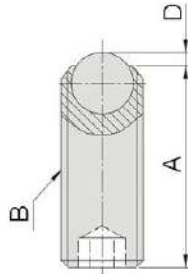
MACHINE TOOL
FIXTURE

Machine Tool Fixture

65952-56 PT16 Swivel Clamping Screw

65952

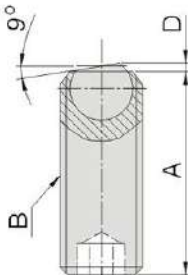
ROUND END



- Material: SCM21 (Body), SUJ2(Ball)
- Hardened HRC 32°~38°(Body) / 62°(Ball)
- Surface Finish: Black Oxide
- Features: Tip contact, supporting or clamping.

65954

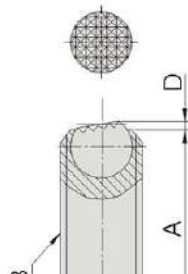
FLAT END



- Material: SCM21 (Body), SUJ2(Ball)
- Hardened HRC 32°~38°(Body) / 62°(Ball)
- Surface Finish: Black Oxide
- Features: Tip contact, supporting or clamping.

65956

SERRATED END



- Material: SCM21 (Body), SUJ2(Ball)
- Hardened HRC 32°~38°(Body) / 62°(Ball)
- Surface Finish: Black Oxide
- Features: Tip contact, supporting or clamping.

Unit: mm

Order No.	Model	A	B	C	D	kg
65952-01	PT16A-0615	13	M6	3	1.4	0.0024
65952-02	PT16A-0625	23	M6	3	1.4	0.0038
65952-03	PT16A-0812	10	M8	4	1.9	0.0032
65952-04	PT16A-0820	18	M8	4	1.9	0.0058
65952-05	PT16A-0830	28	M8	4	1.9	0.0090
65952-06	PT16A-1015	13	M10	5	2.4	0.0067
65952-07	PT16A-1025	23	M10	5	2.4	0.0112
65952-08	PT16A-1035	33	M10	5	2.4	0.0162
65952-09	PT16A-1220	18	M12	6	2.9	0.0125
65952-10	PT16A-1230	28	M12	6	2.9	0.0200
65952-11	PT16A-1240	38	M12	6	2.9	0.0300
65952-12	PT16A-1250	48	M12	6	2.9	0.0400
65952-13	PT16A-1625	23	M16	8	4.0	0.0280
65952-14	PT16A-1635	33	M16	8	4.0	0.0400
65952-15	PT16A-1645	43	M16	8	4.0	0.0450
65952-16	PT16A-1655	53	M16	8	4.0	0.0550
65952-17	PT16A-1665	63	M16	8	4.0	0.0650

Unit: mm

Order No.	Model	A	B	C	D	kg
65954-01	PT16B-0615	13	M6	3	0.5	0.0024
65954-02	PT16B-0625	23	M6	3	0.5	0.0038
65954-03	PT16B-0812	10	M8	4	0.6	0.0032
65954-04	PT16B-0820	18	M8	4	0.6	0.0058
65954-05	PT16B-0830	28	M8	4	0.6	0.0090
65954-06	PT16B-1015	13	M10	5	0.7	0.0067
65954-07	PT16B-1025	23	M10	5	0.7	0.0112
65954-08	PT16B-1035	33	M10	5	0.7	0.0162
65954-09	PT16B-1220	18	M12	6	0.9	0.0125
65954-10	PT16B-1230	28	M12	6	0.9	0.0200
65954-11	PT16B-1240	38	M12	6	0.9	0.0300
65954-12	PT16B-1250	48	M12	6	0.9	0.0400
65954-13	PT16B-1625	23	M16	8	1	0.0280
65954-14	PT16B-1635	33	M16	8	1	0.0400
65954-15	PT16B-1645	43	M16	8	1	0.0450
65954-16	PT16B-1655	53	M16	8	1	0.0550
65954-17	PT16B-1665	63	M16	8	1	0.0650

Unit: mm

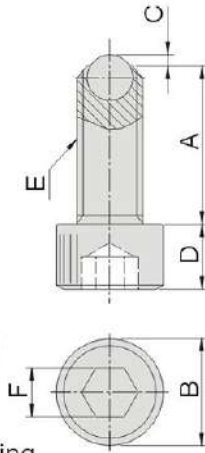
Order No.	Model	A	B	C	D	kg
65956-01	PT16C-0615	13	M6	3	0.5	0.0024
65956-02	PT16C-0625	23	M6	3	0.5	0.0038
65956-03	PT16C-0812	10	M8	4	0.6	0.0032
65956-04	PT16C-0820	18	M8	4	0.6	0.0058
65956-05	PT16C-0830	28	M8	4	0.6	0.0090
65956-06	PT16C-1015	13	M10	5	0.7	0.0067
65956-07	PT16C-1025	23	M10	5	0.7	0.0112
65956-08	PT16C-1035	33	M10	5	0.7	0.0162
65956-09	PT16C-1220	18	M12	6	0.9	0.0125
65956-10	PT16C-1230	28	M12	6	0.9	0.0200
65956-11	PT16C-1240	38	M12	6	0.9	0.0300
65956-12	PT16C-1250	48	M12	6	0.9	0.0400
65956-13	PT16C-1625	23	M16	8	1	0.0280
65956-14	PT16C-1635	33	M16	8	1	0.0400
65956-15	PT16C-1645	43	M16	8	1	0.0450
65956-16	PT16C-1655	53	M16	8	1	0.0550
65956-17	PT16C-1665	63	M16	8	1	0.0650

MACHINE TOOL FIXTURE

65958-62 PT17 Swivel Shoulder Clamping Screw

65958

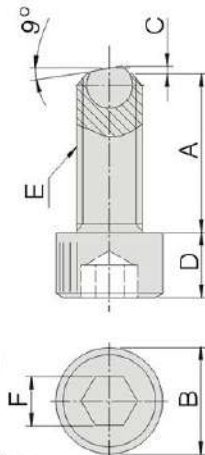
ROUND END



- ▶ Material: SCM21 (Body), SUJ2(Ball)
- ▶ Hardened HRC 32°~38°(Body) / 60°(Ball)
- ▶ Surface Finish: Black Oxide
- ▶ Features: Tip contact, supporting or clamping fixtures.

65960

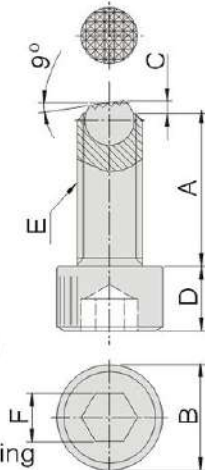
FLAT END



- ▶ Material: SCM21 (Body), SUJ2(Ball)
- ▶ Hardened HRC 32°~38°(Body) / 60°(Ball)
- ▶ Surface Finish: Black Oxide
- ▶ Features: Tip contact, supporting or clamping fixtures.

65962

SERRATED END



- ▶ Material: SCM21 (Body), SUJ2(Ball)
- ▶ Hardened HRC 32°~38°(Body) / 60°(Ball)
- ▶ Surface Finish: Black Oxide
- ▶ Features: Tip contact, supporting or clamping fixtures.

Unit: mm

Order No.	Model	A	B	C	D	E	F	kg
65958-01	PT17A-0615	14	10	1.4	6	M6	5	0.0053
65958-02	PT17A-0625	23	10	1.4	6	M6	5	0.0074
65958-03	PT17A-0635	33	10	1.4	6	M6	5	0.0095
65958-04	PT17A-0820	18	13	1.9	8	M8	6	0.0135
65958-05	PT17A-0830	28	13	1.9	8	M8	6	0.0200
65958-06	PT17A-0840	38	13	1.9	8	M8	6	0.0240
65958-07	PT17A-1025	23	16	2.4	10	M10	8	0.0260
65958-08	PT17A-1040	38	16	2.4	10	M10	8	0.0340
65958-09	PT17A-1060	58	16	2.4	10	M10	8	0.0460
65958-10	PT17A-1230	28	18	2.9	12	M12	10	0.0400
65958-11	PT17A-1245	43	18	2.9	12	M12	10	0.0500
65958-12	PT17A-1265	63	18	2.9	12	M12	10	0.0700
65958-13	PT17A-1280	78	18	2.9	12	M12	10	0.0830
65958-14	PT17A-1640	38	24	4.0	16	M16	14	0.0900
65958-15	PT17A-1650	48	24	4.0	16	M16	14	0.1100
65958-16	PT17A-1665	63	24	4.0	16	M16	14	0.1300
65958-17	PT17A-1690	88	24	4.0	16	M16	14	0.1700

Unit: mm

Order No.	Model	A	B	C	D	E	F	kg
65960-01	PT17B-0615	14	10	0.5	6	M6	5	0.0053
65960-02	PT17B-0625	23	10	0.5	6	M6	5	0.0074
65960-03	PT17B-0635	33	10	0.5	6	M6	5	0.0095
65960-04	PT17B-0820	18	13	0.6	8	M8	6	0.0135
65960-05	PT17B-0830	28	13	0.6	8	M8	6	0.0200
65960-06	PT17B-0840	38	13	0.6	8	M8	6	0.0240
65960-07	PT17B-1025	23	16	0.7	10	M10	8	0.0260
65960-08	PT17B-1040	38	16	0.7	10	M10	8	0.0340
65960-09	PT17B-1060	58	16	0.7	10	M10	8	0.0460
65960-10	PT17B-1230	28	18	0.9	12	M12	10	0.0400
65960-11	PT17B-1245	43	18	0.9	12	M12	10	0.0500
65960-12	PT17B-1265	63	18	0.9	12	M12	10	0.0700
65960-13	PT17B-1280	78	18	0.9	12	M12	10	0.0830
65960-14	PT17B-1640	38	24	1	16	M16	14	0.0900
65960-15	PT17B-1650	48	24	1	16	M16	14	0.1100
65960-16	PT17B-1665	63	24	1	16	M16	14	0.1300
65960-17	PT17B-1690	88	24	1	16	M16	14	0.1700

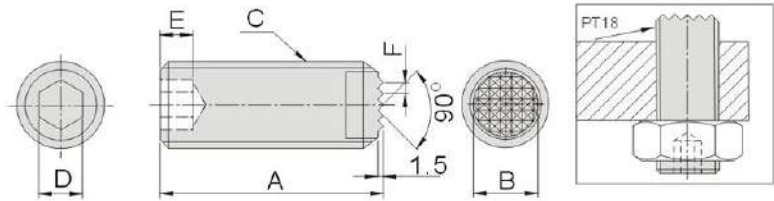
Unit: mm

Order No.	Model	A	B	C	D	E	F	kg
65962-01	PT17C-0615	14	10	0.5	6	M6	5	0.0053
65962-02	PT17C-0625	23	10	0.5	6	M6	5	0.0074
65962-03	PT17C-0635	33	10	0.5	6	M6	5	0.0095
65962-04	PT17C-0820	18	13	0.6	8	M8	6	0.0135
65962-05	PT17C-0830	28	13	0.6	8	M8	6	0.0200
65962-06	PT17C-0840	38	13	0.6	8	M8	6	0.0240
65962-07	PT17C-1025	23	16	0.7	10	M10	8	0.0260
65962-08	PT17C-1040	38	16	0.7	10	M10	8	0.0340
65962-09	PT17C-1060	58	16	0.7	10	M10	8	0.0460
65962-10	PT17C-1230	28	18	0.9	12	M12	10	0.0400
65962-11	PT17C-1245	43	18	0.9	12	M12	10	0.0500
65962-12	PT17C-1265	63	18	0.9	12	M12	10	0.0700
65962-13	PT17C-1280	78	18	0.9	12	M12	10	0.0830
65962-14	PT17C-1640	38	24	1	16	M16	14	0.0900
65962-15	PT17C-1650	48	24	1	16	M16	14	0.1100
65962-16	PT17C-1665	63	24	1	16	M16	14	0.1300
65962-17	PT17C-1690	88	24	1	16	M16	14	0.1700

MACHINE TOOL
FIXTURE

Machine Tool Fixture

65964 PT18 Gripper Screw

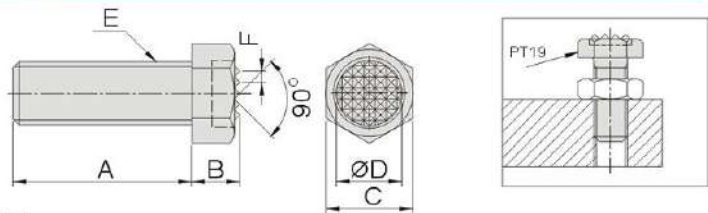


Unit: mm

Order No.	Model	A	B	C	D	E	F	kg
65964-01	PT18-1025	25	6.5	M10	5	4	2.3	0.015
65964-02	PT18-1050	50	6.5	M10	5	5	2.3	0.030
65964-03	PT18-1225	25	8	M12	6	5	2.3	0.022
65964-04	PT18-1250	50	8	M12	6	5	2.3	0.045
65964-05	PT18-1625	25	11.5	M16	8	6	3	0.038
65964-06	PT18-1650	50	11.5	M16	8	6	3	0.078
65964-07	PT18-2025	25	13	M20	10	8	3	0.058
65964-08	PT18-2050	50	13	M20	10	8	3	0.120

- ▶ Material: SKH9
- ▶ Hardened HRC 60°
- ▶ Surface Finish: Black Oxide
- ▶ Features: Supporting or clamping casting workpieces, great grip.

65966 PT19 Gripper Screw

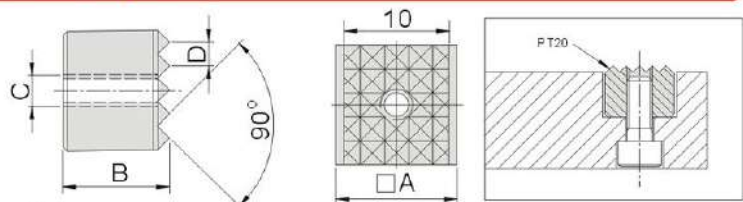


Unit: mm

Order No.	Model	A	B	C	D	E	F	kg
65966-01	PT19-061025	25	6	10	7.9	M6	2.3	0.008
65966-02	PT19-081325	25	7.3	13	9.5	M8	3	0.015
65966-03	PT19-101725	25	7.3	17	12.7	M10	3	0.030
65966-04	PT19-101740	40	8.4	17	12.7	M10	3	0.035
65966-05	PT19-121925	25	9.5	19	15.9	M12	3	0.035
65966-06	PT19-121940	40	9.5	19	15.9	M12	3	0.050
65966-07	PT19-162435	35	12	24	19.1	M16	3	0.085
65966-08	PT19-162450	50	12	24	19.1	M16	3	0.100
65966-09	PT19-203040	40	14.5	30	25.4	M20	3	0.160
65966-10	PT19-203060	60	14.5	30	25.4	M20	3	0.205

- ▶ Material: SKH9
- ▶ Hardened HRC 60°
- ▶ Surface Finish: Black Oxide
- ▶ Features: Supporting or clamping casting workpieces, great grip.

65968 PT20 Gripper Pad (Square)



Unit: mm

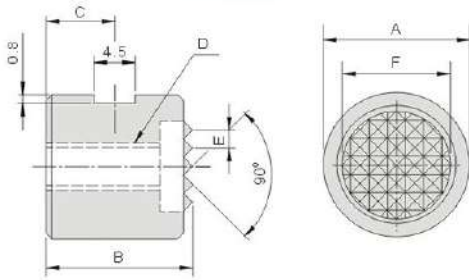
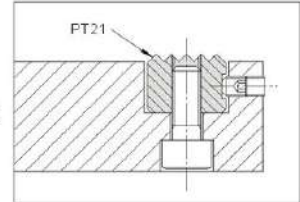
Order No.	Model	A	B	C	D	kg
65968-01	PT20-1010	10	10	M5	2.3	0.008
65968-02	PT20-1210	12	10	M6	3	0.010
65968-03	PT20-2010	20	10	M6	3	0.030
65968-04	PT20-2510	25	10	M6	3	0.043

- ▶ Material: SKH9
- ▶ Hardened HRC 60°
- ▶ Surface Finish: Black Oxide
- ▶ Features: Supporting or clamping casting workpieces, great grip.

65970 PT21 Gripper Pad (Round)



- ▶ Material: SKH9
- ▶ Hardened HRC 60°
- ▶ Surface Finish: Black Oxide
- ▶ Features: Supporting or clamping casting workpieces, great grip.



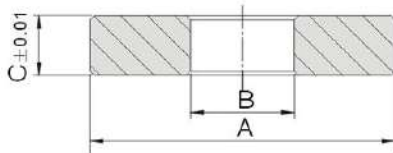
Unit: mm

Order No.	Model	A	B	C	D	E	F	kg
65970-01	PT21-1010	10	10	3.4	M5	2.3	8	0.005
65970-02	PT21-1212	12	12	4	M6	3	9.6	0.008
65970-03	PT21-1612	16	12	4	M6	3	13	0.016
65970-04	PT21-2012	20	12	4	M6	3	16.3	0.025
65970-05	PT21-2512	25	12	4	M6	3	19.5	0.040

65972 PT22 Spacer



- ▶ Material: SKH9
- ▶ Hardened HRC 40°
- ▶ Features: Applied with fixture for extension or height.



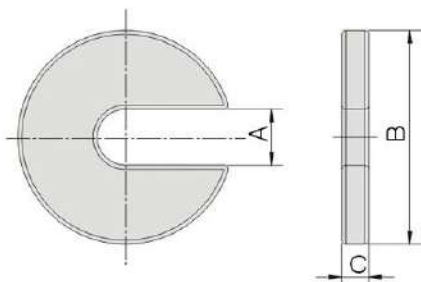
Unit: mm

Order No.	Model	A	B	C	kg
65972-01	PT22-1303	40	13	3	0.030
65972-02	PT22-1305	40	13	5	0.045
65972-03	PT22-1310	40	13	10	0.100
65972-04	PT22-1330	40	13	30	0.300
65972-05	PT22-1703	50	17	3	0.035
65972-06	PT22-1705	50	17	5	0.070
65972-07	PT22-1710	50	17	10	0.350
65972-08	PT22-1730	50	17	30	0.950

65974 PT23 "C" Washer



- ▶ Material: SKH9
- ▶ Hardened HRC 40°
- ▶ Surface Finish: Black Oxide
- ▶ Features: Washer that slides in and out of position for clean loading.

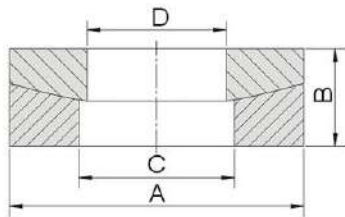


Unit: mm

Order No.	Model	A	B	C	kg
65974-01	PT23-0835	9	35	8	0.065
65974-02	PT23-1040	11	40	8	0.065
65974-03	PT23-1255	13	55	10	0.150
65974-04	PT23-1665	17	65	10	0.200
65974-05	PT23-2080	21	80	10	0.300

Machine Tool Fixture

65976 PT25 Spherical Washer

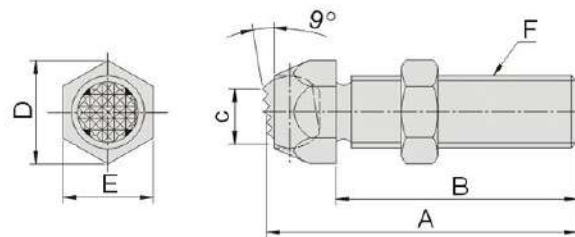


- ▶ Material: S45C
- ▶ Hardened HRC 38°
- ▶ Surface Finish: Black Oxide
- ▶ Features: Two-piece washer that compensates whenever a stub and clamping surface are not exactly perpendicular.

Unit: mm

Order No.	Model	A	B	C	D	R	kg
65976-01	PT25-0819	19	6.2	10	9	30	0.013
65976-02	PT25-1022	22	8	12	11	30	0.019
65976-03	PT25-1226	26	7.5	15	13	32	0.024
65976-04	PT25-1428	28	9	16	15	40	0.033
65976-05	PT25-1632	32	9	19	17	40	0.058
65976-06	PT25-1835	35	10	20	19	40	0.05
65976-07	PT25-2040	40	11.8	23	21	48	0.089
65976-08	PT25-2245	45	12.5	26	24	70	0.11
65976-09	PT25-2450	50	13.5	28	27	70	0.15

65978 PT35 Swiveling Jack Screw with Serrated End

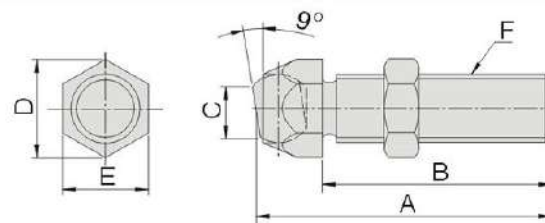


Unit: mm

Order No.	Model	A	B	C	D	E	F	kg
65978-01	PT35-0814	36	25	7	16	14	M8	0.025
65978-02	PT35-1017	45	30	8	19.6	17	M10	0.055
65978-03	PT35-1217	50	35	10	19.6	17	M12	0.055
65978-04	PT35-1624	60	40	12	27.7	24	M16	0.140
65978-05	PT35-2036	87	60	14	41.6	36	M20	0.330

- ▶ Material: S45C (Body), SUJ2 (Ball)
- ▶ Hardened HRC 35°(Body), 62°(Ball)

65980 PT36 Swiveling Jack Screw with Flat End

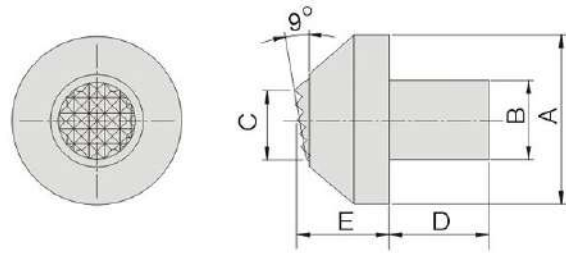


Unit: mm

Order No.	Model	A	B	C	D	E	F	kg
65980-01	PT36-0814	36	25	7	16	14	M8	0.025
65980-02	PT36-1017	45	30	8	19.6	17	M10	0.055
65980-03	PT36-1217	50	35	10	19.6	17	M12	0.055
65980-04	PT36-1624	60	40	12	27.7	24	M16	0.140
65980-05	PT36-2036	87	60	14	41.6	36	M20	0.330

- ▶ Material: S45C (Body), SUJ2 (Ball)
- ▶ Hardened HRC 35°(Body), 62°(Ball)

65982 PT37 Swivel Rest Tip with Serrated End

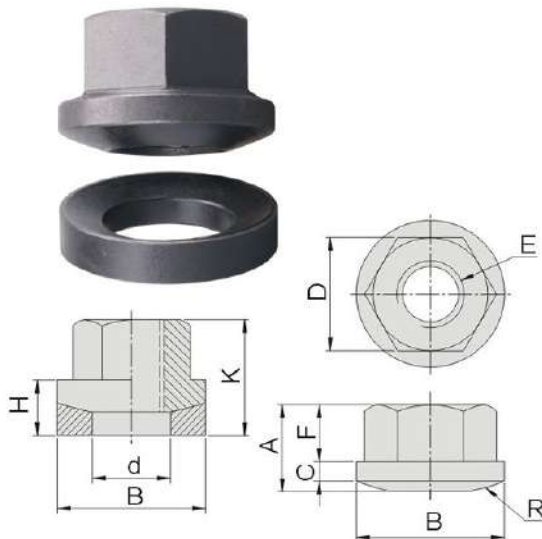


Unit: mm

- ▶ Material: S45C (Body), SUJ2 (Ball)
- ▶ Hardened HRC 35°(Body), 62°(Ball)

Order No.	Model	A	B	C	D	E	kg
65982-01	PT37-1116	25	11	10	10	14.3	0.030
65982-02	PT37-1118	30	11	12	10	18	0.040

65984 PT41 Swivel Flange Nuts

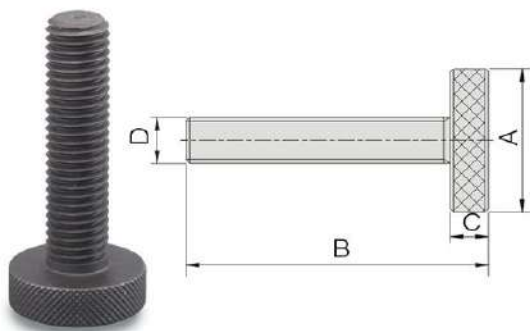


- ▶ Material: S45C
- ▶ Hardened HRC -32°~35°(Ball)

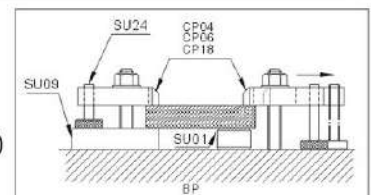
Unit: mm

Order No.	Model	A	B	C	D	d	E	F	H	K	R	kg
65984-01	PT41-0813	12	19	3	13	10	M8	7.8	7	15	30	0.021
65984-02	PT41-1017	13	22	3	17	12	M10	8.4	8	16.5	30	0.032
65984-03	PT41-1219	14.3	26	4	19	15	M12	9	10	19	32	0.046
65984-04	PT41-1422	17.5	28	4.5	22	16	M14	11.4	11	22	40	0.066
65984-05	PT41-1624	20	32	4.5	24	19	M16	12.8	11	23.8	40	0.103
65984-06	PT41-1827	20.6	35	4.5	27	20	M18	13.6	12	25.5	40	0.106
65984-07	PT41-2030	25	40	6	30	23	M20	16.6	14	31	48	0.183
65984-08	PT41-2232	25.4	45	6	32	26	M22	16.9	15	31.5	70	0.21
65984-09	PT41-2436	28	50	6	36	28	M24	18.7	15	33.5	70	0.27

65986 SU24 Knurled Adjusting Screw



- ▶ Material: S45C
- ▶ Hardened HRC -32°~35°(Ball)
- ▶ Surface Finish: Black Oxide



Unit: mm

Order No.	Model	A	B	C	D	kg
65986-01	SU24-12060	28	60	8	M12	0.08
65986-02	SU24-14065	30	65	9	M14	0.10
65986-03	SU24-16070	30	70	10	M16	0.13
65986-04	SU24-18080	36	80	12	M18	0.21
65986-05	SU24-20130	50	130	16	M20	0.47

MACHINE TOOL
FIXTURE