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+7 (495) 988-22-19
info@m-ser.ru

Москва
Санкт-Петербург
Екатеринбург



LEAVE INDUSTRIAL CO., LTD.

МАШСЕРВИС

Modular Jigs & Fixtures
Modular Vise Systems
Tooling & Work Holding Components

Modular Jigs & Fixtures · Tooling & Work Holding Components



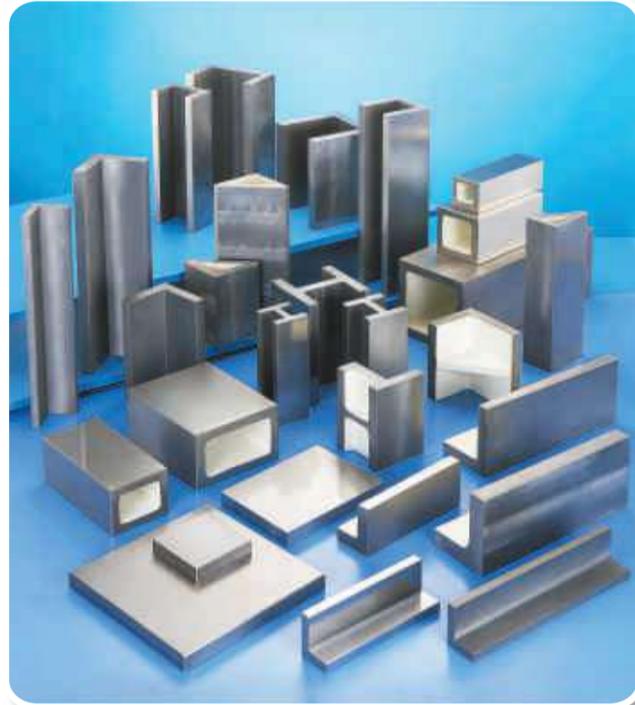
LEAVE INDUSTRIAL CO., LTD.

г. Москва, Ленинградский проспект
д. 37, корпус 12, 1 этаж, оф. 26





BASE SERIES



BASE COMPONENTS



AUX PARTS



SVF SERIES



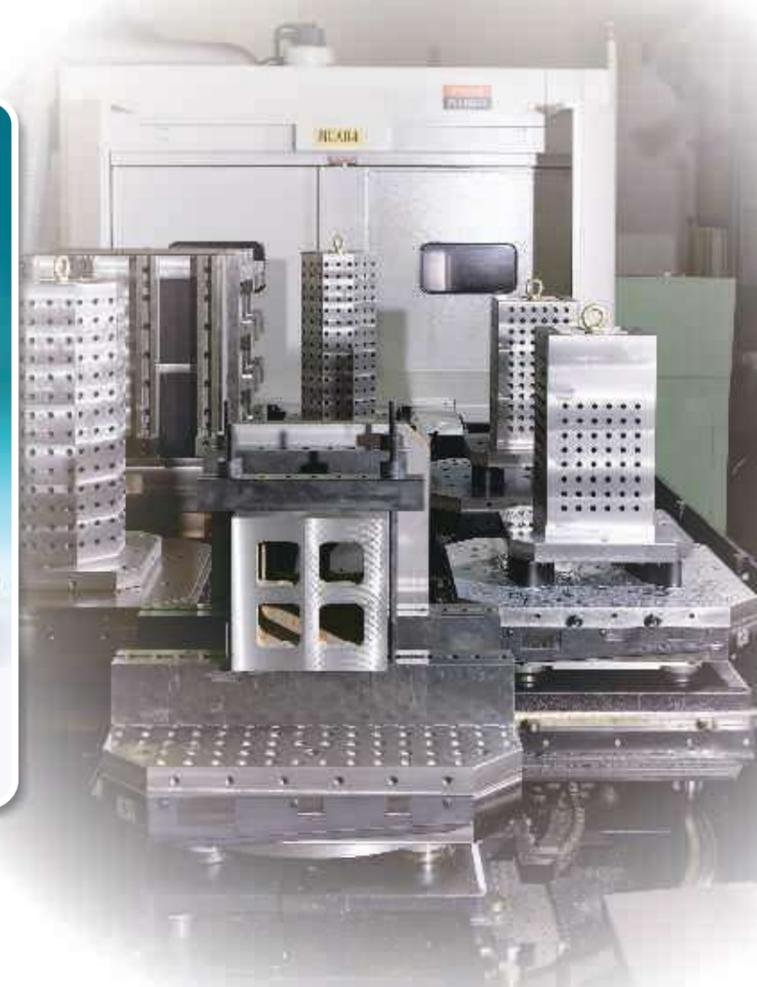
CLAMP PARTS



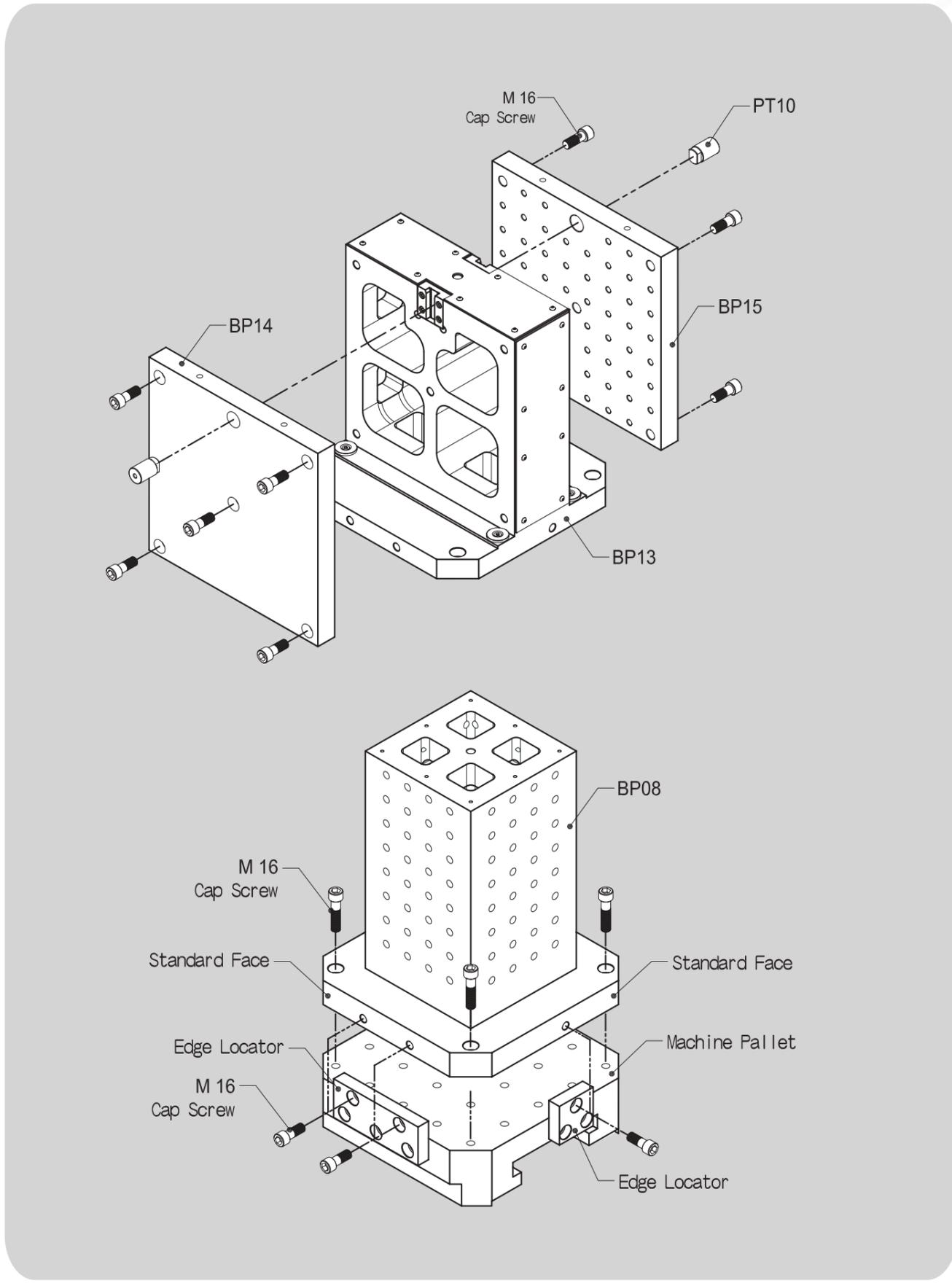
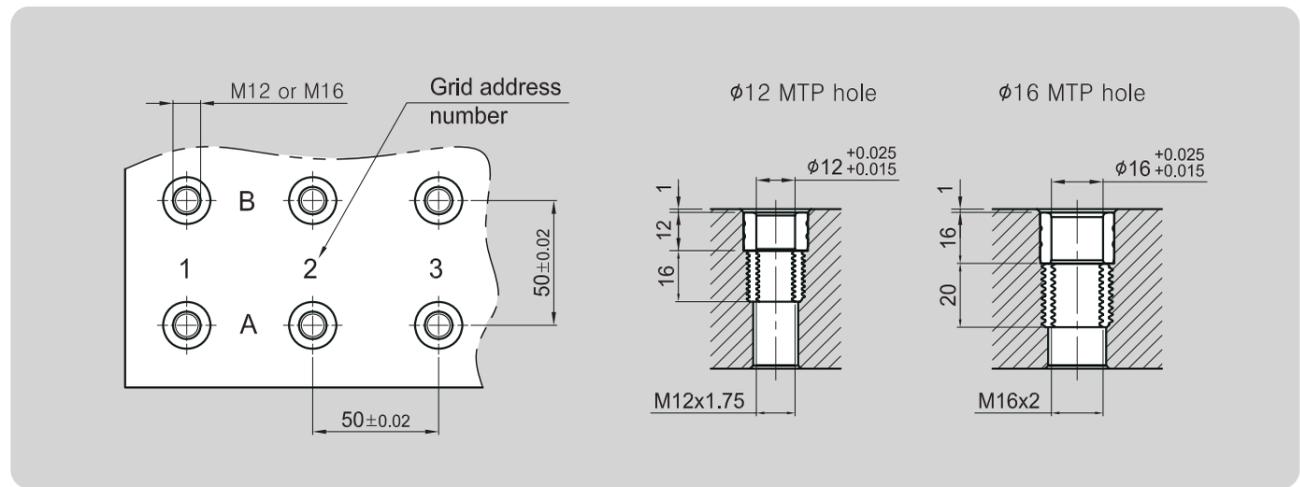
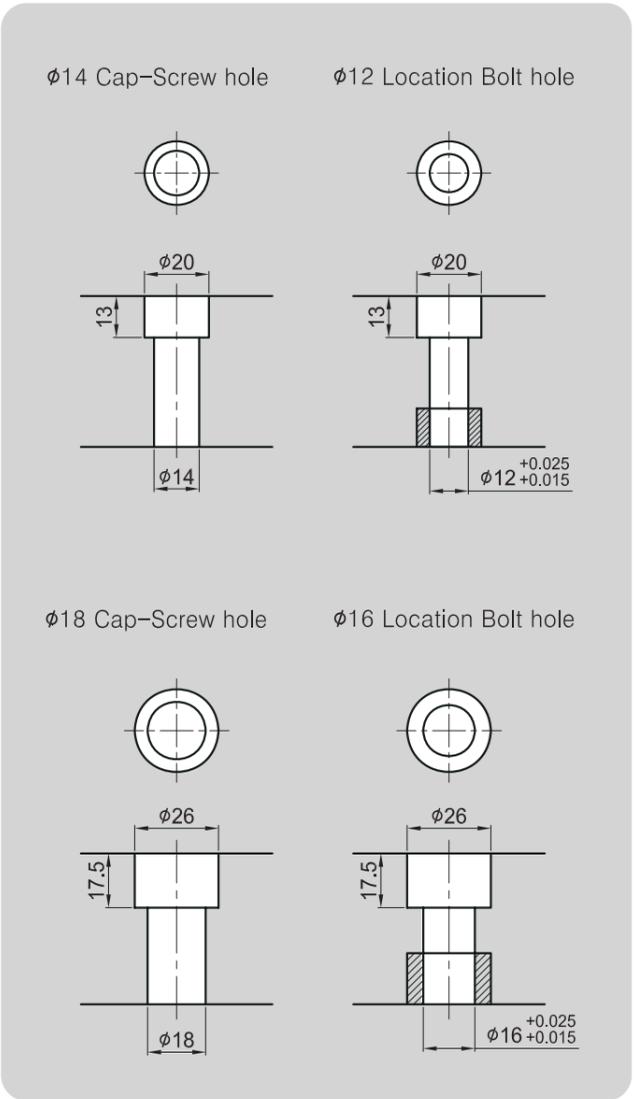
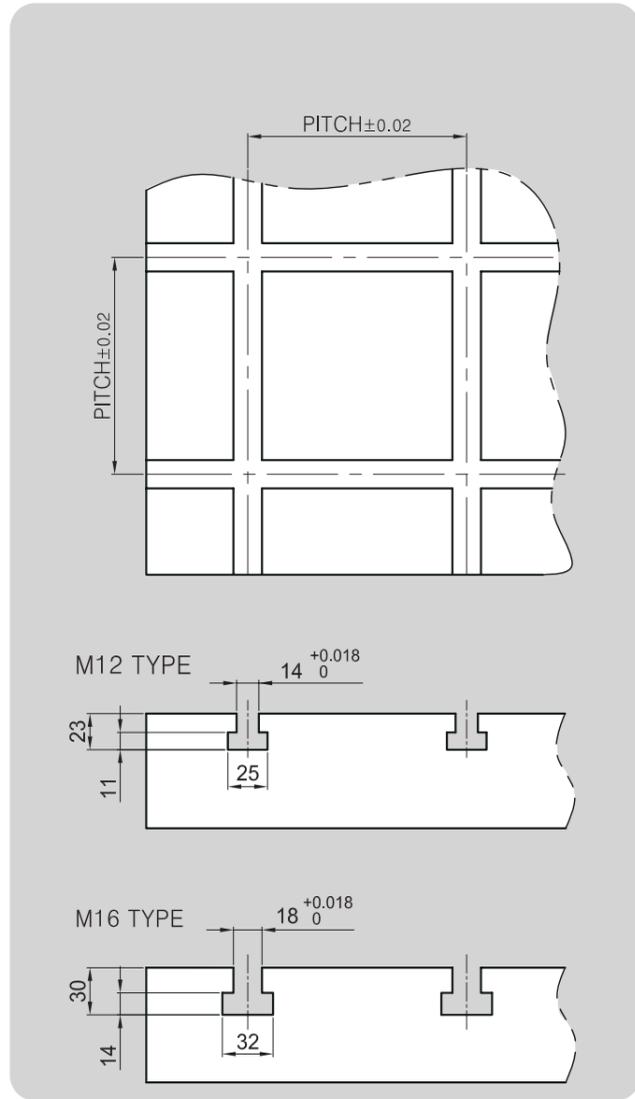
SUPPORT PARTS



ALV SERIES



Various Holes and T-Slots Dimension on All "LEAVE" Tables and Blocks.



BASE SERIES

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CLAMP PARTS



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ALV VISE SERIES



ALV
HIGH STRENGTH
ALUMINUM LINE UP VISE



P.8-1
P.8-10

OK VISE SERIES



OK-VISE
AK2-VT-SO



P.9-2

OK-VISE
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P.9-2

OK-VISE
BK2-VT-SO



P.9-2

OK-VISE
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P.9-3

OK-VISE
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OK-VISE
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P.9-3

OK-VISE
DK2-WT



P.9-3

OK-VISE
FK2-WT



P.9-3

OK-VISE
BK2-VT+3
DK2-VT+5
FK2-VT+5



P.9-3

OK-VISE
BK2-VT-B
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P.9-4

OK-VISE
BK2-VT-T
DK2-VT-T
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P.9-4

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JERGENS
LOCATING AND
CLAMPING SHANKS



P.10-1

JERGENS
FAST ACTING BALL
LOCKTM SHANKS



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JERGENS
LINERS



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JERGENS
RECEIVER
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PRECISION
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TCP
TOOL TIGHTENING
FIXTURE



P.11-1

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PGV PRECISION
HYDRAULIC VISE



P.11-2

PGV
TOOL MAKER
VISE



P.11-3

GVS
SUPER PRECISION
TOOL MAKER VISE



P.11-4

GVS
SUPER PRECISION
TOOL MAKER VISE



P.11-5

GVS
SUPER PRECISION
TOOL MAKER VISE



P.11-6

GVS
TOOL MAKER VISE
(LARGE)



P.11-7

NBK
ROUND SUPER
THIN CHUCK



P.11-8

MCA
SUPER THIN
SQUARE CHUCKS



P.11-9

GP-102
GROUND
PARALLEL SET



P.11-10

MK
CLAMPING KITS
WITH METAL RACKS



P.11-11

BASE SERIES

BP01~BP37, BP-SPECIAL



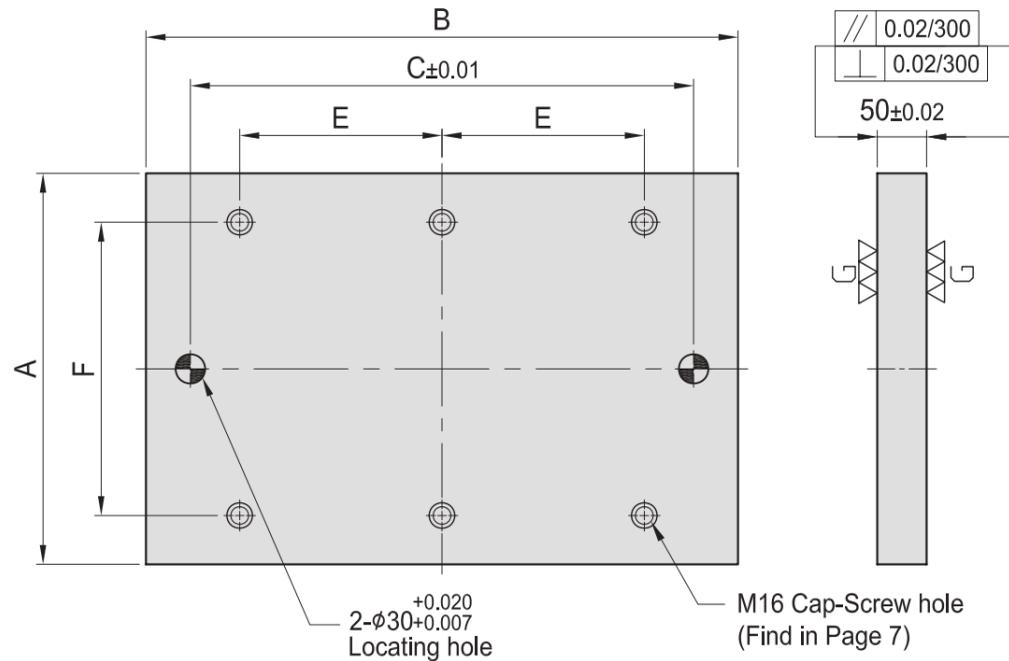
M/C BASE PLATE M/C CLAMPING CUBE M/C DOUBLE-SIDED ANGLE PLATE

BP01

M/C BASE PLATE



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Vertical Machining Center.
- Features: Ready to accept a hole pattern for your special jig.



MODEL NO.	A	B	C	E	F	kg
BP01-50400-0600	400	600	-	-	-	88
BP01-50500-0600	500					106
BP01-50600-0600	600					127
BP01-50400-0800	400	800	-	-	-	113
BP01-50450-0900	450	900				142
BP01-50500-1000	500	1000	-	-	-	176
BP01-50600-1200	600	1200				256

*Special Design Welcome !

BP02

M/C BASE PLATE



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
Alignment Bushing: SUJ2(JIS) / 100Cr6(DIN) heat treated.
Threaded Insert: S45C (JIS)/ CK45 (DIN), heat treated.
MTP hole spacing: 50±0.02
- Application: Vertical Machining Center.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.

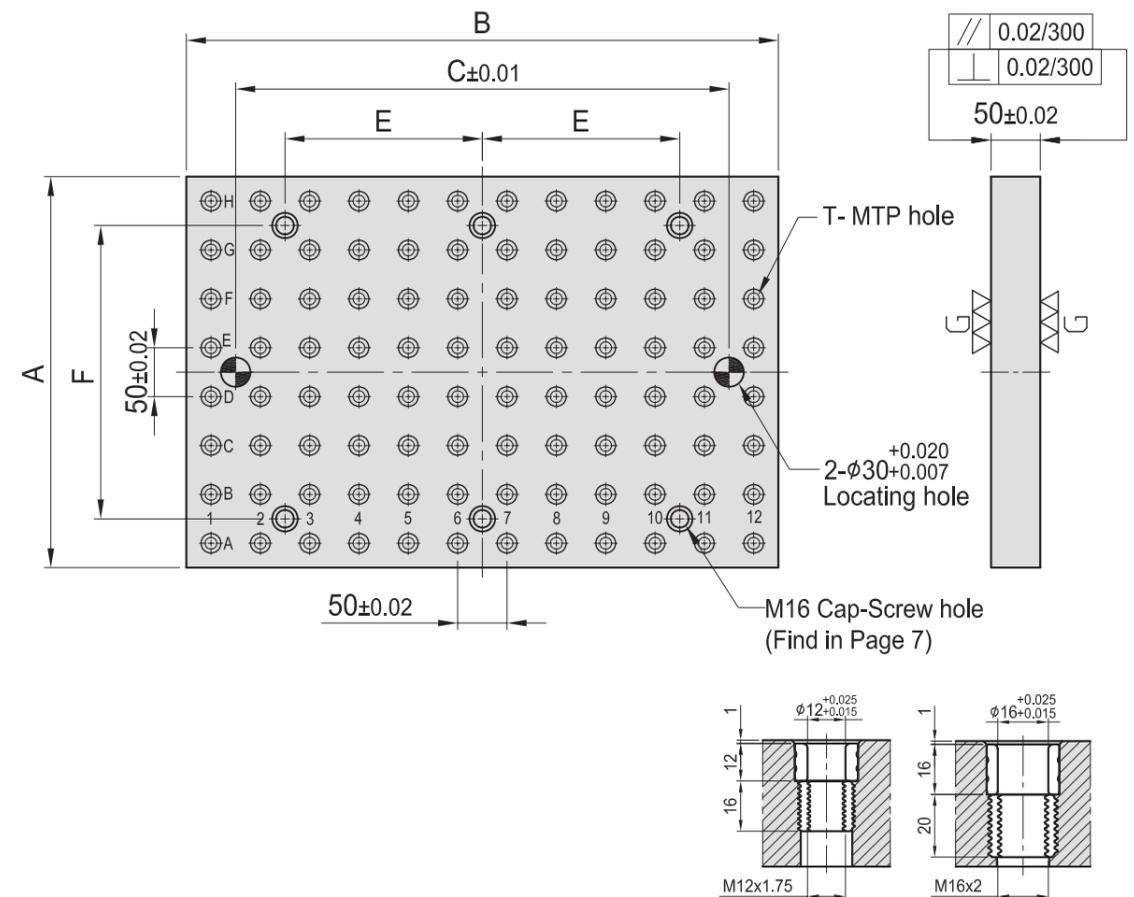


Figure T

MODEL NO.	A	B	C	E	F	T	MTP	kg
BP02-50400-0600-12	400	600	-	-	-	φ 12	M12	96 90
BP02-50500-0600-12	500							120 112
BP02-50600-0600-12	600							144 134
BP02-50400-0800-12	400	800	-	-	-	φ 12	M12	128 109
BP02-50450-0900-12	450	900						158 138
BP02-50500-1000-12	500	1000	-	-	-	φ 12	M12	200 165
BP02-50600-1200-12	600	1200						288 244

*Special Design Welcome !

MODEL NO.	A	B	C	E	F	T	MTP	kg
BP02-50400-0600-16	400	600	-	-	-	φ 16	M16	96 89
BP02-50500-0600-16	500							120 108
BP02-50600-0600-16	600							144 120
BP02-50400-0800-16	400	800	-	-	-	φ 16	M16	128 108
BP02-50450-0900-16	450	900						158 134
BP02-50500-1000-16	500	1000	-	-	-	φ 16	M16	200 164
BP02-50600-1200-16	600	1200						288 240

BP03

M/C BASE PLATE

- Material / Cast Iron FC300(JIS) / GG30(DIN)
- Heat treated: Normalized
- Application: Vertical Machining Center.
- Features: T-Slots running in 2 directions, easily adapts to standardized jig components.



BP04

M/C BASE PLATE

- Material / Finish: Material: Cast Iron FC300(JIS) / GG30(DIN) Heat treated (Normalized)
- Application: Horizontal Machining Center.
- Features: Ready to accept a hole pattern for your special jig.

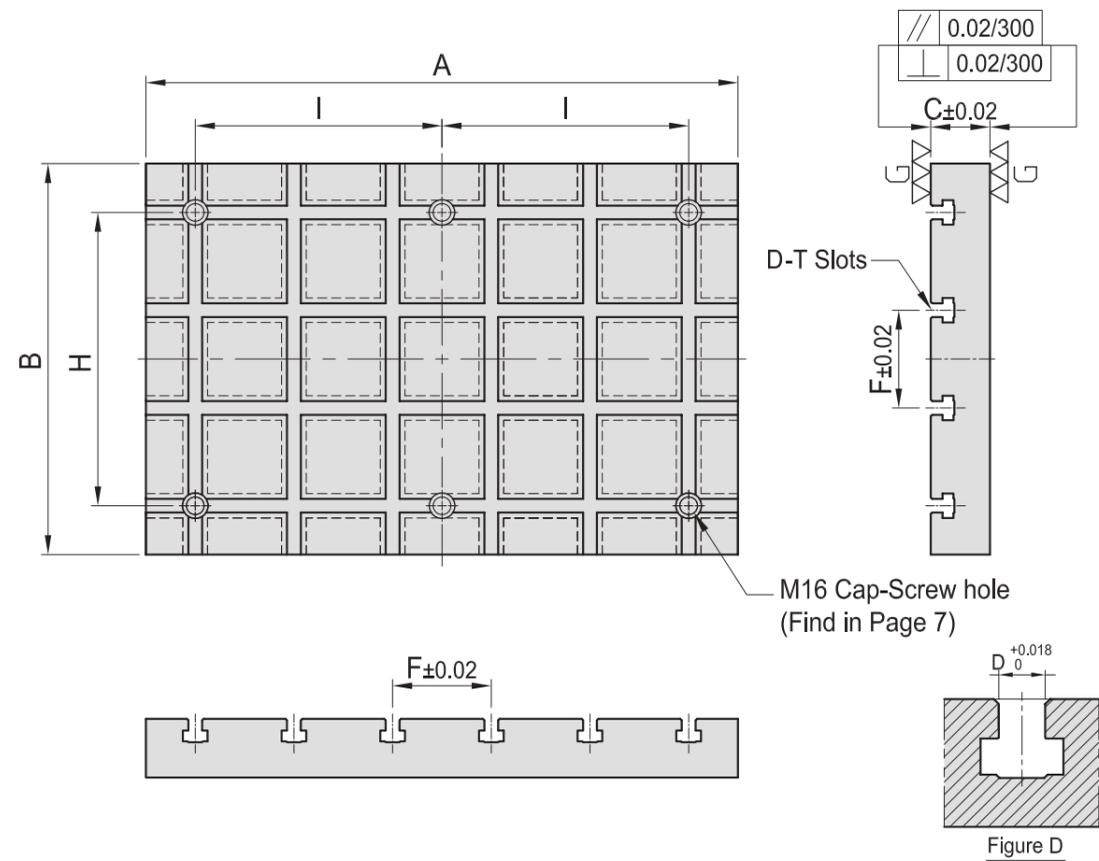
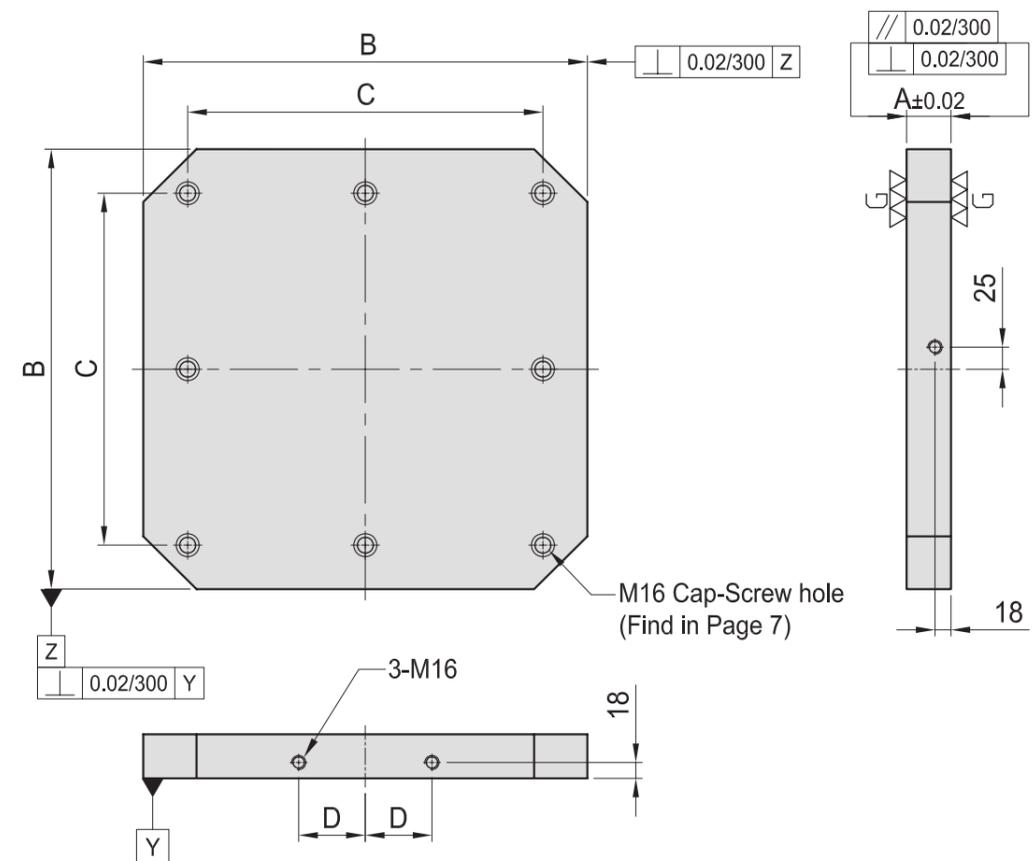


Figure D



MODEL NO.	A	B	C	D	F	H	I	kg
BP03-60400-0600-14		400						92
BP03-60500-0600-14	600	500	60	14	100	-	-	115
BP03-60600-0600-14		600						130
BP03-60400-0800-14	800	400	60	14	100	-	-	117
BP03-60450-0900-14	900	450						168
BP03-60500-1000-14	1000	500						198
BP03-60600-1200-14	1200	600	60	14	100	-	-	264

MODEL NO.	A	B	C	D	F	H	I	kg
BP03-75400-0600-18		400						118
BP03-75500-0600-18	600	500	75	18	100	-	-	147
BP03-75600-0600-18		600						173
BP03-75400-0800-18	800	400	75	18	100	-	-	151
BP03-75450-0900-18	900	450						182
BP03-75500-1000-18	1000	500						228
BP03-75600-1200-18	1200	600	75	18	100	-	-	329

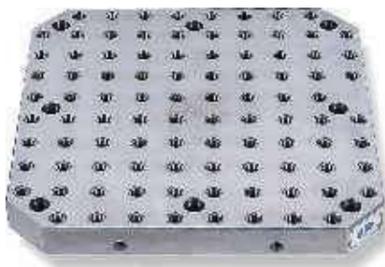
MODEL NO.	A	B	C	D	Mounting holes	kg
BP04-50400-0400	50	400	320	55	4	57
BP04-50500-0500	50	500	400	75	8	88
BP04-50630-0630	50	630	500	100	8	140
BP04-50800-0800	50	800	640	135	8	225

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*Special Design Welcome !

BP05

M/C BASE PLATE



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated(Normalized)
Alignment Bushing: SUJ2(JIS) / 100Cr6(DIN), heat treated.
Threaded Insert: S45C(JIS) / CK45(DIN), heat treated.
MTP hole spacing: 50±0.02
- Application: Horizontal Machining Center.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.

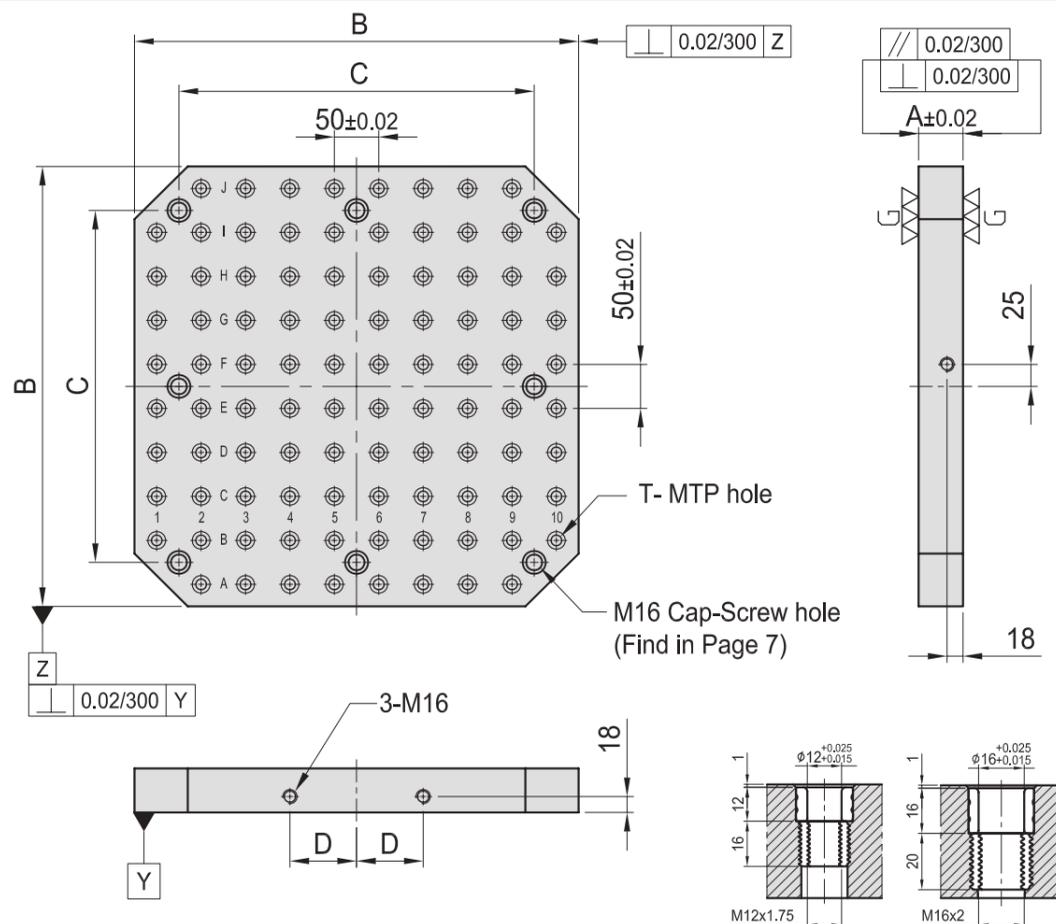


Figure T

MODEL NO.	A	B	C	D	T	MTP	Mounting holes	kg	
BP05-50400-0400-12	50	400	320	55	φ12	M12	59	4	54
BP05-50500-0500-12		500	400	75			93	8	83
BP05-50630-0630-12	50	630	500	100	φ12	M12	139	8	135
BP05-50800-0800-12		800	640	135			237	8	206
BP05-50400-0400-16	50	400	320	55	φ16	M16	59	4	52
BP05-50500-0500-16		500	400	75			93	8	80
BP05-50630-0630-16	50	630	500	100	φ16	M16	139	8	130
BP05-50800-0800-16		800	640	135			237	8	247

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BP06

M/C BASE PLATE



- Material: Cast Iron FC300(JIS) / GG30(DIN)
- Heat treated: Normalized
- Application: Horizontal Machining Center.
- Features: T-Slots running in 2 directions, easily adapts to standardized jig components.

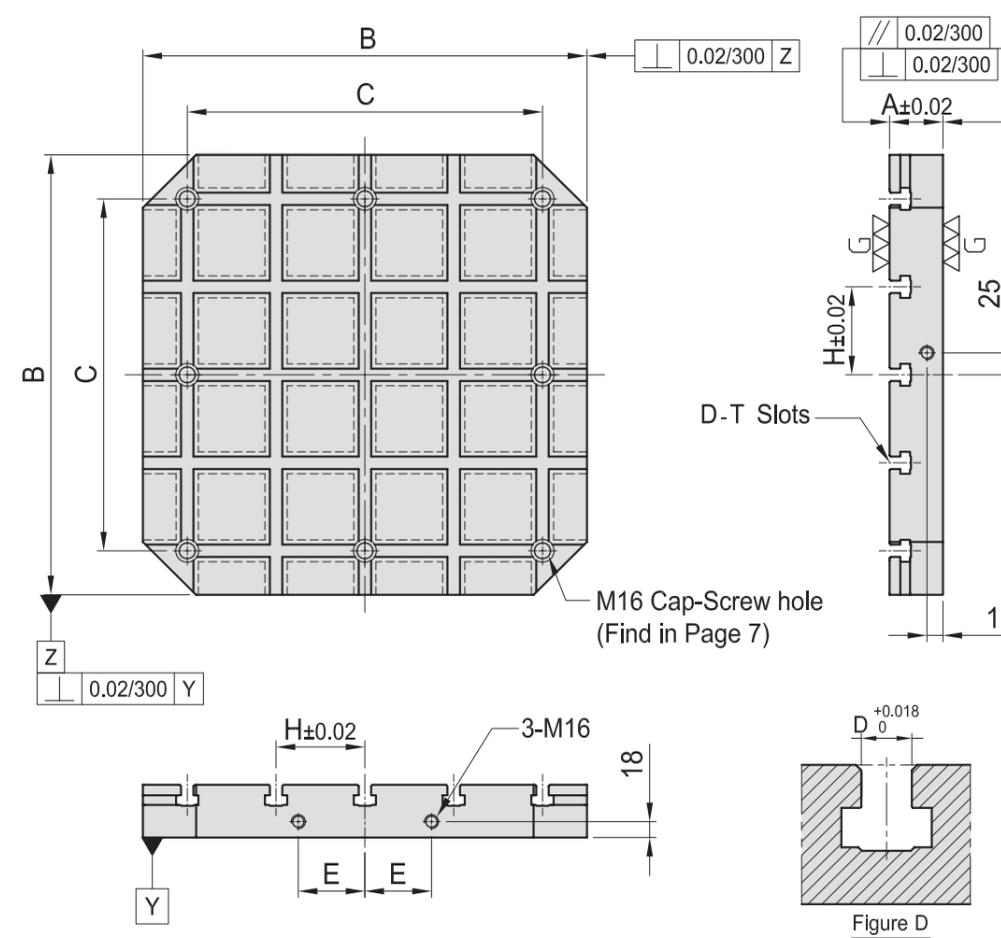


Figure D

MODEL NO.	A	B	C	D	E	H	Mounting holes	kg
BP06-60400-0400-14	60	400	320	14	55	80	4	56
BP06-60500-0500-14		500	400		75	100	8	90
BP06-60630-0630-14	60	630	500	14	100	125	8	150
BP06-60800-0800-14		800	640		135	160	8	230
BP06-75400-0400-18	75	400	320	18	55	80	4	68
BP06-75500-0500-18		500	400		75	100	8	108
BP06-75630-0630-18	75	630	500	18	100	125	8	180
BP06-75800-0800-18		800	640		135	160	8	295

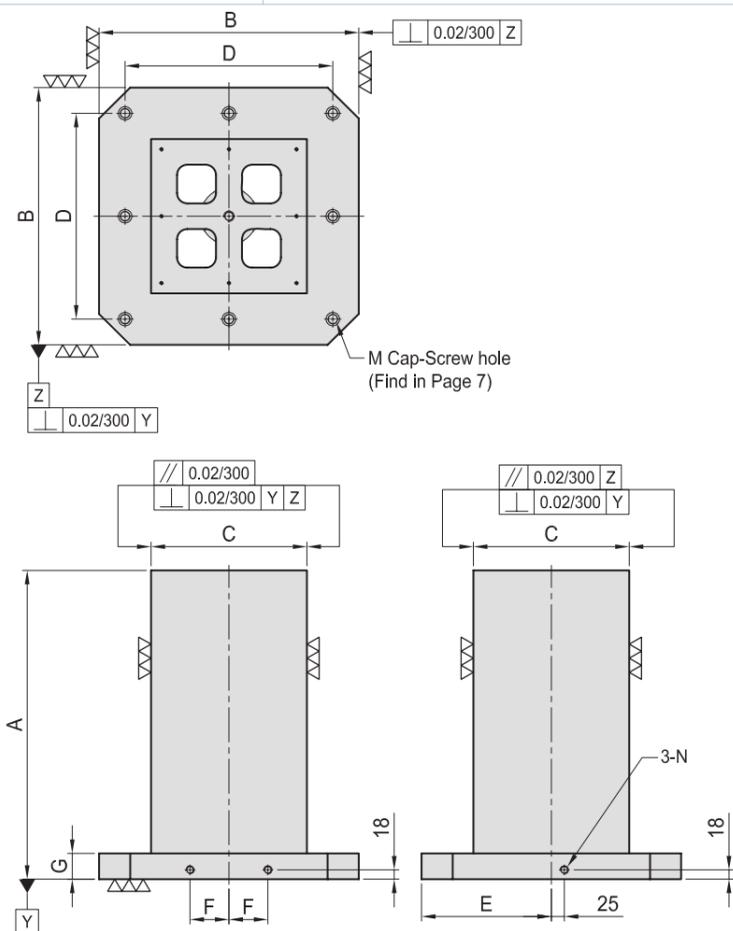
*Special Design Welcome !



BP07

SQUARE TOOLING COLUMN

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Horizontal Machining Center.
- Features: Ready to accept a hole pattern for your special jig.
• Eye bolt & top cover included.



MODEL NO.	A	B	C	D	E	F	G	M	N	Mounting holes	kg
BP07-300300-0500	500	300	150	250	150	40	50	M12	M12	4	90
BP07-400400-0500	500	400	250	320	200	55	50	M16	M16	4	160
BP07-400400-0650	650										210
BP07-500500-0600	600	500	300	400	250	75	50	M16	M16	8	250
BP07-500500-0750	750										310
BP07-630630-0700	700	630	350	500	315	100	50	M16	M16	8	400
BP07-630630-0850	850										460
BP07-800800-0800	800	800	500	640	400	135	50	M16	M16	8	680
BP07-800800-1000	1000										800
BP07-10001000-1000	1000	1000	600	800	500	165	55	M20	M16	8	1164
BP07-10001000-1250	1250										1391

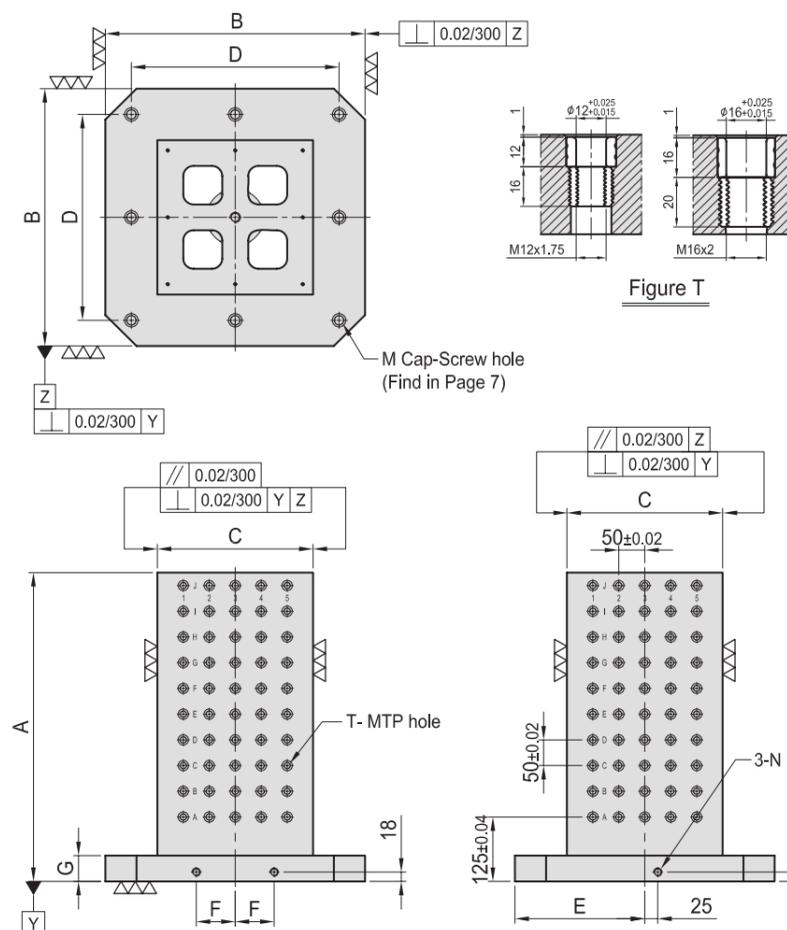
*Special Design Welcome !



BP08

SQUARE TOOLING COLUMN

- Material / Finish:
Material: Cast Iron FC300 (JIS) / GG30 (DIN)
Heat treated (Normalized)
Alignment bushing: SUJ2(JIS) / 100Cr6(DIN), heat treated
Threaded Insert: S45C(JIS) / CK45(DIN), heat treated
MTP hole spacing: 50±0.02
- Application: Horizontal Machining Center.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.
• Eye bolt & top cover included.



MODEL NO.	A	B	C	D	E	F	G	T	M	N	MTP	Mounting holes	kg	MODEL NO.	A	B	C	D	E	F	G	T	M	N	MTP	Mounting holes	kg		
BP08-300300-0500-12	500	300	150	250	150	40	50	φ12	M12	M12	M12	64	4	90	BP08-300300-0500-16	500	300	150	250	150	40	50	φ16	M16	M12	M12	64	4	90
BP08-400400-0500-12	500											128	4	155	BP08-400400-0500-16	500									128	4	152		
BP08-400400-0650-12	650	400	250	320	200	55	50	φ12	M12	M16	M16	176		200	BP08-400400-0650-16	650	400	250	320	200	55	50	φ16	M16	M16	M16	176	4	195
BP08-500500-0600-12	600											200	8	240	BP08-500500-0600-16	600									200	8	235		
BP08-500500-0750-12	750	500	300	400	250	75	50	φ12	M12	M16	M16	260		300	BP08-500500-0750-16	750	500	300	400	250	75	50	φ16	M16	M16	M16	260	8	295
BP08-630630-0700-12	700											288	8	360	BP08-630630-0700-16	700									288	8	365		
BP08-630630-0850-12	850	630	350	500	315	100	50	φ12	M12	M16	M16	360		445	BP08-630630-0850-16	850	630	350	500	315	100	50	φ16	M16	M16	M16	360	8	440
BP08-800800-0800-12	800											504	8	635	BP08-800800-0800-16	800									504	8	630		
BP08-800800-1000-12	1000	800	500	640	400	135	50	φ12	M12	M16	M16	648		780	BP08-800800-1000-16	1000	800	500	640	400	135	50	φ16	M16	M16	M16	648	8	770
BP08-10001000-1000-12	1000											792	8	1164	BP08-10001000-1000-16	1000									792	8	1164		
BP08-10001000-1250-12	1250	1000	600	800	500	165	55	φ12	M12	M20	M16	1012		1391	BP08-10001000-1250-16	1250	1000	600	800	500	165	55	φ16	M16	M20	M16	1012	8	1391

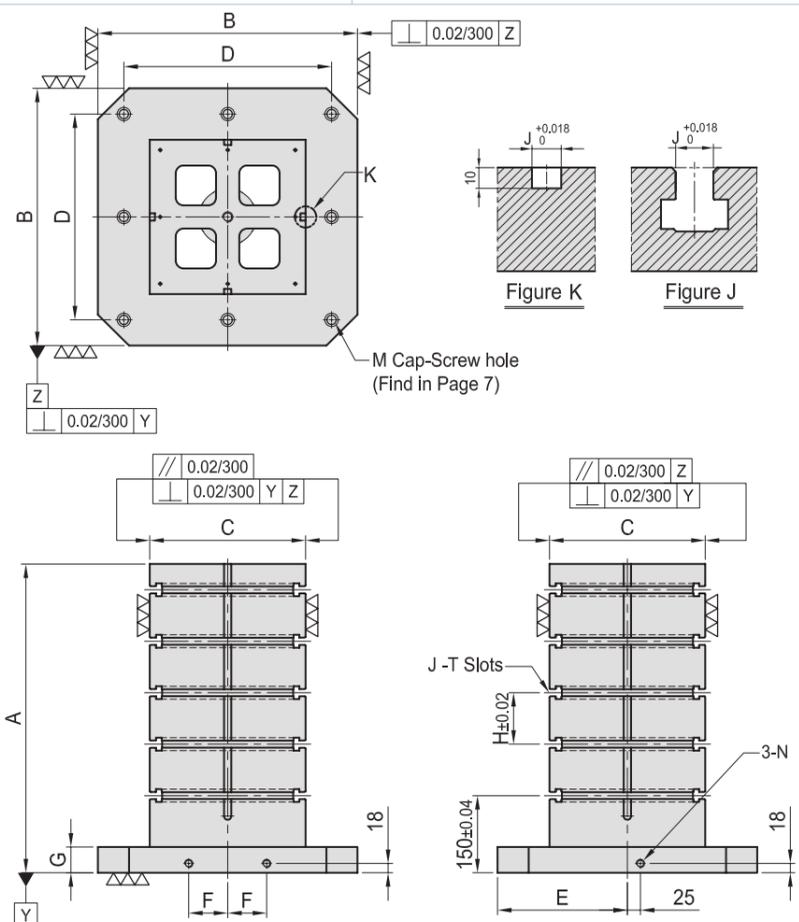
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BP09

SQUARE TOOLING COLUMN

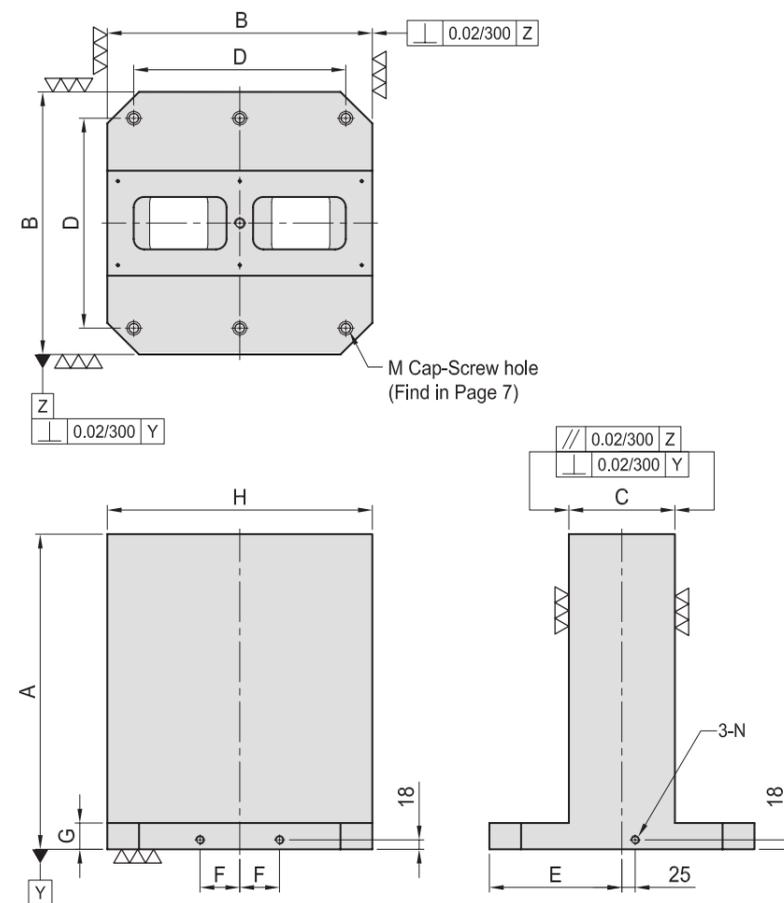
- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Horizontal Machining Center.
- Features: T-Slots running horizontally, key-way running vertically, easily adapts to standardized jig components.
- Eye bolt & top cover included.



BP10

DOUBLE SIDED TOOLING COLUMN

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Horizontal Machining Center.
- Features: Ready to accept a hole pattern for your special jig.
- Eye bolt & top cover included.



MODEL NO.	A	B	C	D	E	F	G	M	N	H	J	Mounting holes	kg
BP09-400400-0500-14	500	400	250	320	200	55	50	M16	M16	100	14	4	160
BP09-400400-0650-14	650	400	250	320	200	55	50	M16	M16	100	14	4	190
BP09-500500-0600-14	600	500	300	400	250	75	50	M16	M16	100	14	8	270
BP09-500500-0750-14	750	500	300	400	250	75	50	M16	M16	100	14	8	300
BP09-630630-0700-14	700	630	350	500	315	100	50	M16	M16	125	14	8	375
BP09-630630-0850-14	850	630	350	500	315	100	50	M16	M16	125	14	8	460
BP09-800800-0800-14	800	800	500	640	400	135	50	M16	M16	150	14	8	655
BP09-800800-1000-14	1000	800	500	640	400	135	50	M16	M16	150	14	8	800
BP09-10001000-1000-14	1000	1000	600	800	500	165	55	M20	M16	160	14	8	1146
BP09-10001000-1250-14	1250	1000	600	800	500	165	55	M20	M16	160	14	8	1358
BP09-400400-0500-18	500	400	250	320	200	55	50	M16	M16	100	18	4	155
BP09-400400-0650-18	650	400	250	320	200	55	50	M16	M16	100	18	4	190
BP09-500500-0600-18	600	500	300	400	250	75	50	M16	M16	100	18	8	265
BP09-500500-0750-18	750	500	300	400	250	75	50	M16	M16	100	18	8	290
BP09-630630-0700-18	700	630	350	500	315	100	50	M16	M16	125	18	8	365
BP09-630630-0850-18	850	630	350	500	315	100	50	M16	M16	125	18	8	450
BP09-800800-0800-18	800	800	500	640	400	135	50	M16	M16	150	18	8	638
BP09-800800-1000-18	1000	800	500	640	400	135	50	M16	M16	150	18	8	790
BP09-10001000-1000-18	1000	1000	600	800	500	165	55	M20	M16	160	18	8	1146
BP09-10001000-1250-18	1250	1000	600	800	500	165	55	M20	M16	160	18	8	1358

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MODEL NO.	A	B	C	D	E	F	G	H	M	N	Mounting holes	kg
BP10-300300-0500	500	300	80	250	150	40	50	300	M12	M12	4	115
BP10-400400-0500	500	400	150	320	200	55	50	400	M16	M16	4	170
BP10-400400-0650	650											215
BP10-500500-0600	600	500	200	400	250	75	50	500	M16	M16	6	270
BP10-500500-0750	750											350
BP10-630630-0700	700	630	250	500	315	100	50	630	M16	M16	6	445
BP10-630630-0850	850											520
BP10-800800-0800	800	800	300	640	400	135	50	800	M16	M16	6	675
BP10-800800-1000	1000											815
BP10-10001000-1000	1000	1000	350	800	500	165	55	1000	M20	M16	6	1162
BP10-10001000-1250	1250											1377

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BP

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ALV

OK-VISE

JER-GENS

OTHER

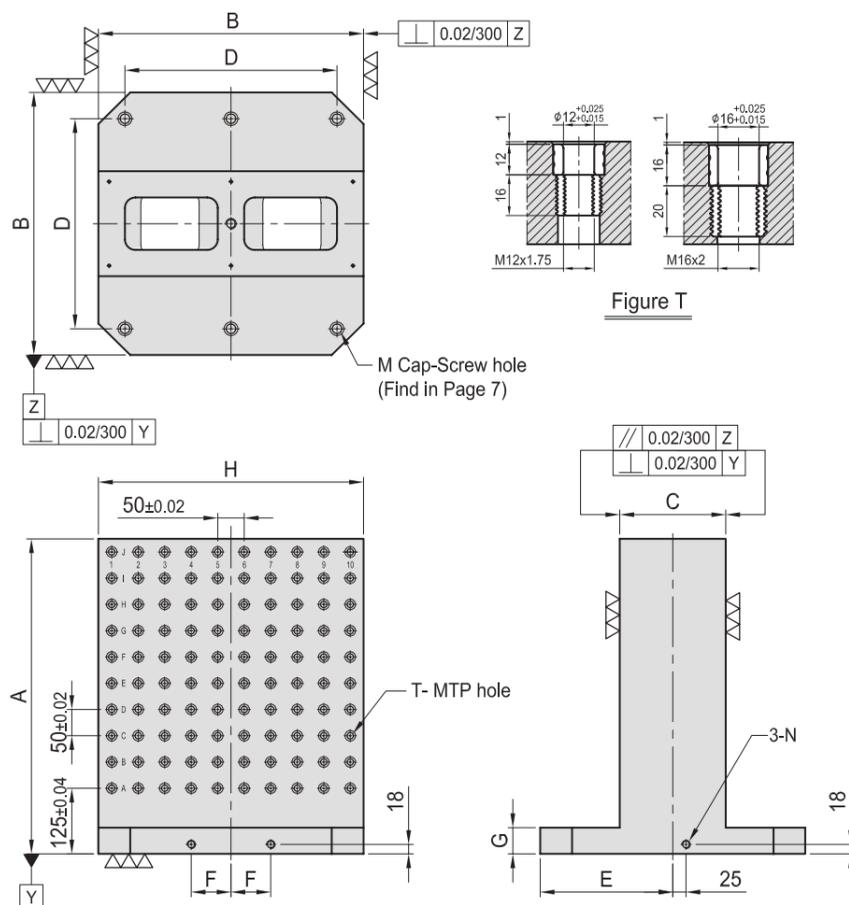
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BP11

DOUBLE SIDED TOOLING COLUMN

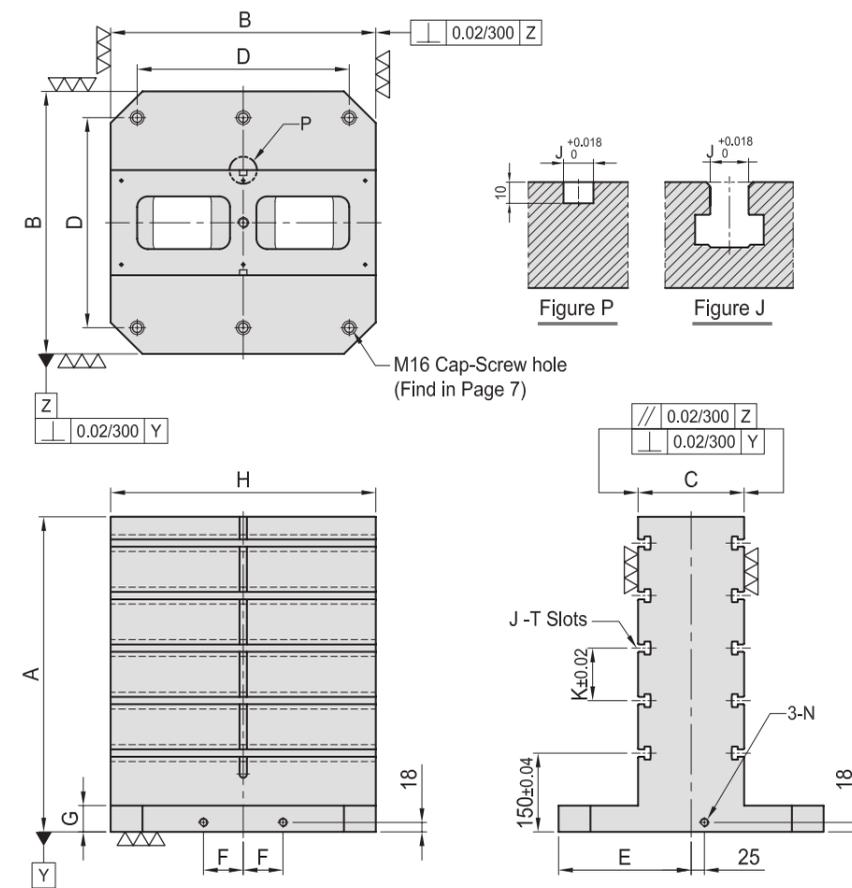
- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
Alignment Bushing: SUJ2(JIS) / 100Cr6 (DIN), heat treated
Threaded Insert: S45C(JIS) / CK45(DIN), heat treated
MTP hole spacing: 50±0.02
- Application: Horizontal Machining Center.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.
- Eye bolt & top cover included.



BP12

DOUBLE SIDED TOOLING COLUMN

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Horizontal Machining Center.
- Features: T-Slots running horizontally, key-way running vertically, easily adapts to standardized jig components.
- Eye bolt & top cover included.



BP

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ALV

OK-
VISE

JER-
GENS

OTHER

Column
for
Technical
Data

MODEL NO.	A	B	C	D	E	F	G	H	T	M	N	MTP	Mount- ing holes	kg	MODEL NO.	A	B	C	D	E	F	G	H	T	M	N	MTP	Mount- ing holes	kg		
BP11-300300-0500-12	500	300	80	250	150	40	50	300	$\phi 12$	M12	M12	M12	96	4	110	BP11-300300-0500-16	500	300	80	250	150	40	50	300	$\phi 16$	M16	M12	M12	96	4	105
BP11-400400-0500-12	500	400	150	320	200	55	50	400	$\phi 12$	M12	M16	M16	128	4	165	BP11-400400-0500-16	500	400	150	320	200	55	50	400	$\phi 16$	M16	M16	M16	128	4	160
BP11-400400-0650-12	650												176	210	BP11-400400-0650-16	650	176												205		
BP11-500500-0600-12	600	500	200	400	250	75	50	500	$\phi 12$	M12	M16	M16	200	6	265	BP11-500500-0600-16	600	500	200	400	250	75	50	500	$\phi 16$	M16	M16	M16	200	6	260
BP11-500500-0750-12	750												260	335	BP11-500500-0750-16	750	260												330		
BP11-630630-0700-12	700	630	250	500	315	100	50	630	$\phi 12$	M12	M16	M16	288	6	435	BP11-630630-0700-16	700	630	250	500	315	100	50	630	$\phi 16$	M16	M16	M16	288	6	430
BP11-630630-0850-12	850												360	515	BP11-630630-0850-16	850	360												505		
BP11-800800-0800-12	800	800	300	640	400	135	50	800	$\phi 12$	M12	M16	M16	420	6	660	BP11-800800-0800-16	800	800	300	640	400	135	50	800	$\phi 16$	M16	M16	M16	420	6	650
BP11-800800-1000-12	1000												540	800	BP11-800800-1000-16	1000	540												790		
BP11-10001000-1000-12	1000	1000	350	800	500	165	55	1000	$\phi 12$	M12	M20	M16	684	6	1158	BP11-10001000-1000-16	1000	1000	350	800	500	165	55	1000	$\phi 16$	M16	M20	M16	684	6	1158
BP11-10001000-1250-12	1250												874	1375	BP11-10001000-1250-16	1250	874												1375		

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MODEL NO.	A	B	C	D	E	F	G	M	N	H	J	K	Mount- ing holes	kg	MODEL NO.	A	B	C	D	E	F	G	M	N	H	J	K	Mount- ing holes	kg
BP12-400400-0500-14	500	400	150	320	200	55	50	M16	M16	400	14	100	4	170	BP12-400400-0500-18	500	400	150	320	200	55	50	M16	M16	400	18	100	4	165
BP12-400400-0650-14	650													220	BP12-400400-0650-18	650													210
BP12-500500-0600-14	600	500	200	400	250	75	50	M16	M16	500	14	100	6	290	BP12-500500-0600-18	600	500	200	400	250	75	50	M16	M16	500	18	100	6	280
BP12-500500-0750-14	750													335	BP12-500500-0750-18	750													325
BP12-630630-0700-14	700	630	250	500	315	100	50	M16	M16	630	14	125	6	440	BP12-630630-0700-18	700	630	250	500	315	100	50	M16	M16	630	18	125	6	430
BP12-630630-0850-14	850													515	BP12-630630-0850-18	850													500
BP12-800800-0800-14	800	800	300	640	400	135	50	M16	M16	800	14	150	6	670	BP12-800800-0800-18	800	800	300	640	400	135	50	M16	M16	800	18	150	6	660
BP12-800800-1000-14	1000													790	BP12-800800-1000-18	1000													785
BP12-10001000-1000-14	1000	1000	350	800	500	165	55	M20	M16	1000	14	150	6	1158	BP12-10001000-1000-18	1000	1000	350	800	500	165	55	M20	M16	1000	18	150	6	1158
BP12-10001000-1250-14	1250													1375	BP12-10001000-1250-18	1250													1375

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BP13

MODULAR TOOLING COLUMN

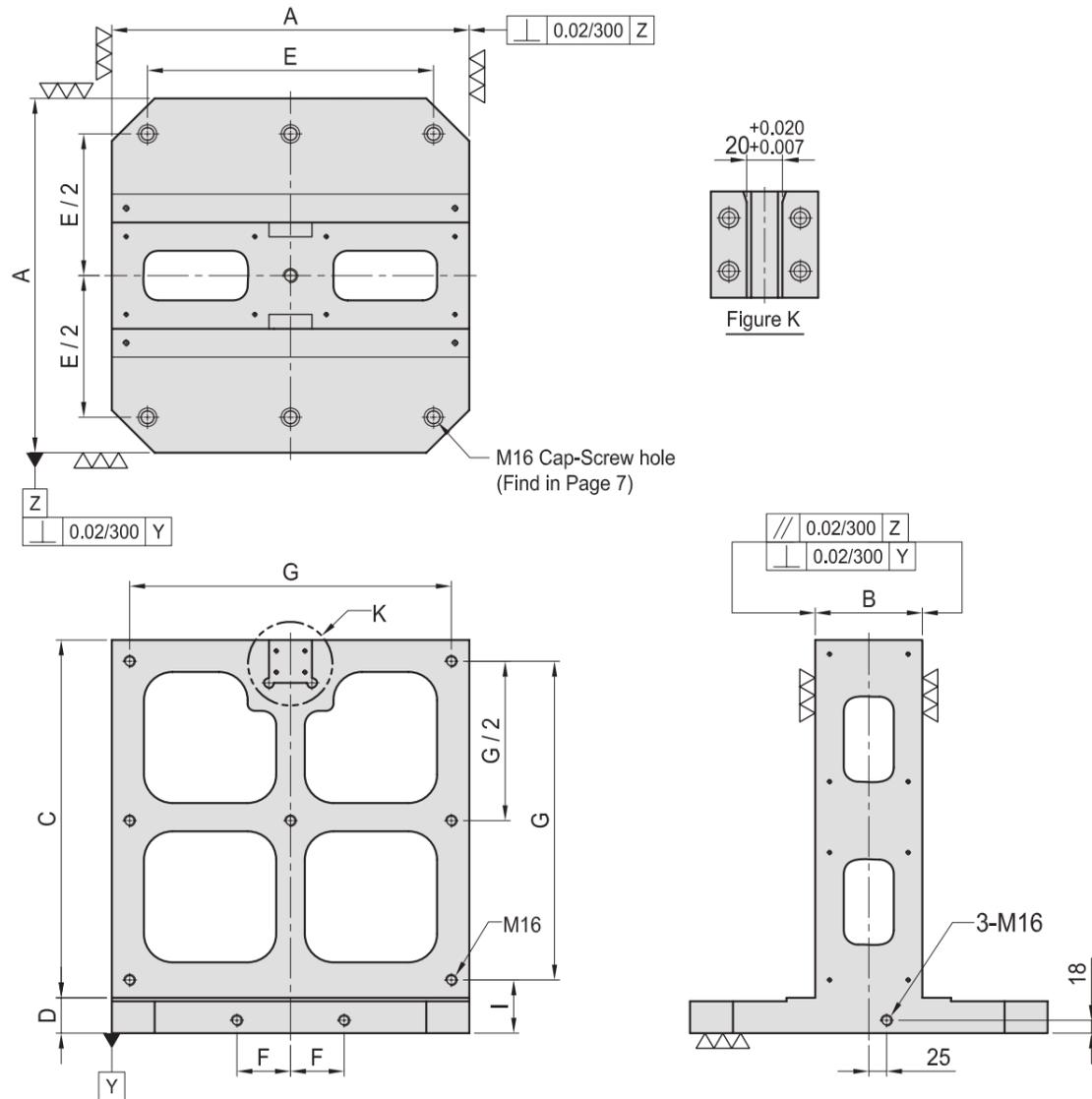
- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Horizontal Machining Center.
- Features: Modular quick-change system, simple 3 point mounting, use with BP14 & BP15 subplates.
- Eye bolt, top cover & side covers included.



BP14

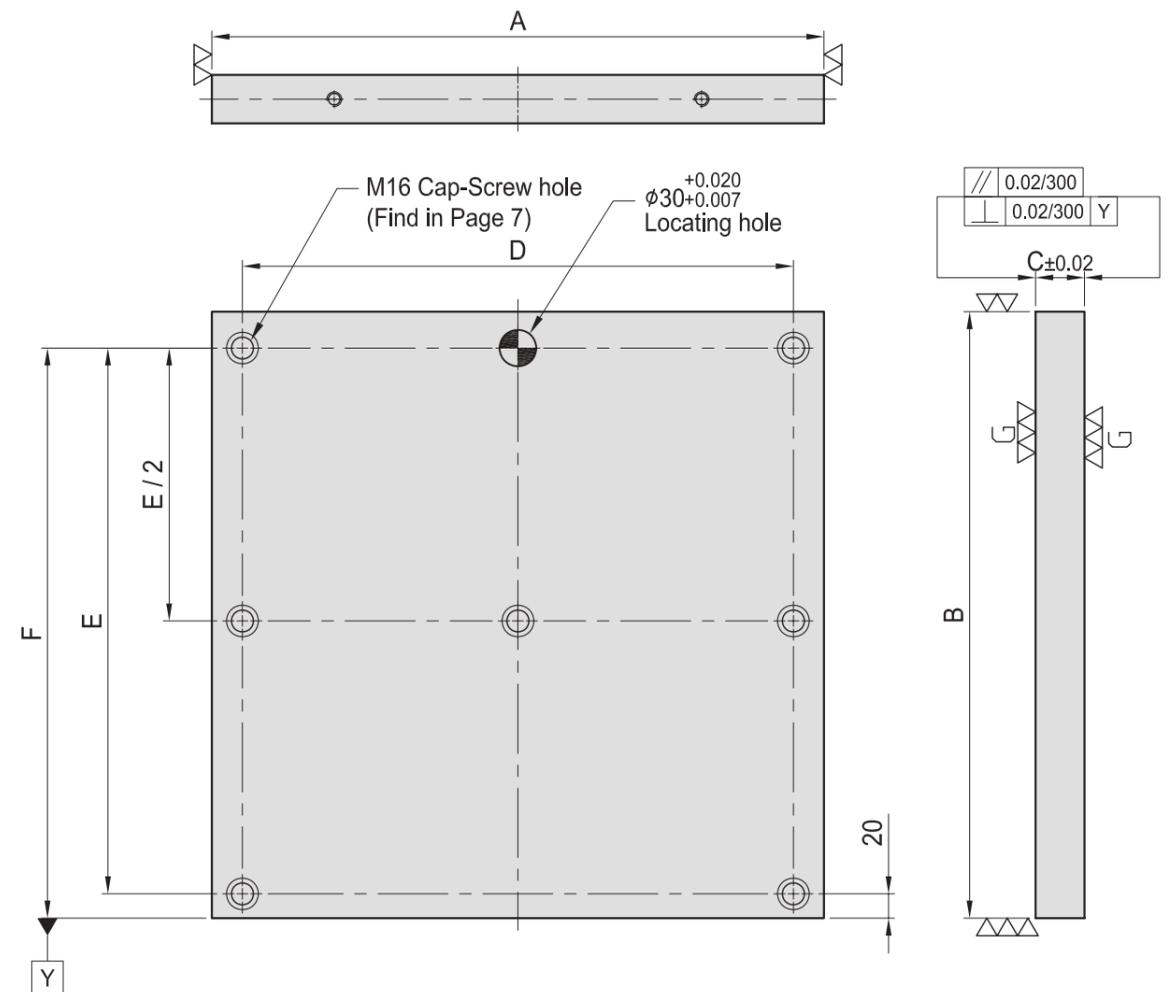
SUB-PLATE

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Modular quick change subplate, use with BP13.
- Features: Ready to accept a hole pattern for your special jig.



MODEL NO.	A	B	C	D	E	F	G	I	Mounting holes	kg
BP13-400400-0450	400	130	400	50	320	55	350	70	4	125
BP13-500500-0555	500	150	500	55	400	75	450	75	6	178
BP13-630630-0690	630	220	630	60	500	100	580	80	6	350
BP13-800800-0860	800	250	800	60	640	135	750	80	6	515

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MODEL NO.	A	B	C	D	E	F	Mounting holes	kg
BP14-40400-0400	400	400	40	350	350	370	5	46
BP14-40500-0500	500	500	40	450	450	470	7	72
BP14-40630-0630	630	630	40	580	580	600	7	114
BP14-50800-0800	800	800	50	750	750	770	7	232

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BP

BPA

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ALV

OK- VISE

JER- GENS

OTHER

Column for Technical Data

BP15

SUB-PLATE



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
Alignment Bushing: SUJ2(JIS) / 100Cr6 (DIN), heat treated
Threaded Insert: S45C(JIS) / CK45(DIN), heat treated
MTP hole spacing: 50±0.02
- Application: Modular quick change subplate, use with BP13.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.

BP16

ROUND BASE PLATE



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: NC Rotary Table or Indexer.
- Features: Ready to accept a hole pattern for your special jig.

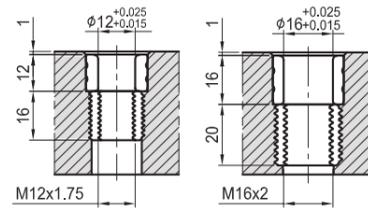
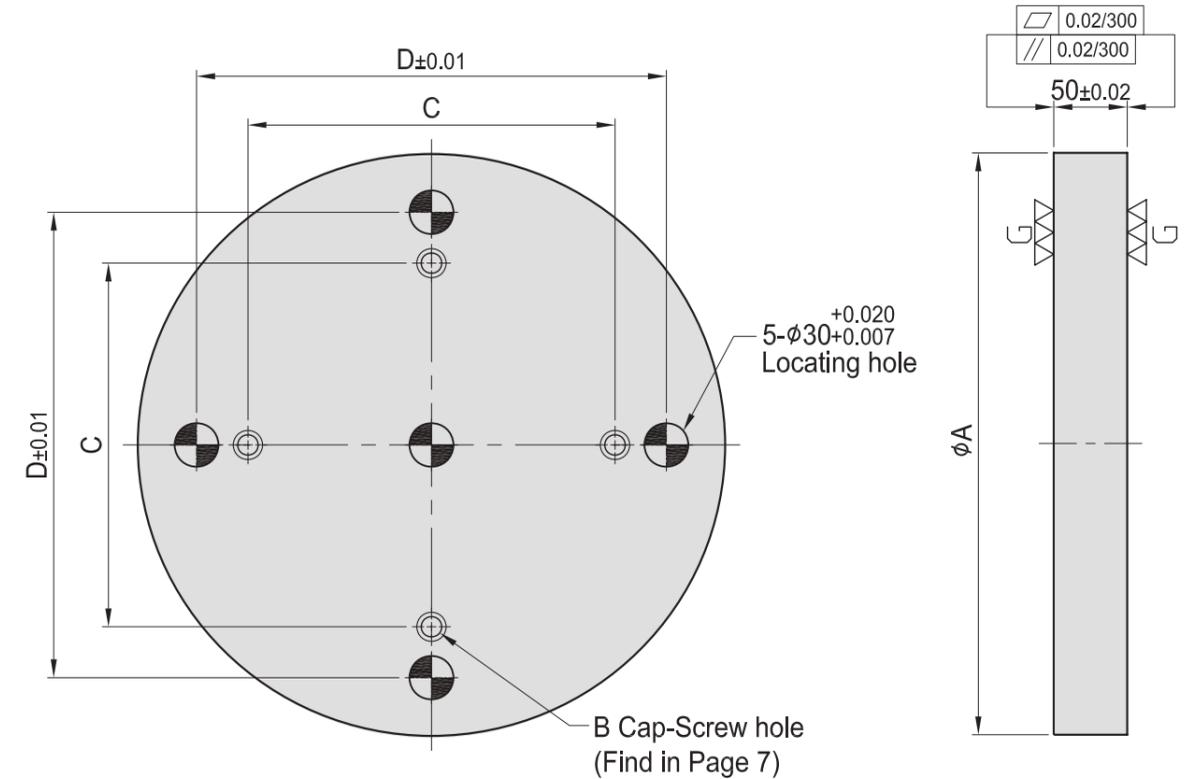
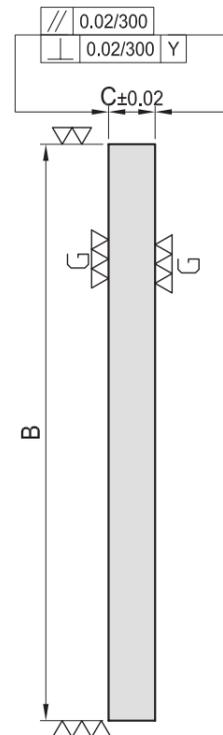
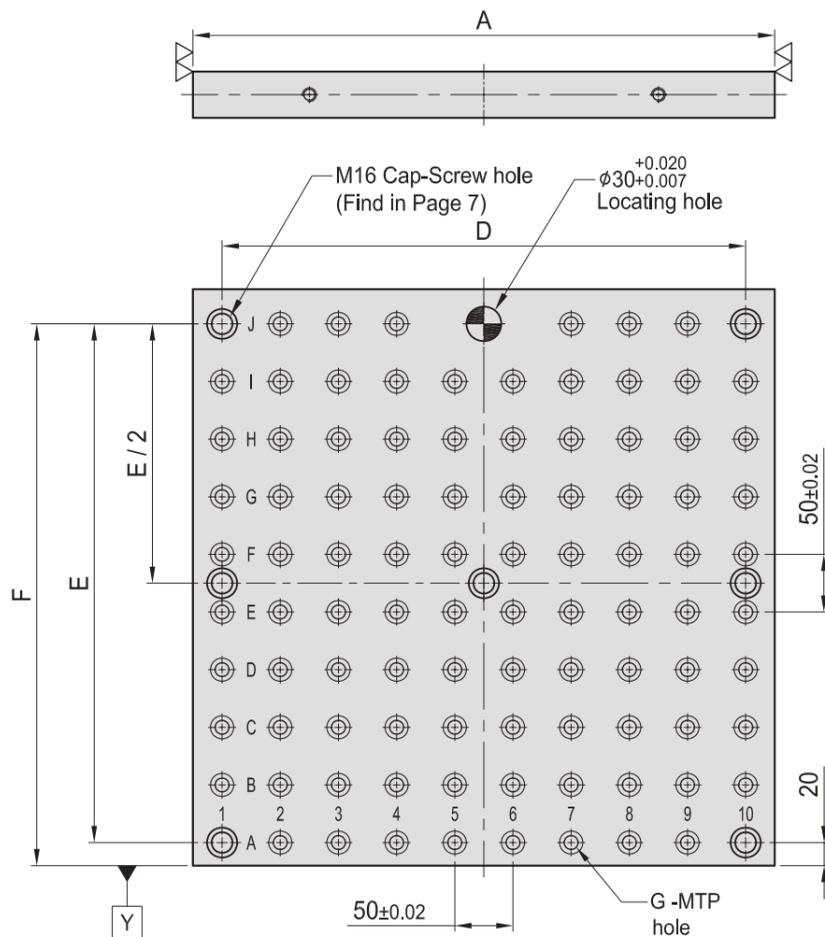


Figure G



MODEL NO.	A	B	C	D	E	F	G	MTP	Mounting holes	kg	
BP15-40400-0400-12	400	400	40	350	350	370	φ12	M12	58	5	42
BP15-40500-0500-12	500	500	40	450	450	470	φ12	M12	94	7	69
BP15-40630-0630-12	630	630	40	580	580	600	φ12	M12	138	7	108
BP15-50800-0800-12	800	800	50	750	750	770	φ12	M12	250	7	220

MODEL NO.	A	B	C	D	E	F	G	MTP	Mounting holes	kg	
BP15-40400-0400-16	400	400	40	350	350	370	φ16	M16	58	5	41
BP15-40500-0500-16	500	500	40	450	450	470	φ16	M16	90	7	67
BP15-40630-0630-16	630	630	40	580	580	600	φ16	M16	138	7	105
BP15-50800-0800-16	800	800	50	750	750	770	φ16	M16	246	7	215

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MODEL NO.	A	B	C	D	kg
BP16-50-0300	300	M12	150	220	25
BP16-50-0400	400	M12	250	320	40
BP16-50-0500	500	M16	300	400	65
BP16-50-0600	600	M16	400	500	95

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BP

BPA

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PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

Column
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Technical
Data

BP17

ROUND BASE PLATE



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
Alignment Bushing: SUJ2(JIS) / 100Cr6(DIN), heat treated
Threaded Insert: S45C(JIS) / CK45(DIN), heat treated
MTP hole spacing: 50±0.02
- Application: NC Rotary Table or Indexer.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.

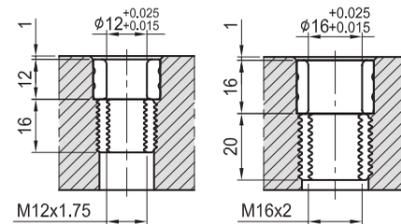
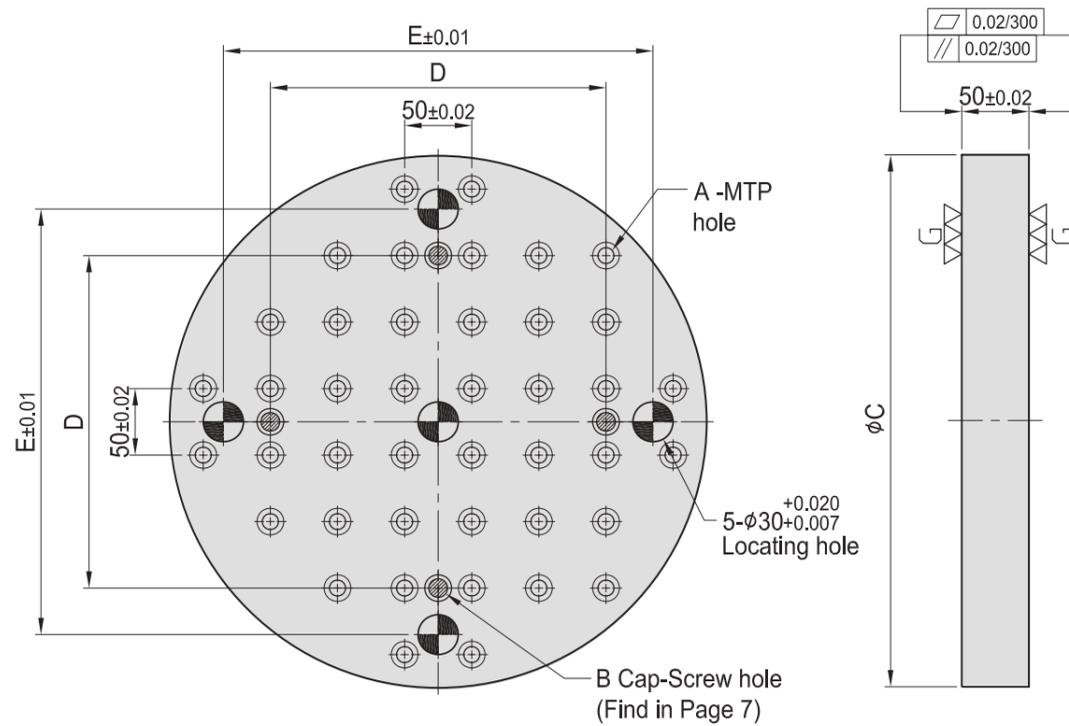


Figure A

MODEL NO.	A	B	C	D	E	MTP	kg
BP17-50-0300-12	φ 12	M12	M12	300	150	220	23
BP17-50-0400-12				400	250	320	44
BP17-50-0500-12	φ 12	M12	M16	500	300	400	70
BP17-50-0600-12				600	400	500	96
BP17-50-0500-16	φ 16	M16	M16	500	300	400	68
BP17-50-0600-16				600	400	500	96

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BP18

ROUND BASE PLATE



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: NC Rotary Table or Indexer.
- Features: T-Slots running in 2 directions, easily adapts to standardized jig components.

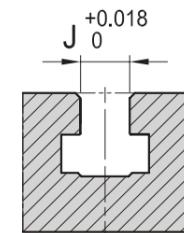
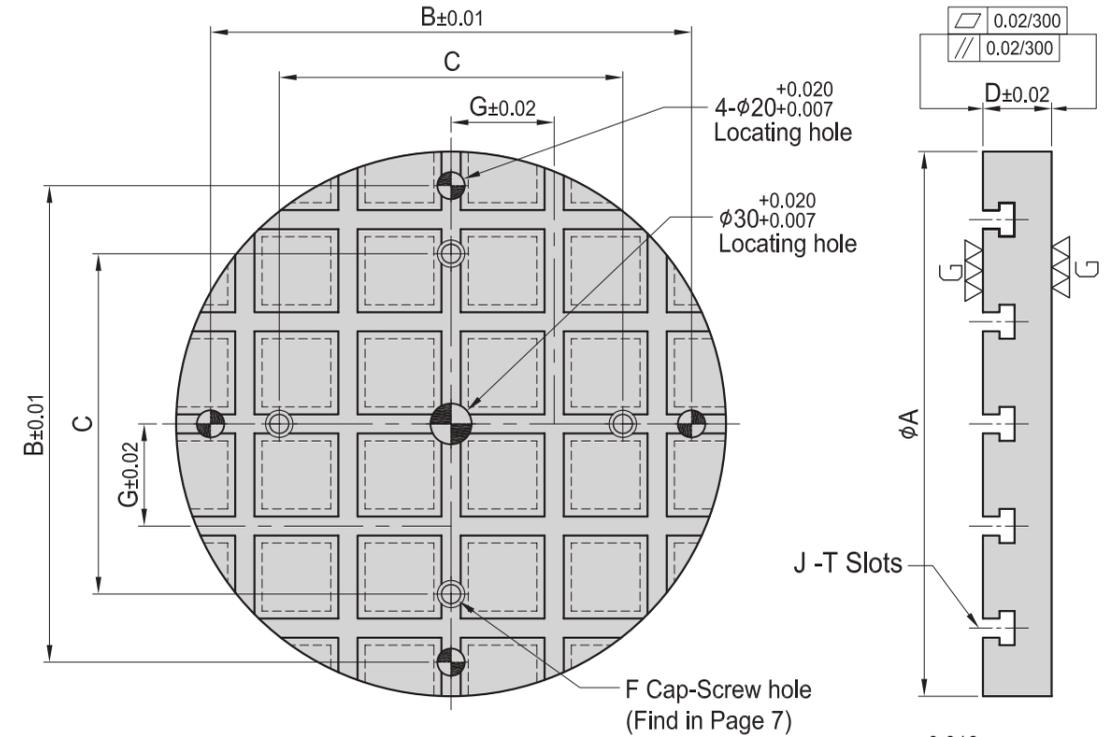


Figure J

MODEL NO.	A	B	C	D	F	G	J	kg
BP18-50-0300-14	300	250	150	50	M12	75	14	22
BP18-50-0400-14	400	350	250					36
BP18-65-0500-18	500	450	300	65	M16	100	18	74
BP18-65-0600-18	600	550	400					110

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BP

BPA

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ALV

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VISE

JER-
GENS

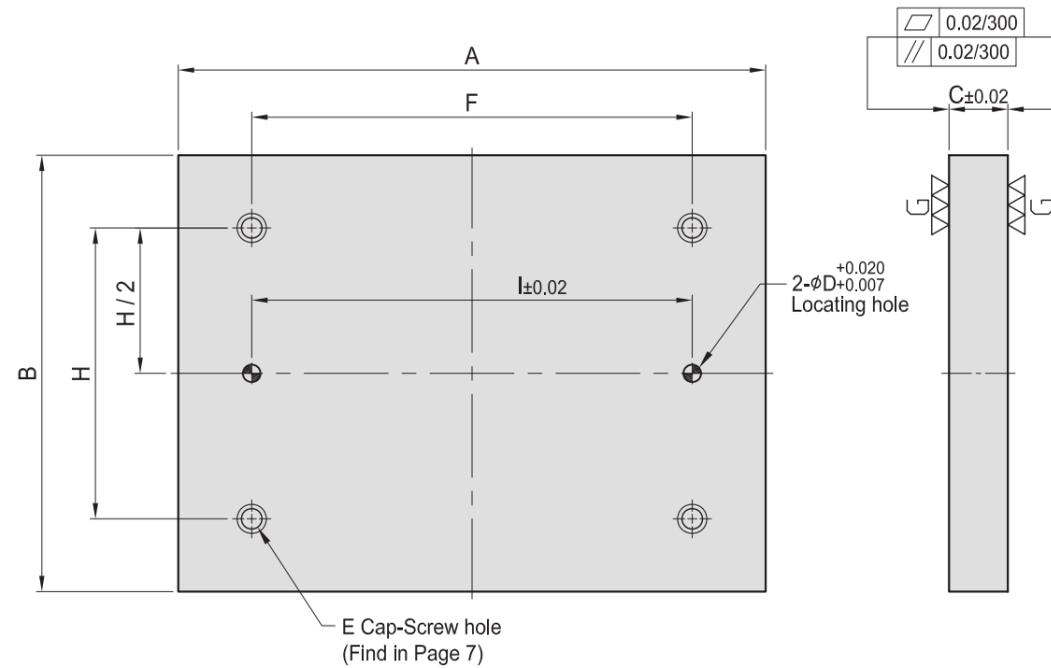
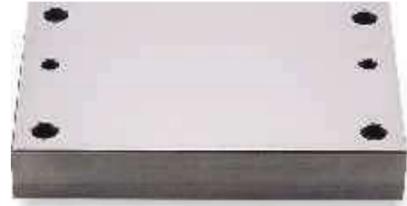
OTHER

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Technical
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BP19

SUB-PLATE

- Material / Finish:
Material: S45C(JIS) / CK45(DIN)
- Application: Multipurpose subplate.
- Features: Ready to accept a hole pattern for your special jig.



MODEL NO.	A	B	C	D	E	F	H	I	kg
BP19-30150-0200-12	200	150	30	12	M12	100	100	100	8.0
BP19-30150-0300-12	300					200		11.0	
BP19-30200-0200-12	200	200	30	12	M12	100	100	100	9.5
BP19-30200-0300-12	300					200		14.5	
BP19-30300-0300-12	300	300	30	12	M12	200	200	200	21.5
BP19-40300-0400-12	400					300		38.0	
BP19-40400-0400-12	400	400	40	12	M12	300	300	300	51.0
BP19-40400-0500-12	500					400		63.0	

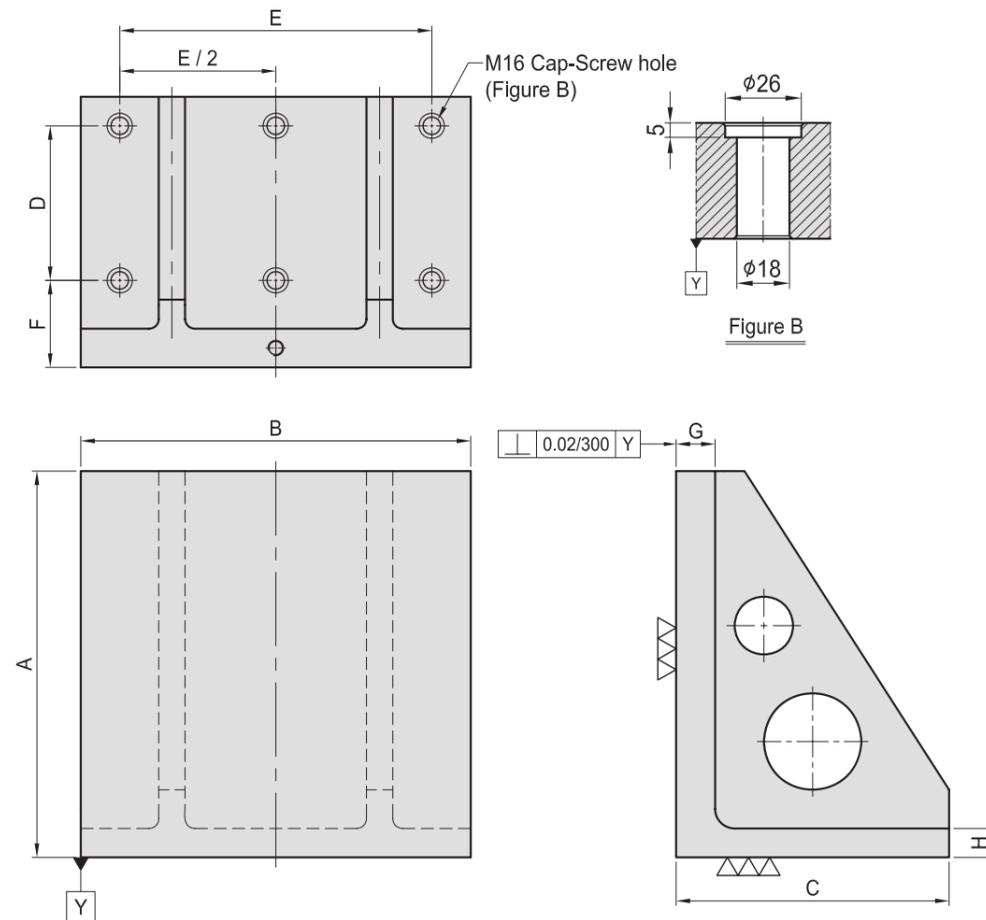
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MODEL NO.	A	B	C	D	E	F	H	I	kg
BP19-30150-0200-16	200	150	30	16	M16	100	100	100	8.0
BP19-30150-0300-16	300					200		11.0	
BP19-30200-0200-16	200	200	30	16	M16	100	100	100	9.5
BP19-30200-0300-16	300					200		14.5	
BP19-30300-0300-16	300	300	30	16	M16	200	200	200	21.5
BP19-40300-0400-16	400					300		38.0	
BP19-40400-0400-16	400	400	40	16	M16	300	300	300	51.0
BP19-40400-0500-16	500					400		63.0	

BP20

M/C ANGLE PLATE

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: HMC / VMC
- Features: Ready to accept a hole pattern for your special jig.



MODEL NO.	A	B	C	D	E	F	G	H	Mounting holes	kg
BP20-220300-0300	300	300	220	100	250	90	40	30	6	50
BP20-280400-0400	400	400	280	160	320					90
BP20-340500-0500	500	500	340	200	400	90	50	35	6	165
BP20-435630-0630	630	630	435	250	500					40
BP20-525800-0800	800	800	525	320	640	115	50	45	6	475

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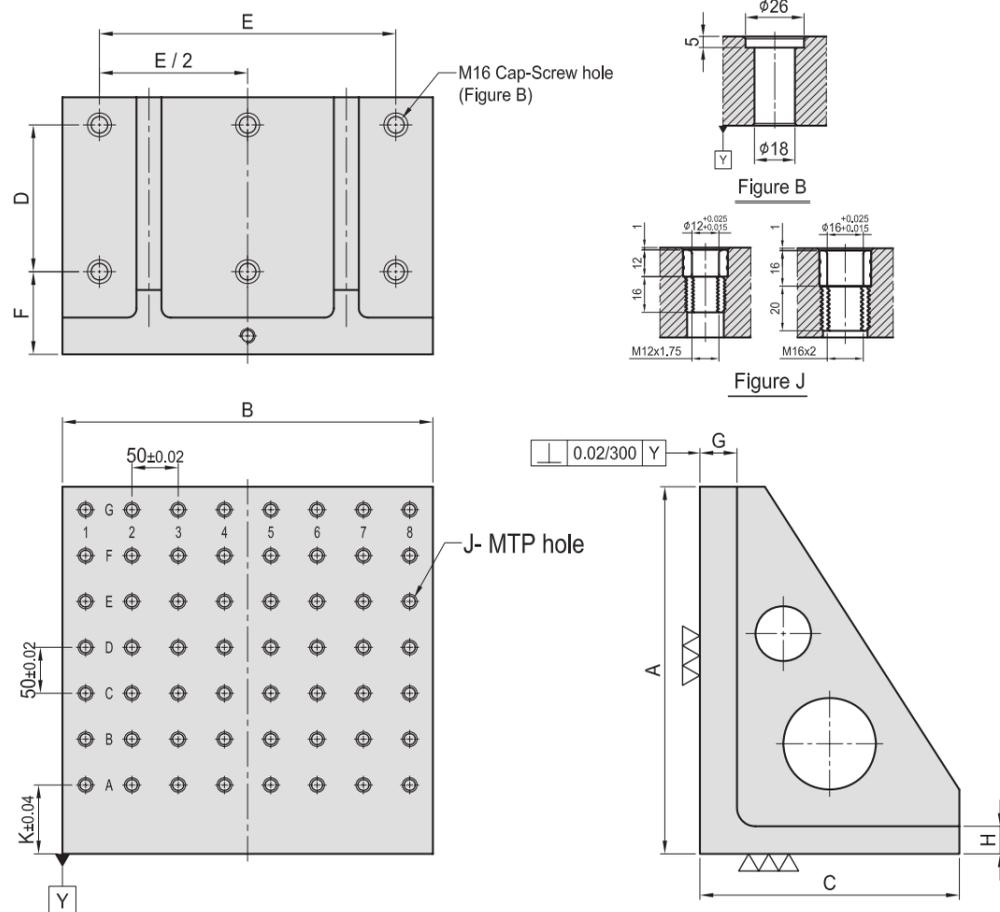
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BP21

M/C ANGLE PLATE

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
Alignment Bushing: SUJ2(JIS) / 100Cr6(DIN), heat treated
Threaded Insert: S45C(JIS) / CK45(DIN), heat treated
MTP hole spacing: 50 ± 0.02
- Application: HMC / VMC.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.



MODEL NO.	A	B	C	D	E	F	G	H	J	K	MTP	Mounting holes	kg	
BP21-220300-0300-12	300	300	220	100	250	90	40	30	φ 12	M12	75	30	50	
BP21-280400-0400-12	400	400	280	160	320							56		6
BP21-340500-0500-12	500	500	340	200	400	90	50	35	φ 12	M12	75	90	173	
BP21-435630-0630-12	630	630	435	250	500							100		40
BP21-525800-0800-12	800	800	525	320	640	115	50	45	φ 12	M12	75	240	6	477
BP21-220300-0300-16	300	300	220	100	250	90	40	30	φ 16	M16	75	30	46	
BP21-280400-0400-16	400	400	280	160	320							56		6
BP21-340500-0500-16	500	500	340	200	400	90	50	35	φ 16	M16	75	90	170	
BP21-435630-0630-16	630	630	435	250	500							100		40
BP21-525800-0800-16	800	800	525	320	640	115	50	45	φ 16	M16	75	240	6	470

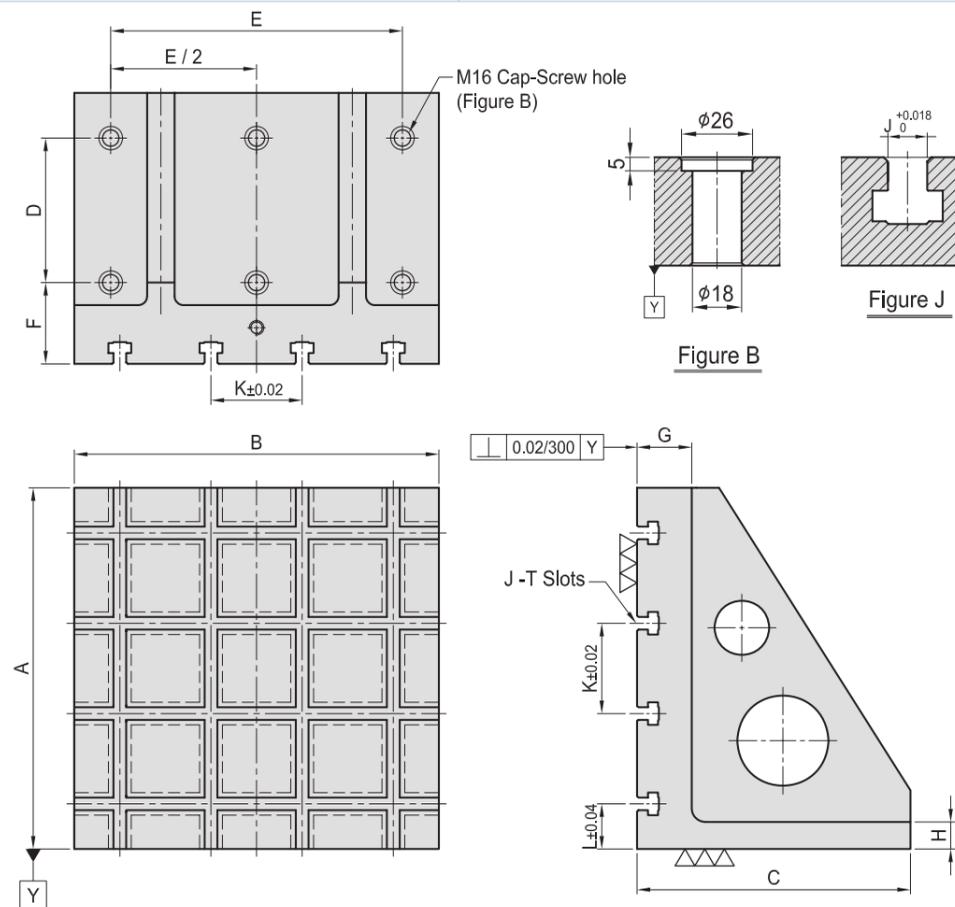
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BP22

M/C ANGLE PLATE

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: HMC / VMC.
- Features: T-Slots running in 2 directions, easily adapts to standardized jig components.



MODEL NO.	A	B	C	D	E	F	G	H	J	K	L	Mounting holes	kg
BP22-220300-0300-14	300	300	220	100	250	90	60	30	14	100	50	6	53
BP22-300400-0400-14	400	400	300	160	320								101
BP22-350500-0500-14	500	500	350	200	400	90	60	35	14	100	50	6	170
BP22-450630-0630-14	630	630	450	250	500								100
BP22-550800-0800-14	800	800	550	320	640	115	75	45	14	150	100	6	566
BP22-220300-0300-18	300	300	220	100	250	90	60	30	18	100	50	6	51
BP22-300400-0400-18	400	400	300	160	320								96
BP22-350500-0500-18	500	500	350	200	400	90	60	35	18	100	50	6	162
BP22-450630-0630-18	630	630	450	250	500								100
BP22-550800-0800-18	800	800	550	320	640	115	75	45	18	150	100	6	555

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BP23

MC NARROW ANGLE PLATE

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: HMC / VMC.
- Features: Ready to accept a hole pattern for your special jig.



BP24

MC NARROW ANGLE PLATE

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: HMC / VMC.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.

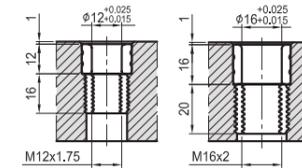
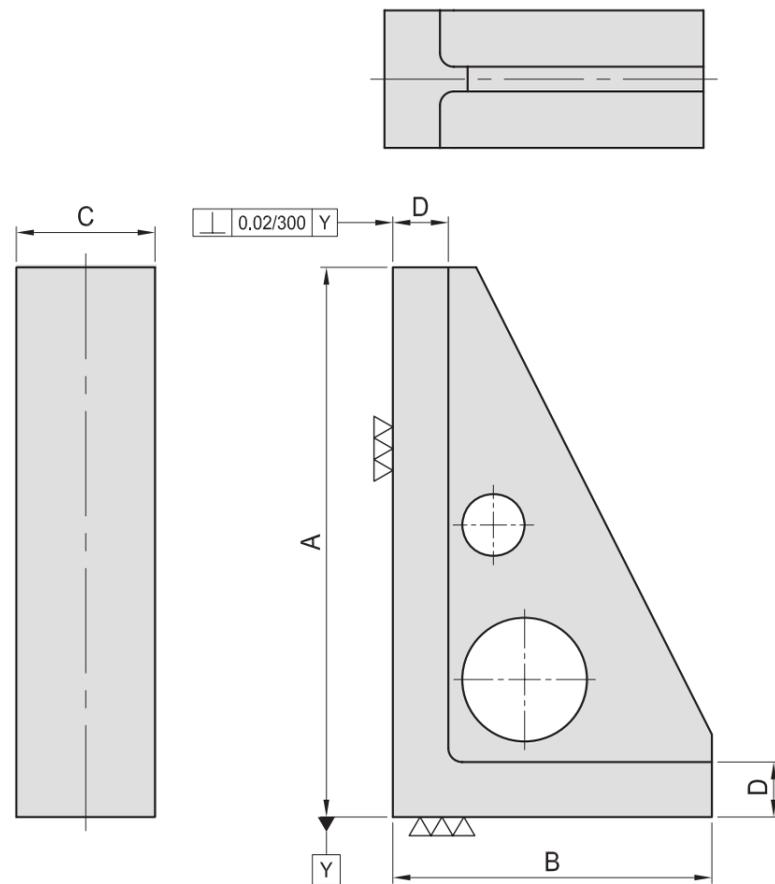


Figure G

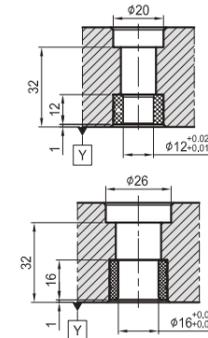
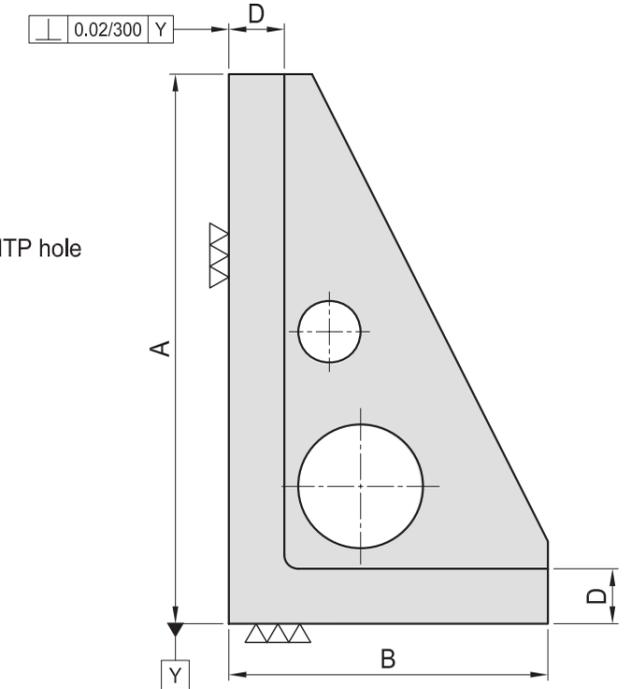
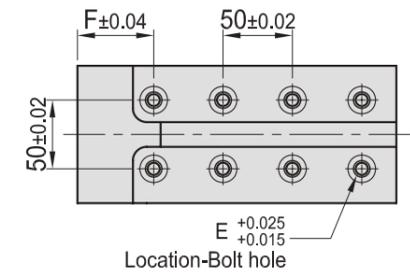
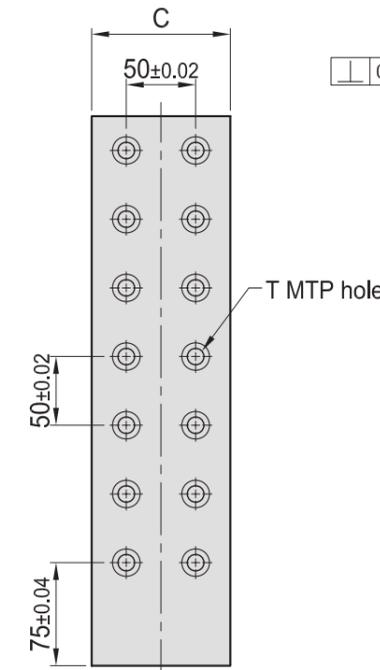


Figure E



MODEL NO.	A	B	C	D	kg
BP23-180100-0300	300	180	100	40	14
BP23-230100-0400	400	230	100	40	20
BP23-280100-0500	500	280	100	40	25

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MODEL NO.	A	B	C	D	E	F	T	MTP	Mounting holes	kg
BP24-180100-0300-12	300	180						10	6	12
BP24-230100-0400-12	400	230	100	40	$\phi 12$	55	$\phi 12$	M12	14	19
BP24-280100-0500-12	500	280						18	10	23
BP24-180100-0300-16	300	180						10	6	13
BP24-230100-0400-16	400	230	100	40	$\phi 16$	55	$\phi 16$	M16	14	20
BP24-280100-0500-16	500	280						18	10	24

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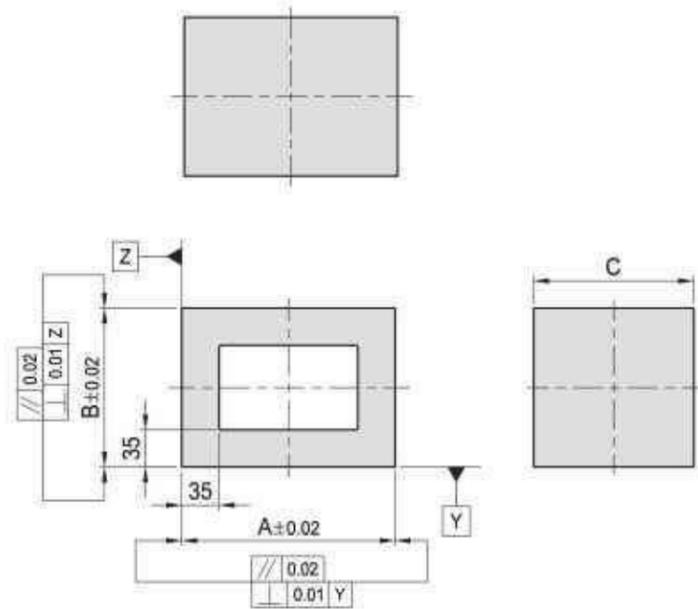
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BP25

RECTANGULAR CAST SECTION



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Cast sections provide a fast & economical way to make special jig components.
- Features: Ready to accept a hole pattern for your special jig.



MODEL NO.	A	B	C	kg
BP25-200150-0150	200	150	150	23
BP25-250150-0200	250	200	150	30
BP25-300200-0250	300	250	200	56

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BP26

RECTANGULAR CAST SECTION



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Cast sections provide a fast & economical way to make special jig components.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.

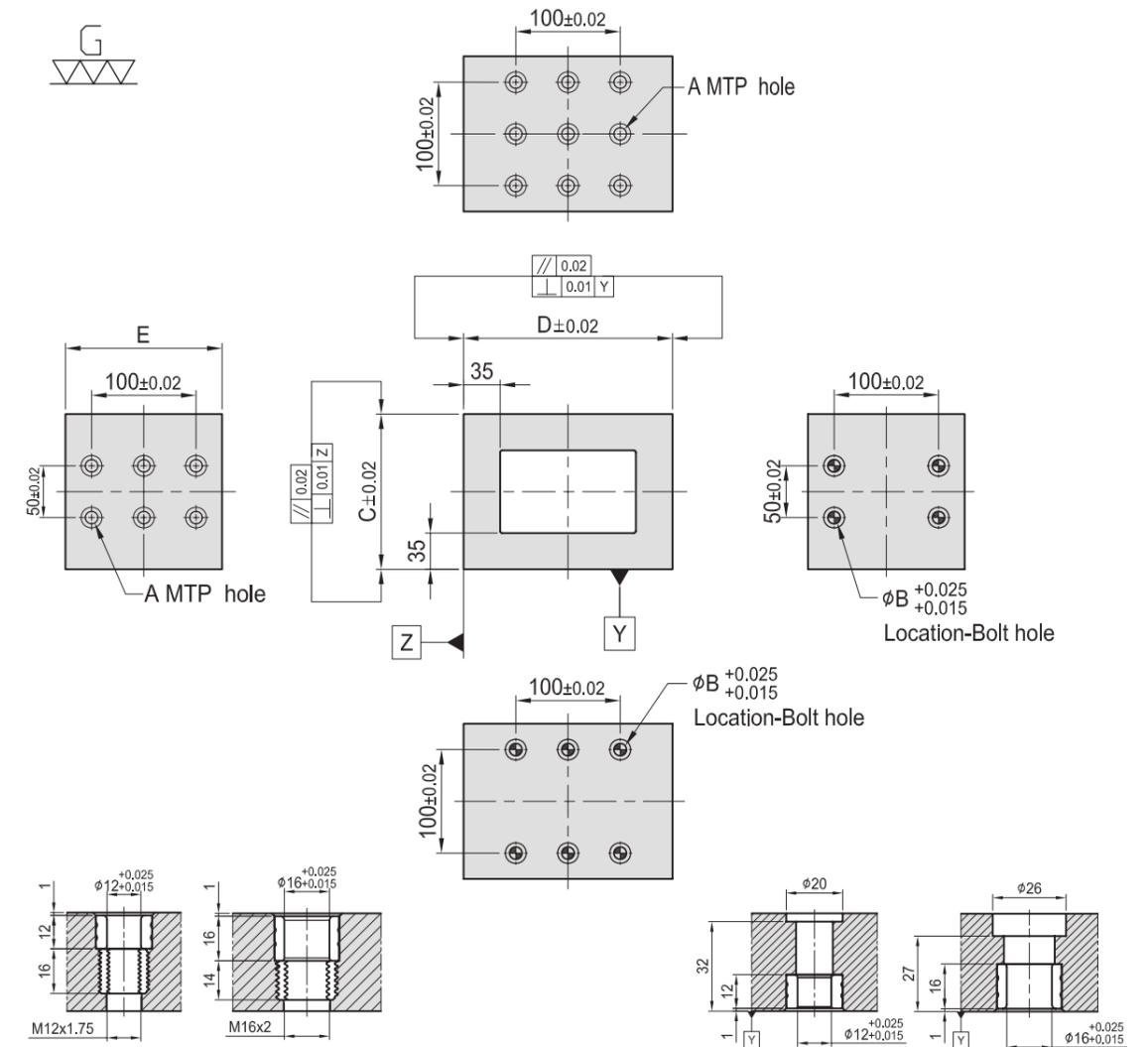


Figure A

Figure B

MODEL NO.	A	B	C	D	E	MTP	Mounting holes	kg	
BP26-200150-0150-12	φ 12	M12	12	150	200	150	15	10	23
200				250	21		14	28	
BP26-200150-0150-16	φ 16	M16	16	150	200	150	15	10	29
BP26-250150-0200-16				200	250		21	14	30

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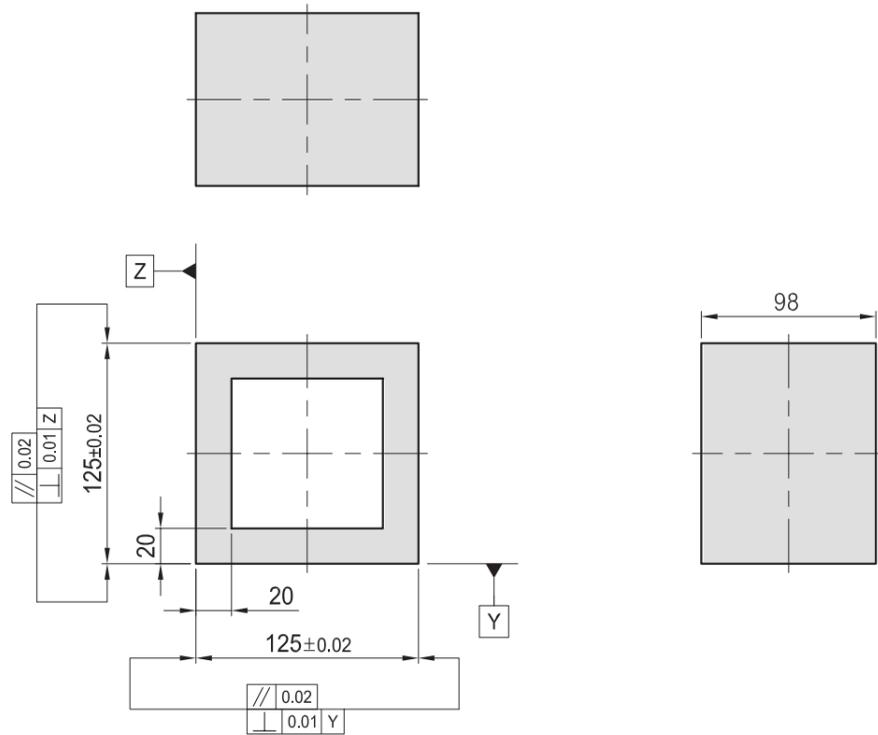
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BP27

RECTANGULAR CAST SECTION



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Cast sections provide a fast & economical way to make special jig components.
- Features: Ready to accept a hole pattern for your special jig.



MODEL NO.	kg
BP27-125098-125	6

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BP28

RECTANGULAR CAST SECTION



- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Cast sections provide a fast & economical way to make special jig components.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.

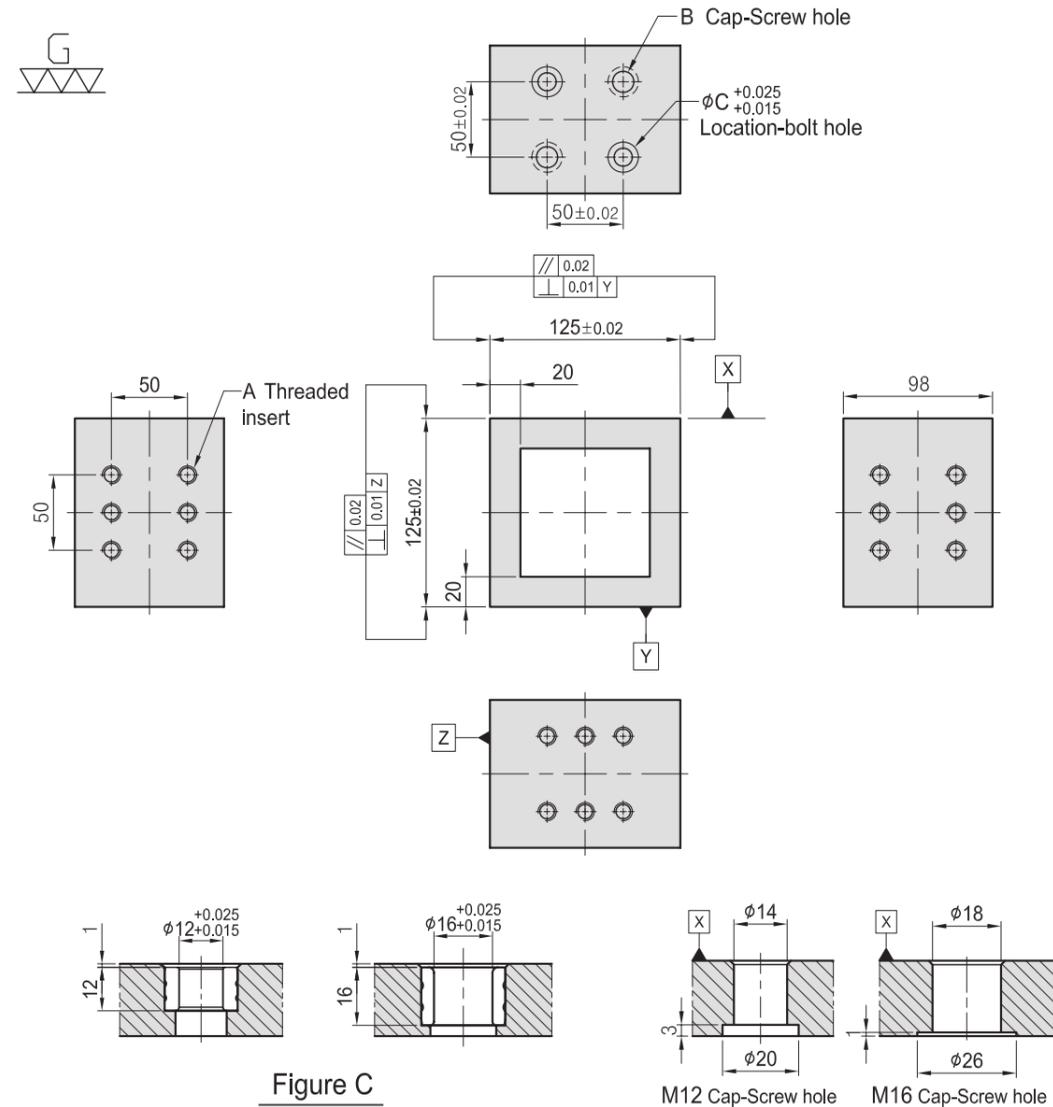


Figure C

Figure B

MODEL NO.	A	B	C	kg
BP28-125098-125-12	M12	M12	12	5.8
BP28-125098-125-16	M16	M16	16	5.5

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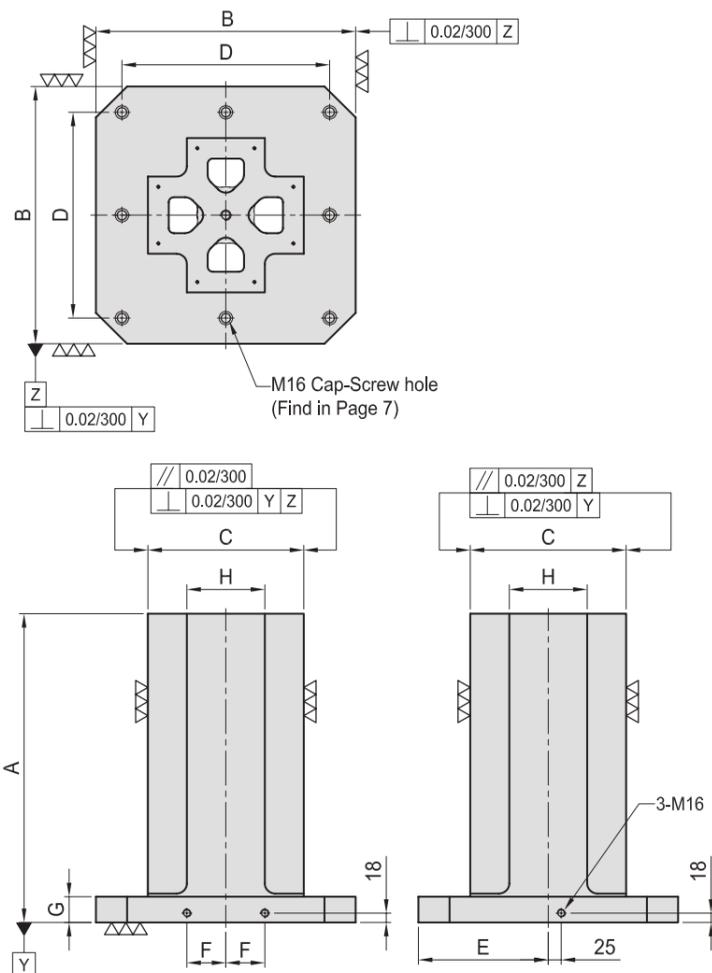
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BP29

CROSS TOOLING COLUMN

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Horizontal Machining Center.
- Features: Ready to accept a hole pattern for your special jig.
• Eye bolt & top cover included.



MODEL NO.	A	B	C	D	E	F	G	H	Mounting holes	kg
BP29-400400-0500	500	400	250	320	200	55	50	125	4	154
BP29-400400-0650	650									188
BP29-500500-0600	600	500	300	400	250	75	50	150	8	244
BP29-500500-0750	750									287
BP29-630630-0700	700	630	350	500	315	100	50	200	8	373
BP29-630630-0850	850									424
BP29-800800-0800	800	800	500	640	400	135	50	300	8	648
BP29-800800-1000	1000									753

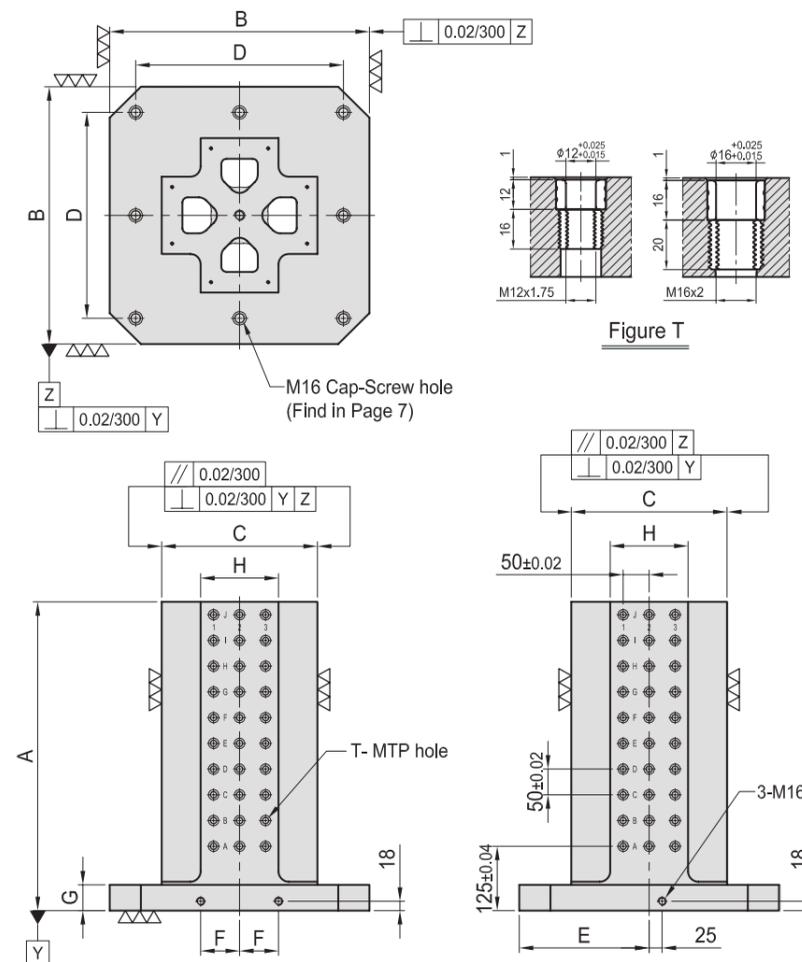
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BP30

CROSS TOOLING COLUMN

- Material / Finish:
Material: Cast Iron FC300 (JIS) / GG30 (DIN)
Heat treated (Normalized)
Alignment bushing: SUJ2(JIS) / 100Cr6(DIN), heat treated
Threaded Insert: S45C(JIS) / CK45(DIN), heat treated
MTP hole spacing: 50±0.02
- Application: Horizontal Machining Center.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.
• Eye bolt & top cover included.



MODEL NO.	A	B	C	D	E	F	G	H	T	MTP	Mounting holes	kg
BP30-400400-0500-12	500	400	250	320	200	55	50	125	φ12	M12	64	152
BP30-400400-0650-12	650										88	186
BP30-500500-0600-12	600	500	300	400	250	75	50	150	φ12	M12	120	250
BP30-500500-0750-12	750										156	293
BP30-630630-0700-12	700	630	350	500	315	100	50	200	φ12	M12	192	368
BP30-630630-0850-12	850										240	418
BP30-800800-0800-12	800	800	500	640	400	135	50	300	φ12	M12	336	640
BP30-800800-1000-12	1000										432	740

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MODEL NO.	A	B	C	D	E	F	G	H	T	MTP	Mounting holes	kg
BP30-400400-0500-16	500	400	250	320	200	55	50	125	φ16	M16	64	151
BP30-400400-0650-16	650										88	184
BP30-500500-0600-16	600	500	300	400	250	75	50	150	φ16	M16	120	247
BP30-500500-0750-16	750										156	290
BP30-630630-0700-16	700	630	350	500	315	100	50	200	φ16	M16	192	364
BP30-630630-0850-16	850										240	413
BP30-800800-0800-16	800	800	500	640	400	135	50	300	φ16	M16	336	633
BP30-800800-1000-16	1000										432	733

BP

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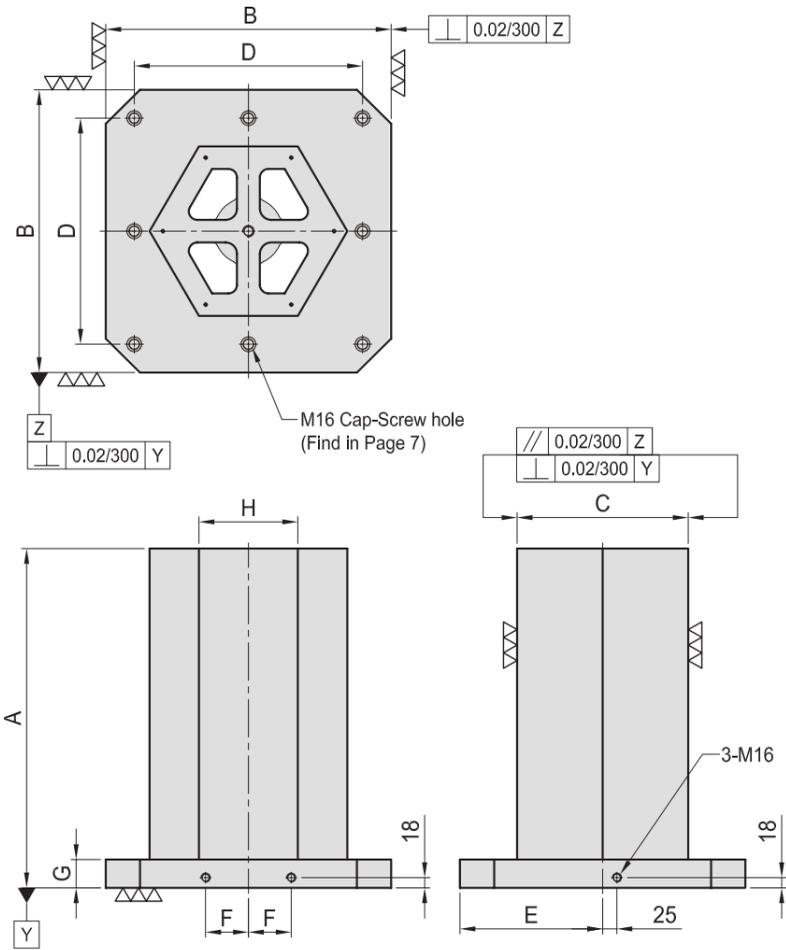
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BP31

HEXAGONAL CUBE

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Horizontal Machining Center.
- Features: Ready to accept a hole pattern for your special jig.
• Eye bolt & top cover included.



MODEL NO.	A	B	C	D	E	F	G	H	Mounting holes	kg
BP31-400400-0500	500	400	250	320	200	55	50	144	4	151
BP31-400400-0650	650									183
BP31-500500-0600	600	500	300	400	250	75	50	173	8	233
BP31-500500-0750	750									272
BP31-630630-0700	700	630	350	500	315	100	50	202	8	361
BP31-630630-0850	850									408
BP31-800800-0800	800	800	500	640	400	135	50	289	8	619
BP31-800800-1000	1000									713

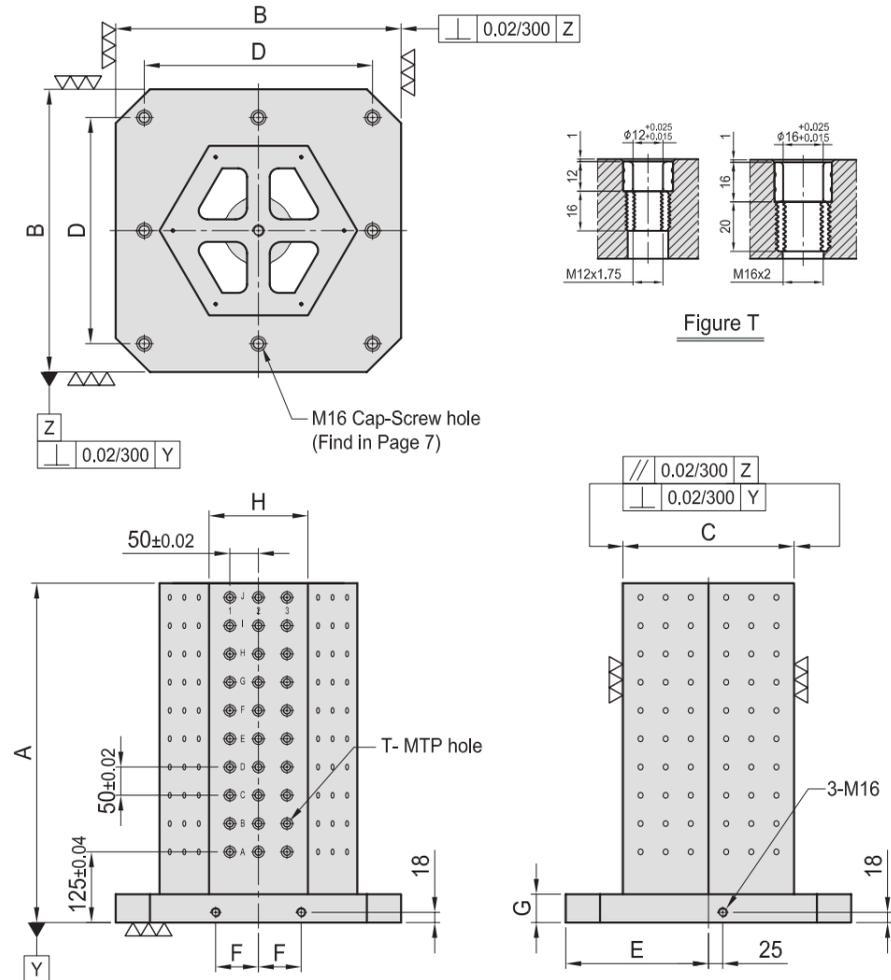
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BP32

HEXAGONAL CUBE

- Material / Finish:
Material: Cast Iron FC300 (JIS) / GG30 (DIN)
Heat treated (Normalized)
Alignment bushing: SUJ2(JIS) / 100Cr6(DIN), heat treated
Threaded Insert: S45C(JIS) / CK45(DIN), heat treated
MTP hole spacing: 50 ± 0.02
- Application: Horizontal Machining Center.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.
• Eye bolt & top cover included.



MODEL NO.	A	B	C	D	E	F	G	H	T	MTP	Mounting holes	kg	MODEL NO.	A	B	C	D	E	F	G	H	T	MTP	Mounting holes	kg
BP32-400400-0500-12	500	400	250	320	200	55	50	144	$\phi 12$	M12	96	149	BP32-400400-0500-16	500	400	250	320	200	55	50	144	$\phi 16$	M16	96	147
BP32-400400-0650-12	650										132	180	BP32-400400-0650-16	650										132	177
BP32-500500-0600-12	600	500	300	400	250	75	50	173	$\phi 12$	M12	180	228	BP32-500500-0600-16	600	500	300	400	250	75	50	173	$\phi 16$	M16	180	224
BP32-500500-0750-12	750										234	267	BP32-500500-0750-16	750										234	262
BP32-630630-0700-12	700	630	350	500	315	100	50	202	$\phi 12$	M12	216	356	BP32-630630-0700-16	700	630	350	500	315	100	50	202	$\phi 16$	M16	216	351
BP32-630630-0850-12	850										270	407	BP32-630630-0850-16	850										270	396
BP32-800800-0800-12	800	800	500	640	400	135	50	289	$\phi 12$	M12	420	609	BP32-800800-0800-16	800	800	500	640	400	135	50	289	$\phi 16$	M16	420	600
BP32-800800-1000-12	1000										540	700	BP32-800800-1000-16	1000										540	688

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- BP
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- OTHER

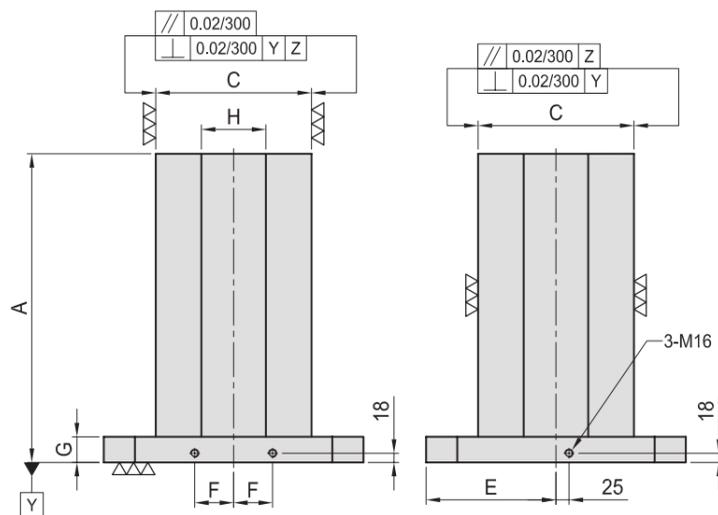
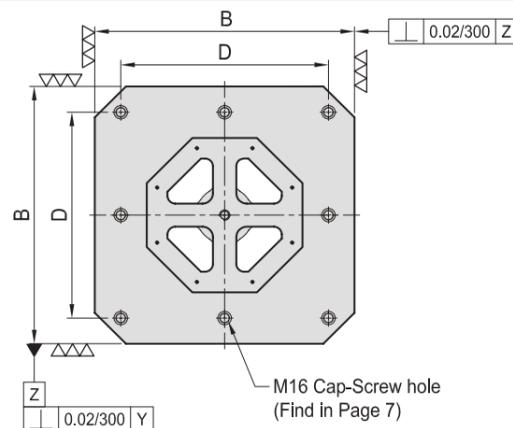
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BP33

OCTAGONAL CUBE

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
Heat treated (Normalized)
- Application: Horizontal Machining Center.
- Features: Ready to accept a hole pattern for your special jig.
• Eye bolt & top cover included.



MODEL NO.	A	B	C	D	E	F	G	H	Mounting holes	kg
BP33-400400-0500	500	400	250	320	200	55	50	103	4	148
BP33-400400-0650	650									179
BP33-500500-0600	600	500	300	400	250	75	50	124	8	227
BP33-500500-0750	750									264
BP33-630630-0700	700	630	350	500	315	100	50	145	8	350
BP33-630630-0850	850									395
BP33-800800-0800	800	800	500	640	400	135	50	207	8	622
BP33-800800-1000	1000									711

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BP34

OCTAGONAL CUBE

- Material / Finish:
Material: Cast Iron FC300 (JIS) / GG30 (DIN)
Heat treated (Normalized)
Alignment bushing: SUJ2(JIS) / 100Cr6(DIN), heat treated
Threaded Insert: S45C(JIS) / CK45(DIN), heat treated
MTP hole spacing: 50±0.02
- Application: Horizontal Machining Center.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.
• Eye bolt & top cover included.

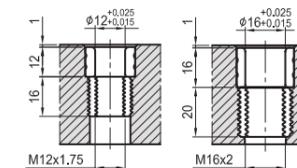
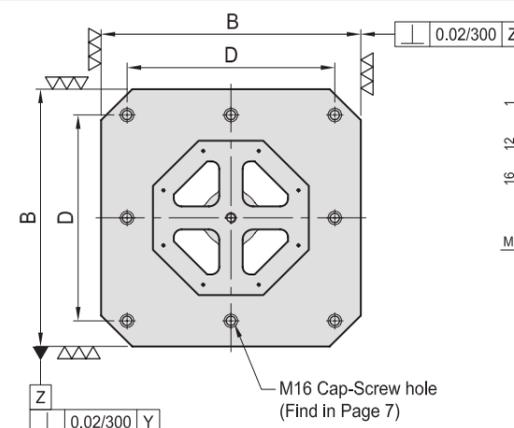
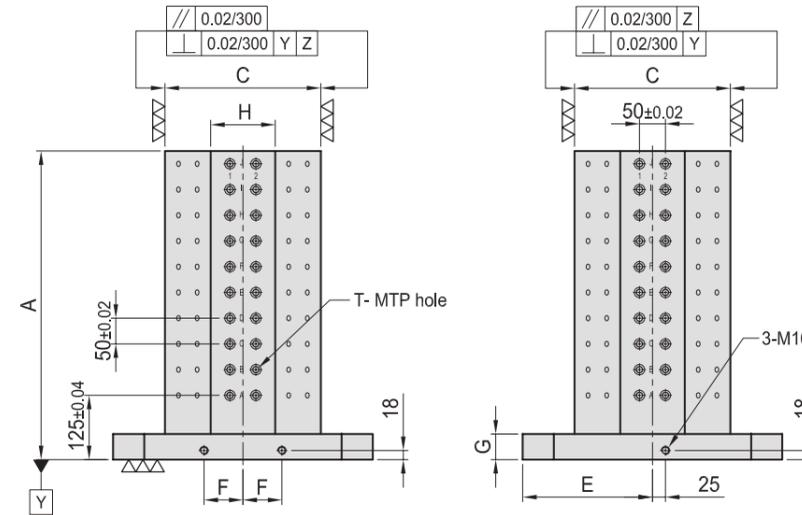


Figure T



MODEL NO.	A	B	C	D	E	F	G	H	T	MTP	Mounting holes	kg	MODEL NO.	A	B	C	D	E	F	G	H	T	MTP	Mounting holes	kg		
BP34-400400-0500-12	500	400	250	320	200	55	50	103	φ12	M12	128	4	145	BP34-400400-0500-16	500	400	250	320	200	55	50	103	φ16	M16	128	4	142
BP34-400400-0650-12	650										176	175	BP34-400400-0650-16	650	176										171		
BP34-500500-0600-12	600	500	300	400	250	75	50	124	φ12	M12	160	8	223	BP34-500500-0600-16	600	500	300	400	250	75	50	124	φ16	M16	160	8	219
BP34-500500-0750-12	750										208	259	BP34-500500-0750-16	750	208										255		
BP34-630630-0700-12	700	630	350	500	315	100	50	145	φ12	M12	192	8	345	BP34-630630-0700-16	700	630	350	500	315	100	50	145	φ16	M16	192	8	341
BP34-630630-0850-12	850										240	389	BP34-630630-0850-16	850	240										384		
BP34-800800-0800-12	800	800	500	640	400	135	50	207	φ12	M12	448	8	611	BP34-800800-0800-16	800	800	500	640	400	135	50	207	φ16	M16	448	8	601
BP34-800800-1000-12	1000										576	697	BP34-800800-1000-16	1000	576										685		

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BP35

H/CAST SECTION

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
- Heat treated (Normalized)
- Features: Easily adapts to standardized jig components.

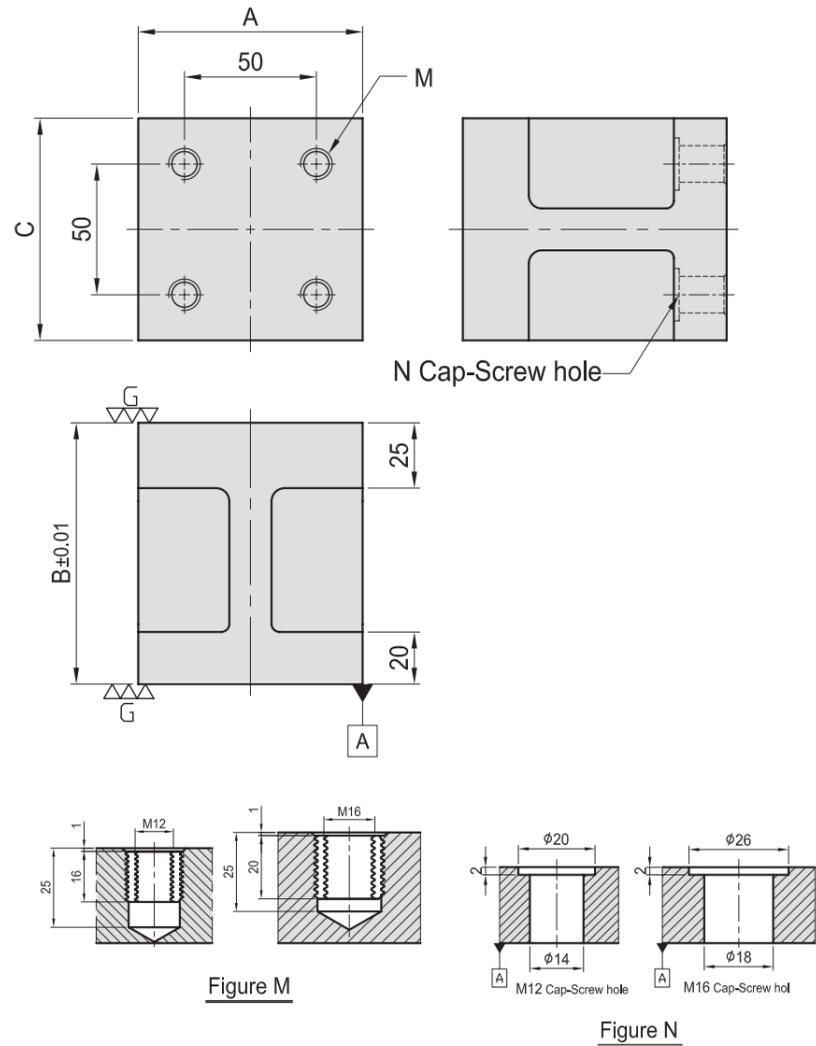


Figure M

Figure N

MODEL NO.	A	B	C	M	N	kg
BP35-085085-0100-12	85	100	85	M12	M12	3.64
BP35-085085-0125-12		125				
BP35-085085-0100-16	85	100	85	M16	M16	4.13
BP35-085085-0125-16		125				

*Special Design Welcome !



BP36

H/CAST SECTION

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
- Heat treated (Normalized)
- Features: Easily adapts to standardized jig components.

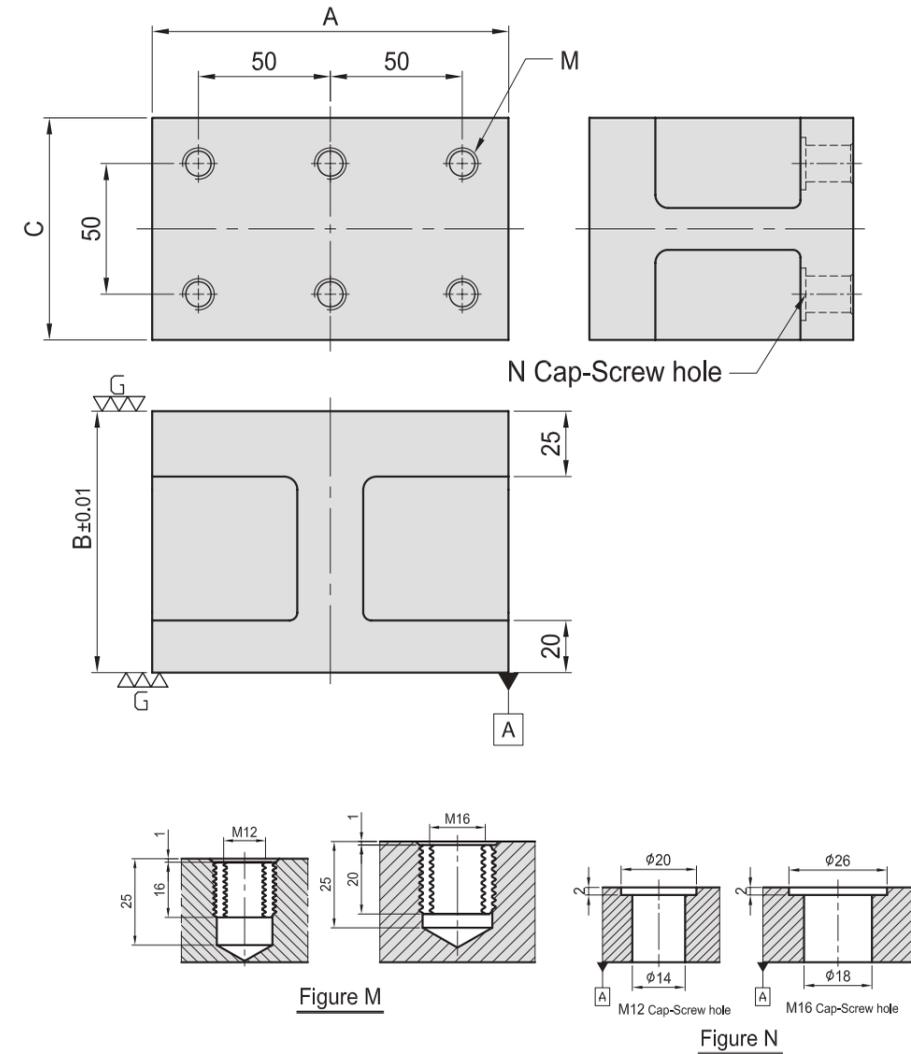


Figure M

Figure N

MODEL NO.	A	B	C	M	N	kg
BP36-135085-0100-12	135	100	85	M12	M12	5.76
BP36-135085-0125-12		125				
BP36-135085-0100-16	135	100	85	M16	M16	6.53
BP36-135085-0125-16		125				

*Special Design Welcome !

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

Column
for
Technical
Data

BP37

H/CAST SECTION

- Material / Finish:
Material: Cast Iron FC300(JIS) / GG30(DIN)
- Heat treated (Normalized)
- Features: Easily adapts to standardized jig components.

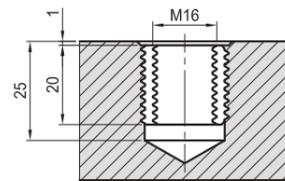
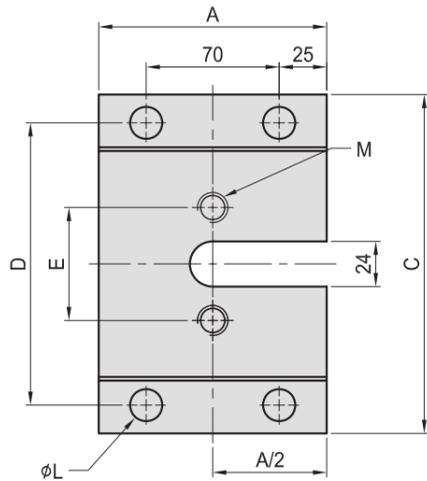
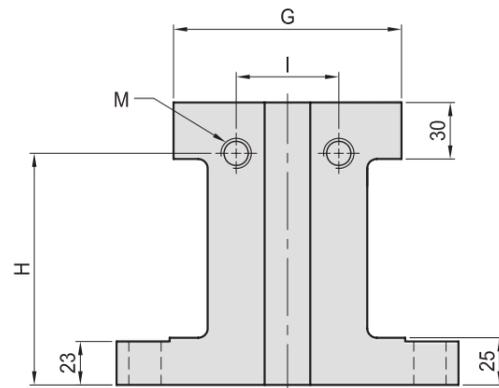
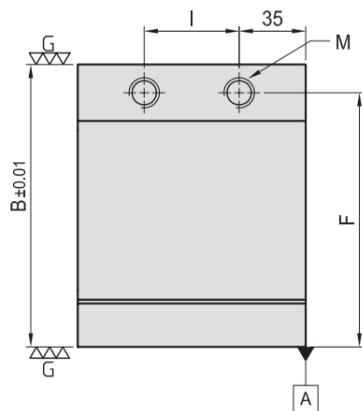


Figure M



MODEL NO.	A	B	C	D	E	F	G	H	I	M	L	kg
BP37-120180-0150-16	120	150	180	150	60	135	120	123	50	M16	17	15.5

*Special Design Welcome !

BP-SPECIAL

**WE CAN BUILD YOUR OWN SPECIAL DESIGN
UP TO 1500mm x 1500mm x 1500mm**



BP

BPA

BC

CP

SU

PT

SVF

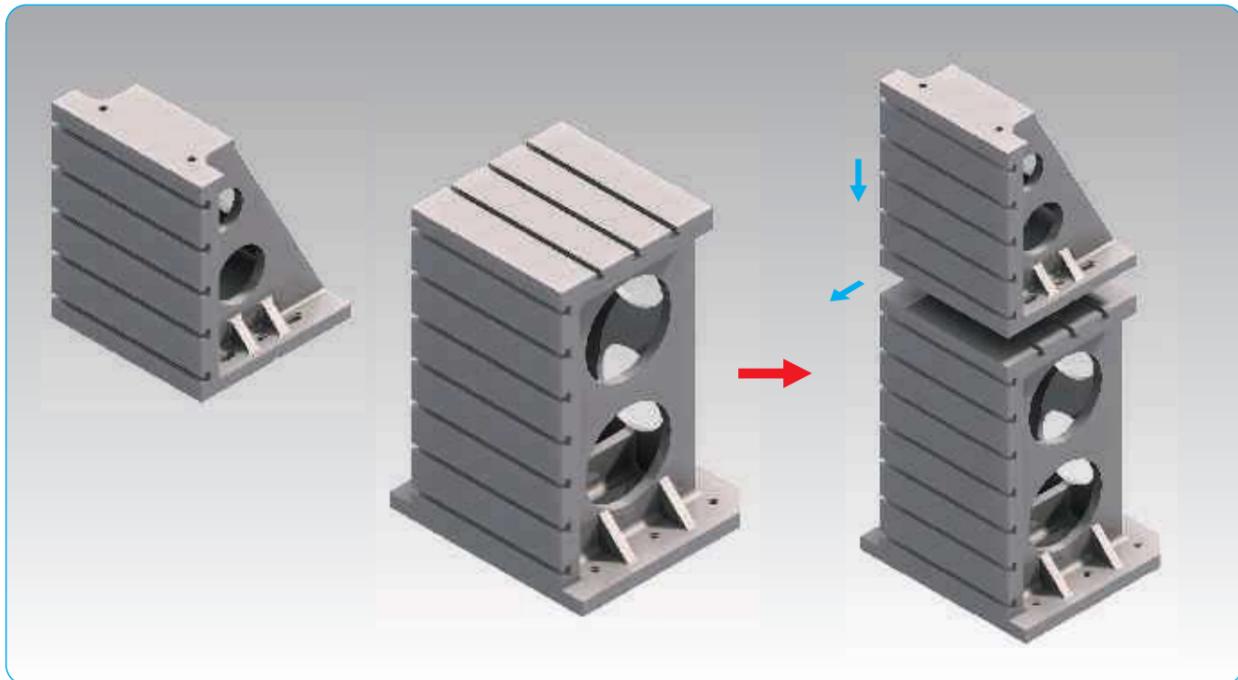
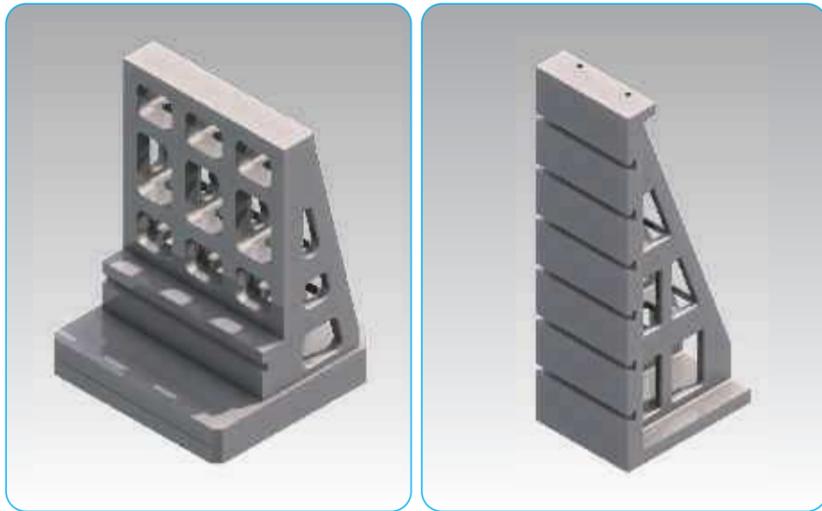
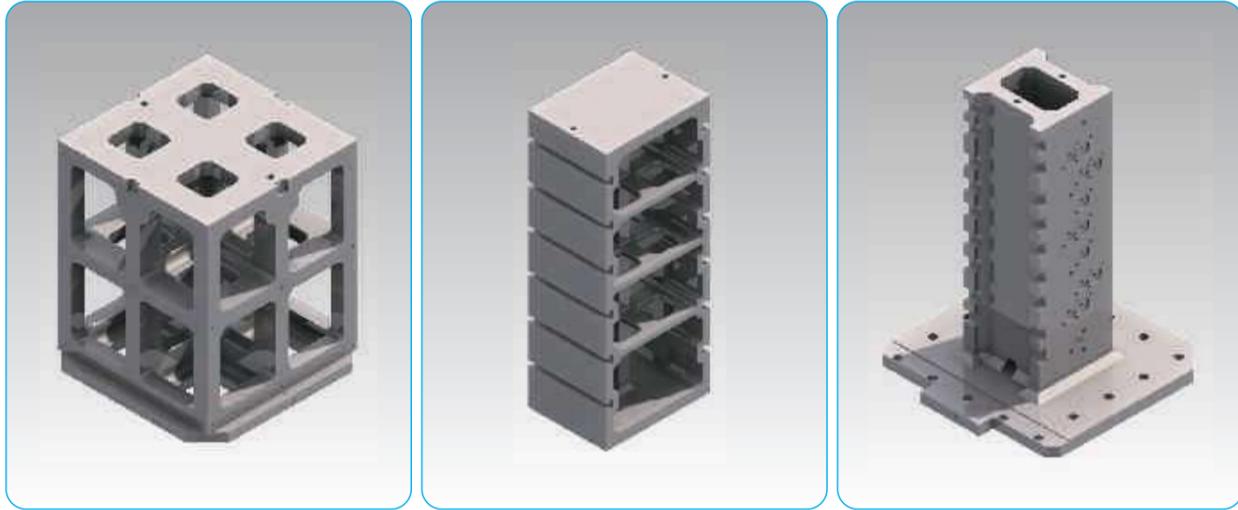
ALV

OK-VISE

JER-GENS

OTHER

Column for Technical Data





HIGH STRENGTH ALUMINUM BASE SERIES

BPA07~BPA12



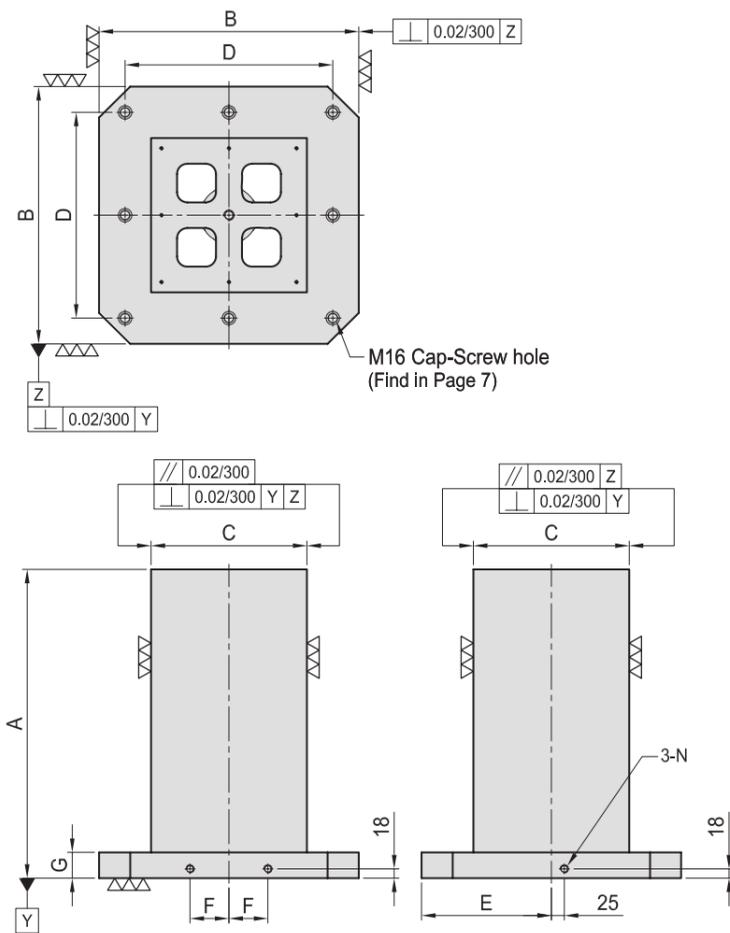
SQUARE TOOLING COLUMN DOUBLE SIDED TOOLING COLUMN



BPA07

SQUARE TOOLING COLUMN

- Material: High Strength Aluminum Casting.
- Application: Horizontal Machining Center.
- Features: Ready to accept a hole pattern for your special jig.
- Eye bolt & Top cover included.



MODEL NO.	A	B	C	D	E	F	G	Mounting holes	kg
BPA07-400400-0500	500	400	250	320	200	55	40	4	56
BPA07-400400-0650	650								73
BPA07-500500-0600	600	500	300	400	250	75	40	8	91
BPA07-500500-0750	750								122
BPA07-630630-0700	700	630	350	500	315	100	50	8	129
BPA07-630630-0850	850								180
BPA07-800800-0800	800	800	500	640	400	135	50	8	215
BPA07-800800-1000	1000								312

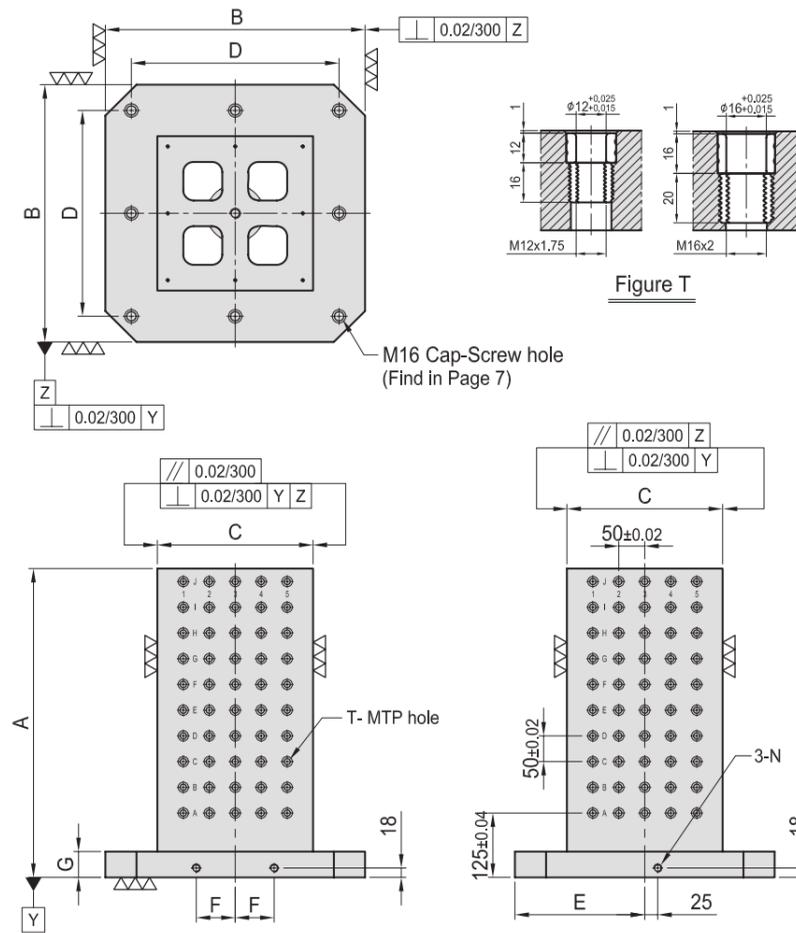
*Special Design Welcome !



BPA08

SQUARE TOOLING COLUMN

- Material: High Strength Aluminum Casting.
- Alignment bushing: SUJ2(JIS) / 100Cr6(DIN), heat treated
- Threaded Insert: S45C(JIS) / CK45(DIN), heat treated
- MTP hole spacing: 50 ± 0.02
- Application: Horizontal Machining Center.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.
- Eye bolt & Top cover included.



MODEL NO.	A	B	C	D	E	F	G	T	MTP	Mounting holes	kg	MODEL NO.	A	B	C	D	E	F	G	T	MTP	Mounting holes	kg		
BPA08-400400-0500-12	500	400	250	320	200	55	40	$\phi 12$	M12	128	4	54	BPA08-400400-0500-16	500	400	250	320	200	55	40	$\phi 16$	M16	128	4	54
BPA08-400400-0650-12	650									176	73	BPA08-400400-0650-16	650	176									73		
BPA08-500500-0600-12	600	500	300	400	250	75	40	$\phi 12$	M12	200	8	88	BPA08-500500-0600-16	600	500	300	400	250	75	40	$\phi 16$	M16	200	8	88
BPA08-500500-0750-12	750									260	122	BPA08-500500-0750-16	750	260									122		
BPA08-630630-0700-12	700	630	350	500	315	100	50	$\phi 12$	M12	288	8	126	BPA08-630630-0700-16	700	630	350	500	315	100	50	$\phi 16$	M16	288	8	123
BPA08-630630-0850-12	850									360	180	BPA08-630630-0850-16	850	360									180		
BPA08-800800-0800-12	800	800	500	640	400	135	50	$\phi 12$	M12	504	8	204	BPA08-800800-0800-16	800	800	500	640	400	135	50	$\phi 16$	M16	504	8	201
BPA08-800800-1000-12	1000									648	312	BPA08-800800-1000-16	1000	648									312		

*Special Design Welcome !

- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JERGENS
- OTHER

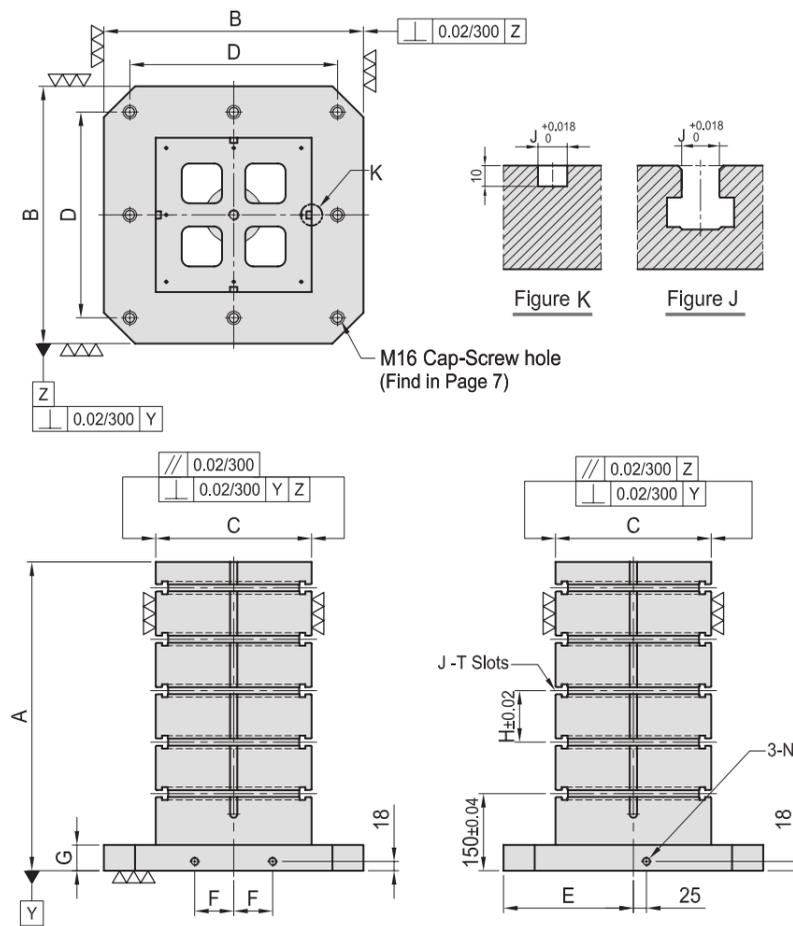
Column for Technical Data



BPA09

SQUARE TOOLING COLUMN

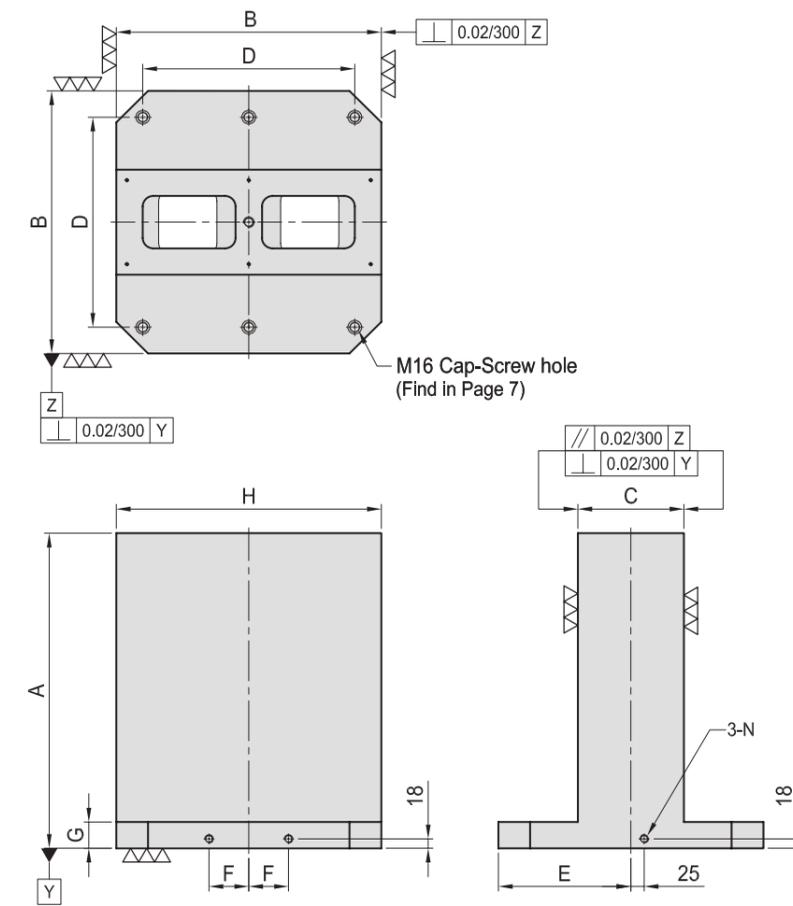
- Material: High Strength Aluminum Casting.
- Application: Horizontal Machining Center.
- Features: T-Slots running horizontally, key-way running vertically, easily adapts to standardized jig components.
- Eye bolt & Top cover included.



BPA10

DOUBLE SIDED TOOLING COLUMN

- Material: High Strength Aluminum Casting.
- Application: Horizontal Machining Center.
- Features: Ready to accept a hole pattern for your special jig.
- Eye bolt & Top cover included.



MODEL NO.	A	B	C	D	E	F	G	H	J	Mounting holes	kg
BPA09-400400-0500-14	500	400	250	320	200	55	40	100	14	4	61
BPA09-400400-0650-14	650										84
BPA09-500500-0600-14	600	500	300	400	250	75	40	100	14	8	86
BPA09-500500-0750-14	750										127
BPA09-630630-0700-14	700	630	350	500	315	100	50	125	14	8	136
BPA09-630630-0850-14	850										183
BPA09-800800-0800-14	800	800	500	640	400	135	50	150	14	8	260
BPA09-800800-1000-14	1000										319

MODEL NO.	A	B	C	D	E	F	G	H	J	Mounting holes	kg
BPA09-400400-0500-18	500	400	250	320	200	55	40	100	18	4	60
BPA09-400400-0650-18	650										84
BPA09-500500-0600-18	600	500	300	400	250	75	40	100	18	8	85
BPA09-500500-0750-18	750										135
BPA09-630630-0700-18	700	630	350	500	315	100	50	125	18	8	135
BPA09-630630-0850-18	850										183
BPA09-800800-0800-18	800	800	500	640	400	135	50	150	18	8	254
BPA09-800800-1000-18	1000										319

*Special Design Welcome !

MODEL NO.	A	B	C	D	E	F	G	H	Mounting holes	kg
BPA10-400400-0500	500	400	150	320	200	55	40	400	4	62
BPA10-400400-0650	650									86
BPA10-500500-0600	600	500	200	400	250	75	40	500	6	96
BPA10-500500-0750	750									135
BPA10-630630-0700	700	630	250	500	315	100	50	630	6	176
BPA10-630630-0850	850									202
BPA10-800800-0800	800	800	300	640	400	135	50	800	6	217
BPA10-800800-1000	1000									318

*Special Design Welcome !

- BP
- BPA**
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JERGENS
- OTHER

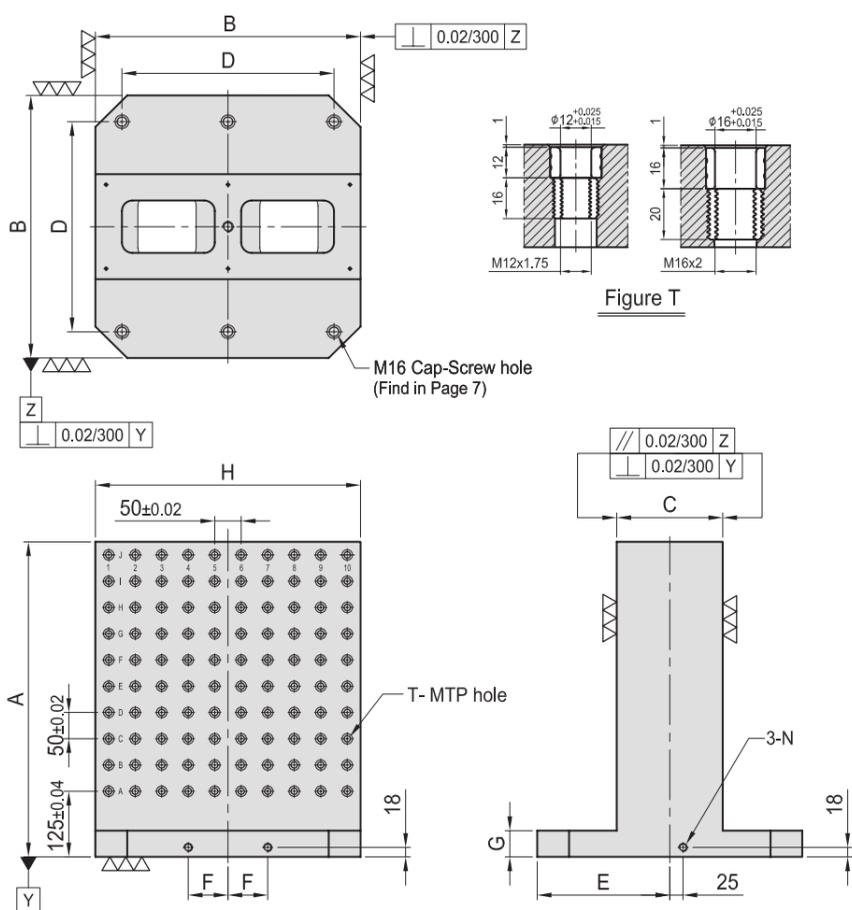
Column for Technical Data



BPA11

DOUBLE SIDED TOOLING COLUMN

- Material: High Strength Aluminum Casting.
- Alignment Bushing: SUJ2(JIS) / 100Cr6 (DIN), heat treated
- Threaded Insert: S45C(JIS) / CK45(DIN), heat treated
- MTP hole spacing: 50 ± 0.02
- Application: Horizontal Machining Center.
- Features: Alignment bushing & thread insert at every hole location, easily adapts to standardized jig components.
- Eye bolt & Top cover included.



MODEL NO.	A	B	C	D	E	F	G	H	T	MTP	Mount-ing holes	kg
BPA11-400400-0500-12	500	400	150	320	200	55	40	400	$\phi 12$	M12	128	56
BPA11-400400-0650-12	650	400	150	320	200	55	40	400	$\phi 12$	M12	176	86
BPA11-500500-0600-12	600	500	200	400	250	75	40	500	$\phi 12$	M12	200	91
BPA11-500500-0750-12	750	500	200	400	250	75	40	500	$\phi 12$	M12	260	135
BPA11-630630-0700-12	700	630	250	500	315	100	50	630	$\phi 12$	M12	288	154
BPA11-630630-0850-12	850	630	250	500	315	100	50	630	$\phi 12$	M12	360	202
BPA11-800800-0800-12	800	800	300	640	400	135	50	800	$\phi 12$	M12	420	214
BPA11-800800-1000-12	1000	800	300	640	400	135	50	800	$\phi 12$	M12	540	318

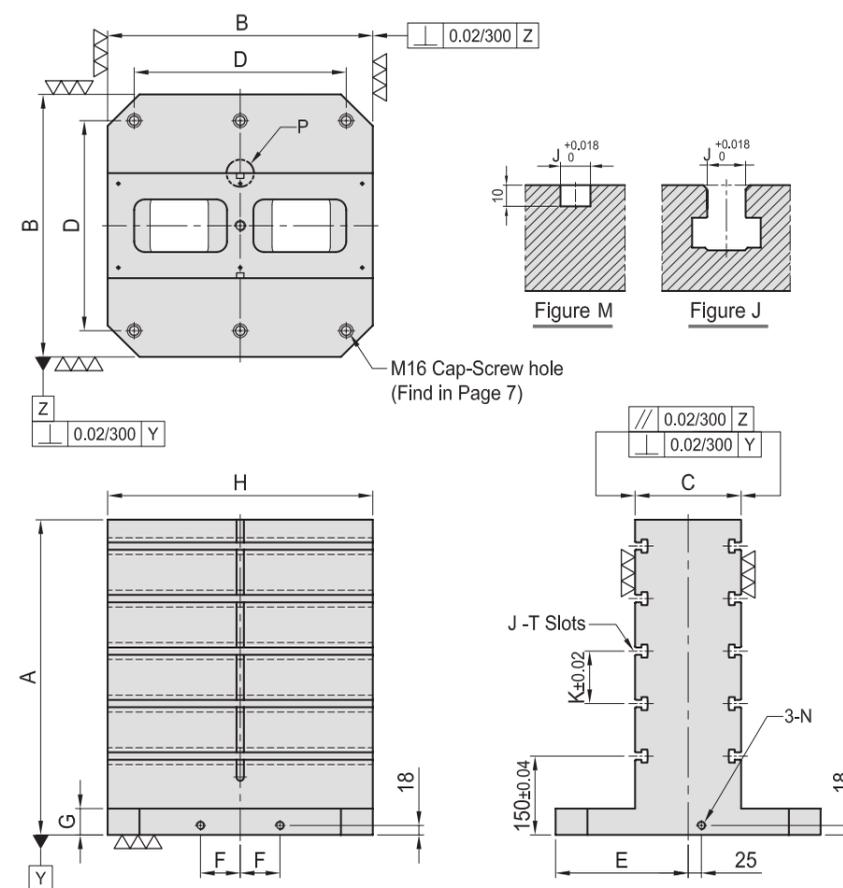
*Special Design Welcome !



BPA12

DOUBLE SIDED TOOLING COLUMN

- Material: High Strength Aluminum Casting.
- Application: Horizontal Machining Center.
- Features: T-Slots running horizontally, key-way running vertically, easily adapts to standardized jig components.
- Eye bolt & Top cover included.



MODEL NO.	A	B	C	D	E	F	G	H	J	K	Mount-ing holes	kg
BPA12-400400-0500-14	500	400	150	320	200	55	40	400	14	100	4	60
BPA12-400400-0650-14	650	400	150	320	200	55	40	400	14	100	4	92
BPA12-500500-0600-14	600	500	200	400	250	75	40	500	14	100	6	87
BPA12-500500-0750-14	750	500	200	400	250	75	40	500	14	100	6	142
BPA12-630630-0700-14	700	630	250	500	315	100	50	630	14	125	6	165
BPA12-630630-0850-14	850	630	250	500	315	100	50	630	14	125	6	212
BPA12-800800-0800-14	800	800	300	640	400	135	50	800	14	150	6	243
BPA12-800800-1000-14	1000	800	300	640	400	135	50	800	14	150	6	325

*Special Design Welcome !

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

Column
for
Technical
Data

BASE COMPONENTS

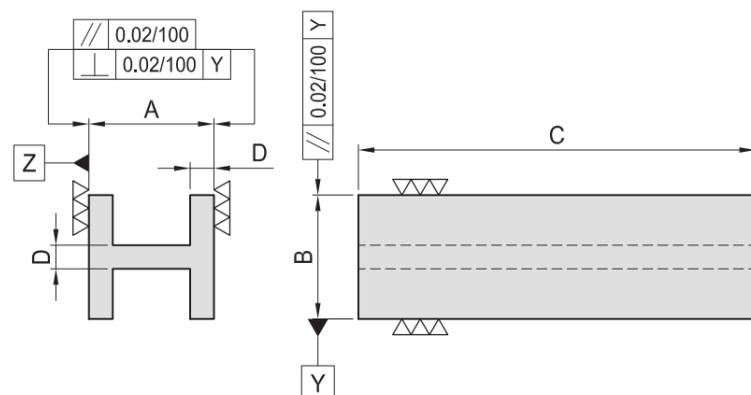
BC01~BC14



NOTCH SECTION
CHANNEL SECTION
H-SECTION
SQUARE HOLLOW BLOCK
RECTANGULAR HOLLOW BLOCK
HOLLOW BLOCK

BC01

H-SECTION

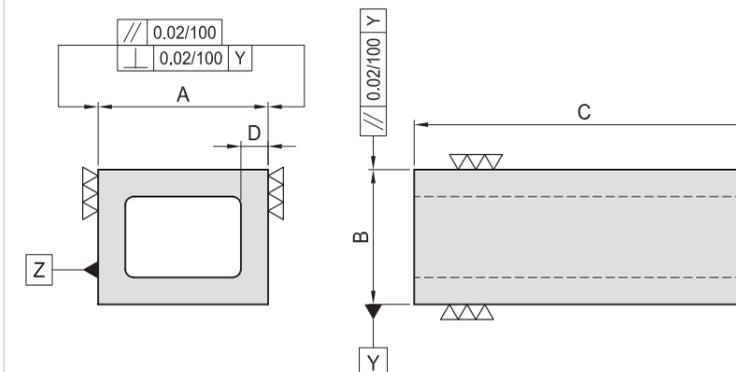


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	E	kg
BC01-063063-200	63	63	200	12	25.5	2.8
BC01-080080-200	80	80	200	16	32.0	4.8
BC01-080080-400			400			9.6
BC01-125125-200	125	125	200	20	52.5	9.6
BC01-125125-400			400			19.3

BC03

RECTANGULAR HOLLOW BLOCK

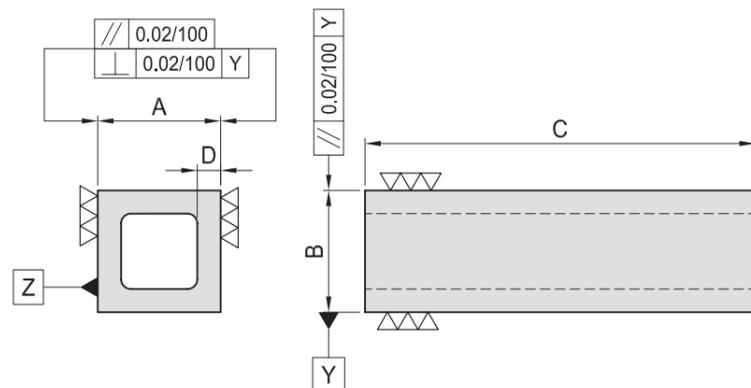
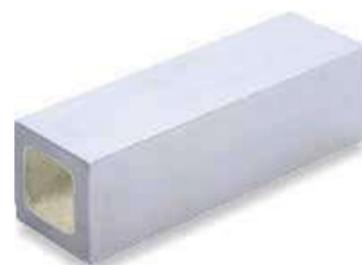


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	kg
BC03-080100-200	100	80	200	16	7.0
BC03-080100-400			400		14.0
BC03-100160-200	160	100	200	18	11.6
BC03-100160-400			400		23.2

BC02

SQUARE HOLLOW BLOCK

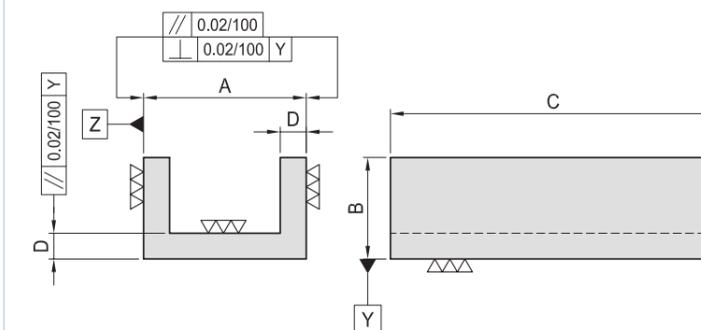


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	kg
BC02-063063-200	63	63	200	12	2.3
BC02-100100-200	100	100	200	16	8.0
BC02-100100-400			400		16.0
BC02-160160-200	160	160	200	20	16.5
BC02-160160-400			400		33.0

BC04

CHANNEL SECTION



- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	kg
BC04-063100-200	100	63	200	16	4.5
BC04-063100-300	100	63	300	16	6.8
BC04-090160-300	160	90	300	20	13.0

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-VISE

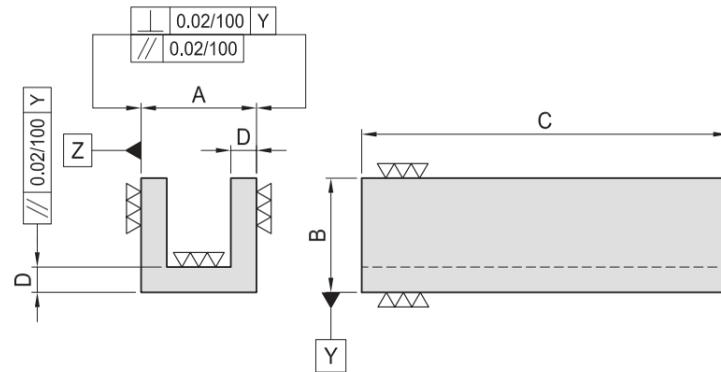
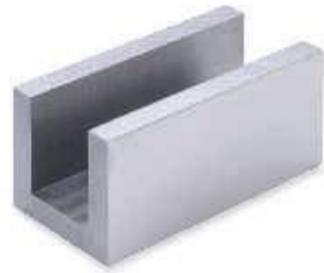
JER-GENS

OTHER

Column for Technical Data

BC05

U-SECTION

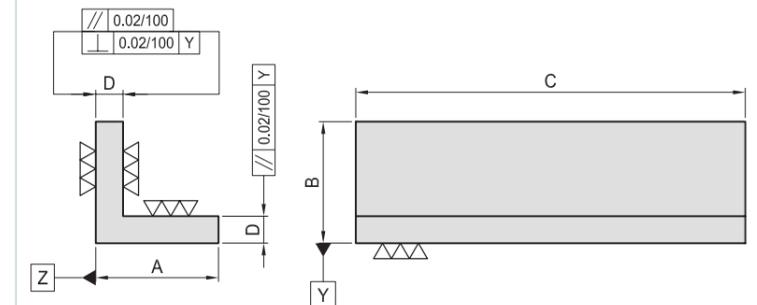


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	kg
BC05-063063-200	63	63	200	14	3.2
BC05-063063-400			400		6.5
BC05-100100-200	100	100	200	20	7.7
BC05-100100-400			400		14.8
BC05-150150-200	150	150	200	25	14.0
BC05-150150-400			400		29.0

BC07

L-SECTION

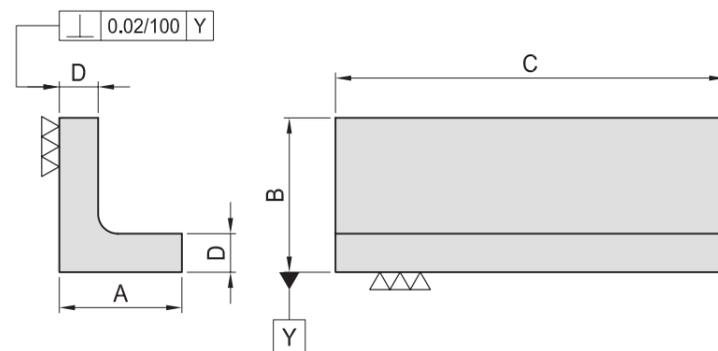
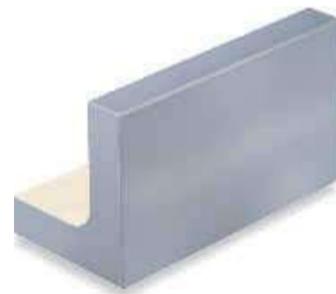


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	kg
BC07-063063-200	63	63	200	14	2.3
BC07-063063-400			400		4.5
BC07-100100-200	100	100	200	20	5.2
BC07-100100-400			400		10.4

BC06

HEAVY DUTY L-SECTION

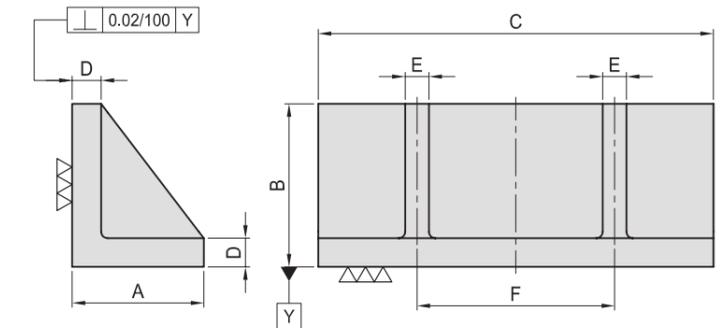


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	kg
BC06-080063-200	63	80	200	20	3.6
BC06-080063-400			400		7.2
BC06-125100-200	100	125	200	25	7.3
BC06-125100-400			400		15.0
BC06-200160-200	160	200	200	32	15.0
BC06-200160-400			400		31.0

BC08

WEBBED L-SECTION

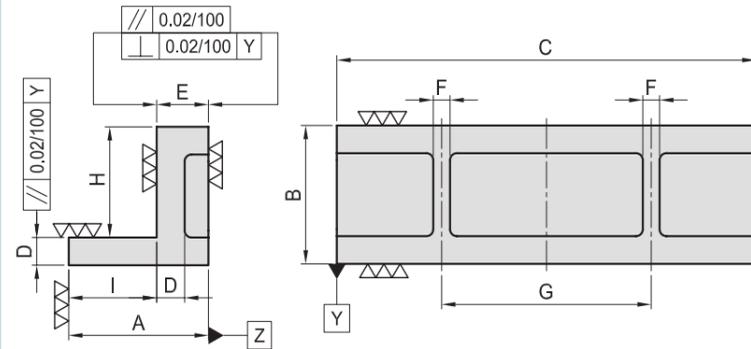


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	E	F	kg
BC08-125100-150	100	125	150	22	18	-	5.3
BC08-125100-300	100	125	300	22	18	150	11.0

BC09

WEBBED T-SECTION

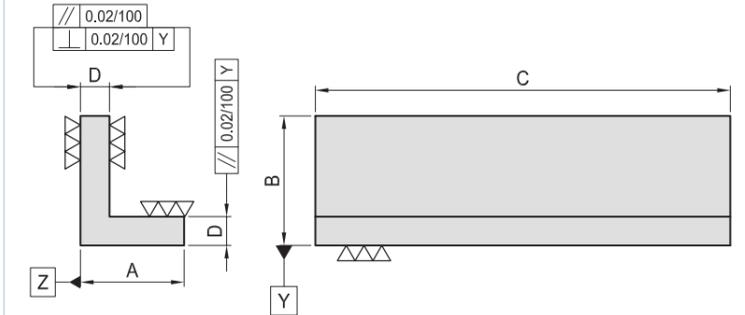


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	E	F	G	H	I	kg
BC09-100100-150	100	100	150	20	37	12	-	80	63	4.4
BC09-100100-300	100	100	300	20	37	12	150	80	63	8.7

BC12

UNEQUAL L-SECTION

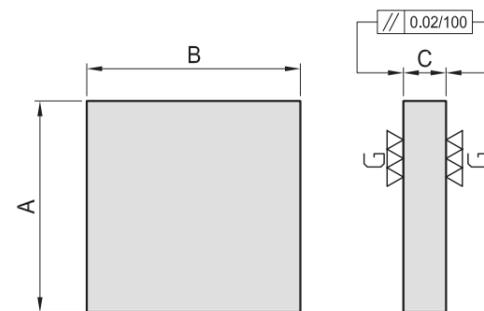


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	kg
BC12-063050-200	50	63	200	14	2.0
BC12-063050-300	50	63	300	14	3.0
BC12-063050-500	50	63	500	14	5.0

BC10

STEEL RECTANGULAR PLATE

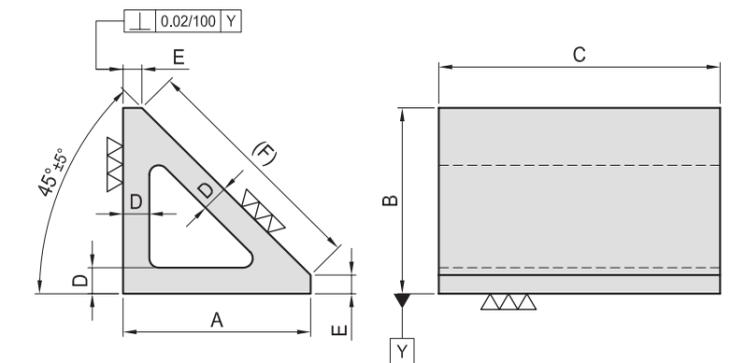


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	kg
BC10-20100-100	100	100	20	1.6
BC10-20100-150		150		2.3
BC10-25150-200	150	200	25	5.9
BC10-25150-250		250		7.3
BC10-25200-200	200	200	25	7.8
BC10-25200-250		250		9.8
BC10-25250-250		250		12.0

BC13

ANGULAR HOLLOW BLOCK 45°

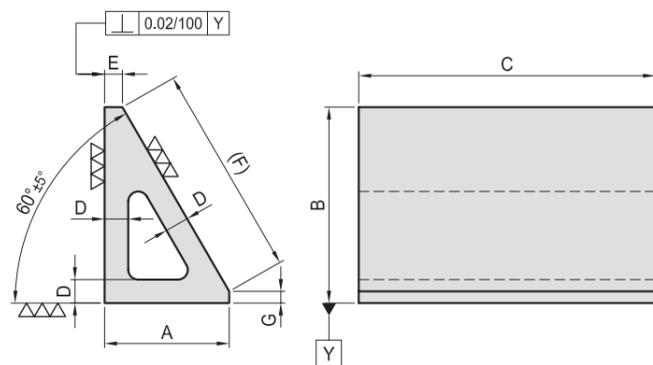


- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	E	F	kg
BC13-100100-150	100	100	150	14	10	127	4.5
BC13-100100-300			300				8.8
BC13-200200-150	200	200	150	22	20	255	15.0
BC13-200200-300			300				29.0

BC14

ANGULAR HOLLOW BLOCK 30°



- Material : Cast Iron.
FC-300 (JIS)
GG-30 (DIN)
- Heat treated : Normalized

MODEL NO.	A	B	C	D	E	F	G	kg
BC14-100063-150	63	100	150	12	9	108	6	3.0
BC14-100063-300			300					6.0
BC14-200125-150	125	200	150	20	14	222	8	9.5
BC14-200125-300			300					19.0



CLAMP PARTS

CP01~CP40



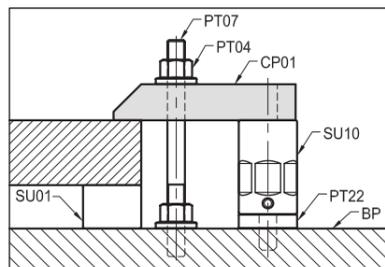
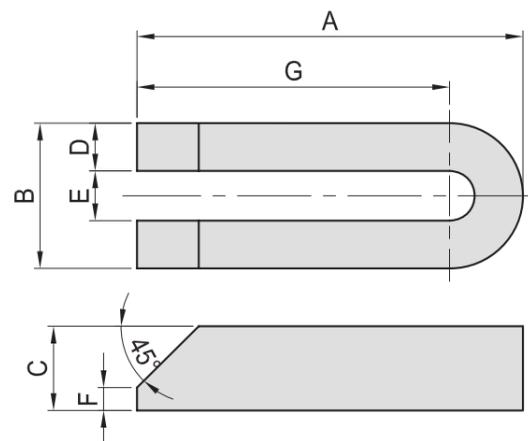
U-CLAMP
TAPPED-NOSE STRAP
GOOSE NECK
TAPPED END U-CLAMP
PLAIN END U-CLAMP

CP01

U-CLAMP



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.
- Features : Open end permits quick & easy installation.



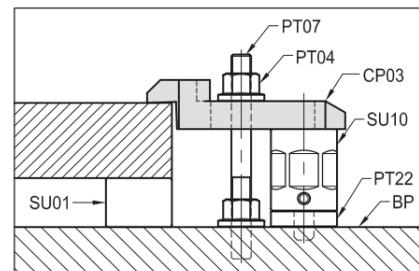
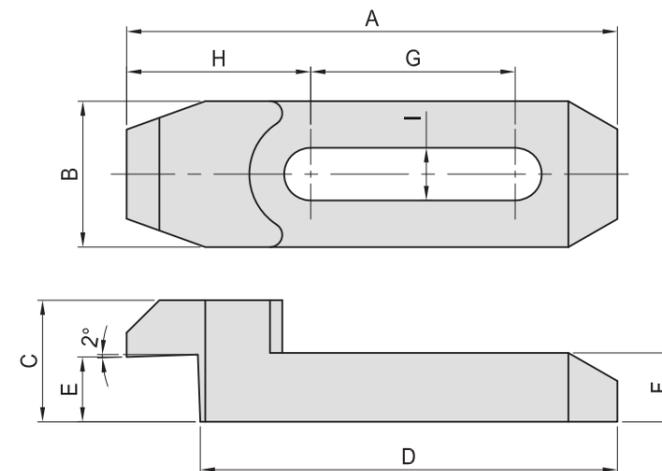
MODEL NO.	A	B	C	D	E	F	G	kg
CP01-12100	100		22				81	0.41
CP01-12125	125	38	25	12.5	13	6	106	0.58
CP01-16150	150						125	1.10
CP01-16200	200	50	32	16.5	17	8	175	1.40
CP01-16300	300						275	1.55
CP01-20200	200						170	2.10
CP01-20300	300	60	35	19.5	21	10	270	2.70
CP01-24250	250	76	48	25.0	26	18	212	3.55

CP03

GOOSE NECK CLAMP



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.
- Features : Low profile design helps eliminate cutter interference.



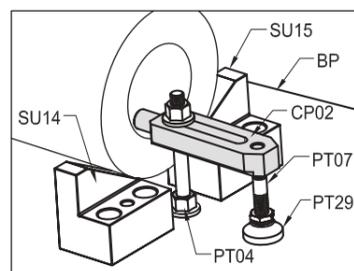
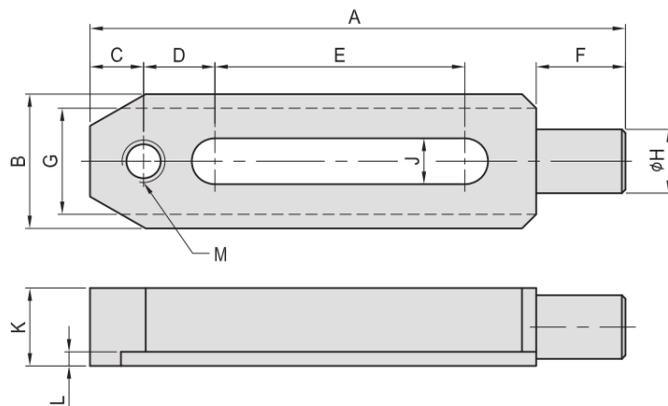
MODEL NO.	A	B	C	D	E	F	G	H	I	kg
CP03-12120	120	36	30	102	16	17	50	45	13	0.49
CP03-16150	150	48	48	130	25	25	55	60	17	1.30
CP03-20175	175	60	60	150	30	30	65	70	21	2.26

CP02

TAPPED-NOSE STRAP



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.
- Features : The cylindrical pin minimizes contact area and is useful for clamping in horizontal holes & round profiles .



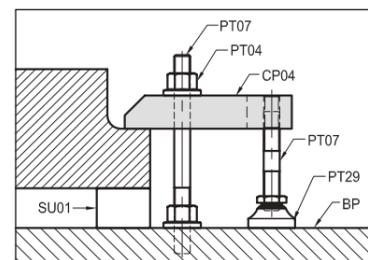
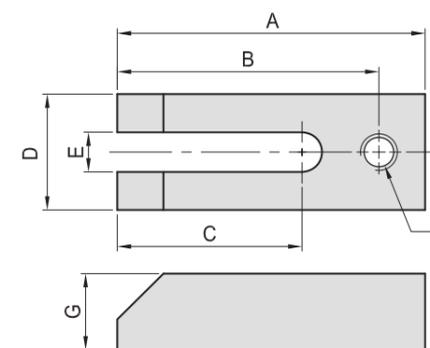
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L	M	Kg
CP02-12150	150	38	15	20	70	25	30	18	13	22	4	M12	0.58
CP02-16150	150				40								1.12
CP02-16200	200	48	20	25	90	35	40	24	17	32	5	M16	1.50
CP02-20200	200				60								2.22
CP02-20250	250	60	30	35	110	40	50	28	21	35	6	M20	2.74

CP04

TAPPED END U-CLAMP



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.
- Features : Open end design permits easy assembly.



MODEL NO.	A	B	C	D	E	F	G	kg
CP04-12075	75	60	35				19	0.31
CP04-12100	100	85	60	38	13	M12	25	0.52
CP04-12125	125	110	85					0.64
CP04-14100	100	84	64				25	0.39
CP04-14150	150	134	89	38	15	M14	25	0.62
CP04-16100	100	80	45					0.73
CP04-16125	125	105	70	50	17	M16	25	0.90
CP04-16150	150	130	95					1.06
CP04-18150	150	130	89	50	19	M18	32	1.05
CP04-18200	200	180	127					1.45
CP04-20150	150	130	95	60	21	M20	32	1.46
CP04-20200	200	180	145					1.85

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

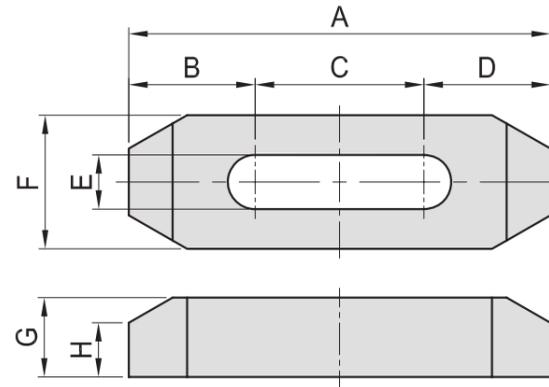
JER-
GENS

OTHER

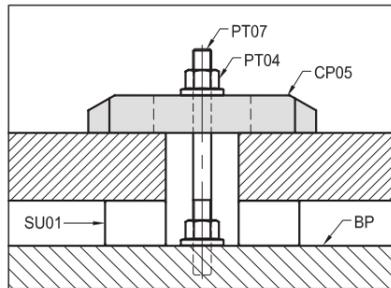
Column
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Technical
Data

CP05

DOUBLE ENDED CLAMP



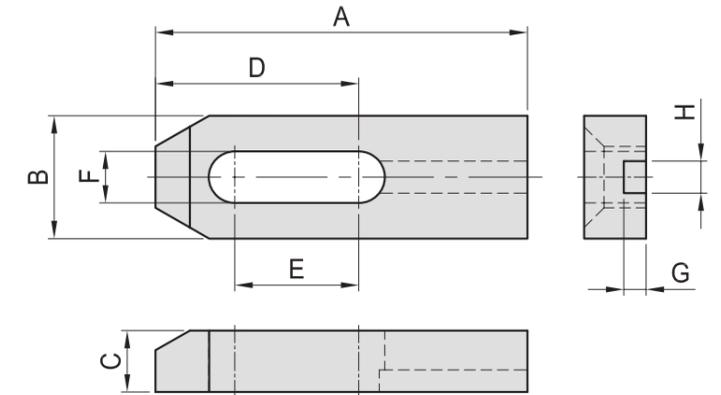
- Material / Finish :
- Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.



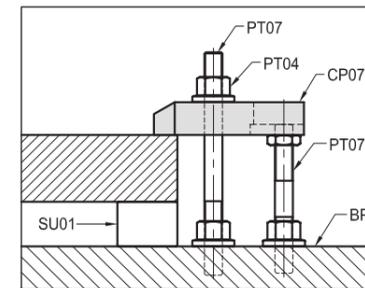
MODEL NO.	A	B	C	D	E	F	G	H	kg
CP05-12065	65	20.0	25	20.0	13	32	19	13	0.22
CP05-12100	100	30.0	40	30.0					0.33
CP05-12150	150	49.5	51	49.5	17	38	25	15	0.48
CP05-16080	80	28.0	24	28.0					0.34
CP05-16125	125	42.0	41	42.0	25	38	25	15	0.57
CP05-16150	150	51.0	48	51.0					0.68
CP05-20100	100	34.0	32	34.0	21	38	22	14	0.41
CP05-20125	125	42.5	40	42.5					0.62
CP05-20150	150	51.0	48	51.0	26	50	32	19	0.82
CP05-24150	150	51.0	48	51.0					1.14

CP07

SLOTTED END CLAMP STRAP



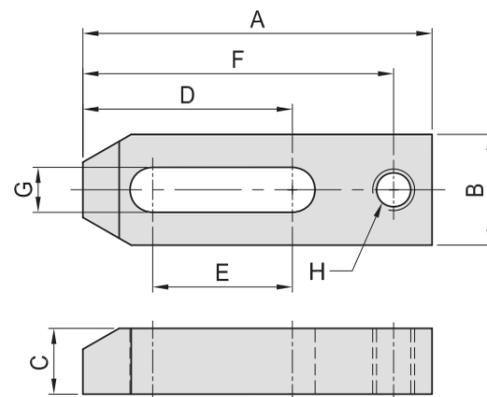
- Material / Finish :
- Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.
- Application : Locating slot keeps clamp properly oriented.



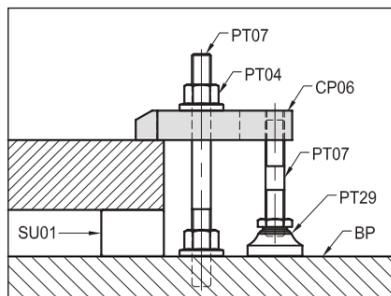
MODEL NO.	A	B	C	D	E	F	G	H	kg
CP07-12065	65	32	22	32	14	13	7	10	0.26
CP07-12080	80			48	25				0.31
CP07-12100	100	38	22	60	40	17	8	12	0.38
CP07-16080	80			40	17				0.38
CP07-16100	100	25	70	55	30	21	9	13	0.53
CP07-16125	125			45	0.65				
CP07-20150	150	32	112	25	82	80	21	9	1.10
CP07-20200	200			80	1.40				

CP06

TAPPED CLAMP STRAP



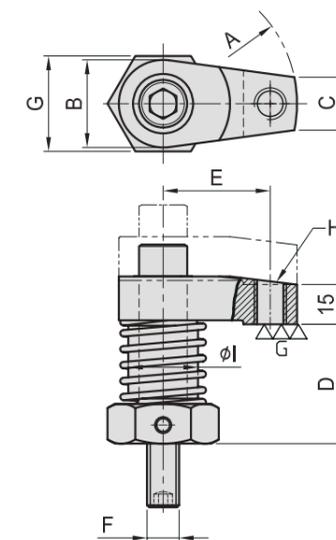
- Material / Finish :
- Material : S45C(JIS) / Ck45(DIN)
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.
- Application : Use with various knobs, jack screws, clamps & pads; such as PT29.



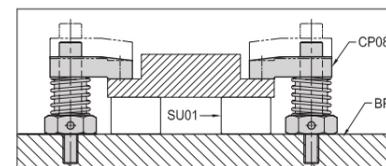
MODEL NO.	A	B	C	D	E	F	G	H	kg
CP06-12065	65	32	19	32	14	52	13	M12	0.22
CP06-12080	80			48	25	69			0.27
CP06-12100	100	38	25	60	40	89	17	M16	0.33
CP06-16080	80			40	17	65			0.32
CP06-16100	100	25	70	55	30	85	21	M20	0.53
CP06-16125	125			45	110	0.65			
CP06-20150	150	32	112	25	82	134	80	184	1.10
CP06-20200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

CP08

SWING CLAMP



- Material / Finish :
- Material : SCM-4(JIS)
- Heat treated : HRC 38°~42°.
- Surface finish : Black Oxide.
- Application : Multipurpose swing clamp, available with plain or threaded toe.
- Features : A small clamp with good holding power, ideal for tight spaces, full swing a way featute permits easy part loading.



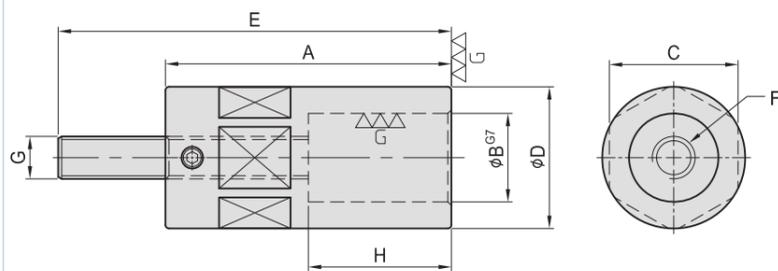
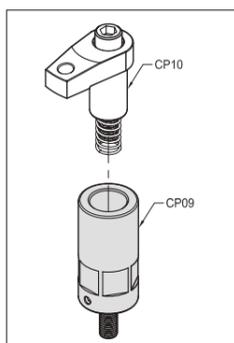
MODEL NO.	A	B	C	D	E	F	G	H	I	kg
CP08-1240-29	30	28	16	40	-	M12	29	-	22	0.29
CP08-1245-36	50	32	20	45	40	M12	36	M12	26	0.50
CP08-1645-36	50	32	20	45	40	M16	36	M12	26	0.50
CP08-1645-41	60	40	25	45	45	M16	41	M16	32	0.75

CP09

SWING CLAMP MOUNT/EXTENSION



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 38°~42°.
- Surface finish : Black Oxide.
- Application : Use with CP10 swing clamp to gain extra height.



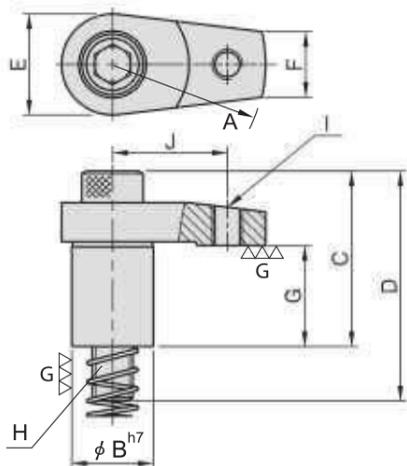
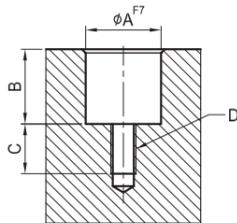
MODEL NO.	A	B	C	D	E	F	G	H	kg
CP09-12080	80	25	36	40	110	M12	M12	40	0.60
CP09-12100	100	25	36	40	130	M12	M12	40	0.78
CP09-16080	80	32	46	50	110	M16	M16	40	0.83
CP09-16100	100	32	46	50	130	M16	M16	40	1.25

CP10

SWING CLAMP



- Material / Finish :
Material : SCM-4(JIS)
- Heat treated : HRC 38°~42°.
- Surface finish : Black Oxide.
- Application : Multipurpose swing clamp, available with plain or threaded toe.



MODEL NO.	A	B	C	D	E	F	G	H	I	J	kg
CP10-1022	30	22	54.5	75	28	16	30	M10	-	-	0.20
CP10-1225	50	25	66.0	87	33	20	40	M12	M12	40	0.35
CP10-1632	60	32	69.5	96	40	26	40	M16	M12	45	0.61

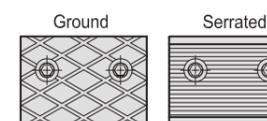
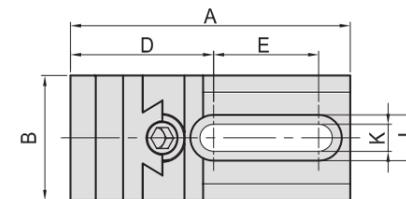
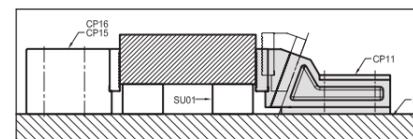
Type	A	B	C	D
CP10-1022	22	30	20	M10
CP10-1225	25	40	25	M12
CP10-1632	32	40	25	M16

CP11

FREE JAW VISE



- Material / Finish :
Material : FCD 45(JIS)
- Heat treated : Nnormalized.
- Application : Ideal for holding large or irregular shapes.
- Features : Clamping force in 2 directions, available with plain or serrated jaws.



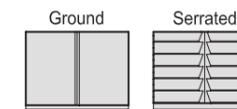
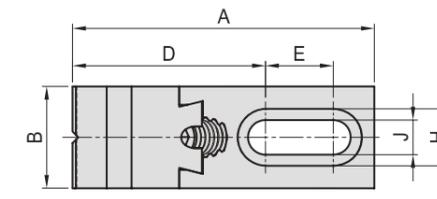
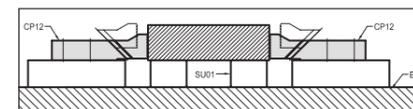
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	Type	kg
CP11-1260-G	133	60	58	68	50	32	16	6	22	13	16.8	42	10	Ground	2.1
CP11-1685-G	187	85	80	92	70	50	24	9	30	17	23.4	60	14	Serrated	5.6
CP11-1260-S	133	60	58	68	50	32	16	6	22	13	16.8	42	10		2.1
CP11-1685-S	187	85	80	92	70	50	24	9	30	17	23.4	60	14	5.6	

CP12

ADJUSTABLE SIDE CLAMP



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 38°. Jaw Surface treated with high frequency quenching.
- Surface finish : Black Oxide.
- Application : Low profile side clamp keeps top surfaces clear for machining, ideal for rough or finished parts, available with plain or serrated jaw.



MODEL NO.	A	B	C	D	E	F	G	H	J	K	L	Type	kg
CP12-0825-G	72.0	25	18.0	45.5	16.5	16	7	14	8.5	5	7	Ground	0.18
CP12-1235-G	104.5	35	27.5	62.0	30.0	22	12	20	13.5	6	9		0.52
CP12-1640-G	133.0	40	37.5	80.5	35.0	30	14	26	17.0	8	13	Serrated	1.02
CP12-0825-S	73.5	25	18.0	47.0	16.5	16	7	14	8.5	5	7		0.18
CP12-1235-S	106.5	35	27.5	64.0	30.0	22	12	20	13.5	6	9	0.52	
CP12-1640-S	134.5	40	37.5	82.0	35.0	30	14	26	17.0	8	13	1.02	

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

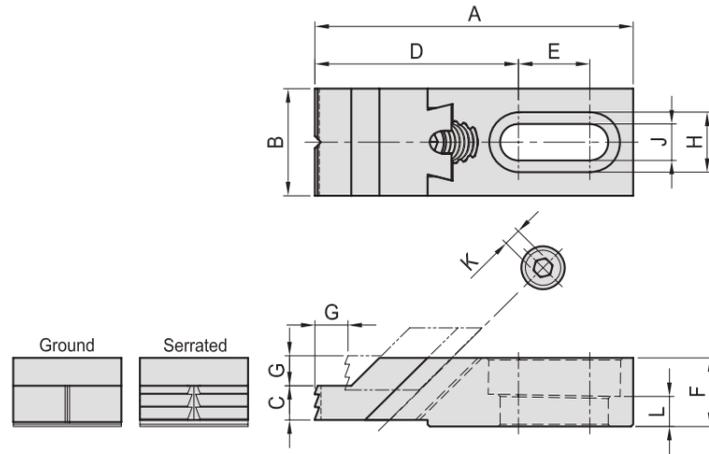
Column
for
Technical
Data

CP13

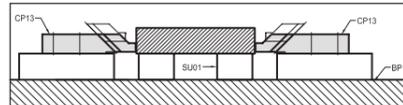
ADJUSTABLE EDGE CLAMP



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 38°. Jaw Surface treated with high frequency quenching.
- Surface finish : Black Oxide.
- Application : Low profile side clamp is ideal for holding thin parts and keeps top surfaces clear for machining.



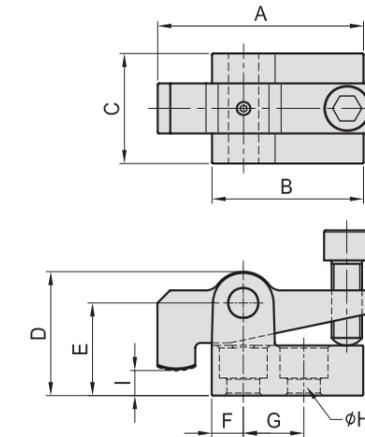
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L	Type	kg
CP13-0825-G	72.0	25	8.5	45.5	16.5	16	7	14	8.5	5	7	Ground	0.15
CP13-1235-G	105.0	35	10.5	62.5	30.0	22	12	20	13.5	6	9		0.45
CP13-1640-G	133.0	40	14.0	80.5	35.0	30	14	26	17.0	8	13		0.88
CP13-0825-S	73.5	25	8.5	47.0	16.5	16	7	14	8.5	5	7	Serrated	0.15
CP13-1235-S	106.5	35	10.5	64.0	30.0	22	12	20	13.5	6	9		0.45
CP13-1640-S	134.5	40	14.0	82.0	35.0	30	14	26	17.0	8	13		0.88



CP14

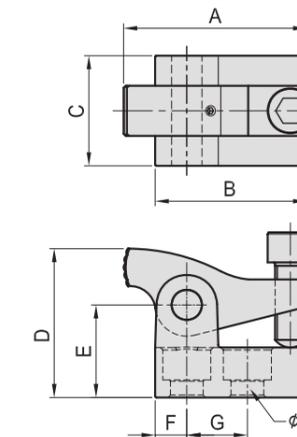
PIVOTING SIDE CLAMP

CP14A



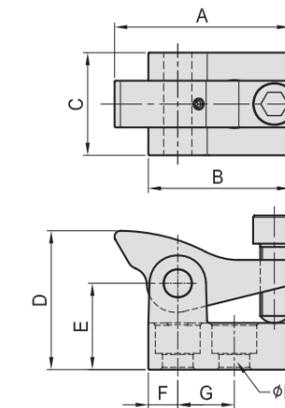
MODEL NO.	A	B	C	D	E	F	G	H	I	kg
CP14A-126045	81.5	60	44	49	37	12.5	24	13	5-15	0.78
CP14A-169068	121.0	91	68	64	47	18.0	36	18	5-15	2.26

CP14B



MODEL NO.	A	B	C	D	E	F	G	H	kg
CP14B-126045	72.5	60	44	59.5	37	12.5	24	13	0.73
CP14B-169068	108.0	91	68	82.0	47	18.0	36	18	2.20

CP14C



MODEL NO.	A	B	C	D	E	F	G	H	kg
CP14C-126045	75	60	44	59.5	37	12.5	24	13	0.73
CP14C-169068	110	91	68	82.0	47	18.0	36	18	2.12

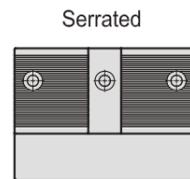
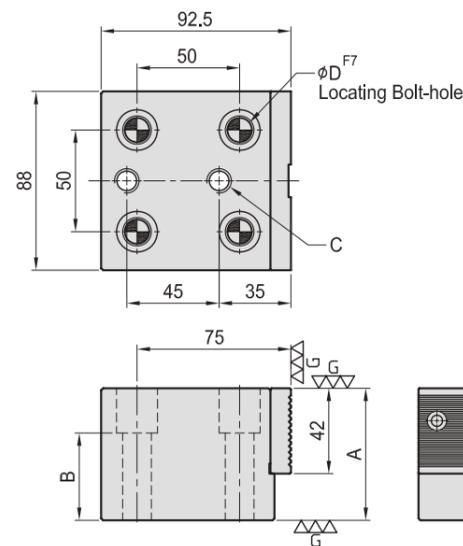
- Material / Finish :
Material : S45C.
- Surface finish : Black Oxide.
- Application : Clamp that is well suited for castings and odd shaped workpieces.
- Pivoting nose has a serrated jaw that clamps forward and downward simultaneously.

CP15

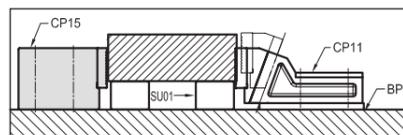
SERRATED BLOCK STOP



- Material :
Body : S45C(JIS)/CK45(DIN)
jaw : YK30(JIS) / C105W1(DIN),
- Heat treated :
Body : HRC 40°
jaw : HRC 58°
- Surface finish : Black Oxide.
- Application : Serrated stop is used with CP11 free vise. Useful for holding rough parts and where heavy clamping is needed.



MODEL NO.	A	B	C	D	kg
CP15-1265	65	43	M12	12	3.52
CP15-1280	80	58	M12	12	4.22
CP15-1665	65	38	M16	16	3.24
CP15-1680	80	53	M16	16	3.78

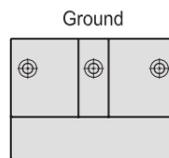
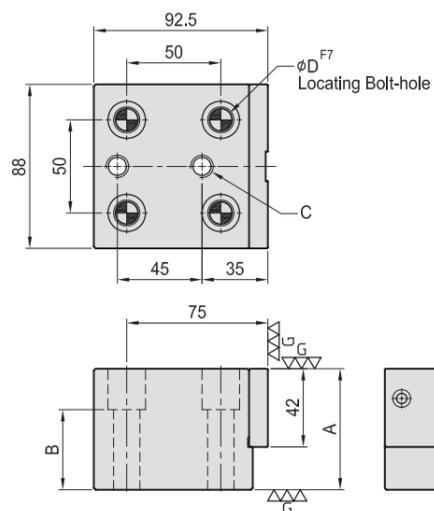


CP16

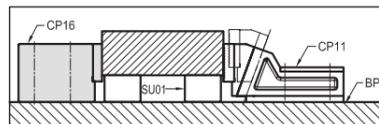
SMOOTH BLOCK STOP



- Material :
Body : S45C(JIS)/CK45(DIN)
jaw : YK30(JIS) / C105W1(DIN),
- Heat treated :
Body : HRC 40°
jaw : HRC 58°
- Surface finish : Black Oxide.
- Application : Smooth stop is used with CP11 free vise. Useful for holding finished parts.



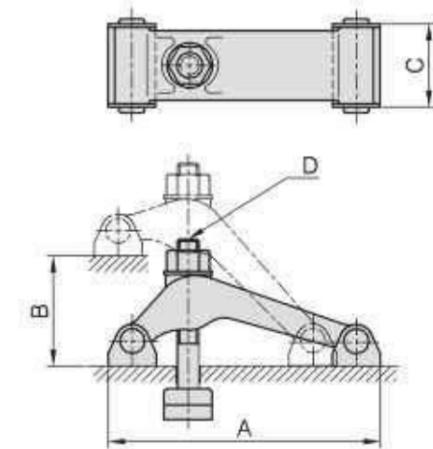
MODEL NO.	A	B	C	D	kg
CP16-1265	65	43	M12	12	3.54
CP16-1280	80	58	M12	12	4.22
CP16-1665	65	38	M16	16	3.28
CP16-1680	80	53	M16	16	3.78



- Material / Finish :
Material : S45C(JIS), Steel forging.
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.

CP19

FORGED SWIVEL CLAMP



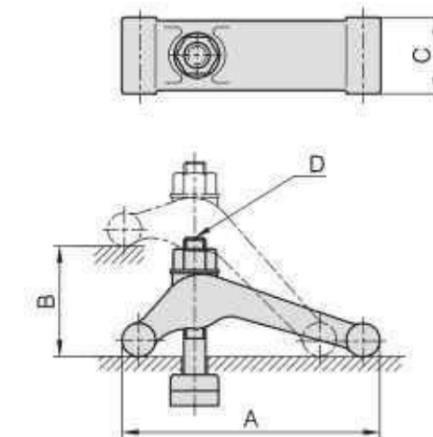
MODEL NO.	A	B	C	D	kg
CP19-12125	131	75	46.5	M12-125	1.50
CP19-16150	156	85	55.0	M16-150	2.64
CP19-20194	201	105	62.0	M20-175	4.80

CP20

FORGED SWIVEL CLAMP



- Material / Finish :
Material : S45C(JIS), Steel forging.
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.



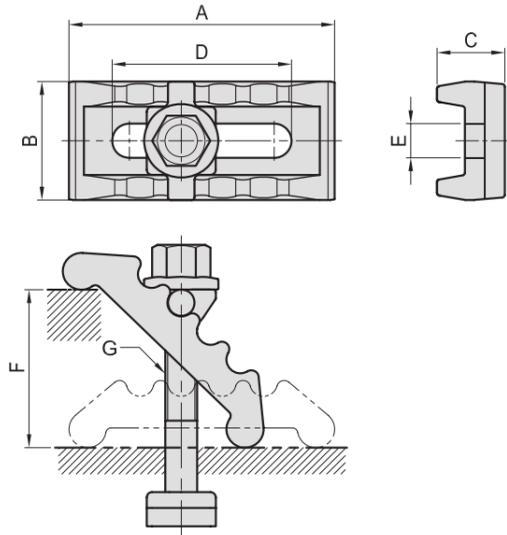
MODEL NO.	A	B	C	D	kg
CP20-12125	125	75	45	M12-125	1.40
CP20-16150	150	85	52	M16-150	2.42
CP20-20194	194	105	58	M20-175	4.50

CP21

UNIVERSAL CLAMP



- Material / Finish : Material : S45C(JIS), Forging.
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.



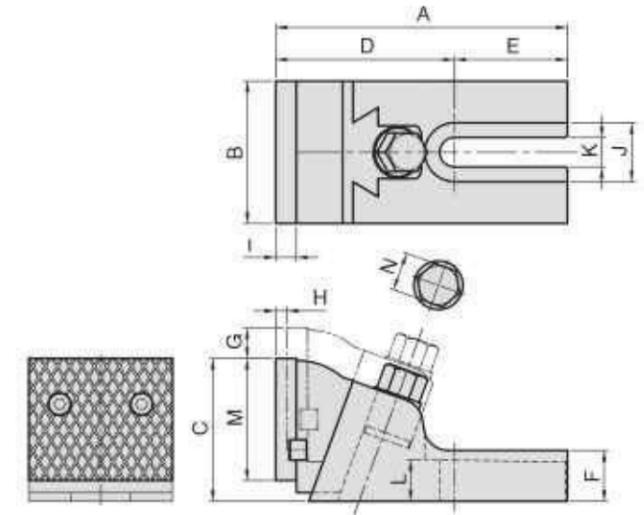
MODEL NO.	A	B	C	D	E	F	G	kg
CP21-12100	100	45	26	67.5	13	60	M12-100	1.1
CP21-16125	125	56	33	84.0	18	65	M16-125	2.1

CP23

FREE VISE



- Material Heat Treated and surface to be treated with Black Oxide.



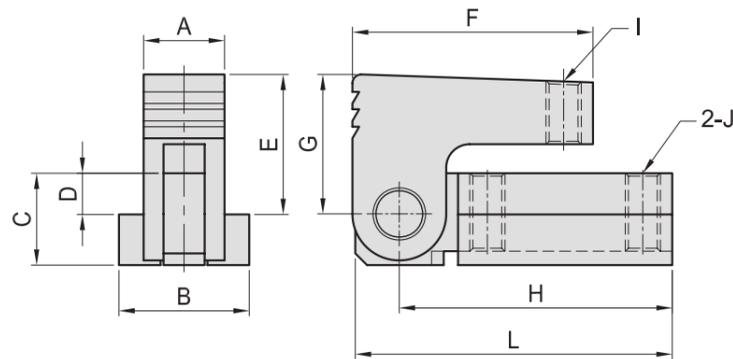
MODEL NO.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	kg
CP23-12140	142	70	70	87	55	25	15	5	10	29	14.5	20.5	60	19	6.3	
CP23-16195	192	85	85	103	88	30	20	7	12	37	17.0	24.0	70	24	11.0	
CP23-20220	220	110	104	120	100	36	25	9	13	42	21.0	28.0	85	30	21.0	

CP22

T-SLOT MINIATURE CLAMP



- Material : S45C (JIS)
- Heat treated : HRC 35°~38°.



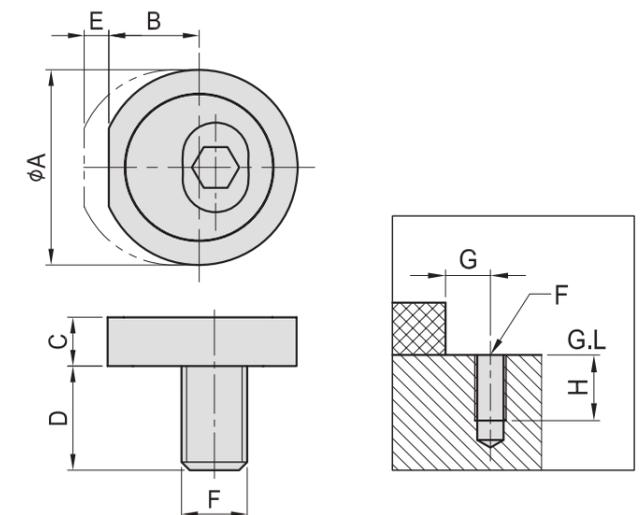
MODEL NO.	A	B	C	D	E	F	G	H	I	L	J	kg
CP22-1218	10.8	17.5	12.7	7.2	23.2	41	22.0	48.0	M6	54.0	M6	0.10
CP22-1422	13.8	22.2	15.8	7.1	24.1	41	24.0	46.0	M6	54.0	M6	0.15
CP22-1625	15.8	25.4	15.8	7.1	27.1	50	27.0	55.0	M8	65.0	M8	0.22
CP22-1828	17.5	28.5	19.0	7.9	28.9	50	29.0	55.0	M8	65.0	M8	0.29
CP22-2032	19.7	31.7	25.4	11.4	33.9	50	34.0	55.0	M10	65.0	M10	0.40
CP22-2240	21.7	38.0	28.0	12.8	39.8	65	39.5	71.0	M12	81.5	M12	0.70
CP22-2841	27.5	46.7	44.0	25.0	49.0	71	49.0	72.5	M12	86.5	M12	1.20
CP22-3559	34.7	55.0	48.0	24.5	64.0	103	62.5	113.5	M16	130.0	M16	2.75

CP24

ECCENTRIC CAM LOCK



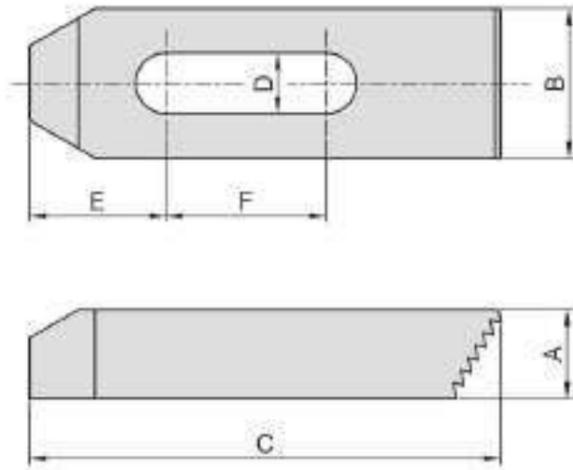
- Material : S45C (JIS)
- Heat treated : HRC 35° (ECCENTRIC CAM)



MODEL NO.	A	B	C	D	E	F	G	H	kg
CP24-0824	24	11.0	6	12.8	3	M 8	11.5	17	0.020
CP24-1026	26	11.8	8	14.3	4	M10	12.5	22	0.030
CP24-1230	30	13.5	9	17.8	5	M12	14.5	22	0.050
CP24-1638	38	16.0	12	20.8	6	M16	17.5	26	0.115

CP25

STEP CLAMP



- Material / Finish :
Material : S45C
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.
- Application : Used with SU25.

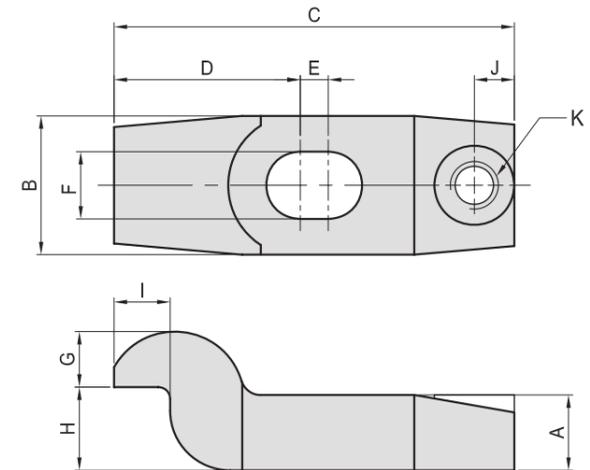
MODEL NO.	A	B	C	D	E	F	kg
CP25-10063	13	25	63	11	18	19	0.100
CP25-10100	16	25	100		27	37	0.215
CP25-10150	19	32	150		30	50	0.570
CP25-12063	13	25	63	13	20	14	0.100
CP25-12100	19	32	100		29	34	0.320
CP25-12150	22	32	150		32	50	0.650
CP25-14063	13	25	63	15	20	14	0.100
CP25-14100	19	32	100		29	34	0.315
CP25-14150	22	32	150		32	50	0.600
CP25-16063	16	32	63	17	22	12	0.160
CP25-16100	19	38	100		31	26	0.400
CP25-16150	22	38	150		40	47	0.710
CP25-18063	16	32	63	20	22	12	0.140
CP25-18100	19	38	100		31	26	0.380
CP25-18150	22	38	150		40	47	0.750
CP25-20100	19	38	100	21	31	26	0.360
CP25-20150	25	38	150		43	44	0.750
CP25-20200	25	50	200		55	65	1.500
CP25-24150	32	50	150	26	43	38	1.290
CP25-24200	32	50	200		53	57	2.000
CP25-24250	38	50	250		60	64	2.950



- Material / Finish :
Material : S45C(JIS), Forging.
- Surface finish : Black Oxide.

CP27

THREADED GOOSE NECK CLAMP



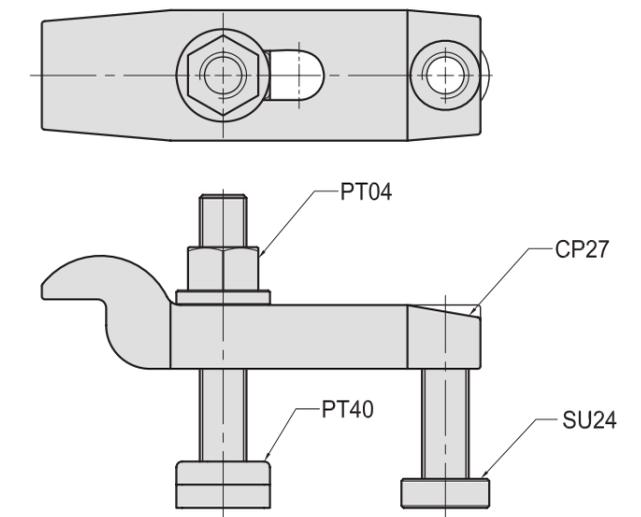
MODEL NO.	A	B	C	D	E	F	G	H	I	J	K	kg
CP27-16100	19	35	100	46.5	7	17	14	21	14	10	M12x1.75	0.78
CP27-16150	22	45	150	62.0	26	17	15	24	22	12	M16x2.00	1.70



- Material / Finish :
Material : S45C(JIS), steel forging.
- Surface finish : Black Oxide.

CP28

GOOSE NECK CLAMP



MODEL NO.	CP27	PT40	PT04	SU24	kg
CP28-ZC-40	16100	16100	1624	12060	1.5
CP28-ZC-60	16150	16100	1624	16070	2.6

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-VISE

JER-GENS

OTHER

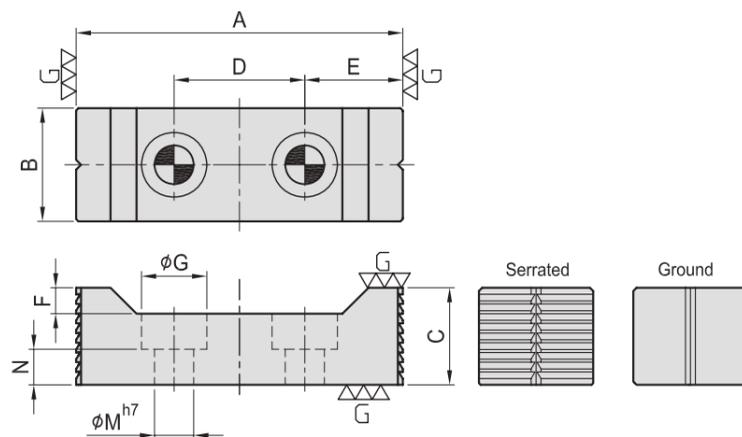
Column for Technical Data

CP29

BLOCK STOP



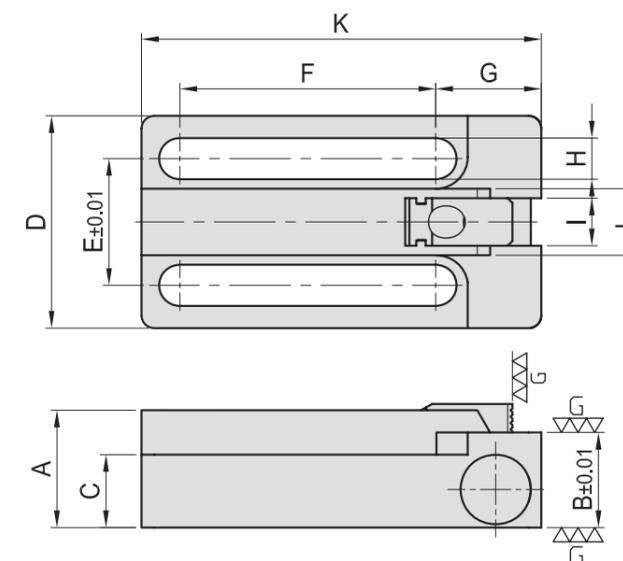
- Material / Finish :
Material : S45C
- Heat treated : HRC 32°~38°
- Surface finish : Black Oxide.
- Application : used with CP12.



MODEL NO.	A	B	C	D	E	F	G	M	N	kg	TYPE
CP29-12100-S	100	35	30	40	30	8	20	12	11	0.59	Serrated
CP29-16130-S	130	40	40	50	40	10	26	16	14	1.20	
CP29-12100-G	100	35	30	40	30	8	20	12	11	0.59	Ground
CP29-16130-G	130	40	40	50	40	10	26	16	14	1.20	

CP31

CLAMPING PARTS



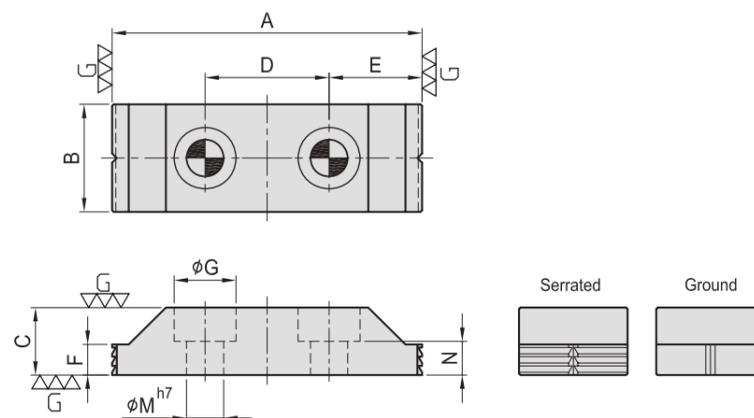
MODEL NO.	A	B	C	D	E	F	G	H	I	K	L	kg
CP31-1240	37	30	23	67	40	80	33.0	13.0	15	125	21	1.36
CP31-1250				77	50	85	33.0	13.0		130	1.71	
CP31-1650				77	50	85	34.5	16.5		130	1.54	

CP30

THIN BLOCK STOP



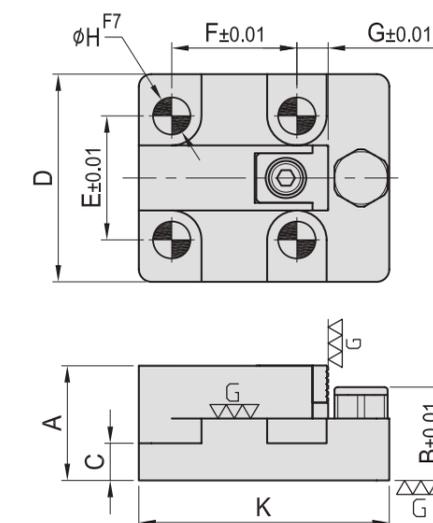
- Material / Finish :
Material : S45C
- Heat treated : HRC 32°~38°
- Surface finish : Black Oxide.
- Application : used with CP13.



MODEL NO.	A	B	C	D	E	F	G	M	N	kg	TYPE
CP30-12100-S	100	35	22	40	30	10	20	12	11	0.46	Serrated
CP30-16130-S	130	40	30	50	40	14	26	16	14	0.88	
CP30-12100-G	100	35	22	40	30	10	20	12	11	0.46	Ground
CP30-16130-G	130	40	30	50	40	14	26	16	14	0.88	

CP32

BLOCK STOP



MODEL NO.	A	B	C	D	E	F	G	H	K	kg
CP32-1240	37	30	12	67	40	40	10	12	80	0.86
CP32-1250			12	77	50	50		12	95	1.19
CP32-1650			15	77	50	50		16	95	1.14

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

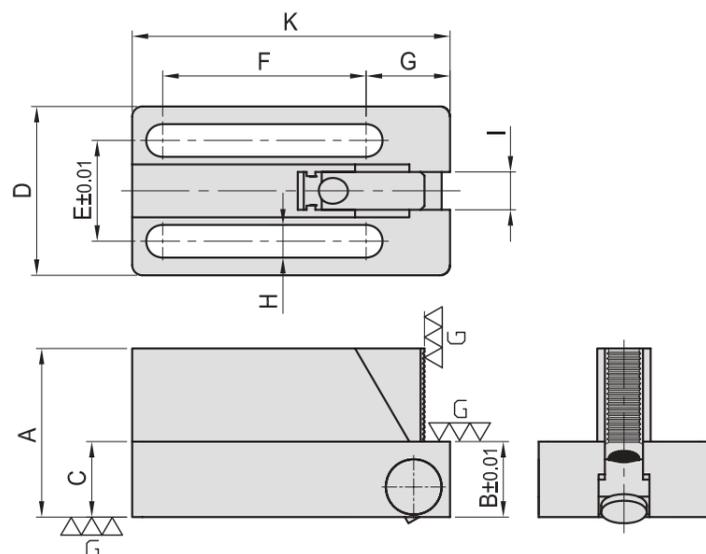
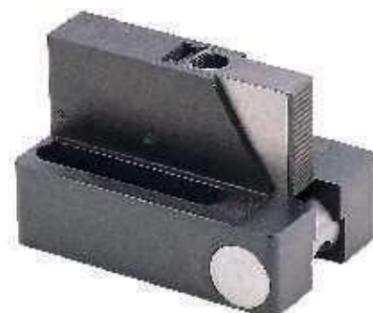
JER-
GENS

OTHER

Column
for
Technical
Data

CP33

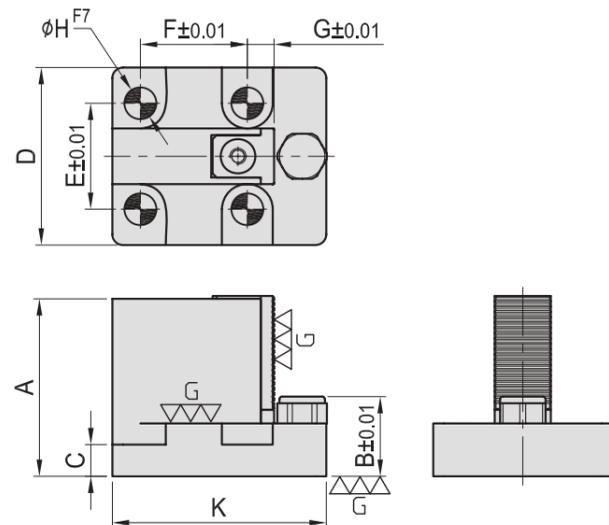
CLAMPING PARTS



MODEL NO.	A	B	C	D	E	F	G	H	I	K	kg
CP33-1240	67	30	30	67	40	80	33.0	13.0	15	125	2.02
CP33-1250				77	50	85	33.0	13.0		130	2.45
CP33-1650				77	50	85	34.5	16.5		130	2.25

CP34

BLOCK STOP

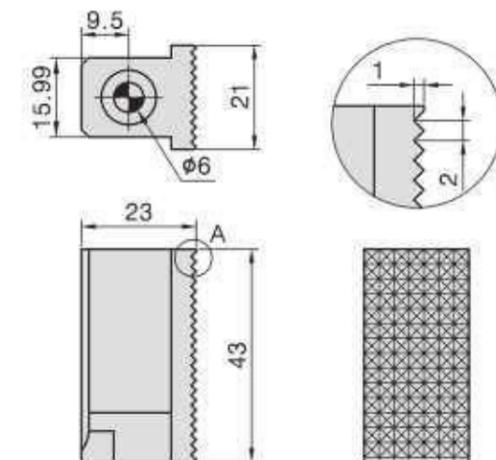


MODEL NO.	A	B	C	D	E	F	G	H	K	kg
CP34-1240	67	30	12	67	40	40	10	12	80	1.24
CP34-1250			12	77	50	50		12	95	1.60
CP34-1650			15	77	50	50		16	95	1.52

CP35

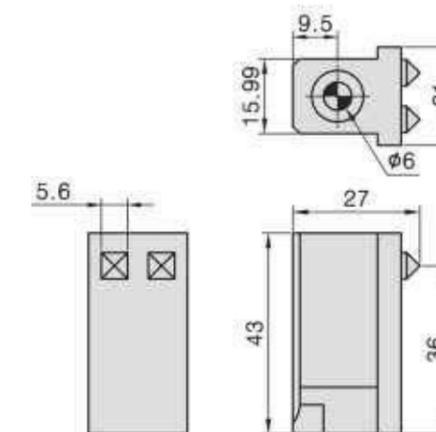
REPLACEMENT HARD-JAW

CP35A



MODEL NO.	kg
CP35A-2143	0.12

CP35B



MODEL NO.	kg
CP35B-2143	0.12

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

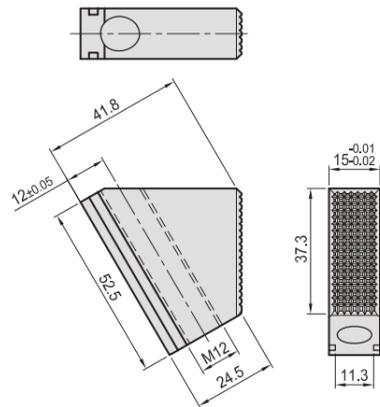
OTHER

Column
for
Technical
Data

CP36

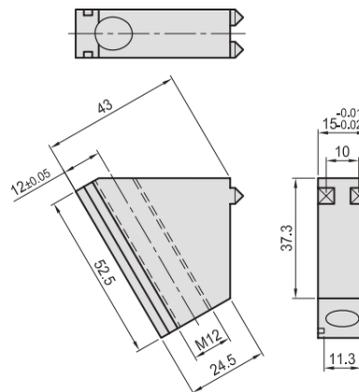
REPLACEMENT HARD-JAW

CP36A



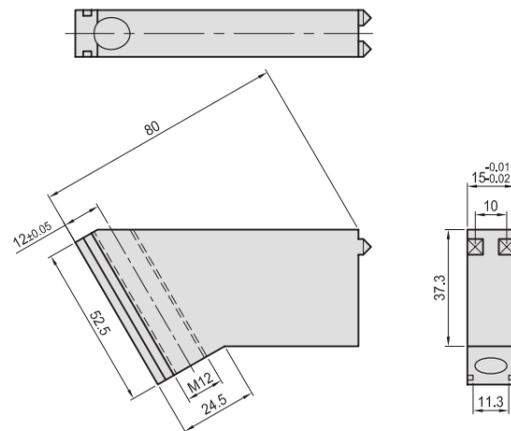
MODEL NO.	kg
CP36A-1243	0.14

CP36B



MODEL NO.	kg
CP36B-1243	0.14

CP36C

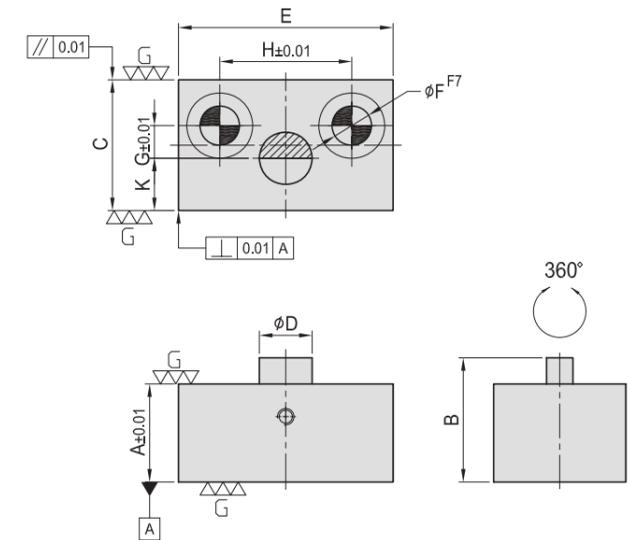


MODEL NO.	kg
CP36C-1280	0.30



CP37

POSITIONING EDGE SUPPORT



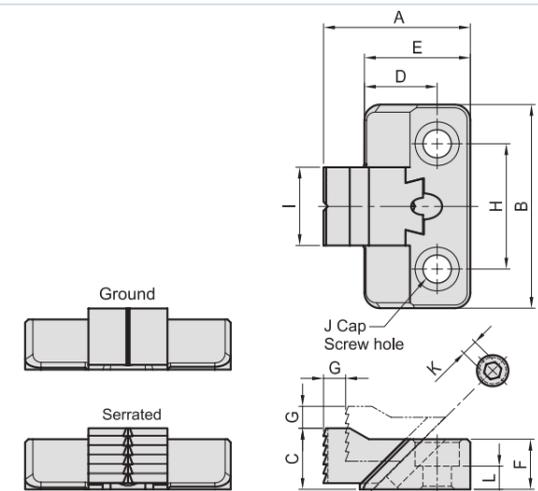
MODEL NO.	A	B	C	D	E	F	G	H	K	kg
CP37-1240			40		65	12		40	16	0.60
CP37-1250	30	38	40	16	75	12	10	50	15	0.60
CP37-1650			45		80	16		50	18	0.65



CP38

ADJUSTABLE SIDE CLAMP

- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 38°. Jaw Surface treated with high frequency quenching.
- Surface finish : Black Oxide.
- Application : Low profile side clamp keeps top surfaces clear for machining, ideal for rough or finished parts, available with plain or serrated jaw.



MODEL NO.	A	B	C	D	E	F	G	H	I	J	K	L	Type	kg
CP38-0865-G	45.14	65	19.5	23	33.5	16	7	40	25	M 8	5	7.4	Ground	0.22
CP38-1285-G	65.14	85	29.0	33	48.0	22	12	50	35	M12	6	9.0	Ground	0.65
CP38-16100-G	85.64	100	39.0	48	68.0	30	14	50	40	M16	8	12.5	Ground	1.40
CP38-0865-S	46.45	65	19.5	23	33.5	16	7	40	25	M 8	5	7.4	Serrated	0.22
CP38-1285-S	67.14	85	29.0	33	48.0	22	12	50	35	M12	6	9.0	Serrated	0.65
CP38-16100-S	87.14	100	39.0	48	68.0	30	14	50	40	M16	8	12.5	Serrated	1.40

- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JER-GENS
- OTHER

Column for Technical Data

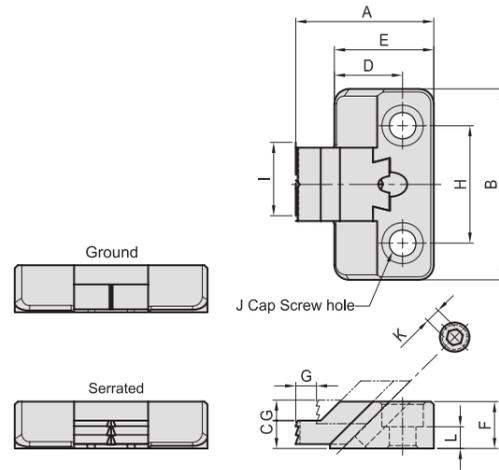


CP39

ADJUSTABLE SIDE CLAMP



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 38°. Jaw Surface treated with high frequency quenching.
- Surface finish : Black Oxide.
- Application : Low profile side clamp keeps top surfaces clear for machining, ideal for rough or finished parts, available with plain or serrated jaw.



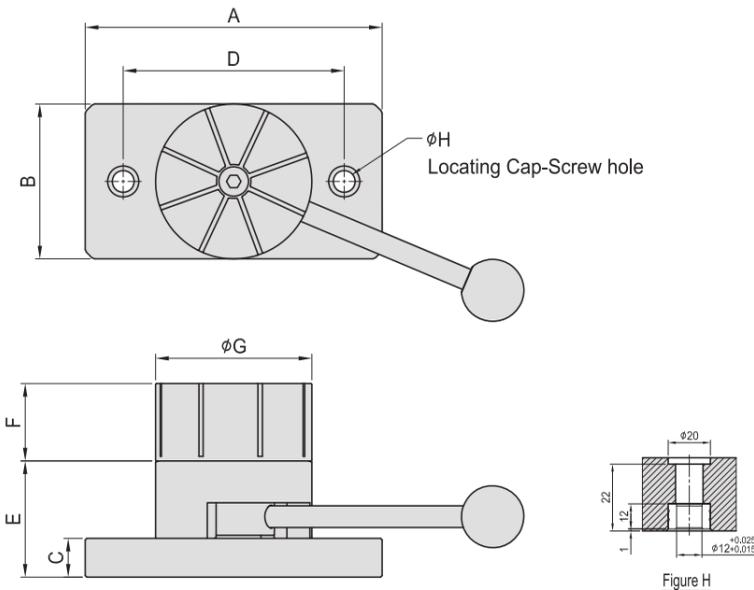
MODEL NO.	A	B	C	D	E	F	G	H	I	J	K	L	Type	kg
CP39-0865-G	45.14	65	9.5	23	33.5	16	7	40	25	M 8	5	7.4	Ground	0.2
CP39-1285-G	65.64	85	12.0	33	48.0	22	12	50	35	M12	6	9.0		0.6
CP39-16100-G	86.14	100	15.5	48	68.0	30	14	50	40	M16	8	12.5		1.3
CP39-0865-S	46.55	65	9.5	23	33.5	16	7	40	25	M 8	5	7.4	Serrated	0.2
CP39-1285-S	67.14	85	12.0	33	48.0	22	12	50	35	M12	6	9.0		0.6
CP39-16100-S	87.64	100	15.5	48	68.0	30	14	50	40	M16	8	12.5		1.3

CP40

MACHINABLE IRREGULAR CLAMPS



- Material : Soft Jaw : A6061, Base : S45C(JIS)
- Surface finish : Soft Jaws : Anodic Treatment
- Heat treated : Base : HRC 25°~ 30°
- Application : Vertical Machining Center
- Features : Hold the irregular clamps of aluminum and copper.



MODEL NO.	A	B	C	D	E	F	G	H	kg
CP40-A100	190	100	25	141.42	75	50	100	12	7.5

SUPPORT PARTS

SU01~SU29



JIG REST BUTTON
OFFSET JIG REST BUTTON
SHOULDER SUPPORT CYLINDER
LOCKING CYLINDER

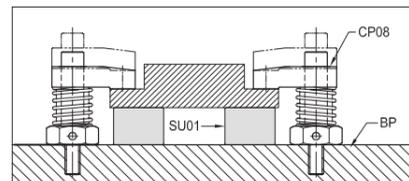
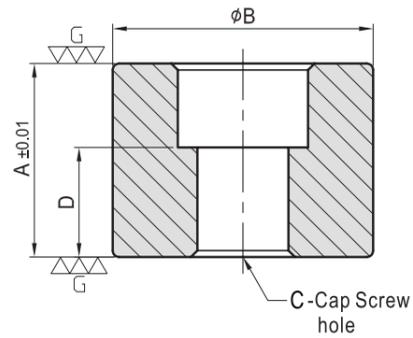
2.62.56246557
0065562162.56246557
0065562162.56246557

SU01

JIG REST BUTTON



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated: HRC 40°.
- Surface finish : Black Oxide.
- Application : mount onto base plate or clamp cube for supporting workpiece.
- Features : Jig rest buttons are extremely useful as supports, side locator pads, and jig feet.



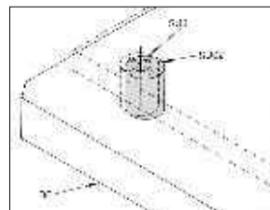
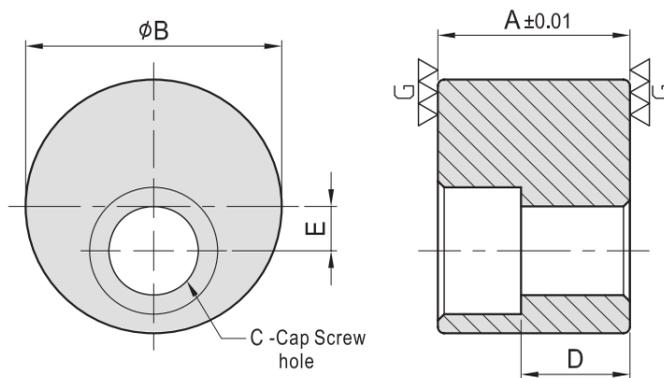
MODEL NO.	A	B	C	D	kg
SU01-1230	30	40	M12	17	0.24
SU01-1240	40			27	0.32
SU01-1250	50			37	0.41
SU01-1630	30	50	M16	12	0.36
SU01-1640	40			22	0.50
SU01-1650	50			32	0.64

SU02

OFFSET JIG REST BUTTON



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 40°.
- Surface finish : Black Oxide.
- Application : Use for supporting and / or positioning workpiece.
- Features : Jig rest buttons are extremely useful as supports, side locator pads, and jig feet.



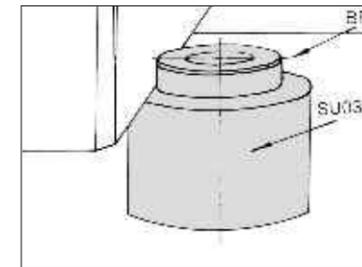
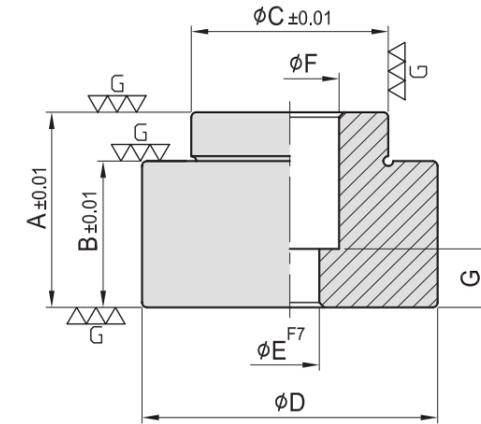
MODEL NO.	A	B	C	D	E	kg
SU02-1230	30	40	M12	17	7	0.24
SU02-1240	40			27		0.32
SU02-1250	50			37		0.41
SU02-1630	30	50	M16	12	10	0.36
SU02-1640	40			22		0.50
SU02-1650	50			32		0.64



SU03

SHOULDER SUPPORT CYLINDER

- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 40°.
- Surface finish : Black Oxide.
- Application : Support and locate with one part.



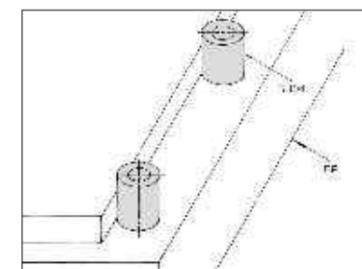
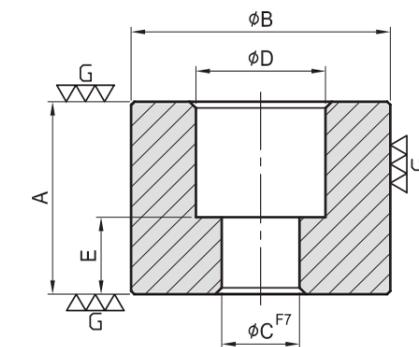
MODEL NO.	A	B	C	D	E	F	G	Kg
SU03-1230	30	40	40	60	12	20	12	0.68
SU03-1240	40	50						0.88
SU03-1250	50	60						1.10
SU03-1630	30	40	50	75	16	26	15	1.08
SU03-1640	40	50						1.40
SU03-1650	50	60						1.70

SU04

LOCATING CYLINDER



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 40°.
- Surface finish : Black Oxide.
- Application : Support and locate with one part.



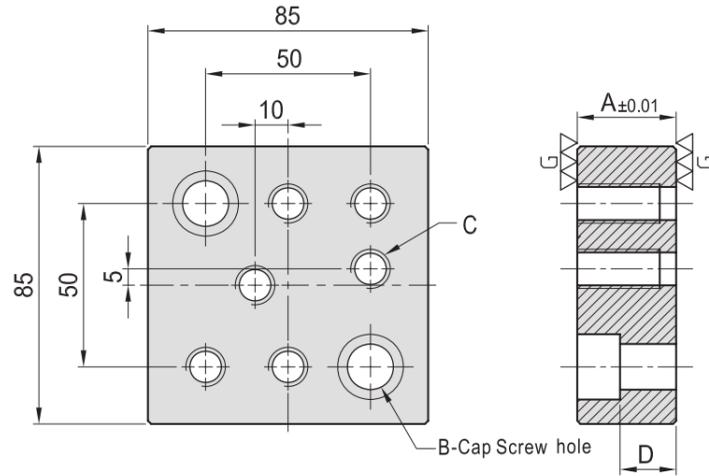
MODEL NO.	A	B	C	D	E	kg
SU04-1230	30	40	12	20	12	0.24
SU04-1240	40					0.32
SU04-1250	50					0.40
SU04-1630	30	50	16	26	15	0.37
SU04-1640	40					0.49
SU04-1650	50					0.60

SU05

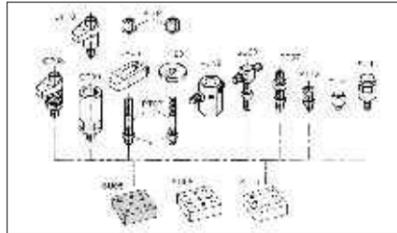
SQUARE ADAPTER



- Material / Finish :
Material : S45C, (JIS) / CK45 (DIN)
- Heat treated : HRC 40°.
- Surface finish : Black Oxide.
- Application : Multipurpose adapter for a variety of stops & clamps.



MODEL NO.	A	B	C	D	kg
SU05-1230	30	M12	M12	17	1.50
SU05-1240	40			27	2.00
SU05-1250	50			37	2.25
SU05-1630	30	M16	M16	12	1.30
SU05-1640	40			22	1.80
SU05-1650	50			32	2.22

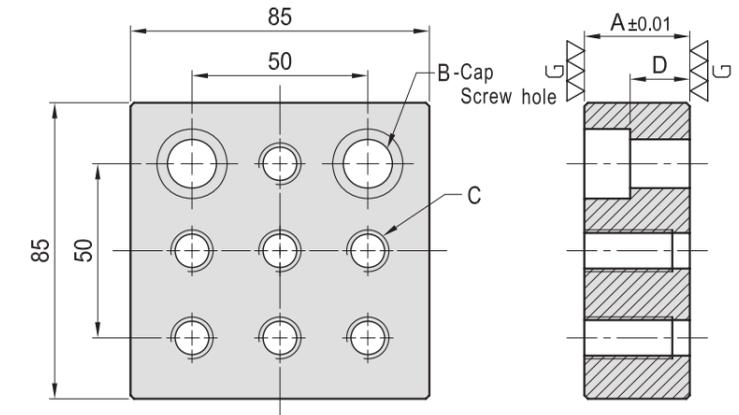


SU07

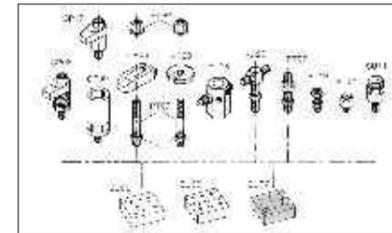
SQUARE ADAPTER



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 40°.
- Surface finish : Black Oxide.
- Application : Multipurpose adapter for a variety of stops & clamps.



MODEL NO.	A	B	C	D	kg
SU07-1230	30	M12	M12	17	1.5
SU07-1240	40			27	2.0
SU07-1250	50			37	2.6
SU07-1630	30	M16	M16	12	1.3
SU07-1640	40			22	1.8
SU07-1650	50			32	2.2

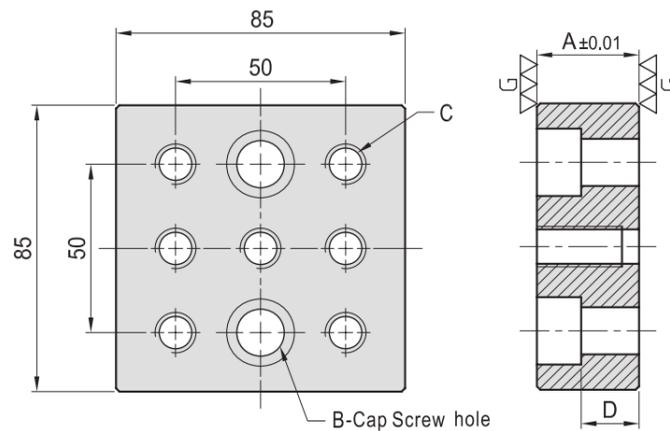


SU06

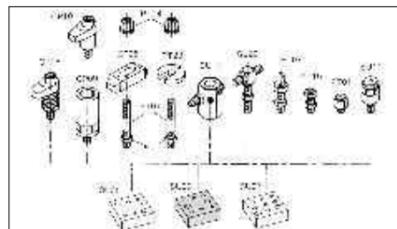
SQUARE ADAPTER



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 40°.
- Surface finish : Black Oxide.
- Application : Multipurpose adapter for a variety of stops & clamps.



MODEL NO.	A	B	C	D	kg
SU06-1230	30	M12	M12	17	1.50
SU06-1240	40			27	2.00
SU06-1250	50			37	2.60
SU06-1630	30	M16	M16	12	1.30
SU06-1640	40			22	1.80
SU06-1650	50			32	2.25

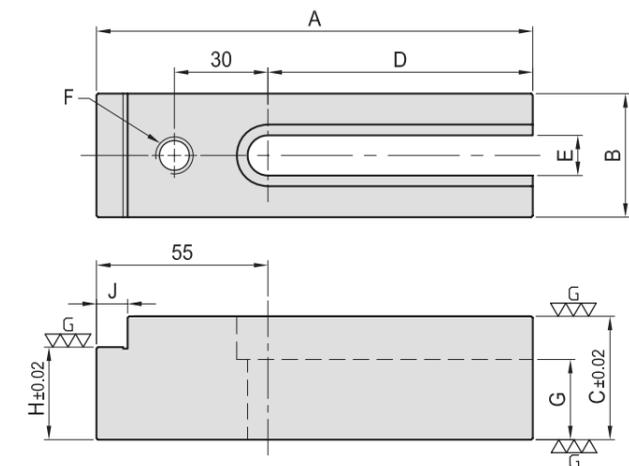


SU08

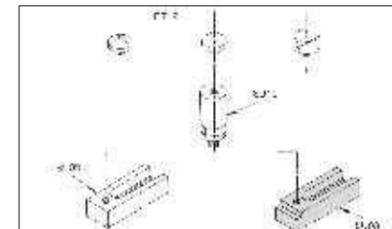
EXTENSION SUPPORT



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 40°.
- Surface finish : Black Oxide.
- Application : Gives extra flexibility in the placement of stops.



MODEL NO.	A	B	C	D	E	F	G	H	J	kg
SU08-12140-30	140	40	40	85	13	M12	26	30	10	1.3
SU08-12140-40			50				36	40		1.6
SU08-16140-30	140	50	40	85	17	M16	22	30	10	1.5
SU08-16140-40			50				32	40		1.9



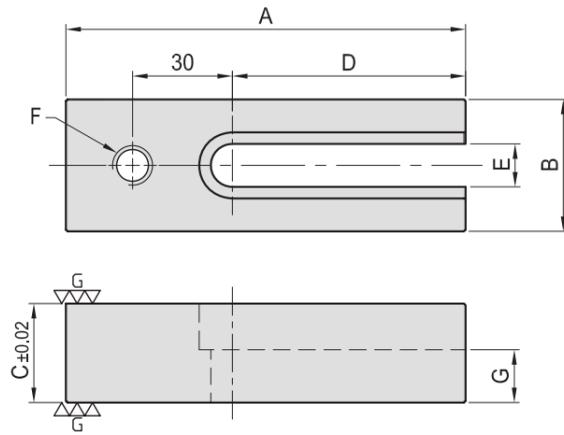
- BP
- BPA
- BC
- CP
- SU**
- PT
- SVF
- ALV
- OK-VISE
- JERGENS
- OTHER
- Column for Technical Data

SU09

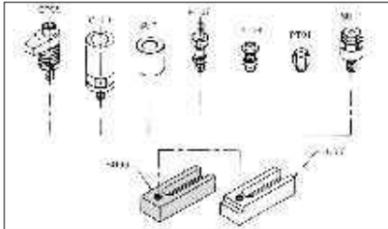
EXTENSION SUPPORT



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 40°.
- Surface finish : Black Oxide.
- Application : Multipurpose adapter for a variety of stops & clamps.



MODEL NO.	A	B	C	D	E	F	G	kg
SU09-12120-30	120	40	30	70	13	M12	16	0.85
SU09-12120-40			40				26	1.10
SU09-16140-30	140	50	30	90	17	M16	12	1.14
SU09-16140-40			40				22	1.52

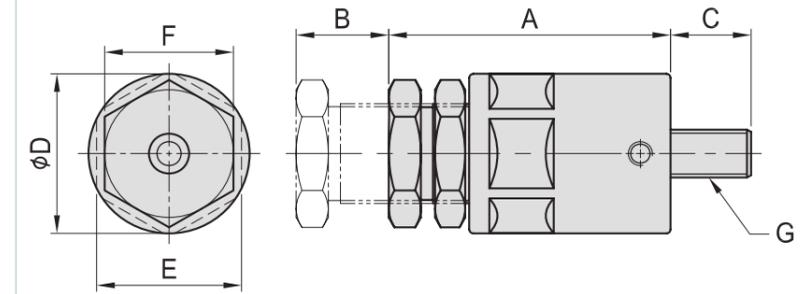


SU11

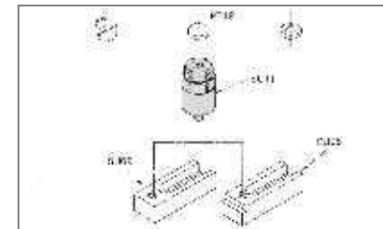
SUPPORT JACK



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 38°~40°.
- Surface finish : Black Oxide.
- Application : Multipurpose support part.



MODEL NO.	A	B	C	D	E	F	G	kg
SU11-1265	65	20	20	40	36	32	M12	0.54
SU11-1665	65	20	20	50	46	36	M16	0.82

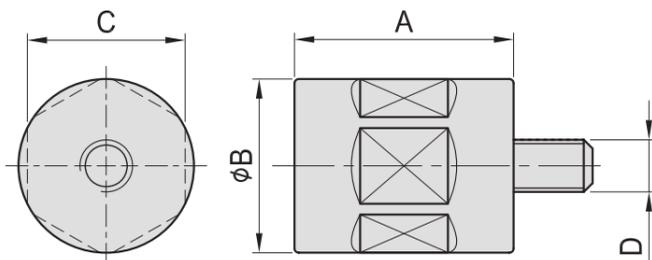


SU10

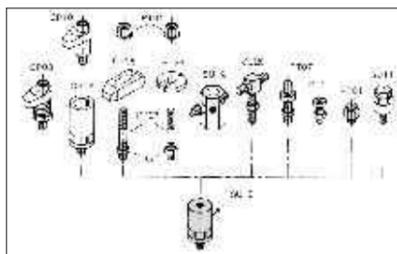
RISER CYLINDER



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 38°.
- Surface finish : Black Oxide.
- Application : Elevate a work stop or clamp.



MODEL NO.	A	B	C	D	kg
SU10-1250	50				0.45
SU10-1265	65	40	36	M12	0.59
SU10-1280	80				0.74
SU10-1650	50				0.72
SU10-1665	65	50	46	M16	0.84
SU10-1680	80				1.20

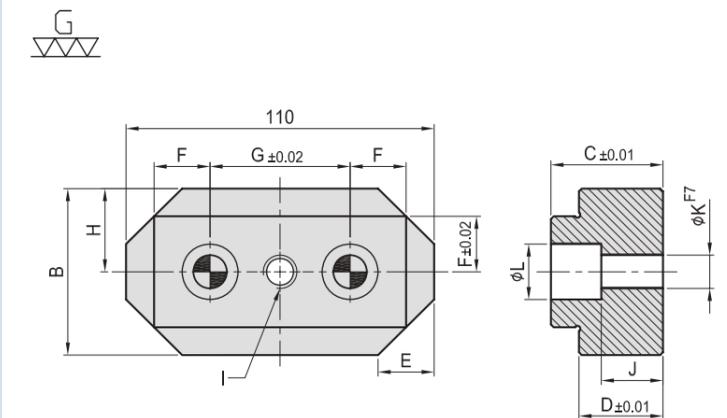


SU12

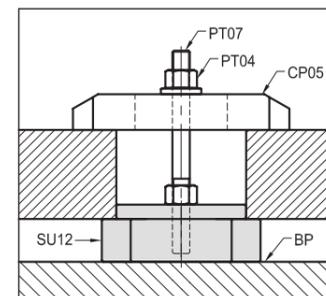
POSITIONING EDGE SUPPORT



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 45°.
- Application : Work piece support & positioning.



MODEL NO.	A	B	C	D	E	F	G	H	I	J	K	L	kg
SU12-1230	110	60	40	30	20	20	50	30	M12	22	12	20	1.50
SU12-1240			50	40						32			1.92
SU12-1630	110	60	40	30	20	20	50	30	M16	17	16	26	1.40
SU12-1640			50	40						26			1.80



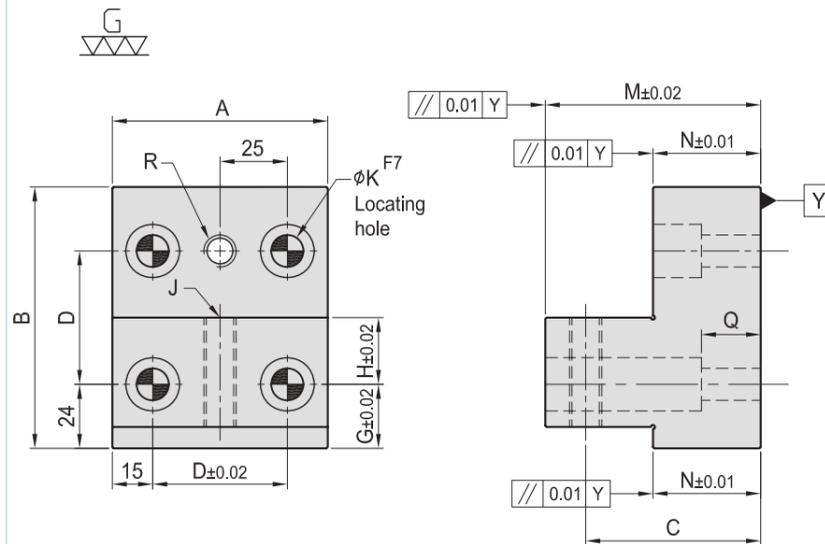
- BP
- BPA
- BC
- CP
- SU**
- PT
- SVF
- ALV
- OK-VISE
- JER-GENS
- OTHER
- Column for Technical Data

SU13

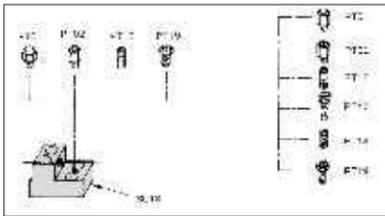
POSITIONING EDGE SUPPORT



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 45°.
- Application : Multipurpose adapter for a variety of stops & clamps.



MODEL NO.	A	B	C	D	G	H	J	K	M	N	Q	R	kg
SU13-1240	80	98	65	50	16	25	M12	12	80	40	22	M12	3.00
SU13-1640	80	98	65	50	16	25	M16	16	80	40	16	M16	2.64

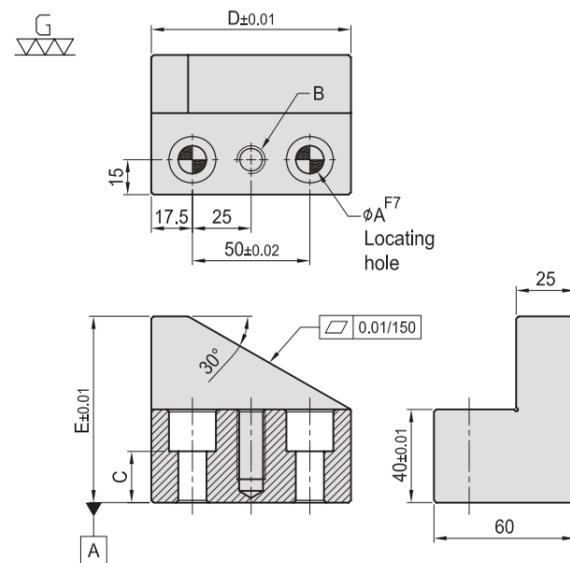


SU14

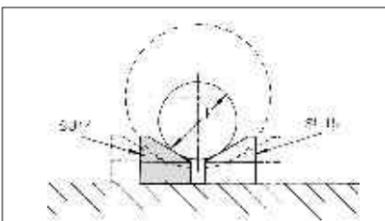
SPLIT V BLOCK



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 45°.
- Application : Use with SU15 to create an adjustable V block set.



MODEL NO.	A	B	C	D	E	F		kg
						Max.	Min.	
SU14-1250-600	12	M12	22	85	80	600	50	1.86
SU14-1650-600	16	M16	16	85	80	600	50	1.76

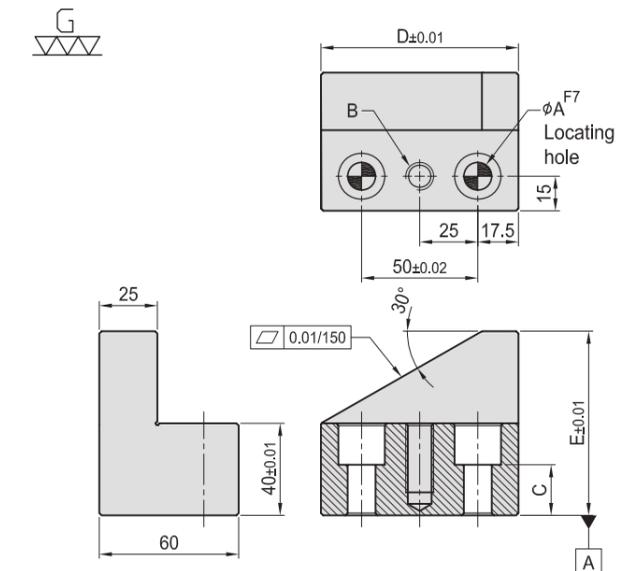


SU15

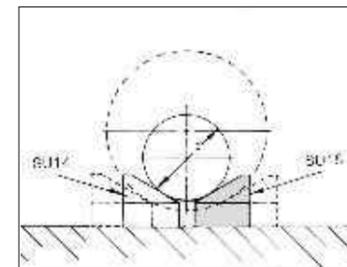
SPLIT V BLOCK



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 45°.
- Application : Use with SU14 to create an adjustable V block set.



MODEL NO.	A	B	C	D	E	F		kg
						Max.	Min.	
SU15-1250-600	12	M12	22	85	80	600	50	1.86
SU15-1650-600	16	M16	16	85	80	600	50	1.74

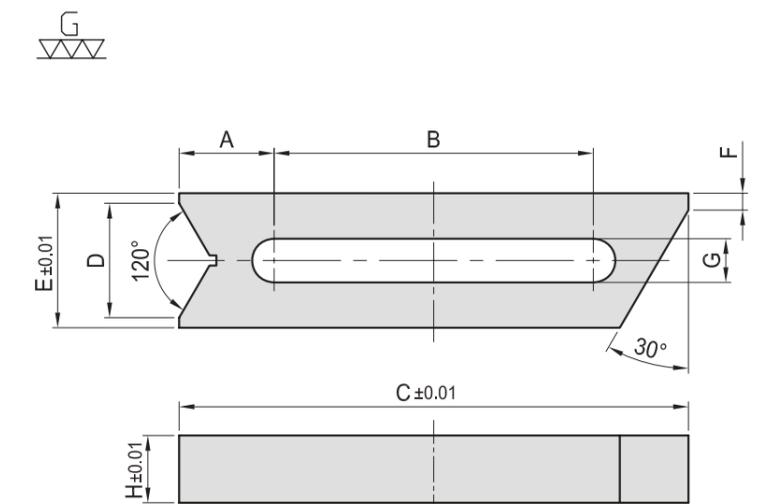


SU16

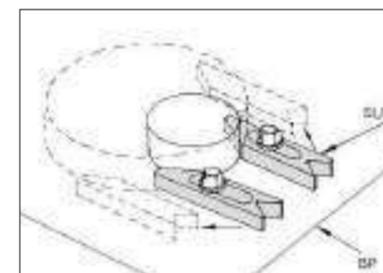
V BLOCK



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 45°.
- Application : Multipurpose V-block, use independently or in pairs.



MODEL NO.	A	B	C	D	E	F	G	H	kg
SU16-12150	28	94	150	34	40	5	13	20	0.65
SU16-16175	30	115	175	40	50	5	17	20	0.90

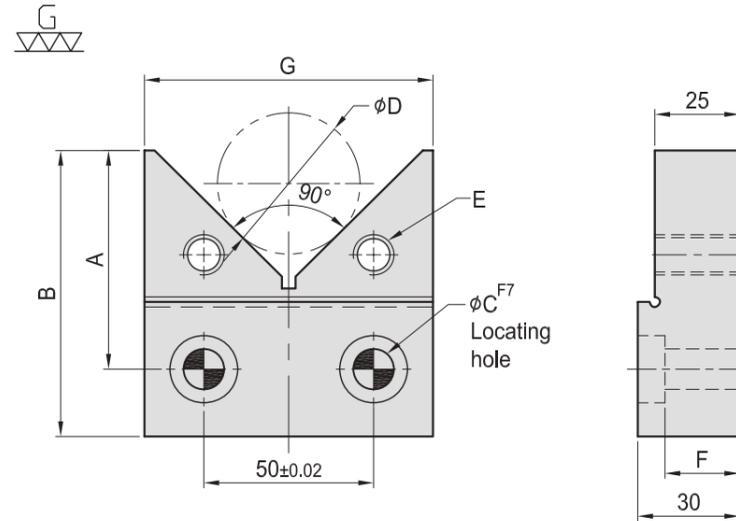
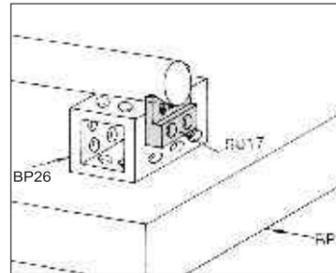


SU17

V BLOCK



- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 45°.
- Application : Easily mounts to any fixture to support round parts.



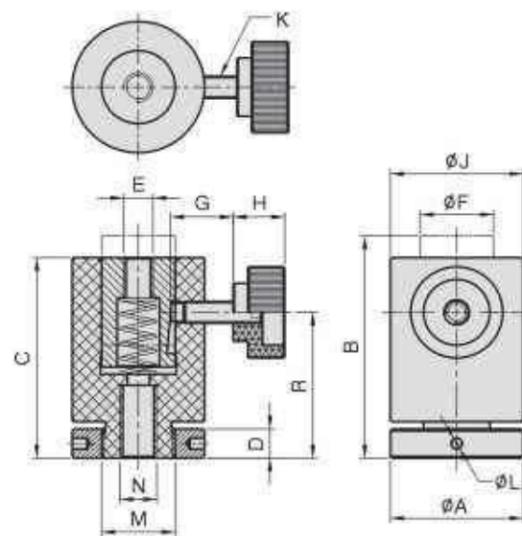
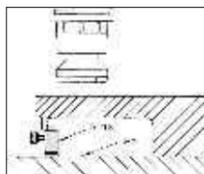
MODEL NO.	A	B	C	D		E	F	G	kg
				Max.	Min.				
SU17-1215-080	65	85	12	80	15	M12	22	85	1.10
SU17-1215-100	75	95		100					1.30
SU17-1615-080	65	85	16	80	15	M16	25	85	1.02
SU17-1615-100	75	95		100					1.20

SU18

SUPPORT JACK



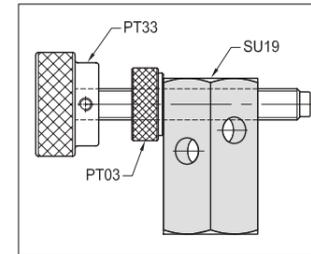
- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
 - Heat treated : HRC 38°~42°.
 - Surface finish : Black Oxide.
 - Application : Designed to support over hanging workpiece, spring loaded & adjustable.
 - Features : supporting height can be adjusted by loosening the adjusting screw.
- Shock resistance during machining operation.



MODEL NO	A	B	C	D	E	F	G	H	J	K	L	M	N	R	kg
SU18-3655	36	61	55	8	M 8	20	17	14	36	M 6	3	M20	M10	40	0.43
SU18-4270	42	79	70	9	M10	25	25	17	42	M 8	4	M24	M12	50	0.73
SU18-5085	50	100	87	10	M12	30	27	20	50	M10	5	M30	M16	62	1.30

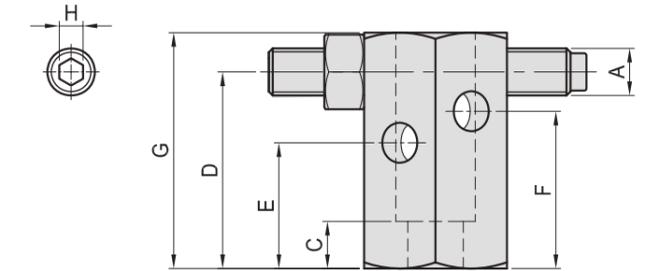
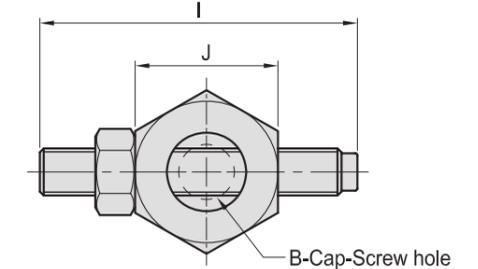


- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.
- Application : Multipurpose work piece positioning.



SU19

ADJUSTABLE STOP



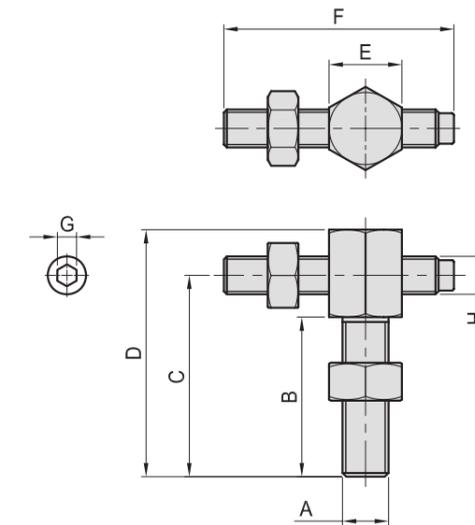
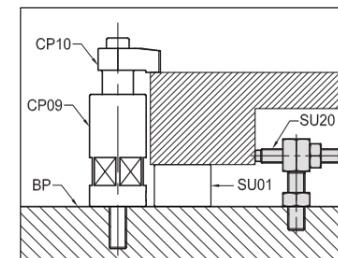
MODEL NO.	A	B	C	D	E	F	G	H	I	J	kg
SU19-1280	M12	M12	12	32	40	50	60	6	80	36	0.43
SU19-1690	M16	M16	14	40	50	63	80	8	90	46	0.89

SU20

MINI ADJUSTABLE STOP



- Material / Finish :
Material : S45C (JIS) / CK45(DIN)
- Heat treated : HRC 32°~38°.
- Surface finish : Black Oxide.
- Application : Multipurpose work piece positioning.

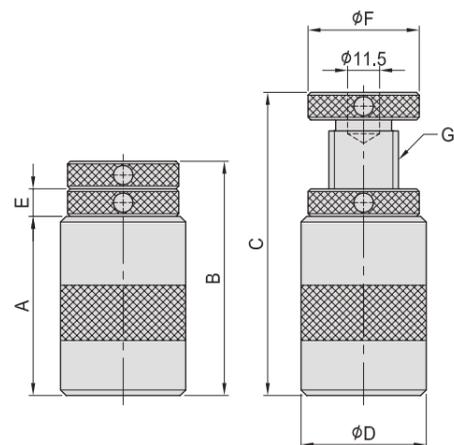


MODEL NO.	A	B	C	D	E	F	G	H	kg
SU20-1260	M12	42	53	65	19	60	5	M10	0.13
SU20-1680	M16	45	58	70	24	80	6	M12	0.24

- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JER-GENS
- OTHER
- Column for Technical Data

SU21

MAGNETIC SUPPORT JACK

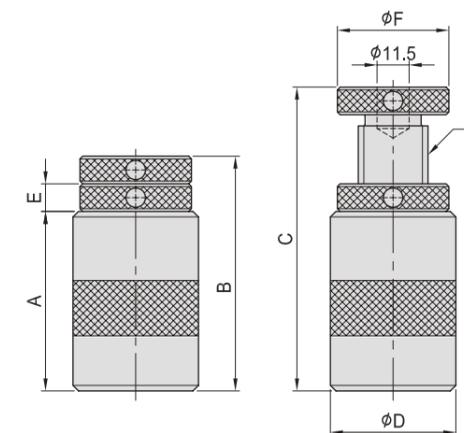


- Material / Finish :
Material : S45C(JIS), heat treated
- Surface finish : Black Oxide.

MODEL NO.	A	B-C	D	E	F	G	kg	KN
SU21-S050	24	40~50	45	8	35	Tr18x2	0.41	80
SU21-S065	34	50~65					0.54	
SU21-S085	49	65~85	45	8	35	Tr20x3	1.03	80
SU21-S110	63	85~110	45	12	40	Tr25x4	1.75	150
SU21-S165	85	110~165					2.93	
SU21-S265	135	165~265	60	15	50	Tr32x5	6.23	200
SU21-S300	170	265~300					7.50	

SU23

LARGE SUPPORT JACK

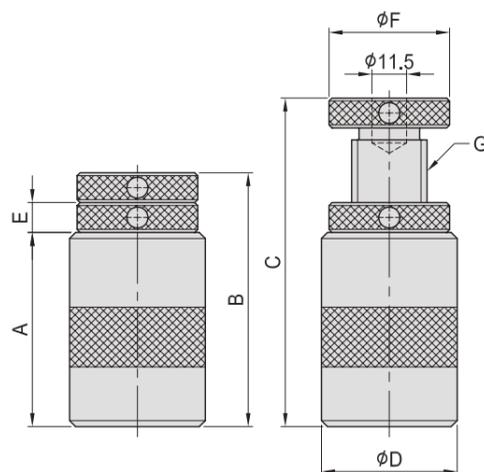


- Material / Finish :
Material : S45C(JIS), heat treated
- Surface finish : Black Oxide.

MODEL NO.	A	B-C	D	E	F	G	kg	KN
SU23-S0400	270	285~400	70	15	60	Tr40x4	8.0	260
SU23-S0500	370	385~500					10.5	
SU23-S0600	470	485~600	70	15	60	Tr40x4	12.0	260
SU23-S0700	570	585~700					14.0	
SU23-S0800	670	685~800	70	15	60	Tr40x4	15.0	260
SU23-S0900	770	785~900					16.5	
SU23-S1000	870	885~1000					18.0	

SU22

SUPPORT JACK

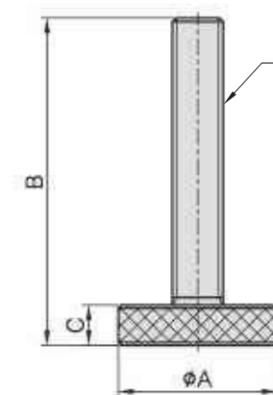


- Material / Finish :
Material : S45C(JIS), heat treated
- Surface finish : Black Oxide.

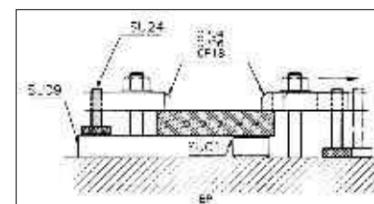
MODEL NO.	A	B-C	D	E	F	G	kg	KN
SU22-S050	21	37~50	40	8	35	Tr20x3	0.29	72
SU22-S070	34	50~70					0.40	
SU22-S100	50	70~100	45	10	40	Tr25x4	0.72	135
SU22-S150	76	100~150	50	12	45		1.30	
SU22-S250	120	150~250	60	15	50	Tr28x5	2.90	155
SU22-S300	170	200~300					3.50	

SU24

KNURLED ADJUSTING SCREW



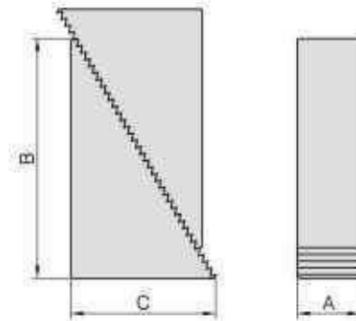
- Material /Finish :
Material : S45C(JIS), heat treated
- Heat treated : HRC 33°.
- Surface finish : Black Oxide.



MODEL NO.	A	B	C	D	kg
SU24-12060	28	60	8	M12	0.08
SU24-14065	30	65	9	M14	0.10
SU24-16070	30	70	10	M16	0.13
SU24-18080	36	80	12	M18	0.21
SU24-20130	50	130	16	M20	0.47

SU25

STEP BLOCK



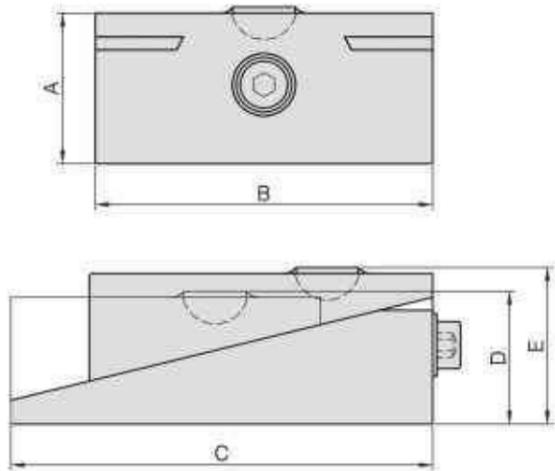
- Material / Finish :
Material : S45C.
- Heat treated : HRC32°~36°.
- Surface finish : Black Oxide.
- Application : Multipurpose clamping accessory, use with CP25.

MODEL NO.	Supporting Height	A	B	C	kg
SU25-25030	19-49	25	29.0	17	0.05
SU25-25045	28-68		45.0	27	0.12
SU25-25097	58-150		97.5	57	0.50
SU25-32059	38-90	32	59.0	35	0.24
SU25-32097	58-150		97.5	57	0.62
SU25-32139	82-210		139.0	81	1.32
SU25-38059	36-90	38	59.0	35	0.29
SU25-38097	58-150		97.5	57	0.73
SU25-38139	82-210		139.0	81	1.60
SU25-50059	36-90	50	59.0	35	0.70
SU25-50097	58-150		97.5	57	1.66
SU25-50139	82-210		139.0	81	3.43



SU27

ADJUSTABLE PARALLEL BLOCK

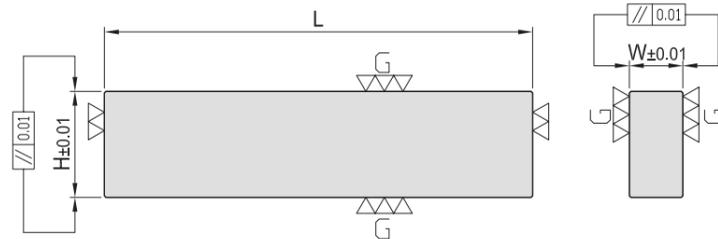


- Material / Finish :
Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 38°~42°.
- Surface finish : Black Oxide.
- Application : Adjustable work piece support, fine adjustment capability.

MODEL NO.	A	B	C	D	E	kg
SU27-5039-46	39	50	82	35	41	1.2
SU27-8052-59	53	80	125	49	55	3.4

SU26

HARDENED GROUND PARALLEL



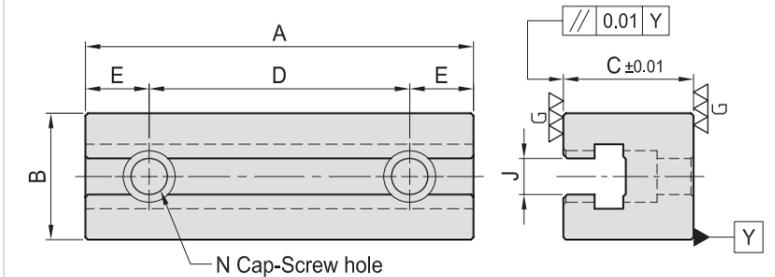
- Material : S45C
- Heat treated : HRC 45°.

MODEL NO.	W	H	L	kg	MODEL NO.	W	H	L	kg
SU26-0812-100	8	12	100	0.18	SU26-2025-200	20	25	200	1.60
SU26-0815-100		15		0.19	SU26-2030-200		30		1.92
SU26-1015-100	15	0.24	SU26-2040-200	40	2.54				
SU26-1020-100	10	20	100	0.32	SU26-2530-250	25	30	250	3.00
SU26-1025-100		25		0.22	SU26-2540-250		40		3.95
SU26-1215-100	15	0.28	SU26-2550-250	50	4.90				
SU26-1220-100	12	20	100	0.19	SU26-2840-300	28	40	300	5.80
SU26-1225-100		25		0.26	SU26-2850-300		50		6.66
SU26-1620-150	16	20	150	0.38	SU26-3850-300		38		50
SU26-1625-150		25		0.48	SU26-3875-300	75		13.80	
SU26-1630-150		30		1.14					



SU28

T SLOT PARALLEL BLOCK



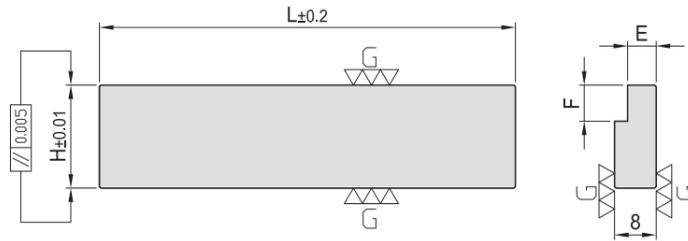
- Material / Finish :
Material : SCM420
- Heat treated : HRC 60°.
- Surface finish : Black Oxide.

MODEL NO.	A	B	C	D	E	N	J	kg
SU28-5050150-12	149	49	50	100	24.5	M12	14	1.4
SU28-5050200-12				150			2.3	
SU28-6060150-16	149	59	60	100	24.5	M16	18	2.3
SU28-6060200-16				150			3.5	

SU29

HARDENED SLICED PARALLEL

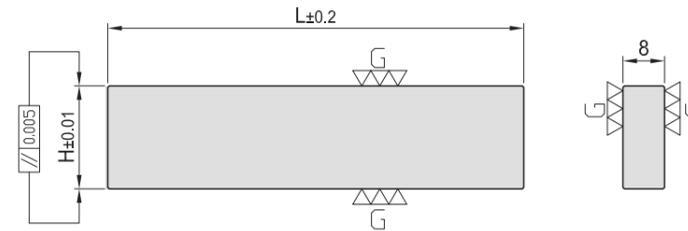
SU29-S



MODEL NO.	E	F	H	L	kg	MODEL NO.	E	F	H	L	kg	
SU29-125S21	2.5	7	21	125	0.25	SU29-160S50	3.0	10	50	160	0.88	
SU29-125S25			25		0.31	SU29-160S52			52		0.92	
SU29-125S29			29		0.38	SU29-160S54			54		0.96	
SU29-125S30			30		0.39	SU29-160S56			56		1.00	
SU29-125S32			32		0.42	SU29-160S58			58		1.04	
SU29-125S33			33		0.44	SU29-200S40			200		40	0.90
SU29-125S34			34		0.46	SU29-200S45					45	1.03
SU29-125S36			36		0.49	SU29-200S50					50	1.15
SU29-125S37			37		0.50	SU29-200S55					55	1.30
SU29-125S38			38		0.52	SU29-200S58					58	1.42
SU29-160S30	3.0	10	30	160	0.47	SU29-200S60	60	1.35				
SU29-160S35			35		0.58	SU29-200S62	62	1.40				
SU29-160S40			40		0.67	SU29-200S64	64	1.45				
SU29-160S45			45		0.77	SU29-200S66	66	1.50				
SU29-160S48			48		0.84	SU29-200S68	68	1.55				

※ TWO PIECES PER PAIR!

SU29-F



MODEL NO.	H	L	kg	MODEL NO.	H	L	kg
SU29-160F30	30	160	0.60	SU29-200F40	40	200	1.06
SU29-160F35	35		0.70	SU29-200F45	45		1.09
SU29-160F40	40		0.80	SU29-200F50	50		1.26
SU29-160F45	45		0.90	SU29-200F55	55		1.38
SU29-160F48	48		0.96	SU29-200F58	58		1.46
SU29-160F50	50		1.00	SU29-200F60	60		1.50
SU29-160F52	52		1.04	SU29-200F62	62		1.56
SU29-160F54	54		1.09	SU29-200F64	64		1.61
SU29-160F56	56		1.13	SU29-200F66	66		1.66
SU29-160F58	58		1.17	SU29-200F68	68		1.71

※ TWO PIECES PER PAIR!

- Material / Finish : S50C
- Heat treated : HRC 47°~52°.

AUX PARTS

PT01~PT59



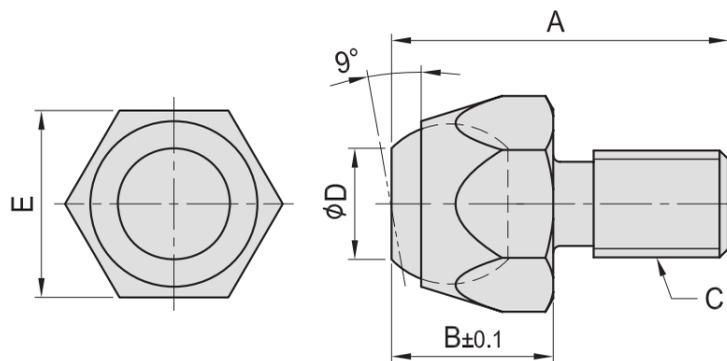
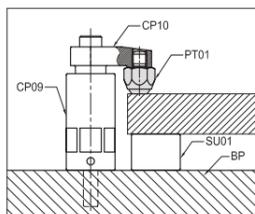
SMOOTH BALL END BOLT
SERRATED BALL END BOLT
KNURLED NUT
FLANGE NUT
EXTENSION NUT



PT01

SMOOTH BALL END BOLT

- Material :
Bolt : S45C(JIS) / CK45(DIN)
Ball : SUJ2(JIS) / 100Cr6(DIN)
- Heat treated :
Bolt : HRC 28°~32°
Ball : HRC 62°
- Surface finish : Black Oxide.
- Application : Precision swivel ball that can be used either as a contact bolt or as a rest pad. As contact bolts, these swivel-ball units are ideal for evenly distributing clamping pressure on sloped or uneven surfaces.
- Features : Precision ground top surface.



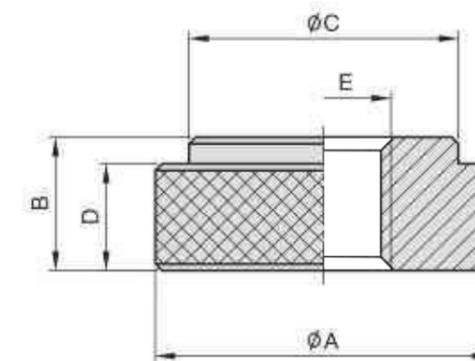
MODEL NO.	A	B	C	D	E	kg
PT01-0610	21	10	M6x1.00	6	10	0.012
PT01-0814	25	12	M8x1.25	8	14	0.015
PT01-1017	30	16	M10x1.50	10	17	0.025
PT01-1222	35	22	M12x1.75	12	22	0.070
PT01-1627	42	26	M16x2.00	14	27	0.140
PT01-2036	55	27	M20x2.50	14	36	0.280
PT01-2436	65	32	M24x2.00	18	36	0.560
PT01-3046	80	35	M30x2.00	21	46	0.880



PT03

KNURLED NUT

- Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 30°~35°
- Surface finish : Black Oxide.
- Application : use where quick hand assembly is needed.



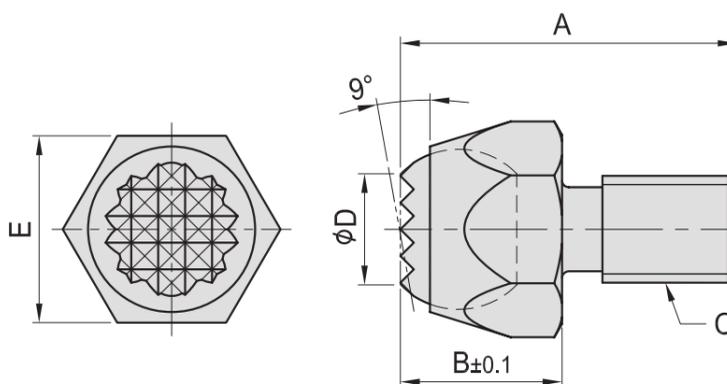
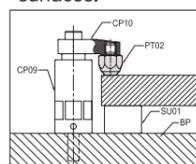
MODEL NO.	A	B	C	D	E	kg
PT03-0820	20	8	16	6	M 8	0.015
PT03-1025	25	10	20	8	M10	0.030
PT03-1228	28	12	24	10	M12	0.040
PT03-1630	30	12	25	10	M16	0.045



PT02

SERRATED BALL END BOLT

- Material :
Bolt : S45C(JIS) / CK45(DIN)
Ball : SUJ2(JIS) / 100Cr6(DIN)
- Heat treated :
Bolt : HRC 28°~32°
Ball : HRC 62°
- Surface finish : Black Oxide.
- Application : Precision swivel ball that can be used either as a contact bolt or as a rest pad. As contact bolts, these swivel-ball units are ideal for evenly distributing clamping pressure on sloped or uneven surfaces.
- Features : serrated gripper is ideal for rough surfaces.



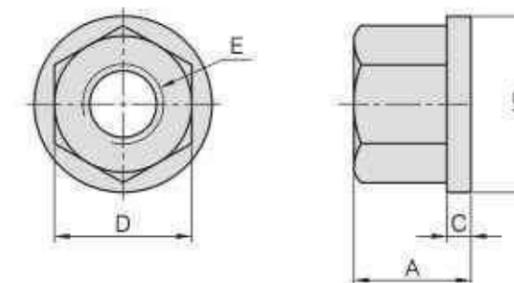
MODEL NO.	A	B	C	D	E	kg
PT02-0610	21	10	M6x1.00	6	10	0.012
PT02-0814	25	12	M8x1.25	8	14	0.015
PT02-1017	30	16	M10x1.50	10	17	0.025
PT02-1222	35	22	M12x1.75	12	22	0.070
PT02-1627	42	26	M16x2.00	14	27	0.140
PT02-2036	55	27	M20x2.50	14	36	0.280
PT02-2436	65	32	M24x2.00	18	36	0.560
PT02-3046	80	35	M30x2.00	21	46	0.880



PT04

FLANGE NUT

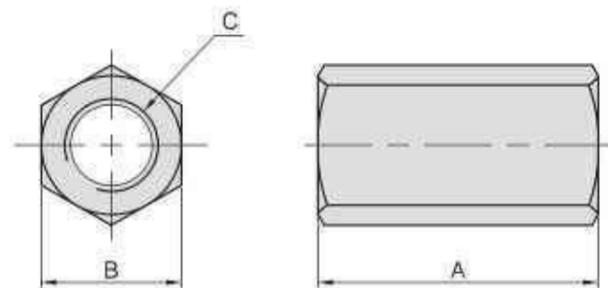
- Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 30°~35°
- Surface finish : Black Oxide.



MODEL NO.	A	B	C	D	E	kg
PT04-0812	9	17	3	12	M 8	0.010
PT04-1017	13	22	3	17	M10	0.020
PT04-1219	17	28	4	19	M12	0.040
PT04-1422	17	28	4	22	M14	0.040
PT04-1624	20	32	5	24	M16	0.060
PT04-1827	20	35	5	27	M18	0.070
PT04-2030	25	40	6	30	M20	0.110
PT04-2232	28	45	6	32	M22	0.150
PT04-2436	28	47	6	36	M24	0.185

PT05

EXTENSION NUT



- Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 30°~35°.
- Surface finish : Black Oxide.
- Application : Extends the length of clamping studs.

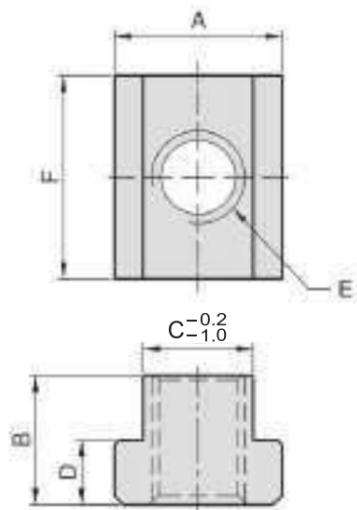
MODEL NO.	A	B	C	kg
PT05-0813	22	14	M 8	0.020
PT05-1017	30	17	M10	0.030
PT05-1219	36	19	M12	0.046
PT05-1422	42	22	M14	0.065
PT05-1624	48	24	M16	0.110
PT05-1827	54	27	M18	0.150
PT05-2030	60	30	M20	0.220
PT05-2232	66	32	M22	0.350
PT05-2436	72	36	M24	0.350

PT06

T-SLOT NUT



- Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 30°~35°
- Surface finish : Black Oxide.



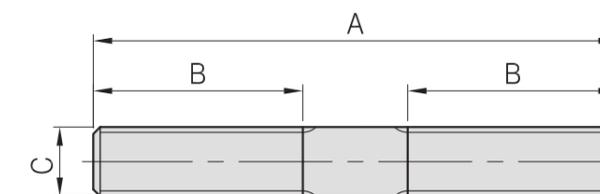
MODEL NO.	A	B	C	D	E	F	kg
PT06-1008	15.0	13.0	10.0	6.0	M 8	22	0.020
PT06-1210	18.0	14.0	12.0	7.0	M10	28	0.022
PT06-1410	22.0	16.0	14.0	8.0	M10	28	0.050
PT06-1412					M12		0.048
PT06-1612	25.0	16.0	16.0	8.0	M12	28	0.060
PT06-1614					M14		0.057
PT06-1810	28.0	20.0	18.0	10.5	M10	30	0.090
PT06-1812					M12		
PT06-1814	28.0	20.0	18.0	10.5	M14	30	0.090
PT06-1816					M16		0.085
PT06-2016	32.0	19.0	20.0	11.9	M16	30	0.098
PT06-2018	32.0	25.0	20.0	14.0	M18	38	0.110
PT06-2218	36.0	25.0	22.0	14.0	M18	38	0.178
PT06-2220					M20		0.190
PT06-2418	38.0	25.0	24.0	14.0	M18	38	0.184
PT06-2420					M20		0.250
PT06-2620	41.3	25.0	26.0	15.8	M20	44	0.250
PT06-2622					M22		0.240
PT06-2822	44.0	28.5	28.0	17.5	M22	50	0.330
PT06-2824					M24		0.312

PT07

CLAMPING STUD



- Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 22°~28°
- Surface finish : Black Oxide.

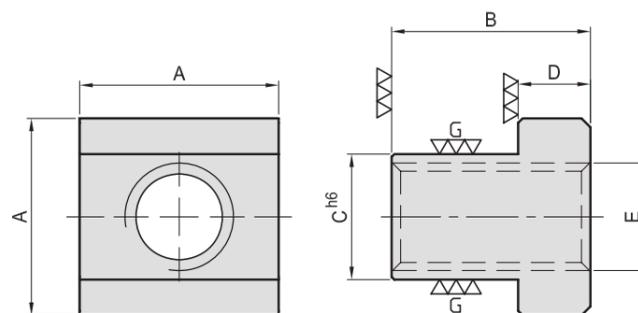


MODEL NO.	A	B	C	kg	
PT07-08050	50	22	M8 P=1.25	0.020	
PT07-08075	75			0.030	
PT07-08100	100	38		0.040	
PT07-08125	125			0.050	
PT07-08150	150			0.060	
PT07-08175	175			50	0.070
PT07-08200	200				0.080
PT07-08250	250	0.098			
PT07-10050	50	22		M10 P=1.5	0.030
PT07-10075	75				0.042
PT07-10100	100	38	0.055		
PT07-10125	125		0.070		
PT07-10150	150		0.090		
PT07-10175	175	50	0.108		
PT07-10200	200		0.123		
PT07-10250	250	0.154			
PT07-12050	50	22	M12 P=1.75		0.040
PT07-12075	75				0.060
PT07-12100	100	38		0.080	
PT07-12125	125			0.100	
PT07-12150	150			0.125	
PT07-12175	175	50		0.155	
PT07-12200	200			0.160	
PT07-12300	300	80		0.240	
PT07-14050	50	22		M14 P=2.0	0.060
PT07-14075	75				0.090
PT07-14100	100	38	0.120		
PT07-14125	125		0.150		
PT07-14150	150		0.180		
PT07-14175	175	50	0.210		
PT07-14200	200		0.240		
PT07-16050	50	22	M16 P=2.0		0.078
PT07-16075	75				0.120
PT07-16100	100	38			0.145
PT07-16125	125			0.180	
PT07-16150	150			0.230	
PT07-16175	175	50		0.276	
PT07-16200	200			0.290	
PT07-16250	250	65		0.350	
PT07-16300	300	80		0.450	
PT07-16400	400	100		0.580	
PT07-16500	500	100	0.700		

MODEL NO.	A	B	C	kg	
PT07-18050	50	22	M18 P=2.5	0.100	
PT07-18075	75			0.150	
PT07-18100	100	38		0.200	
PT07-18125	125			0.220	
PT07-18150	150			0.300	
PT07-18175	175	50		0.320	
PT07-18200	200			0.360	
PT07-18300	300	80		0.600	
PT07-20050	50	22		M20 P=2.5	0.125
PT07-20075	75				0.170
PT07-20100	100	38	0.230		
PT07-20125	125		0.275		
PT07-20150	150		0.360		
PT07-20175	175	50	0.437		
PT07-20200	200		0.450		
PT07-20250	250	65	0.550		
PT07-20300	300	80	0.700		
PT07-20400	400	100	0.880		
PT07-20500	500	100	1.100		
PT07-22050	50	22	M22 P=2.5	0.150	
PT07-22075	75			0.223	
PT07-22100	100	38		0.300	
PT07-22125	125			0.373	
PT07-22150	150			0.448	
PT07-22175	175	50		0.522	
PT07-22200	200			0.597	
PT07-22250	250	65		0.746	
PT07-22300	300	80		0.895	
PT07-22400	400	100		1.194	
PT07-22500	500	100	1.492		
PT07-24050	50	22	M24 P=3.0	0.177	
PT07-24075	75			0.266	
PT07-24100	100	38		0.355	
PT07-24125	125			0.443	
PT07-24150	150			0.533	
PT07-24175	175	50		0.620	
PT07-24200	200			0.710	
PT07-24250	250	65		0.880	
PT07-24300	300	80		1.065	
PT07-24400	400	100		1.420	
PT07-24500	500	100	1.775		

PT08

T-SLOT NUT(GROUND)

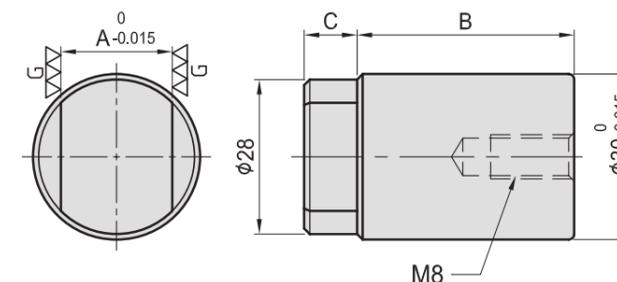


- Material : S45C(JIS) / CK45(DIN)
- Heat treated : HRC 30°~35°
- Application : Ground surfaces provide accurate positioning inside of t-slot.

MODEL NO.	A	B	C	D	E	kg
PT08-1214	22	22	14	8	M12	0.045
PT08-1618	28	30	18	10	M16	0.080

PT10

LOCATING KEY

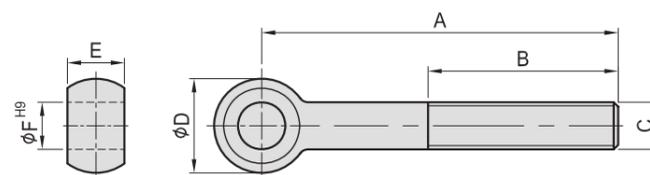


- Material : SCM440(JIS) / 34CrMo4(DIN)
- Heat treated : HRC 55°
- Application : Multipurpose locating key.

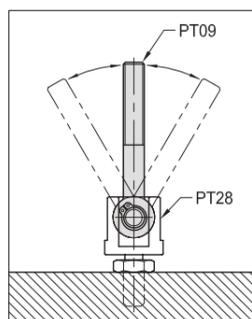
MODEL NO.	A	B	C	kg
PT10-1410	14	49	10.0	0.032
PT10-1815	18		15.0	0.033
PT10-2009	20	39	9.5	0.028
PT10-2010	20	49	10.0	0.033
PT10-2015			15.0	0.034

PT09

EYEBOLT



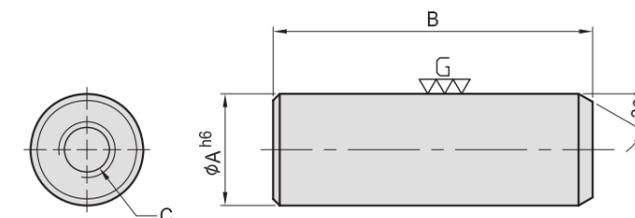
- Material : SCM220(JIS)
- Heat treated : HRC 30°~35°
- Surface finish : Black Oxide.
- Application : use with PT28 to build custom clamping components.
- Features : Reamed hole for smooth swiveling.



MODEL NO.	A	B	C	D	E	F	kg
PT09-10075	75	40	M10	20	12	10	0.060
PT09-10100	100						0.080
PT09-12075	75	50	M12	25	14	12	0.095
PT09-12100	100	60					0.120
PT09-16125	125	60	M16	32	17	16	0.250
PT09-16150	150	75					0.300
PT09-20125	125	60	M20	40	22	20	0.400
PT09-20150	150	75					0.485

PT11

THREADED DOWEL PINS



- Material : SCM440(JIS) / 34CrMo4(DIN)
- Heat treated : HRC 45°
- Application : Threaded end makes removal easy.

MODEL NO.	A	B	C	kg
PT11-0825	8	25	M4	0.010
PT11-1030	10	30	M5	0.015
PT11-1234	12	34	M6	0.030
PT11-1642	16	42		0.060
PT11-2047	20	47	M8	0.100
PT11-2549	25	49		0.160

- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JER-GENS
- OTHER
- Column for Technical Data

PT12

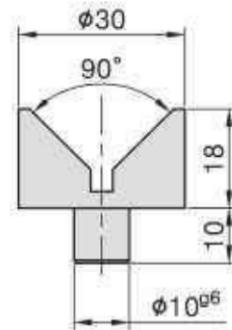
JACK SCREW TIP

- Material : SCM440(JIS) / 42CrMo4(DIN)
- Heat treated : HRC 60°
- Surface finish : Black Oxide.
- Application : Multipurpose support tip, use with SU11.

PT12A-3028



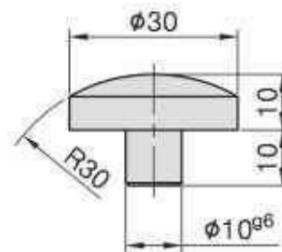
NW : 70g



PT12B-3020



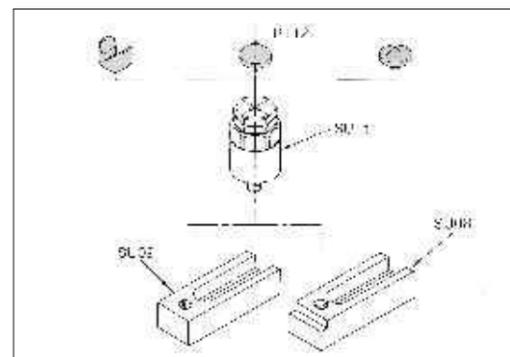
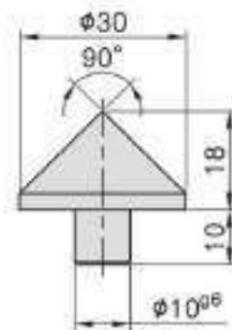
NW : 50g



PT12C-3028



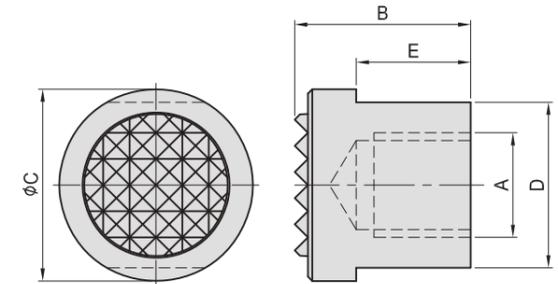
NW : 60g



PT13-15

GRIPPER NUT

- Material : S45C(JIS)
- Surface finish : Black Oxide.
- Application : Use for supporting workpiece.
- Features : Serrated



PT13 SERRATED END



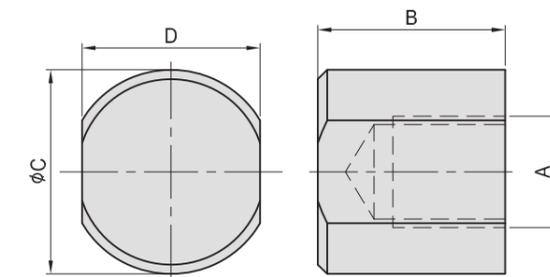
- Tooth plate
- Material : SKH9(JIS)S18-1-2-5(DIN)
 - Heat treated : HRC 60°
 - Surface finish : Black Oxide.

MODEL NO.	A	B	C	D	E	kg
PT13-1220	M12	20	22	19	13	0.043
PT13-1625	M16	25	28	24	16	0.080

- Tooth plate
- Material : Extremely hard.
 - Surface finish : Black Oxide.

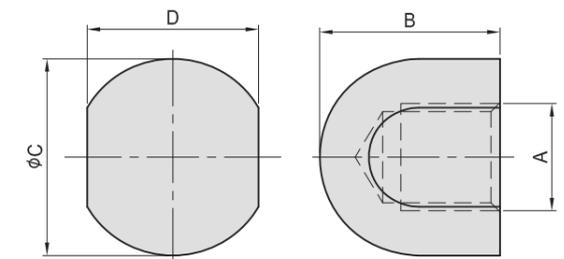
MODEL NO.	A	B	C	D	E	kg
PT13-1220-K	M12	20	22	19	13	0.043
PT13-1625-K	M16	25	28	24	16	0.080

PT14 FLAT END



MODEL NO.	A	B	C	D	kg
PT14-1220	M12	20	22	19	0.043
PT14-1625	M16	25	28	24	0.076

PT15 ROUND END



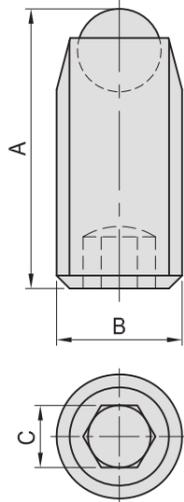
MODEL NO.	A	B	C	D	kg
PT15-1220	M12	20	22	19	0.042
PT15-1625	M16	25	28	24	0.063

- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JER-GENS
- OTHER

Column for Technical Data

PT16

PT16A ROUND END

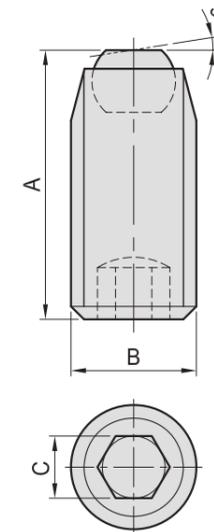


- Material :
Bolt : SCM21(JIS) / 34CrMo4(DIN)
Ball : SUJ2(JIS) / 100Cr6(DIN)
- Heat treated :
Bolt : HRC 28°~32°.
Ball : HRC 62°.
- Surface finish : Black Oxide.
- Application : Ideal for clamping odd shaped work pieces.
- Features : Available with : Flat end, round end, serrated end, less chance of deforming the work piece due the rounded tip.

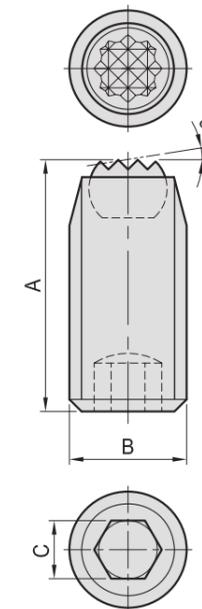
SWIVEL CLAMPING SCREW

MODEL NO.	A	B	C	max (KN)	g			
PT16A-0408	8.0	M4	2	4	0.6			
PT16A-0410	10.0				0.7			
PT16A-0412	12.0				0.8			
PT16A-0416	16.0				1.1			
PT16A-0510	10.0	M5	2.5	5	1.0			
PT16A-0512	12.0				1.3			
PT16A-0516	16.0				1.7			
PT16A-0520	20.0				2.3			
PT16A-0525	25.0				2.9			
PT16A-0610	10.8	M6	3	9	1.5			
PT16A-0615	13.5				2.4			
PT16A-0616	16.8				2.4			
PT16A-0620	20.8				3.0			
PT16A-0625	23.5				3.8			
PT16A-0812	12.0				M8	4	15	3.2
PT16A-0816	17.2	4.1						
PT16A-0820	20.0	5.8						
PT16A-0825	26.2	7.3						
PT16A-0830	30.0	9.0						
PT16A-1014	15.0	M10	5	20				5.0
PT16A-1015	16.0							6.7
PT16A-1020	21.0				8.7			
PT16A-1025	26.0				11.2			
PT16A-1030	31.0				13.7			
PT16A-1035	36.0				16.2			
PT16A-1040	41.0				18.7			
PT16A-1218	18.2				M12	6	30	10.0
PT16A-1220	23.2	12.5						
PT16A-1230	31.2	20.0						
PT16A-1240	41.2	30.0						
PT16A-1250	51.2	40.0						
PT16A-1625	25.6	M16	8	60				28.0
PT16A-1635	35.6							40.0
PT16A-1645	45.6							45.0
PT16A-1655	55.6							55.0
PT16A-1665	65.6				65.0			
PT16A-2030	32.0				M20	10	90	54.0
PT16A-2040	42.0	74.0						
PT16A-2050	52.0	94.0						
PT16A-2060	62.0	120.0						
PT16A-2435	37.0	M24	12	120				90.0
PT16A-2450	52.0				130.0			
PT16A-2480	82.0				235.0			

PT16B FLAT END



PT16C SERRATED END



MODEL NO.	MODEL NO.	A	B	C	max (KN)	g			
PT16B-0610	PT16C-0610	10.3	M6	3	9	1.5			
PT16B-0615	PT16C-0615	13.0				2.4			
PT16B-0616	PT16C-0616	16.3				2.4			
PT16B-0620	PT16C-0620	20.3				3.0			
PT16B-0625	PT16C-0625	23.0				3.8			
PT16B-0812	PT16C-0812	11.2	M8	4	15	3.2			
PT16B-0816	PT16C-0816	16.4				4.1			
PT16B-0820	PT16C-0820	19.2				5.8			
PT16B-0825	PT16C-0825	25.4				7.3			
PT16B-0830	PT16C-0830	29.2				9.0			
PT16B-1014	PT16C-1014	14.0				M10	5	20	5.0
PT16B-1015	PT16C-1015	15.0	6.7						
PT16B-1020	PT16C-1020	20.0	8.7						
PT16B-1025	PT16C-1025	25.0	11.2						
PT16B-1030	PT16C-1030	30.0	13.7						
PT16B-1035	PT16C-1035	35.0	16.2						
PT16B-1040	PT16C-1040	40.0	18.7						
PT16B-1218	PT16C-1218	17.0	M12	6	30				10.0
PT16B-1220	PT16C-1220	22.0				12.5			
PT16B-1230	PT16C-1230	30.0				20.0			
PT16B-1240	PT16C-1240	40.0				30.0			
PT16B-1250	PT16C-1250	50.0				40.0			
PT16B-1625	PT16C-1625	24.0				M16	8	60	28.0
PT16B-1635	PT16C-1635	34.0							40.0
PT16B-1645	PT16C-1645	44.0							45.0
PT16B-1655	PT16C-1655	54.0							55.0
PT16B-1665	PT16C-1665	64.0	65.0						
PT16B-2030	PT16C-2030	30.0	M20	10	90				54.0
PT16B-2040	PT16C-2040	40.0				74.0			
PT16B-2050	PT16C-2050	50.0				94.0			
PT16B-2060	PT16C-2060	60.0				120.0			
PT16B-2435	PT16C-2435	35.0				M24	12	120	90.0
PT16B-2450	PT16C-2450	50.0	130.0						
PT16B-2480	PT16C-2480	80.0	235.0						

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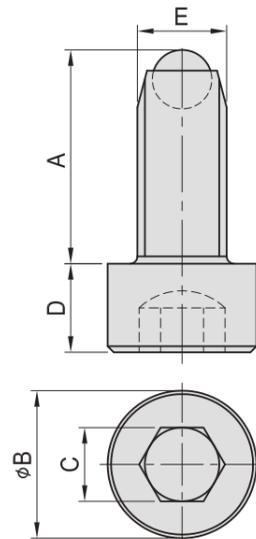
OTHER

Column for Technical Data

PT17

PT17A ROUND END

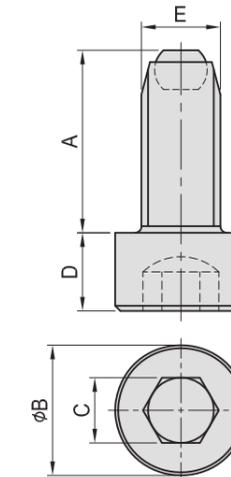
SWIVEL SHOULDER CLAMPING SCREW



MODEL NO.	A	B	C	D	E	max (KN)	g
PT17A-0615	14.5						5.3
PT17A-0625	23.5	10	5	6	M 6	9	7.4
PT17A-0635	33.5						9.5
PT17A-0820	18.7						13.5
PT17A-0830	28.7	13	6	8	M 8	15	20.0
PT17A-0840	38.7						24.0
PT17A-0850	50.7						30.0
PT17A-1025	25.0						26.0
PT17A-1040	40.0	16	8	10	M10	20	34.0
PT17A-1060	60.0						46.0
PT17A-1230	31.2						40.0
PT17A-1245	46.2	18	10	12	M12	30	50.0
PT17A-1265	66.2						70.0
PT17A-1280	81.2						83.0
PT17A-1640	40.6						90.0
PT17A-1650	50.6	24	14	16	M16	60	110.0
PT17A-1665	65.6						130.0
PT17A-1690	90.6						170.0
PT17A-20050	52.0						185.1
PT17A-20080	82.0	30	17	20	M20	90	256.4
PT17A-20100	102.0						301.2
PT17A-24060	62.0						324.8
PT17A-24090	92.0	36	19	24	M24	120	283.5
PT17A-24120	122.0						351.0

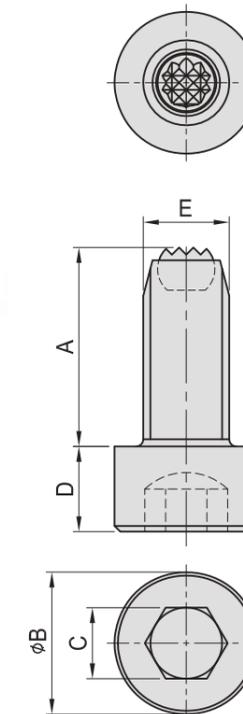
- Material :
Bolt : SCM21(JIS) / 34CrMo4(DIN)
Ball : SUJ2(JIS) / 100Cr6(DIN)
- Heat treated :
Bolt : HRC 28°~32°
Ball : HRC 62°
- Surface finish : Black Oxide.
- Application : Support or clamp the work piece.
- Features : Available with : Flat end, round end, serrated end, less chance of deforming the work piece due the rounded tip.

PT17B FLAT END



MODEL NO.	A	B	C	D	E	max (KN)	g
PT17B-0615	14						5.3
PT17B-0625	23	10	5	6	M 6	9	7.4
PT17B-0635	33						9.5
PT17B-0820	18						13.5
PT17B-0830	28	13	6	8	M 8	15	20.0
PT17B-0840	38						24.0
PT17B-0850	50						30.0
PT17B-1025	24						26.0
PT17B-1040	39	16	8	10	M10	20	34.0
PT17B-1060	59						46.0
PT17B-1230	30						40.0
PT17B-1245	45	18	10	12	M12	30	50.0
PT17B-1265	65						70.0
PT17B-1280	80						83.0
PT17B-1640	39						90.0
PT17B-1650	49	24	14	16	M16	60	110.0
PT17B-1665	64						130.0
PT17B-1690	89						170.0
PT17B-20050	50						185.1
PT17B-20080	80	30	17	20	M20	90	256.4
PT17B-20100	100						301.2
PT17B-24060	60						324.8
PT17B-24090	90	36	19	24	M24	120	283.5
PT17B-24120	120						351.0

PT17C SERRATED END



MODEL NO.	A	B	C	D	E	max (KN)	g
PT17C-0615	14						5.3
PT17C-0625	23	10	5	6	M 6	9	7.4
PT17C-0635	33						9.5
PT17C-0820	18						13.5
PT17C-0830	28	13	6	8	M 8	15	20.0
PT17C-0840	38						24.0
PT17C-0850	50						30.0
PT17C-1025	24						26.0
PT17C-1040	39	16	8	10	M10	20	34.0
PT17C-1060	59						46.0
PT17C-1230	30						40.0
PT17C-1245	45	18	10	12	M12	30	50.0
PT17C-1265	65						70.0
PT17C-1280	80						83.0
PT17C-1640	39						90.0
PT17C-1650	49	24	14	16	M16	60	110.0
PT17C-1665	64						130.0
PT17C-1690	89						170.0
PT17C-20050	50						185.1
PT17C-20080	80	30	17	20	M20	90	256.4
PT17C-20100	100						301.2
PT17C-24060	60						324.8
PT17C-24090	90	36	19	24	M24	120	283.5
PT17C-24120	120						351.0

BP

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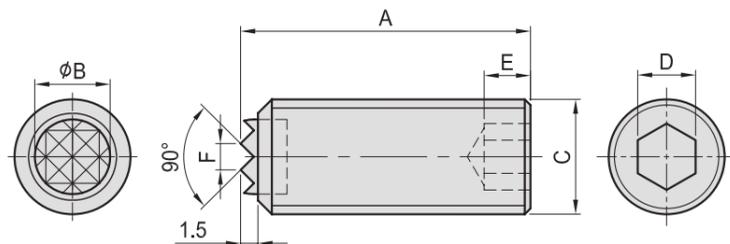
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PT18

GRIPPER SCREW



- Material : SCM435(JIS) / 34CrMo4(DIN)
- Heat treated : HRC 32°~38°
- Serrated surface to be heat treated with high frequency quenching.
- Surface finish : Black Oxide.
- Application : Multipurpose work support and clamping unit, ideal for rough parts.
- Features : Excellent holding power from the serrated face.

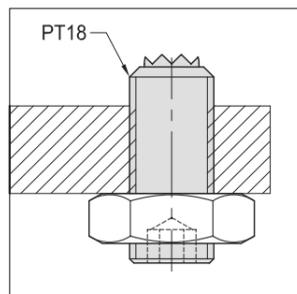


MODEL NO.	A	B	C	D	E	F	kg
PT18-1025	25	6.5	M10	5	4	2.3	0.015
PT18-1050	50						0.030
PT18-1225	25	8.0	M12	6	5	2.3	0.022
PT18-1250	50						0.045
PT18-1625	25	11.5	M16	8	6	3.0	0.038
PT18-1650	50						0.078
PT18-2025	25	13.0	M20	10	8	3.0	0.058
PT18-2050	50						0.120

- Tooth plate
- Material : SKH9(JIS) S18-1-2-5(DIN)
 - Heat treated : HRC 60°

MODEL NO.	A	B	C	D	E	F	kg
PT18-1025-K	25	6.5	M10	5	4	2.3	0.015
PT18-1050-K	50						0.030
PT18-1225-K	25	8.0	M12	6	5	2.3	0.022
PT18-1250-K	50						0.045
PT18-1625-K	25	11.5	M16	8	6	3.0	0.038
PT18-1650-K	50						0.078
PT18-2025-K	25	13.0	M20	10	8	3.0	0.058
PT18-2050-K	50						0.120

- Tooth plate
- Material : extremely hard

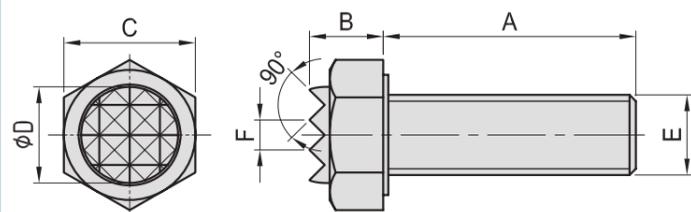


PT19

GRIPPER SCREW



- Material : SCM435(JIS) / 34CrMo4(DIN)
- Heat treated : HRC 32°~38°
- Serrated surface to be heat treated with high frequency quenching.
- Surface finish : Black Oxide.
- Application : Multipurpose work support and clamping unit, ideal for rough parts.
- Features : Excellent holding power from the serrated face.

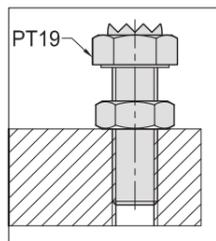


MODEL NO.	A	B	C	D	E	F	kg
PT19-061025	25	6.0	10	7.9	M6	2.3	0.008
PT19-081325	25	7.3	13	9.5	M8	3.0	0.015
PT19-101725	25	8.4	17	12.7	M10	3.0	0.030
PT19-101740	40						0.035
PT19-121925	25	9.5	19	15.9	M12	3.0	0.035
PT19-121940	40						0.050
PT19-162435	35	12.0	24	19.1	M16	3.0	0.085
PT19-162450	50						0.100
PT19-203040	40	14.5	30	25.4	M20	3.0	0.160
PT19-203060	60						0.205

- Tooth plate
- Material : SKH9(JIS) S18-1-2-5(DIN)
 - Heat treated : HRC 60°

MODEL NO.	A	B	C	D	E	F	kg
PT19-061025-K	25	6.0	10	7.9	M6	2.3	0.008
PT19-081325-K	25	7.3	13	9.5	M8	3.0	0.015
PT19-101725-K	25	8.4	17	12.7	M10	3.0	0.030
PT19-101740-K	40						0.035
PT19-121925-K	25	9.5	19	15.9	M12	3.0	0.035
PT19-121940-K	40						0.050
PT19-162435-K	35	12.0	24	19.1	M16	3.0	0.085
PT19-162450-K	50						0.100
PT19-203040-K	40	14.5	30	25.4	M20	3.0	0.160
PT19-203060-K	60						0.205

- Tooth plate
- Material : extremely hard

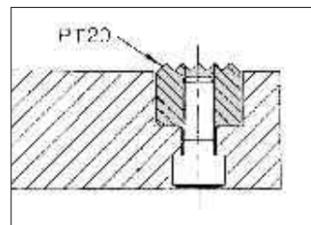
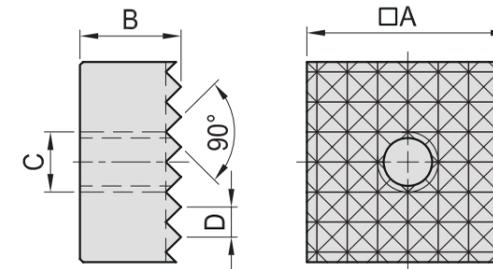


PT20

GRIPPER PAD(SQUARE)



- Material : SKH9(JIS)/S18-1-2-5(DIN)
- Heat treated : HRC 60°
- Surface finish : Black Oxide.
- Application : Multipurpose work support and clamping unit, ideal for rough parts.



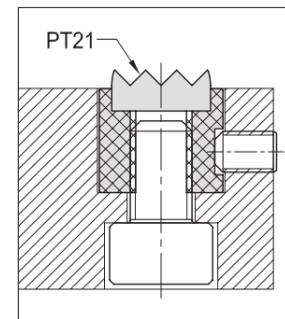
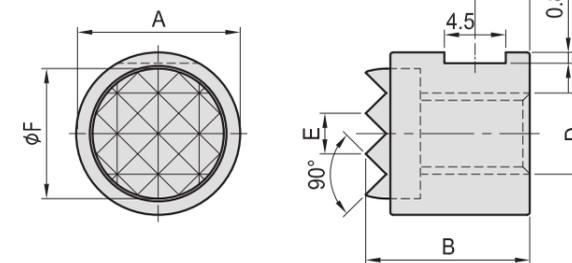
MODEL NO.	A	B	C	D	kg
PT20-1010	10	10	M5	2.3	0.008
PT20-1210	12				0.010
PT20-2010	20	10	M6	3.0	0.030
PT20-2510	25				0.043

PT21

GRIPPER PAD(ROUND)



- Material : S45C(JIS)/CK45(DIN)
- Heat treated : HRC 33°
- Surface finish : Black Oxide.
- Application : Multipurpose work support and clamping unit, ideal for rough parts.



MODEL NO.	A	B	C	D	E	F	kg
PT21-1010	10	10.0	3.4	M5	2.3	8.1	0.005
PT21-1212	12	12.0	4.0	M6	3.0	9.6	0.008
PT21-1612	16					13.0	0.016
PT21-2012	20	12.0	4.0	M6	3.0	16.3	0.025
PT21-2512	25					19.5	0.040

- Tooth plate
- Material : SKH9(JIS) S18-1-2-5(DIN)
 - Heat treated : HRC 60°

MODEL NO.	A	B	C	D	E	F	kg
PT21-1010-K	10	10.0	3.4	M5	2.3	8.1	0.005
PT21-1212-K	12	12.0	4.0	M6	3.0	9.6	0.008
PT21-1612-K	16					13.0	0.016
PT21-2012-K	20	12.0	4.0	M6	3.0	16.3	0.025
PT21-2512-K	25					19.5	0.040

- Tooth plate
- Material : extremely hard

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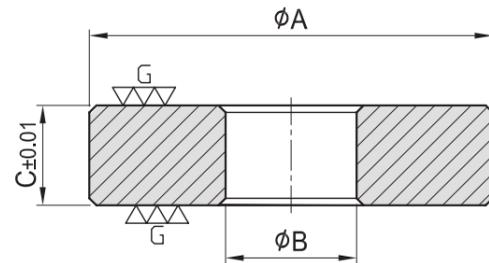
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PT22

SPACER

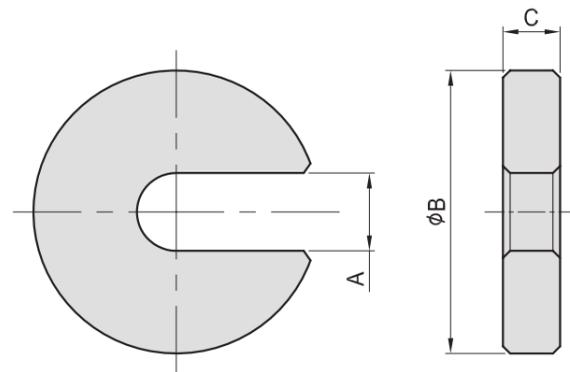


- Material : S45C(JIS)/CK45(DIN)
- Heat treated : HRC 40°
- Application : Use with jig components for increasing height or extending length.

MODEL NO.	A	B	C	kg
PT22-1303	40	13	3	0.030
PT22-1305			5	0.045
PT22-1310			10	0.100
PT22-1330			30	0.300
PT22-1703	50	17	3	0.035
PT22-1705			5	0.070
PT22-1710			10	0.350
PT22-1730			30	0.950

PT23

"C" WASHER



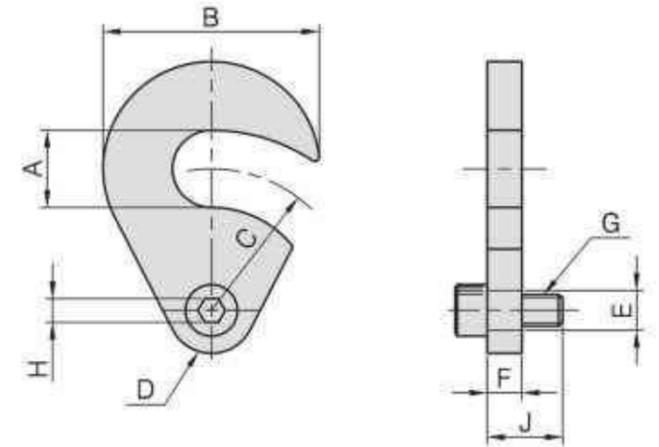
- Material : S45C(JIS)/CK45(DIN)
- Heat treated : HRC 40°
- Surface finish : Black Oxide.
- Application : Use where quick assembly is important.
- Features : Washer that slides in and out of position for clean loading.

MODEL NO.	A	B	C	kg
PT23-0835	9	35	8	0.065
PT23-1040	11	40		0.065
PT23-1255	13	55	10	0.150
PT23-1665	17	65		0.200
PT23-2080	21	80	10	0.300
PT23-2490	25	90	12	0.470



PT24

SWING "C" WASHER

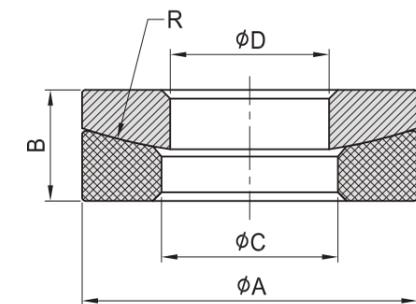


- Material : 4140(JIS)/CK45(DIN)
- Heat treated : HRC 40°
- Surface finish : Black Oxide.
- Application : C washer that swings out of the way for clean loading. Can be reversed to swing into position either clockwise or counter-clockwise.

MODEL NO.	A	B	C	D	E	F	G	H	J	kg
PT24-0632	11.0	32	24	16	8	6	M6	8	15	0.050
PT24-0840	13.5	40	27	20	10	8	M8	10	20	0.090
PT24-0850	18.0	50	33	20	10	8	M8	10	20	0.130

PT25

SPHERICAL WASHER



- Material : S45C(JIS)/CK45(DIN)
- Heat treated : HRC 38°
- Surface finish : Black Oxide.
- Application : Two-piece washer that compensates whenever a stud and clamping surface are not exactly perpendicular.

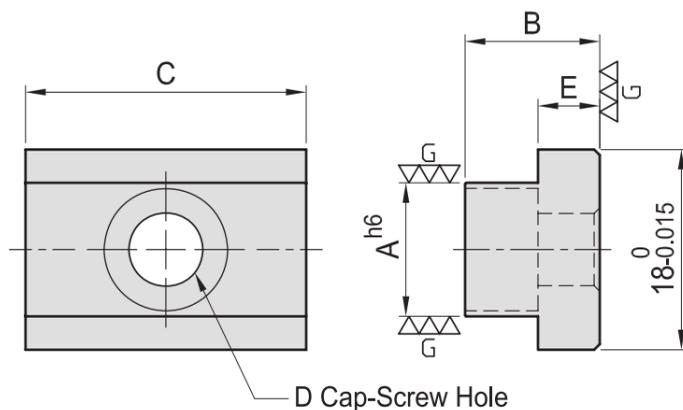
MODEL NO.	A	B	C	D	R	kg
PT25-0819	19	6.2	10	9	30	0.013
PT25-1022	22	8.0	12	11		0.019
PT25-1226	26	7.5	15	13	40	0.024
PT25-1428	28	9.0	16	15		0.033
PT25-1632	32	10.0	19	17	70	0.058
PT25-1835	35		20	19		0.050
PT25-2040	40	11.8	23	21	70	0.089
PT25-2245	45	12.5	26	24		0.110
PT25-2450	50	13.5	28	27		0.150

PT26

LOCATING KEY



- Material : S45C(JIS)/C105W1(DIN)
- Heat treated : HRC 50°
- Application : Locate & align jig components
T-slot, ground surface provide accurate placement.



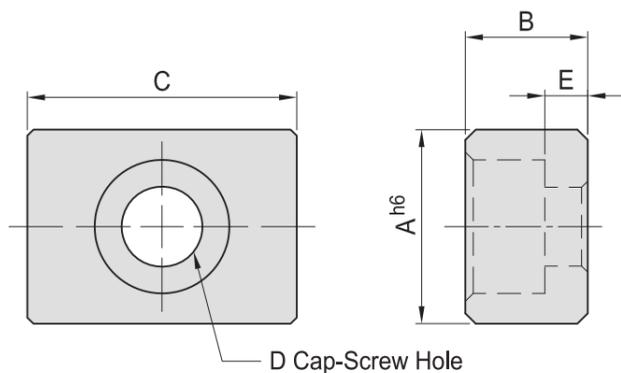
MODEL NO.	A	B	C	D	E	kg
PT26-1812	12	12	25	M6	5.5	0.035
PT26-1814	14					0.040
PT26-1816	16					0.040
PT26-1820	20					0.040
PT26-1822	22					0.040

PT27

LOCATING KEY



- Material : S45C(JIS)/C105W1(DIN)
- Heat treated : HRC 45°~50°
- Application : Locate & align jig components
T-slot, ground surface provide accurate placement.



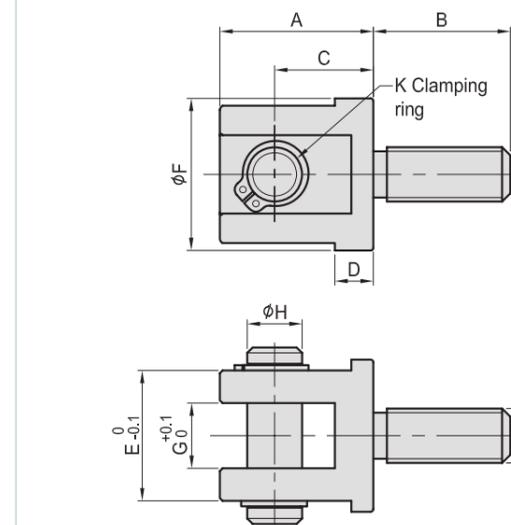
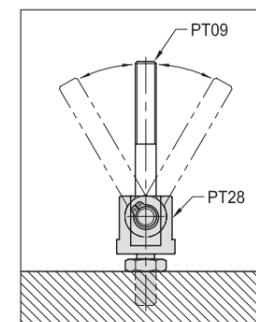
MODEL NO.	A	B	C	D	E	kg
PT27-1008	10	8	20	M4	3.5	0.015
PT27-1208	12			M5	2.5	0.019
PT27-1410	14	10	22	M6	3.5	0.020
PT27-1610	16					0.025
PT27-1810	18					0.025
PT27-2010	20					0.030
PT27-2210	22					0.030

PT28

SWIVEL JOINT SUPPORT



- Material : S45C(JIS)/CK45(DIN)
- Heat treated : HRC 32°~38°
- Surface finish : Black Oxide.
- Application : Use with PT09 to build up a swiveling jig.



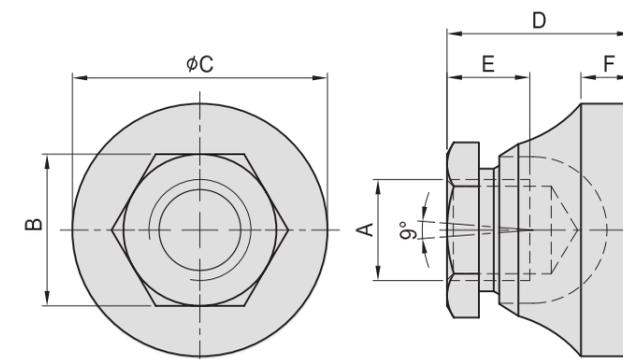
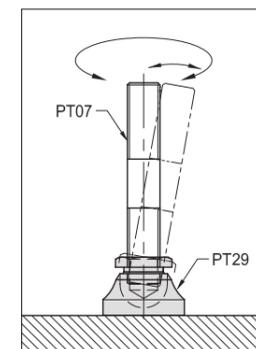
MODEL NO.	A	B	C	D	E	F	G	H	J	K	kg
PT28-1025	28	25	18	7.0	24	28	12	10	M10	10	0.055
PT28-1230	34	30	21	7.5	25	30	14	12	M12	12	0.105
PT28-1640	42	40	26	9.0	34	40	17	16	M16	16	0.210
PT28-2050	52	50	32	11.0	42	50	22	20	M20	20	0.300

PT29

SWIVEL PAD



- Material : S45C(JIS)/CK45(DIN)
- Heat treated : HRC 32°~38°
- Surface finish : Black Oxide.
- Application : Use for supporting uneven surfaces.



MODEL NO.	A	B	C	D	E	F	kg
PT29-1219	M12	19	35	24	11	7	0.080
PT29-1624	M16	24	40	29	13	8	0.150
PT29-2029	M20	29	50	40	18	10	0.300

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-VISE

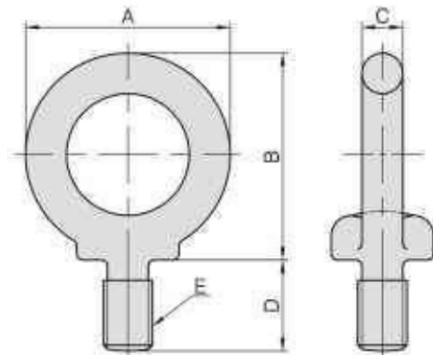
JER-GENS

OTHER

Column for Technical Data

PT30

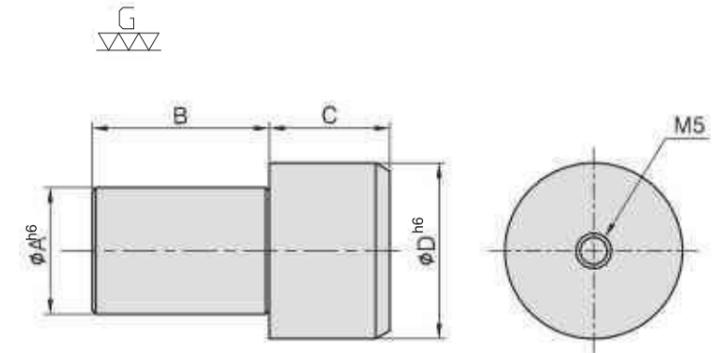
LIFTING EYEBOLT



MODEL NO.	A	B	C	D	E	Load kg	kg
PT30-08	32.6	33.3	6.3	15	M 8	80	0.032
PT30-10	41.0	41.5	8.0	18	M10	150	0.063
PT30-12	50.0	51.0	10.0	22	M12	220	0.125
PT30-16	60.0	60.0	12.5	27	M16	450	0.216
PT30-20	72.0	71.0	16.0	30	M20	630	0.400
PT30-24	90.0	90.0	20.0	38	M24	950	0.830
PT30-30	110.0	110.0	25.0	45	M30	1500	1.500
PT30-36	133.0	131.5	31.5	55	M36	2300	2.900
PT30-42	151.0	150.5	35.5	65	M42	3400	4.400

PT32

SHOULDER DOWEL PIN

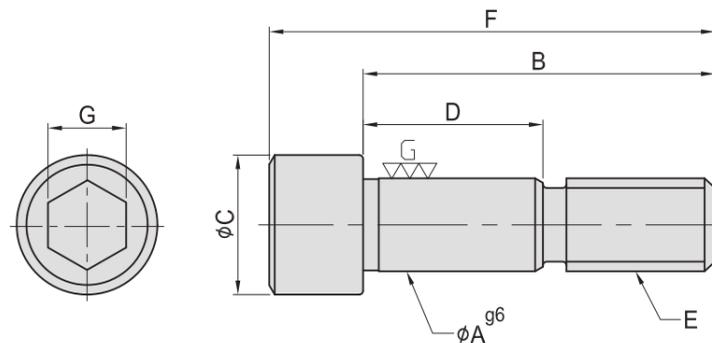


- Material : SCM435(JIS)/34CrMo4(DIN)
- Heat treated : HRC 55°
- Application : Multifunction Positioning.

MODEL NO.	A	B	C	D	kg
PT32-081225	8	13	12	12	0.012
PT32-121632	12	18	14	16	0.032
PT32-142037	14	22	15	20	0.052
PT32-162239	16	22	17	22	0.072
PT32-182542	18	25	17	25	0.098

PT31

SHOULDER BOLT



- Material : SCM435(JIS)/34CrMo4(DIN)
- Heat treated : HRC 32°~38°
- Application : Position & fasten this accurately ground bolt.

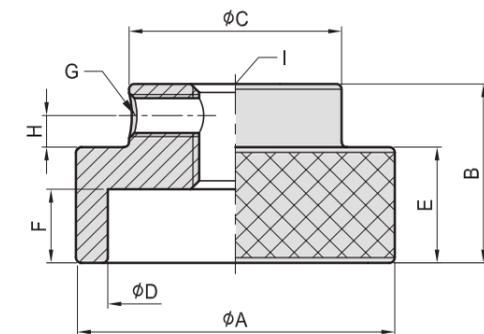
MODEL NO.	A	B	C	D	E	F	G	kg
PT31-1245	12	45	18	23	M12	57	10	0.053
PT31-1255		55		33		67		0.060
PT31-1265	12	65	18	43	M12	77	10	0.070
PT31-1275		75		53		87		0.078
PT31-1655	16	55	24	28	M16	72	14	0.120
PT31-1665		65		40		82		0.140
PT31-1675	16	75	24	50	M16	92	14	0.150



- Material : S45C(JIS)/CK45(DIN)
- Heat treated : HRC 32°~38°
- Surface finish : Black Oxide.
- Application : Used where quick hand assembly is needed.

PT33

KNURLED NUT

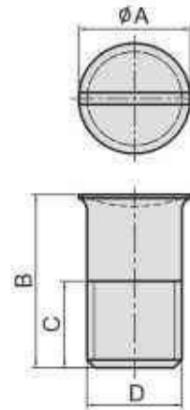


MODEL NO.	A	B	C	D	E	F	G	H	I	kg
PT33-0830	30	17	20	24	11	7	M4	3	M8	0.05
PT33-1035	35	20	28	30	13	8	M4	4	M10	0.09
PT33-1240	40	24	32	34	15	10	M5	4	M12	0.12
PT33-1645	45	30	35	38	18	12	M6	5	M16	0.18

PT34

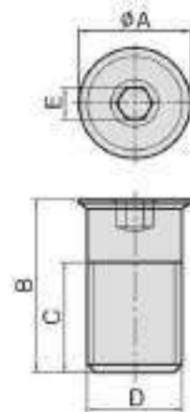
PROTECTION PLUG

S45C(JIS) / CK45(DIN)



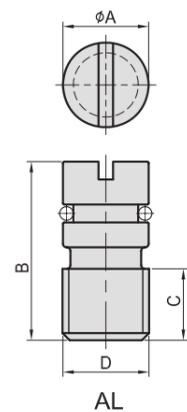
MODEL NO.	A	B	C	D	kg
PT34-10	11	19	10	M10	0.015
PT34-12	14	22	11	M12	0.018
PT34-16	18	25	13	M16	0.035

PBT



MODEL NO.	A	B	C	D	E	kg
PT34-12-PBT	14	22	14	M12	4	0.005
PT34-16-PBT	18	25	11	M16	5	0.010

AL



MODEL NO.	A	B	C	D	kg
PT34-12-AL	12	25	10	M12	0.007
PT34-16-AL	16	30	11	M16	0.015

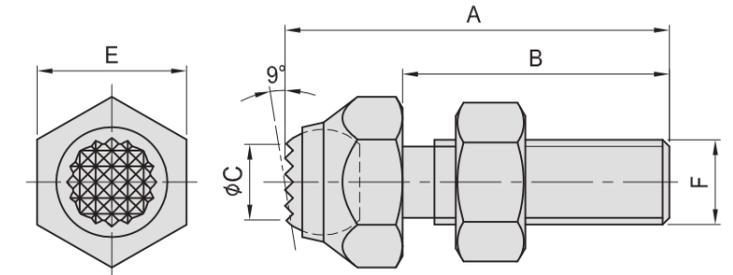
- Material : S45C(JIS) / CK45(DIN) / PBT/AL
- Application : Protect unused MTP holes from Chips & dirt.

PT35

SWIVELING JACK SCREW



- Material :
Body : S45C(JIS)
Ball : SUJ2(JIS)
- Heat treated :
Body : HRC 28°~32°
Ball : HRC 62°
- Surface finish : Black Oxide.



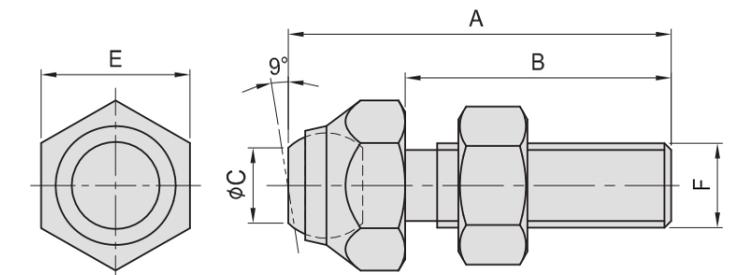
MODEL NO.	A	B	C	E	F	kg
PT35-0814	36	25	7	14	M8x1.25	0.025
PT35-1017	45	30	8	17	M10x1.50	0.055
PT35-1217	50	35	10	17	M12x1.75	0.055
PT35-1624	60	40	12	24	M16x2.00	0.140
PT35-2036	87	60	14	36	M20x2.50	0.330
PT35-2436	98	66	18	36	M24x2.00	0.660
PT35-3046	110	75	21	46	M30x2.00	1.100

PT36

SWIVELING JACK SCREW



- Material :
Body : S45C(JIS)
Ball : SUJ2(JIS)
- Heat treated :
Body : HRC 28°~32°
Ball : HRC 62°
- Surface finish : Black Oxide.



MODEL NO.	A	B	C	E	F	kg
PT36-0814	36	25	7	14	M8x1.25	0.025
PT36-1017	45	30	8	17	M10x1.50	0.055
PT36-1217	50	35	10	17	M12x1.75	0.055
PT36-1624	60	40	12	24	M16x2.00	0.140
PT36-2036	87	60	14	36	M20x2.50	0.330
PT36-2436	98	66	18	36	M24x2.00	0.660
PT36-3046	110	75	21	46	M30x2.00	1.100

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

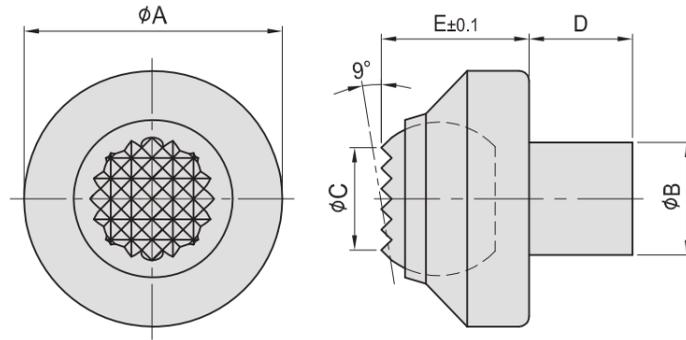
Column
for
Technical
Data

PT37

SWIVEL REST TIP



- Material :
Body : S45C(JIS)
Ball : SUJ2(JIS)
- Heat treated :
Body : HRC 28°~32°
Ball : HRC 62°
- Surface finish : Black Oxide.



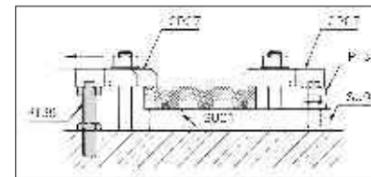
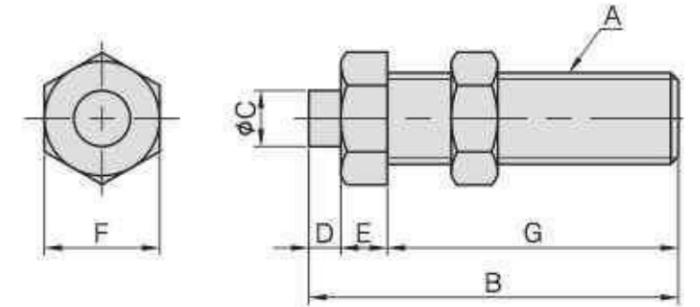
MODEL NO.	A	B	C	D	E	kg
PT37-1116	25	11	10	10	14.3	0.03
PT37-1118	30	11	12	10	18.0	0.04

PT39

CLAMP REST



- Material : S45C(JIS)
- Heat treated : HRC 35°
- Surface Finish : Black Oxide.



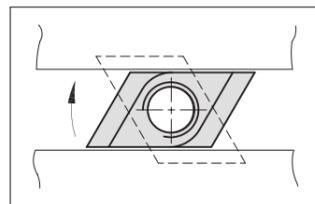
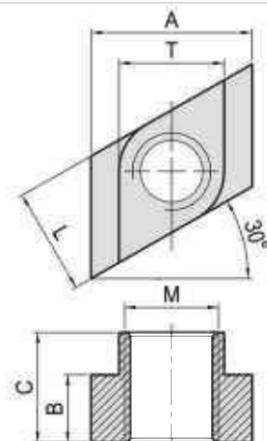
MODEL NO.	A	B	C	D	E	F	G	kg
PT39-1219	M12	75	9.5	6	9	19	60	0.09
PT39-1624	M16	80	11.0	7	10	24	63	0.17
PT39-2030	M20	100	12.0	8	12	30	80	0.35

PT38

ROTARY T-SLOT NUT



- Material : S45C(JIS)
- Heat treated : HRC 30°~35°
- Surface Finish : Black Oxide.



MODEL NO.	T	A	B	C	L	M	kg
PT38-1210	11.7	17.5	5.5	12.7	11.5	M10	0.010
PT38-1412	13.8	22.2	8.7	15.8	13.5	M12	0.023
PT38-1614	15.8	25.4	8.7	15.8	15.5	M14	0.030
PT38-1816	17.8	28.5	11.1	19.0	17.5	M16	0.030
PT38-2018	19.7	31.7	11.9	19.0	19.5	M18	0.044
PT38-2220	21.7	36.0	13.8	25.4	21.5	M20	0.062
PT38-2420	23.5	38.2	14.0	25.4	23.5	M20	0.092
PT38-2824	26.9	41.3	17.5	28.5	27.5	M24	0.162

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

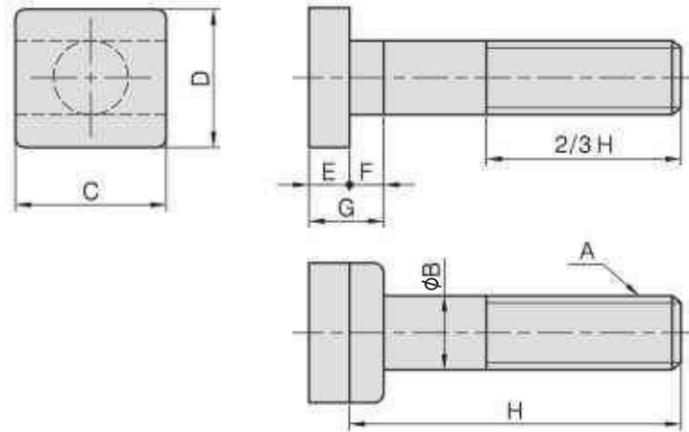
JER-
GENS

OTHER

Column
for
Technical
Data

PT40

T-SLOT BOLT



- Material : S45C(JIS)steel forging
- Heat treated : HRC 32°~38°
- Surface finish : Black Oxide.

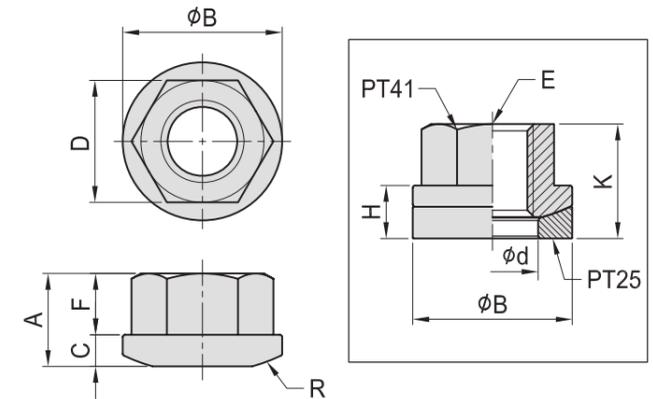
MODEL NO.	A	B	C	D	E	F	G	H	kg
PT40-12050								50	0.054
PT40-12075								75	0.057
PT40-12100								100	0.110
PT40-12125	M12	12	26	22	7	6	13	125	0.125
PT40-12150								150	0.140
PT40-12175								175	0.170
PT40-12200								200	0.185
PT40-16050								50	0.130
PT40-16075								75	0.160
PT40-16100								100	0.200
PT40-16125	M16	16	32	27	8	8	16	125	0.230
PT40-16150								150	0.270
PT40-16175								175	0.305
PT40-16200								200	0.325
PT40-18075								75	0.270
PT40-18100								100	0.320
PT40-18125	M18	18	40	30	11	11	22	125	0.340
PT40-18150								150	0.385
PT40-18175								175	0.445
PT40-18200								200	0.490
PT40-20075								75	0.290
PT40-20100								100	0.350
PT40-20125								125	0.400
PT40-20150	M20	20	40	30	11	11	22	150	0.455
PT40-20175								175	0.505
PT40-20200								200	0.560
PT40-20250								250	0.660
PT40-20315								315	1.000
PT40-22100								100	0.450
PT40-22125								125	0.510
PT40-22150	M22	22	40	38	14	13	27	150	0.580
PT40-22175								175	0.635
PT40-22200								200	0.700
PT40-24100								100	0.650
PT40-24125								125	0.690
PT40-24150	M24	24	50	44	16	15	31	150	0.775
PT40-24175								175	0.855
PT40-24200								200	0.925



- Material : S45C(JIS)
- Heat treated : HRC 32°~35°
- Surface finish : Black Oxide.

PT41

SWIVEL FLANGE NUTS



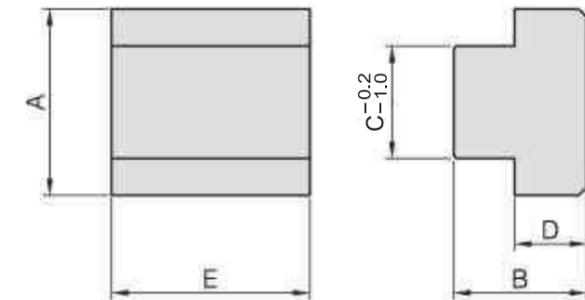
MODEL NO.	A	B	C	D	d	E	F	H	K	R	kg
PT41-0813	12.0	19	3.0	13	10	M8	7.8	7	15.0	30	0.021
PT41-1017	13.0	22		17	12	M10	8.4	8	16.5		0.032
PT41-1219	14.3	26	4.0	19	15	M12	9.0	10	19.0	32	0.046
PT41-1422	17.5	28	4.5	22	16	M14	11.4	11	22.0		0.066
PT41-1624	20.0	32		24	19	M16	12.8		23.8	40	0.103
PT41-1827	20.6	35		27	20	M18	13.6	12	25.5		0.106
PT41-2030	25.0	40	6.0	30	23	M20	16.6	14	31.0	48	0.183
PT41-2232	25.4	45		32	26	M22	16.9	15	31.5	70	0.210
PT41-2436	28.0	50	36	28	M24	18.7	33.5				

PT42

T-SLOT NUT-BLANK



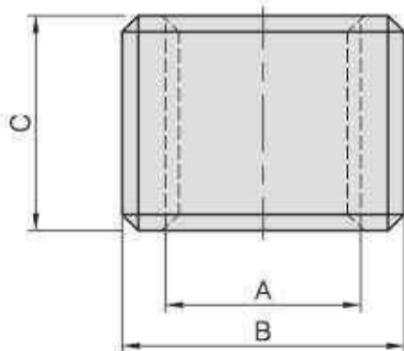
- Material : S45C(JIS)
- Surface finish : Black Oxide.



MODEL NO.	A	B	C	D	E	kg
PT42-1022	15.8	12.7	10	4.7	22	0.026
PT42-1222	17.5		12	5.5		0.032
PT42-1428	22.2	15.8	14	8.7	28	0.064
PT42-1628	25.4		16	8.7		0.073
PT42-1830	28.5	19.0	18	11.1	30	0.112
PT42-2030	31.7		20	11.9		0.128
PT42-2238	36.0	25.0	22	13.8	38	0.223
PT42-2438	38.2		24	14.0		0.239
PT42-2644	41.3	25.0	26	15.8	44	0.309
PT42-2850	44.0	28.5	28	17.5	50	0.403

PT43

THREADED INSERT

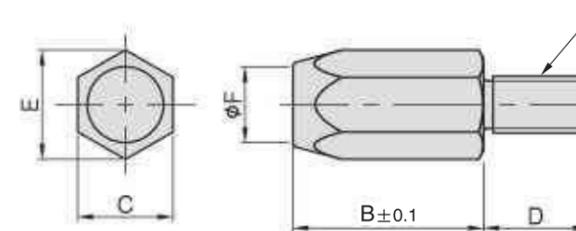


- Material : S45C(JIS)
- Heat treated : HRC 32°~35°
- Surface finish : Black Oxide.

MODEL NO.	A	B	C	kg
PT43-0612-10	M6x1.00	M12x1.5	10	0.005
PT43-0814-12	M8x1.25	M14x1.5	12	0.008
PT43-1016-15	M10x1.50	M16x1.5	15	0.010
PT43-1218-16	M12x1.75	M18x2.0	16	0.015
PT43-1420-18	M14x2.00	M20x2.0	18	0.300
PT43-1622-14	M16x2.00	M22x2.0	14	0.020
PT43-1622-20	M16x2.00	M22x2.0	20	0.025
PT43-2028-25	M20x2.50	M28x2.0	25	0.050

PT45

FEET(FLAT END)

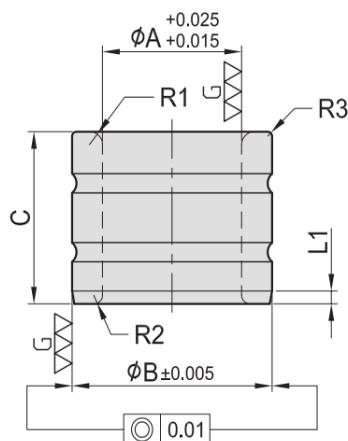


- Material : S45C(JIS)
- Surface finish : Black Oxide.
- High frequency quenching.

MODEL NO.	A	B	C	D	E	F	kg
PT45-0610	M 6	10	10	11	11.5	8	0.008
PT45-0620		20					0.013
PT45-0815	M 8	15	14	13	16.1	10	0.018
PT45-0830		30					0.033
PT45-1020	M10	20	17	16	19.6	13	0.044
PT45-1040		40					0.080
PT45-1225	M12	25	19	20	21.9	15	0.070
PT45-1250		50					0.126
PT45-1630	M16	30	24	25	27.7	20	0.130
PT45-1660		60					0.230
PT45-2030	M20	30	30	25	34.6	28	0.200
PT45-2060		60					0.360

PT44

POSITIONING BUSHING

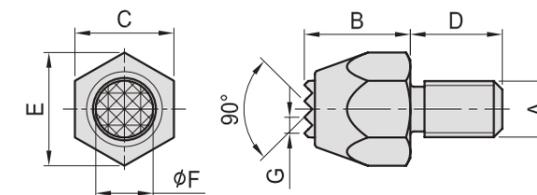


- Material : SUJ2(JIS)
- Heat treated : HRC 60°

MODEL NO.	A	B	C	R1	R2	R3	L1	kg
PT44-0613-10	6	13	10	1.0	0.5	0.5	1.25	0.007
PT44-0815-10	8	15						0.009
PT44-1018-12	10	18	12	1.5	0.5	0.5	1.50	0.015
PT44-1220-12	12	20						0.017
PT44-1423-16	14	23	16	1.5	1.0	0.5	1.50	0.030
PT44-1523-16	15							0.028
PT44-1623-16	16	23	16	1.5	1.0	0.5	1.50	0.025
PT44-1623-20	20							0.030
PT44-1826-20	18	26	20	1.5	1.0	0.5	1.50	0.040
PT44-2030-20	20	30						0.060
PT44-2230-20	22	30	20	2.0	1.5	0.5	2.50	0.050
PT44-2535-20	25	35						0.070
PT44-3042-25	30	42	25	2.0	1.5	0.5	2.50	0.130
PT44-4055-30	40	55						0.255
PT44-5070-30	50	70	30	3.0	2.0	1.0	3.00	0.430

PT46

FEET(SERRATED END)



Tooth plate

- Material : SKH9(JIS) / S18-1-2-5(DIN)
- Heat treated : HRC 60°

Tooth plate

- Material : Extremely hard.

- Material : S45C(JIS)/34CrMo4(DIN)
- Heat treated : HRC 28 °~ 32 °
- Serrated surface to be heat treated with high frequency quenching.
- Surface finish : Black Oxide.
- Application : Multipurpose work support and clamping unit, ideal for rough parts.
- Features : Excellent holding power from the serrated face.

MODEL NO.	A	B	C	D	E	F	G	kg	MODEL NO.	A	B	C	D	E	F	G	kg	
PT46-0610	M6	10	10	11	11.5	6.5	2.3	0.008	PT46-0610-K	M6	10	10	11	11.5	6.5	2.3		0.008
PT46-0620		20						0.013	PT46-0620-K		20							0.013
PT46-0815	M8	15	14	13	16.1	8.1	2.3	0.018	PT46-0815-K	M8	15	14	13	16.1	8.1	2.3		0.018
PT46-0830		30						0.033	PT46-0830-K		30							0.033
PT46-1020	M10	20	17	16	19.6	11.4	3.0	0.044	PT46-1020-K	M10	20	17	16	19.6	11.4	3.0		0.044
PT46-1040		40						0.080	PT46-1040-K		40							0.080
PT46-1225	M12	25	19	20	21.9	13.0	3.0	0.070	PT46-1225-K	M12	25	19	20	21.9	13.0	3.0		0.070
PT46-1250		50						0.126	PT46-1250-K		50							0.126
PT46-1630	M16	30	24	25	27.7	16.2	3.0	0.130	PT46-1630-K	M16	30	24	25	27.7	16.2	3.0		0.130
PT46-1660		60						0.230	PT46-1660-K		60							0.230
PT46-2030	M20	30	30	25	34.6	25.2	3.0	0.200	PT46-2030-K	M20	30	30	25	34.6	25.2	3.0		0.200
PT46-2060		60						0.360	PT46-2060-K		60							0.360

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

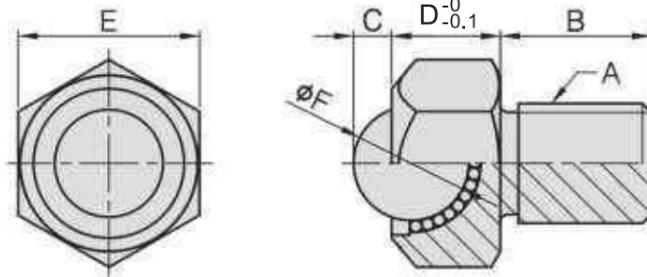
Column
for
Technical
Data

PT47-49

BALL ROLLERS

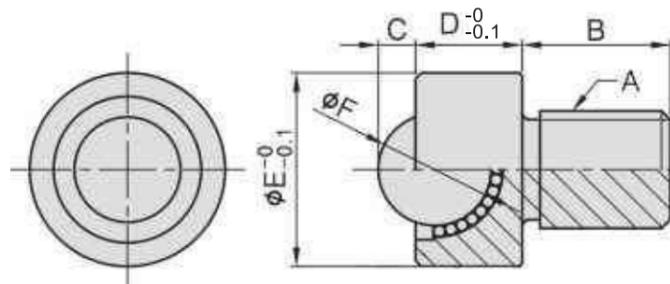
• Material : SUS304(JIS)

PT47



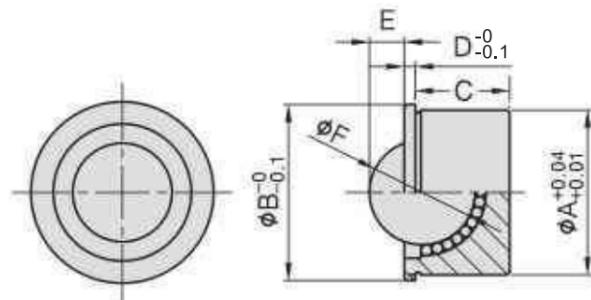
MODEL NO.	A	B	C	D	E	F	N(kgf)
PT47-1615	M16	20	3.3	16	24	15.87	343(35)
PT47-2018	M20	25	5.3	19	30	19.05	412(42)

PT48



MODEL NO.	A	B	C	D	E	F	G	N(kgf)
PT48-1615	M16	20	3.3	16	27	15.87	23	343(35)
PT48-2018	M20	25	5.3	19	33	19.05	29	412(42)

PT49



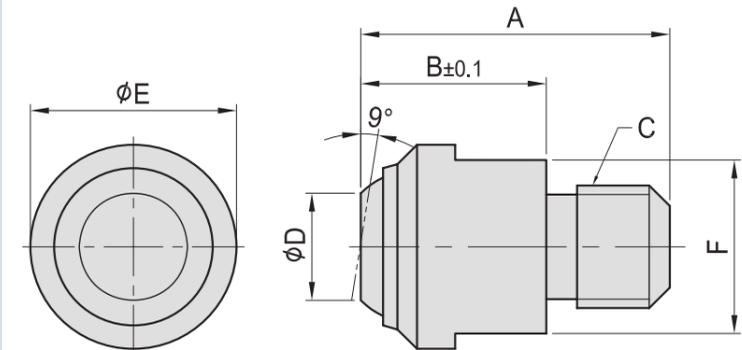
MODEL NO.	A	B	C	D	E	F	N(kgf)
PT49-2614	24	26	14	1.5	5.3	15.87	343(35)
PT49-3217	30	32	17	2	6.3	19.05	412(42)



- Material :
Bolt : S45C(JIS) / CK45(DIN)
Ball : SUJ2(JIS) / 100Cr6(DIN)
- Heat treated :
Bolt : HRC 28°~32°
Ball : HRC 62°
- Surface finish : Black Oxide.
- Application : Precision swivel ball that can be used either as a contact bolt or as a rest pad. As contact bolts, these swivel-ball units are ideal for evenly distributing clamping pressure on sloped or uneven surfaces.
- Features : Precision ground top surface.

PT50

SMOOTH BALL END BOLT



MODEL NO.	A	B	C	D	E	F	max (KN)	g
PT50-0613	21	13	M6x1.00	7.2	13	11	10	12
PT50-0813	21	13	M8x1.25	7.2	13	11	10	13
PT50-0818	28	18		10.5	20	17	25	38
PT50-1018	28	18	M10x1.50	10.5	20	17	25	40
PT50-1218	30		M12x1.75					
PT50-1627	43	27	M16x2.00	20.0	30	27	90	150
PT50-2035	55	35	M20x2.50	34.5	50	41	165	520

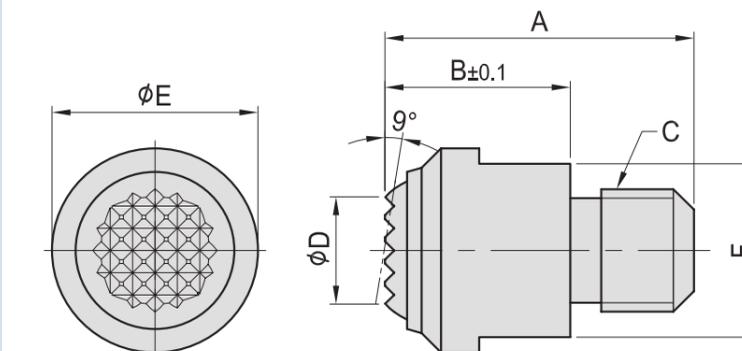
*Applies only when the minimum bore depth is kept to.



- Material :
Bolt : S45C(JIS) / CK45(DIN)
Ball : SUJ2(JIS) / 100Cr6(DIN)
- Heat treated :
Bolt : HRC 28°~32°
Ball : HRC 62°
- Surface finish : Black Oxide.
- Application : Precision swivel ball that can be used either as a contact bolt or as a rest pad. As contact bolts, these swivel-ball units are ideal for evenly distributing clamping pressure on sloped or uneven surfaces.
- Features : serrated gripper is ideal for rough surfaces.

PT51

SMOOTH BALL END BOLT



MODEL NO.	A	B	C	D	E	F	max (KN)	g
PT51-0613	21	13	M6x1.00	7.2	13	11	10	12
PT51-0813	21	13	M8x1.25	7.2	13	11	10	13
PT51-0818	28	18		10.5	20	17	25	38
PT51-1018	28	18	M10x1.50	10.5	20	17	25	40
PT51-1218	30		M12x1.75					
PT51-1627	43	27	M16x2.00	20.0	30	27	90	150
PT51-2035	55	35	M20x2.50	34.5	50	41	165	520

*Applies only when the minimum bore depth is kept to.

- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JER-GENS
- OTHER

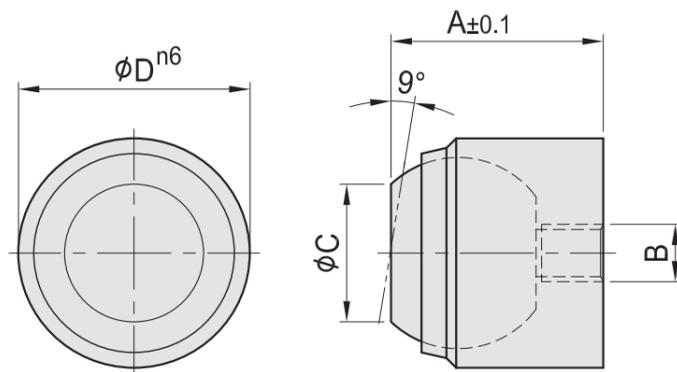
Column for Technical Data

PT52

SMOOTH BALL END BOLT



- Material :
Bolt : S45C(JIS) / CK45(DIN)
Ball : SUJ2(JIS) / 100Cr6(DIN)
- Heat treated :
Bolt : HRC 28°~32°
Ball : HRC 62°
- Surface finish : Black Oxide.
- Application : Precision swivel ball that can be used either as a contact bolt or as a rest pad. As contact bolts, these swivel-ball units are ideal for evenly distributing clamping pressure on sloped or uneven surfaces.
- Features : Precision ground top surface.



MODEL NO.	A	B	C	D	max (kN)	g
PT52-0311	11	M3x0.5	7.2	12	10	8
PT52-0417	17	M4x0.7	10.5	18	25	30
PT52-0525	25	M5x0.8	20.0	28	90	80

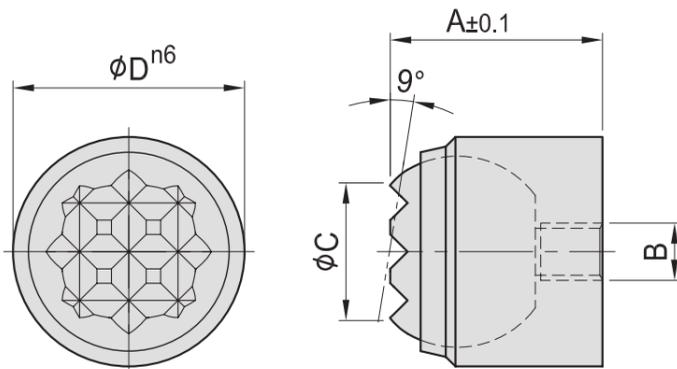
*Applies only when the minimum bore depth is kept to.

PT53

SMOOTH BALL END BOLT



- Material :
Bolt : S45C(JIS) / CK45(DIN)
Ball : SUJ2(JIS) / 100Cr6(DIN)
- Heat treated :
Bolt : HRC 28°~32°
Ball : HRC 62°
- Surface finish : Black Oxide.
- Application : Precision swivel ball that can be used either as a contact bolt or as a rest pad. As contact bolts, these swivel-ball units are ideal for evenly distributing clamping pressure on sloped or uneven surfaces.
- Features : serrated gripper is ideal for rough surfaces.



MODEL NO.	A	B	C	D	max (kN)	g
PT53-0311	11	M3x0.5	7.2	12	10	8
PT53-0417	17	M4x0.7	10.5	18	25	30
PT53-0525	25	M5x0.8	20.0	28	90	80

*Applies only when the minimum bore depth is kept to.

PT55

SPRING LOCATING PINS

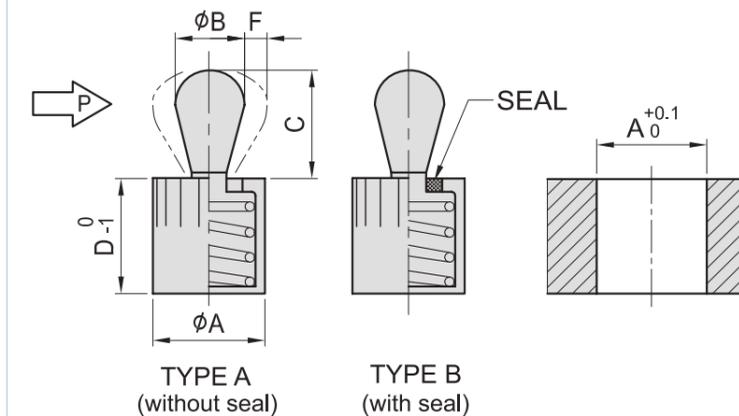


TYPE A

- Body Material : Aluminum
Surface finish : Silver passivated
- Pin Material : Steel
Heat treated : HRC 45°
Surface finish : Galvanized
- Spring Material : Spring steel wire

TYPE B

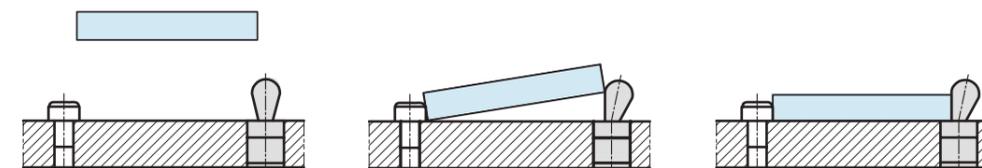
- Body Material : Aluminum
Surface finish : Silver passivated
- Pin Material : Steel
Heat treated : HRC 45°
Surface finish : Galvanized
- Spring Material : Spring steel wire
- Seal Material : CR



Note :

- P(N) : The MAX Strength when pin moves
- Application temperature with steel pins up to 250°C
- See P.6-34 Installtion method
- See P.6-34 Installtion tool

Example :



TYPE A

MODEL NO.	A	B	C	D	F	P(N)	INSTALLATION TOOLS	g
PT55A-0603-010						10		0.6
PT55A-0603-020	6	3	4.0	7	0.5		PT57-0603	20
40								
100								
PT55A-1005-020	10	5	6.7	11	0.8		PT57-1006	20
50								
100								
150								
PT55A-1006-040	10	6	10.7	11	1.0		PT57-1006	40
75								
150								
200								
PT55A-1208-050	12	8	13.9	13	1.3		PT57-1208	50
100								
200								
PT55A-1610-100	16	10	16.7	17	1.6		PT57-1610	100
200								
300								

TYPE B

MODEL NO.	A	B	C	D	F	P(N)	INSTALLATION TOOLS	g
PT55B-0603-010						10		0.6
PT55B-0603-020	6	3	4	7	0.5		PT57-0603	20
40								
100								
PT55B-1005-020	10	5	6	12	0.8		PT57-1006	20
50								
100								
150								
PT55B-1006-040	10	6	10	12	1.0		PT57-1006	40
75								
150								
200								
PT55B-1208-050	12	8	13	14	1.3		PT57-1208	50
100								
200								
PT55B-1610-100	16	10	16	18	1.6		PT57-1610	100
200								
300								

PT56

SPRING LOCATING PINS

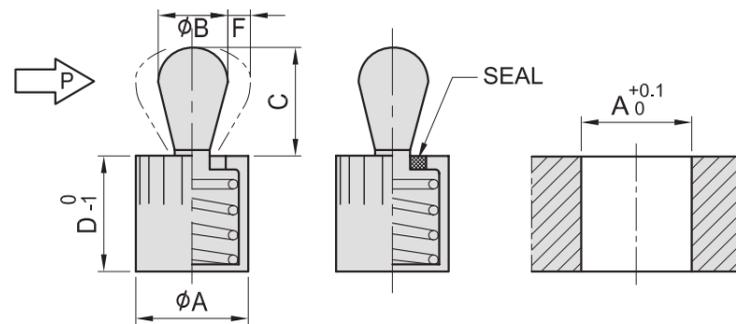


TYPE A

- Body Material : Aluminum
Surface finish : Silver passivated
- Pin Material : POM
- Spring Material : Spring steel wire

TYPE B

- Body Material : Aluminum
Surface finish : Silver passivated
- Pin Material : POM
- Spring Material : Spring steel wire
- Seal Material : CR



TYPE A
(without seal)

TYPE B
(with seal)

Note :

- P(N) : The MAX Strength when pin moves
- Application temperature with plastic pins up to 80°C
- See P.6-34 Installtion method
- See P.6-34 Installtion tool

TYPE A

MODEL NO.	A	B	C	D	F	P(N)	INSTALLATION TOOLS	g
PT56A-0603-010	6	3	4.0	7	0.5	10	PT57-0603	0.4
PT56A-1005-020	10	5	6.7	11	0.8	20	PT57-1006	1.3
PT56A-1006-040	10	6	10.7	11	1.0	40	PT57-1006	1.5
PT56A-1208-050	12	8	13.9	13	1.3	50	PT57-1208	2.9
PT56A-1610-100	16	10	16.7	17	1.6	100	PT57-1610	6.6

TYPE B

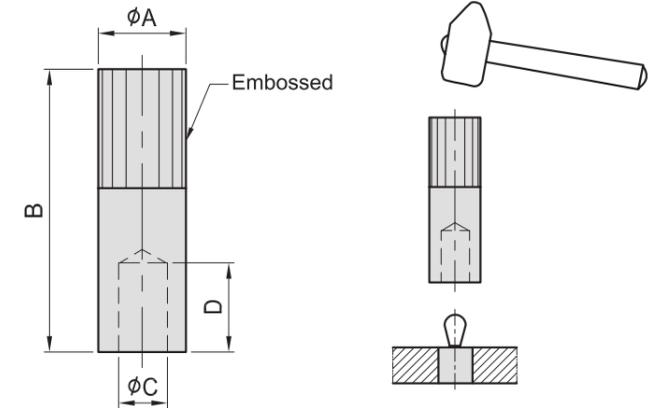
MODEL NO.	A	B	C	D	F	P(N)	INSTALLATION TOOLS	g
PT56B-0603-010	6	3	4	7	0.5	10	PT57-0603	0.4
PT56B-1005-020	10	5	6	12	0.8	20	PT57-1006	1.3
PT56B-1006-040	10	6	10	12	1.0	40	PT57-1006	1.5
PT56B-1208-050	12	8	13	14	1.3	50	PT57-1208	3.0
PT56B-1610-100	16	10	16	18	1.6	100	PT57-1610	6.7

PT57

INSTALLATION TOOLS



- Material : S45C
- Surface finish : Black Oxid



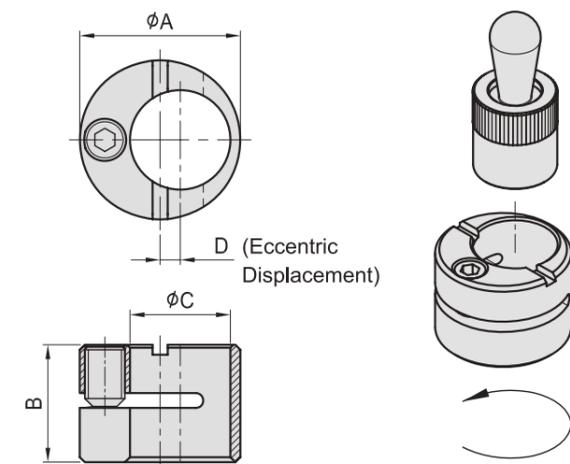
MODEL NO.	A	B	C	D	g
PT57-0603	8	50	3.2	6	19
PT57-1006	12	60	6.2	13	50
PT57-1208	14	60	8.1	16	65
PT57-1610	18	60	10.2	19	106

PT58

ECCENTRIC LINERS



- Material : S45C
- Surface finish : Black Oxid



MODEL NO.	A	B	C	D	g
PT58-0612	12	9.9	6	2	5.5
PT58-1016	16	11.9	10	2	9.4
PT58-1218	18	13.9	12	2	12.8
PT58-1625	25	17.9	16	3	34.0

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

Column
for
Technical
Data

《 INSTALLATION 》

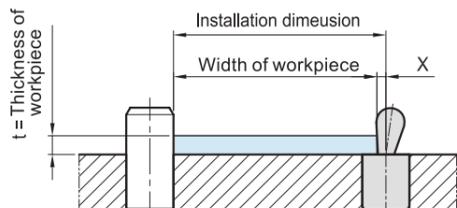
■ CALCULATING LOCATION FOR INSTALLATION

Based on the proposed usage of the spring locating pins, choose the correct specifications and size, and calculate as follows:

Installation dimension = width of workpiece + X

X: Distance from the edge of the workpiece

to the center of spring locating pin as per the drawing.



■ X CALCULATION

There are two methods for calculating X dimension based on the thickness of the workpiece.

(1) When thickness of workpiece < H

$$X = B/2 - F - [(C - B/2 - t) \times 0.123]$$

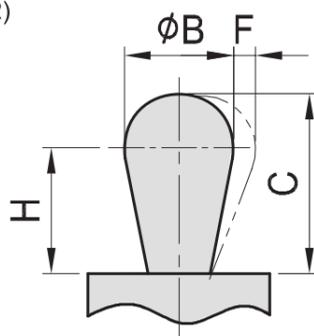
(2) When thickness of workpiece > H

$$X = B/2 - F$$

If thickness of workpiece is greater than H, then the X value of remains the same, regardless of the thickness of the workpiece.

< H CALCULATION >

Formula : $H = C - (B/2)$



< X Reference Table >

	MODEL NO.		H	Width of workpiece (t)mm							
	STEEL	PLASTIC		1	2	3	4	5	6	8	
TYPE A without seal	PT55A-0603-010	PT56A-0603-010	2.5	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	PT55A-0603-020										
	PT55A-0603-040										
	PT55A-1005-020	PT56A-1005-020	4.2	-	1.5	1.7				1.7	1.7
	PT55A-1005-050										
	PT55A-1005-100						1.7	1.7			
	PT55A-1006-040	PT56A-1006-040	7.7	-	-	-				1.9	1.9
	PT55A-1006-075										
	PT55A-1006-150										
	PT55A-1208-050	PT56A-1208-050	9.9	-	-	-	-	-	-	2.5	2.7
	PT55A-1208-100										
	PT55A-1208-200										
PT55A-1610-100	PT56A-1610-100	11.7	-	-	-	-	-	-	-	3.1	
PT55A-1610-200											
PT55A-1610-300											
TYPE B with seal	PT55B-0603-010	PT56B-0603-010	2.5	0.8	1.0	1.0	1.0	1.0	1.0	1.0	
	PT55B-0603-020										
	PT55B-0603-040										
	PT55B-1005-020	PT56B-1005-020	3.5	-	1.5	1.7				1.7	1.7
	PT55B-1005-050										
	PT55B-1005-100						1.7	1.7			
	PT55B-1006-040	PT56B-1006-040	7.0	-	-	-				1.9	1.9
	PT55B-1006-075										
	PT55B-1006-150										
	PT55B-1208-050	PT56B-1208-050	9.0	-	-	-	-	-	-	2.5	2.7
	PT55B-1208-100										
	PT55B-1208-200										
	PT55B-1610-100	PT56B-1610-100	11.0	-	-	-	-	-	-	-	3.1
	PT55B-1610-200										
	PT55B-1610-300										

■ INSTALLATION METHOD

Apply yellow grease and press it into place while installing.

《 Example 1 》

P/N :

Spring locating pin PT55B-1006-075
Steel pin(B type)

Width of workpiece 100mm
Thickness of workpiece 2.3mm

< Calculation of H >

Comparison of thickness of workpiece and H size.

$$H = C - B/2 = 10 - 6/2 = 7 \text{ (mm)}$$

Because the thickness of the workpiece is bigger than H, use the second calculation method.

< Calculation of X >

$$\begin{aligned} X &= B/2 - F - [(C - B/2 - t) \times 0.123] \\ &= 6/2 - 1 - [(10 - 6/2 - 2.3) \times 0.123] \\ &= 3 - 1 - [(4.7) \times 0.123] \\ &= 1.4 \text{ (mm)} \end{aligned}$$

< Installation Location calculating >

$$\begin{aligned} \text{Installation location} &= \text{Width of workpiece} + X \\ &= 100 + 1.4 \\ &= 101.4 \text{ (mm)} \end{aligned}$$

《 Example 2 》

P/N :

Spring locating pin PT56A-1610-100
POM (A type)

Width of workpiece 300mm
Thickness of workpiece 40mm

< Calculation of H >

Comparison of thickness of workpiece and H size.

$$H = C - B/2 = 16.7 - 10/2 = 11.7 \text{ (mm)}$$

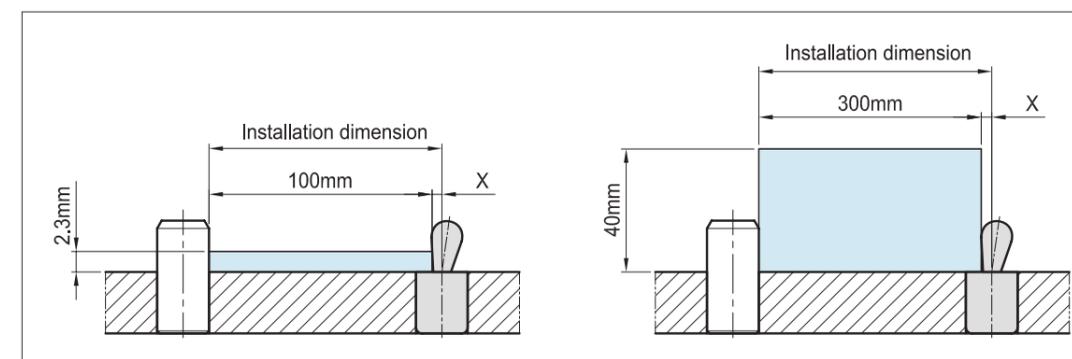
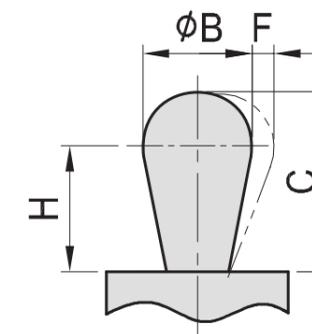
Because the thickness of the workpiece is bigger than H, use the second calculation method.

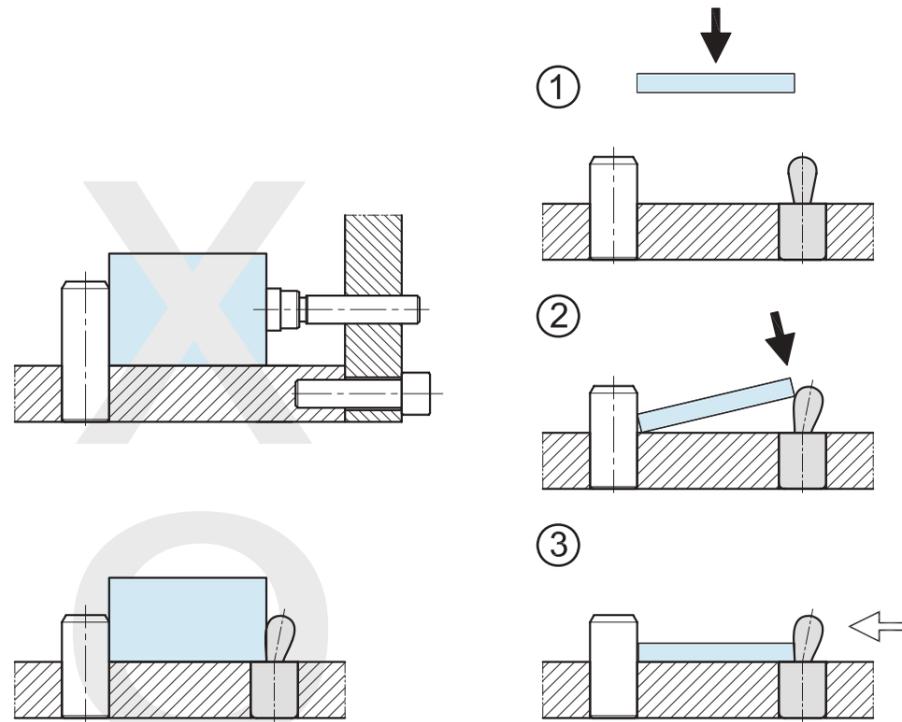
< Calculation of X >

$$\begin{aligned} X &= B/2 - F \\ &= 10/2 - 1.6 \\ &= 3.4 \text{ (mm)} \end{aligned}$$

< Calculation of Installation Location >

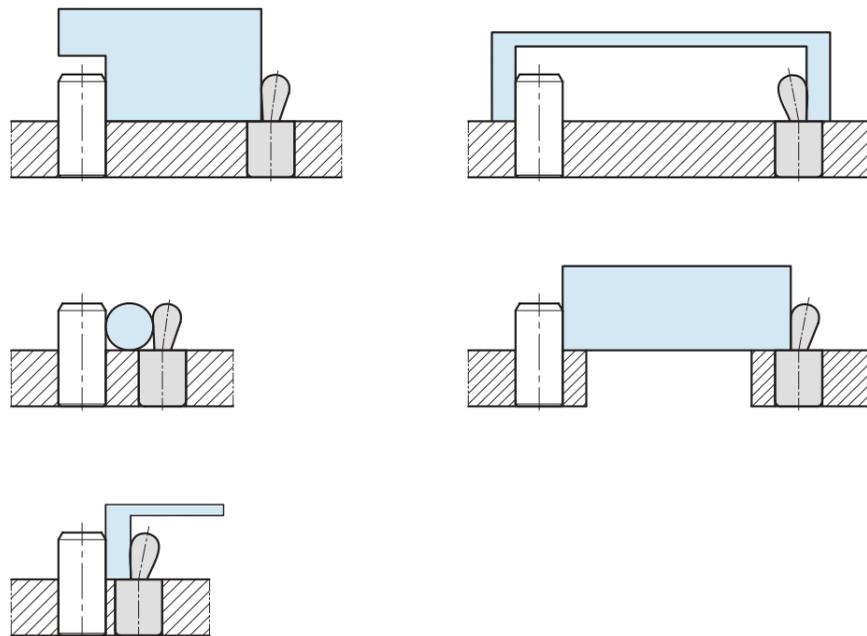
$$\begin{aligned} \text{Installation Location} &= \text{Width of workpiece} \\ &= 300 + 3.4 \\ &= 303.4 \text{ (mm)} \end{aligned}$$





< Compared with traditional method, simple design can lower cost >

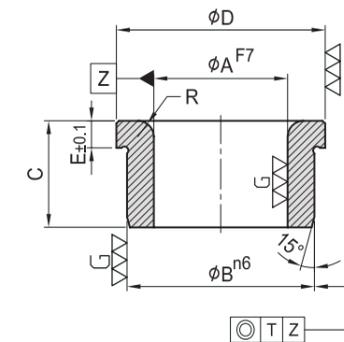
■ Application:



- Material : SUJ2
- Surface finish : HRC 60°

PT59

POSITIONING BUSHING



MODEL NO.	A	B	C	D	E	R	T
PT59-0615-10	6	12	10	15	3	1.5	0.01
PT59-0818-12	8	15	12	18	3	2.0	0.01
PT59-1022-12	10	18		22	4		
PT59-1266-16	12	22	16	26	4	2.0	0.01
PT59-1426-16	14						
PT59-1530-16	15	26	16	30	4	2.0	0.01
PT59-1630-16	16						
PT59-1834-20	18	30	20	34	5	3.0	0.01
PT59-2034-20	20						
PT59-2239-20	22	35	20	39	5	3.0	0.01
PT59-2539-20	25						
PT59-3052-25	30	48	25	52	5	3.0	0.01
PT59-4059-30	40	55	30	59			
PT59-5074-30	50	70	30	74	6	3.5	0.01

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

Column
for
Technical
Data



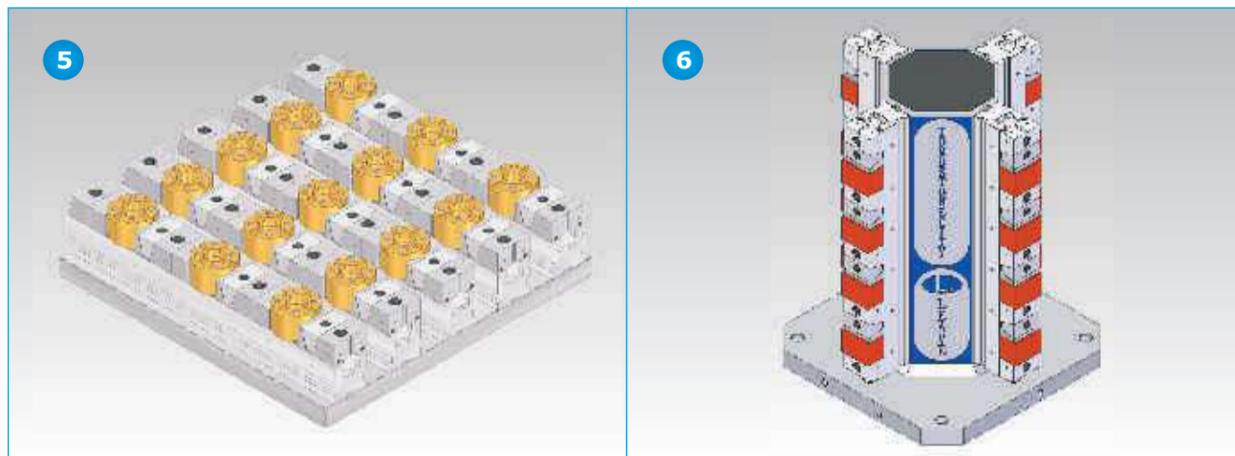
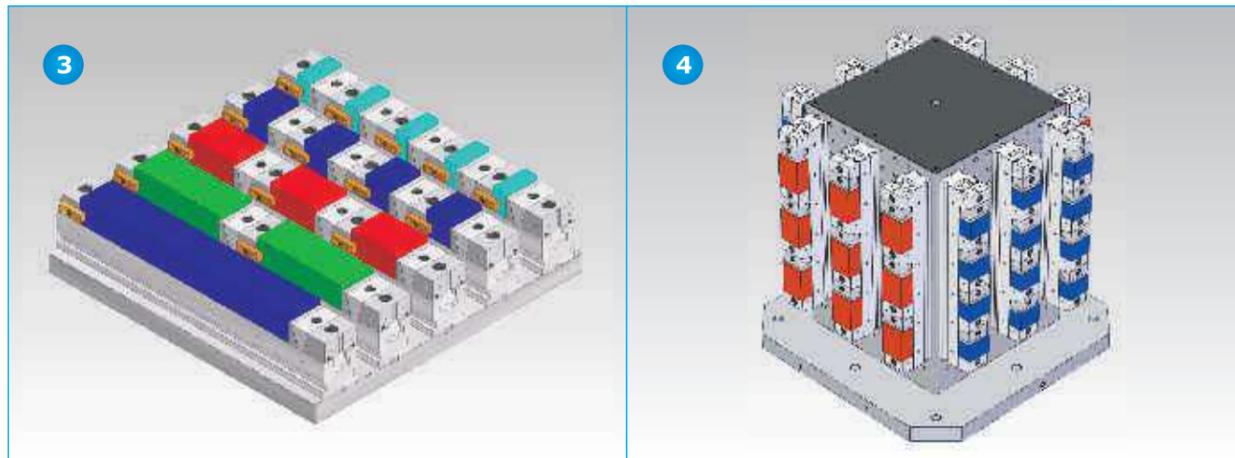
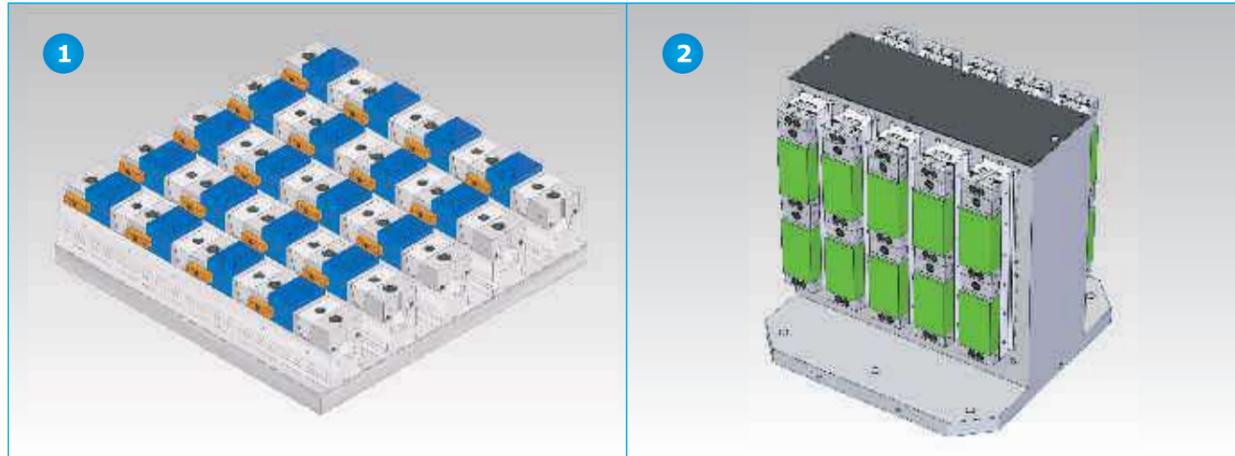
SVF SERIES MODULAR VISE SYSTEM

SVF-A,B,BE,C, SVF-CB, SVFX

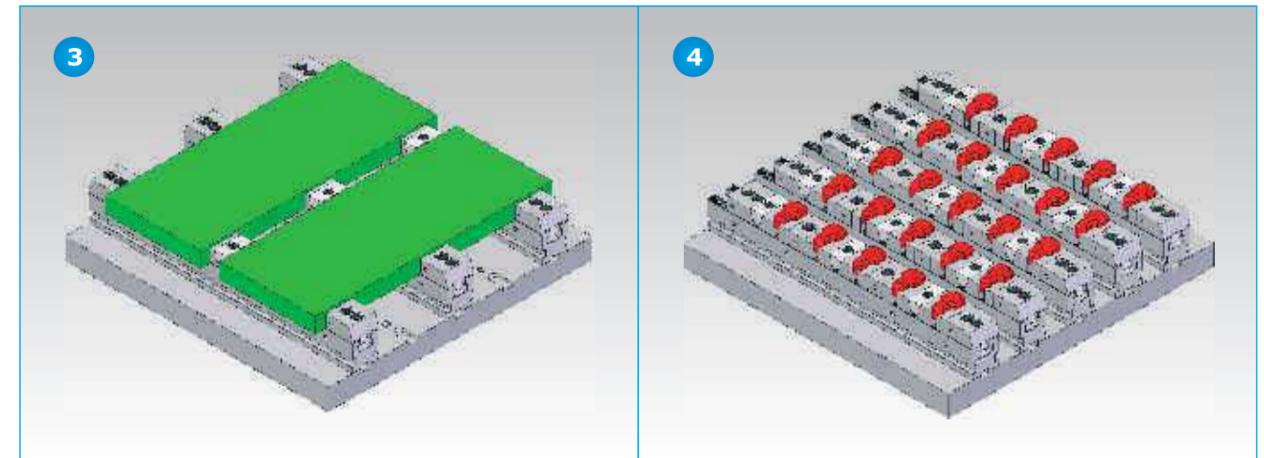
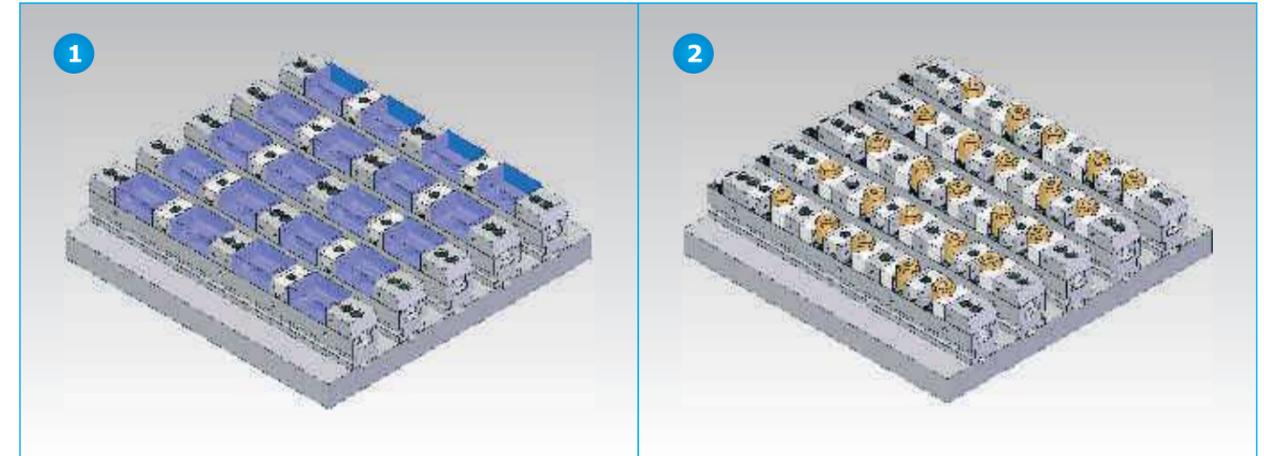


FLEXIBLE LINE UP VISE SERIES
M/C OCTAGONAL CUBE
INDEXING TABLE

Clamping Examples

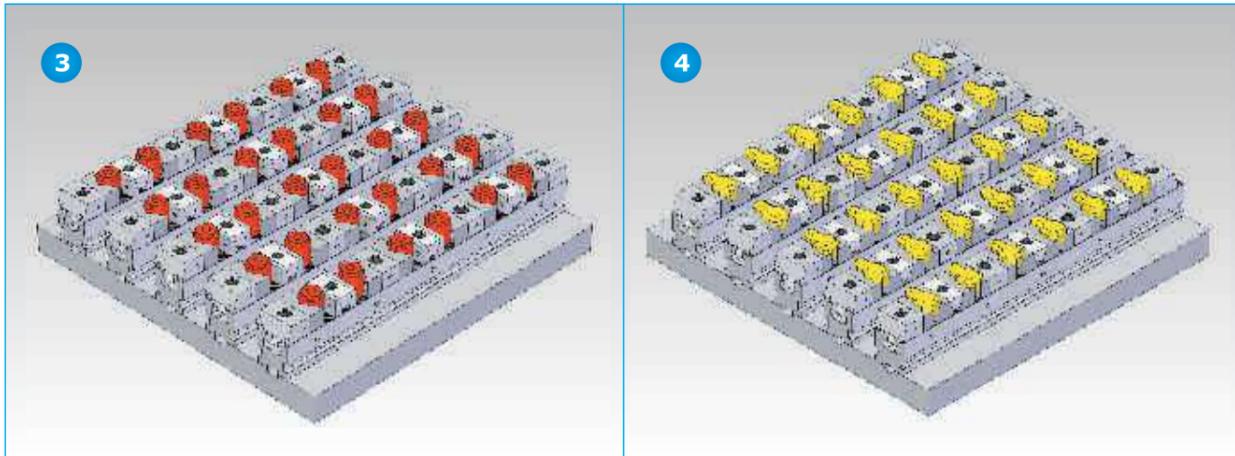
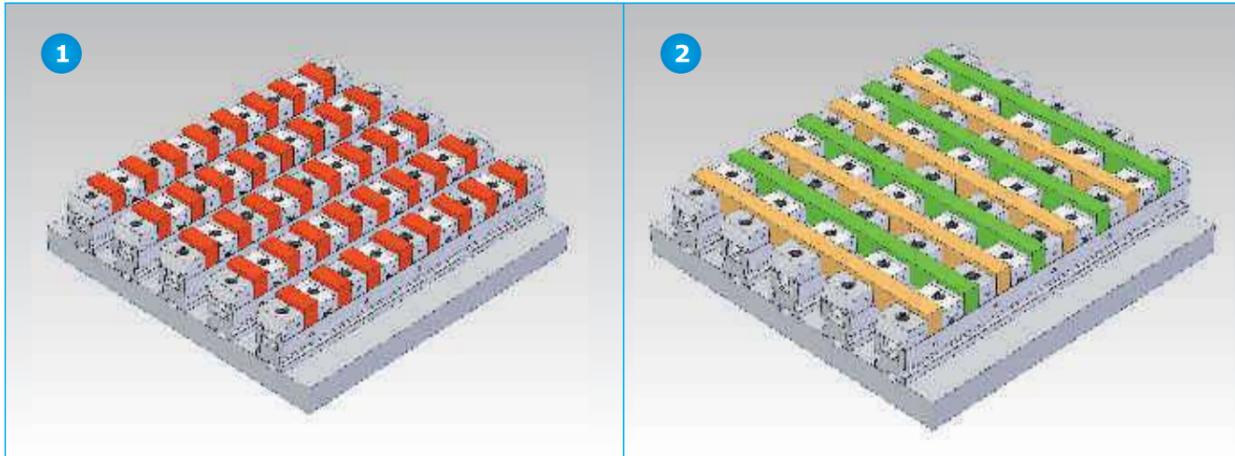


Clamping Examples

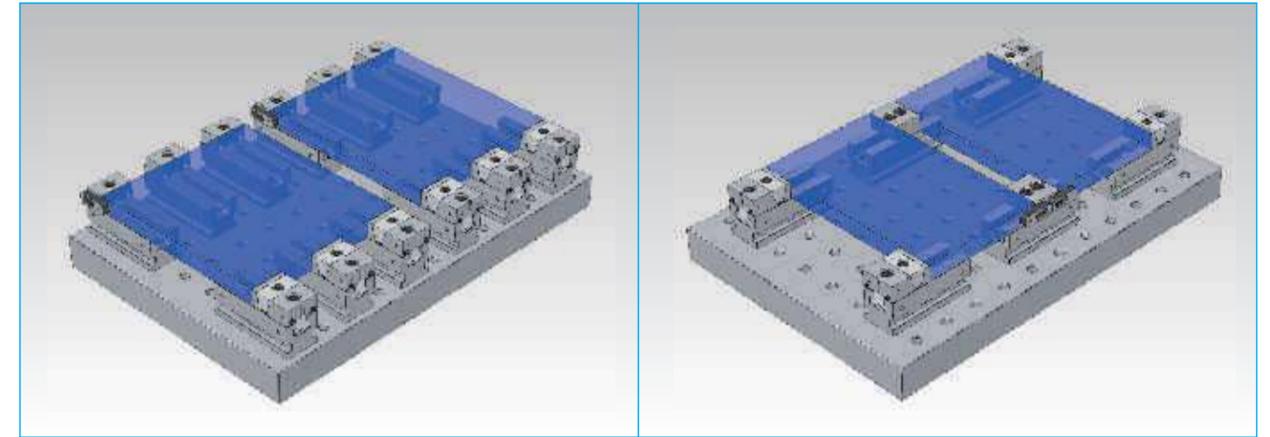


- BP
- BPA
- BC
- CP
- SU
- PT
- SVF**
- ALV
- OK-VISE
- JER-GENS
- OTHER
- Column for Technical Data

Clamping Examples



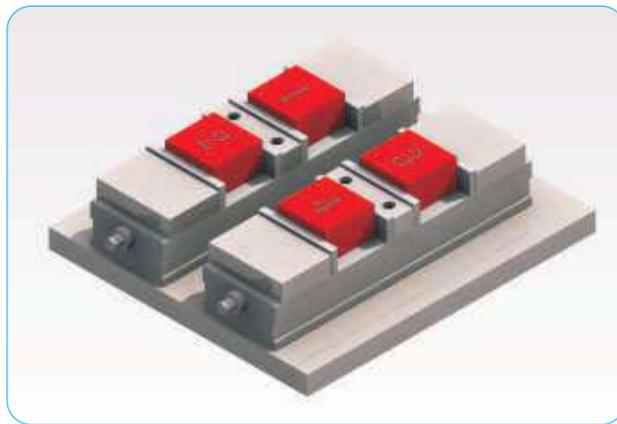
Clamping Examples



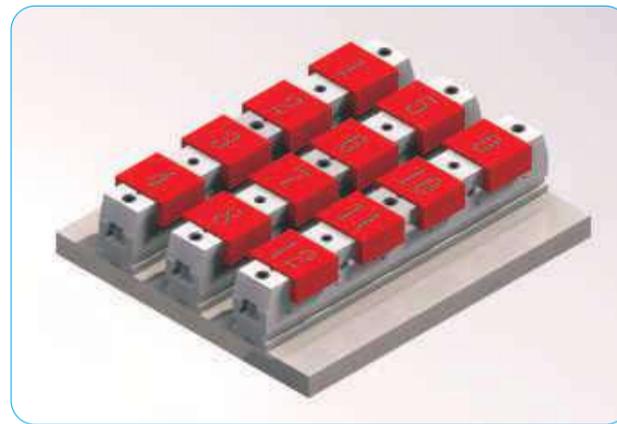
- BP
- BPA
- BC
- CP
- SU
- PT
- SVF**
- ALV
- OK-VISE
- JER-GENS
- OTHER
- Column for Technical Data

The SVF vise system will:

- Optimize your machine real estate to the fullest extent
- Increase production
- Streamline the work holding process
- Give you a true competitive edge



Traditional vise



SVF series vise

SVF-50 : 1000 kgf
Clamping force: SVF-72 : 2000 kgf
SVF-100: 3000 kgf

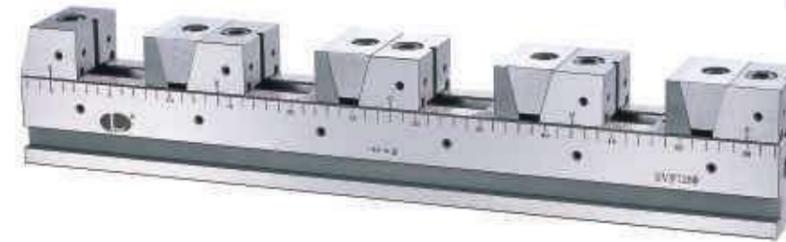
SVF-A type vs SVF-B type

Type		SVF-A	SVF-B
Common features	1	Can accommodate a wide range of part quantities & sizes.	
	2	Can accommodate both regular & irregular shaped parts.	
Differences	1	One way clamping.	Two way clamping.
	2	For both of Vertical and Horizontal Machine	For Vertical Machine only.

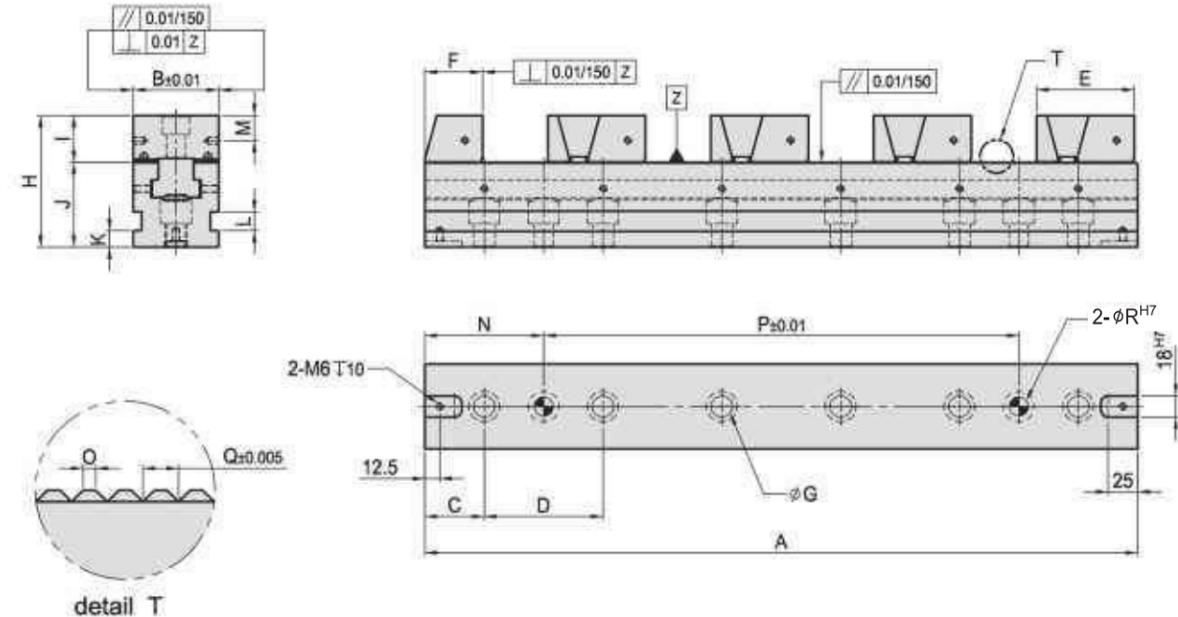
SVF-A FLEXIBLE LINE UP VISE SERIES

- One way clamping**
- Material 100% tool steel
 - Heat treated HRC 55° & ground

High Capacity
High Flexibility



Clamping force:
 SVF-50 : 1000 kgf
 SVF-72 : 2000 kgf
 SVF-100: 3000 kgf



Specification

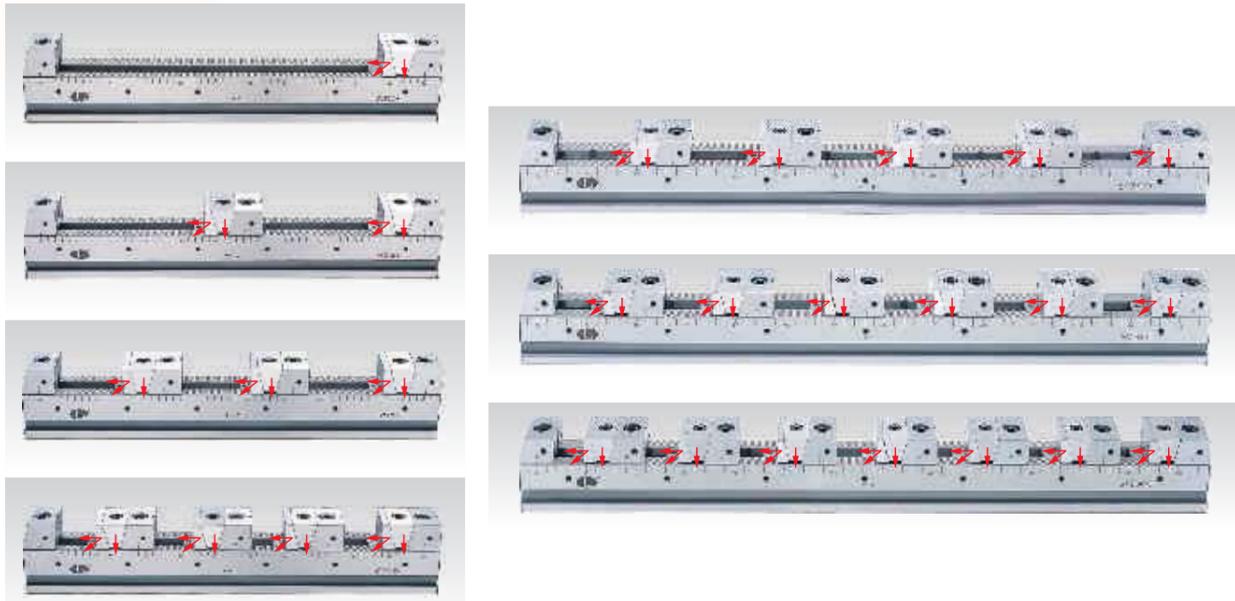
MODEL NO.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	kg
SVF-A-5030-80*	300	50	30	80	60.6	35	14	75	24.8	50	10	12	12.5	70	0.50	160	1.5	12	6.5
SVF-A-5030-100*			100																
SVF-A-5040-80	400	50	40	80	60.6	35	14	75	24.8	50	10	12	12.5	80	0.50	240	1.5	12	8.5
SVF-A-5040-100			100																
SVF-A-5050-80	500	50	50	80	60.6	35	14	75	24.8	50	10	12	12.5	90	0.50	320	1.5	12	10.0
SVF-A-5050-100			100																
SVF-A-5060-80	600	50	60	80	60.6	35	14	75	24.8	50	10	12	12.5	100	0.50	400	1.5	12	11.5
SVF-A-5060-100			100																
SVF-A-5070-80	700	50	70	80	60.6	35	14	75	24.8	50	10	12	12.5	110	0.50	480	1.5	12	13.0
SVF-A-5070-100			100																
SVF-A-7240-100*	400	72	50	100	82.2	48	18	112	39.7	72	14	16	21.3	100	0.70	200	2.0	16	19.0
SVF-A-7250-100	500															300			
SVF-A-7260-100	600	72	50	100	82.2	48	18	112	39.7	72	14	16	21.3	100	0.70	400	2.0	16	27.0
SVF-A-7270-100	700															500			
SVF-A-10040-100*	400	100	50	100	93.2	48	18	115	43.1	72	14	16	22.2	100	0.85	200	2.5	16	29.0
SVF-A-10050-100	500															300			
SVF-A-10060-100	600	100	50	100	93.2	48	18	115	43.1	72	14	16	22.2	100	0.85	400	2.5	16	41.0
SVF-A-10070-100	700															500			

(SVF vises listed above come equipped to clamp 1-4 parts, if additional part clamping is required please order optional accessories as listed on pages 7-14 ~ 7-19)

* these units will only hold up to 3 parts.

- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK- VISE
- JER-GENS
- OTHER
- Column for Technical Data

Forcing direction



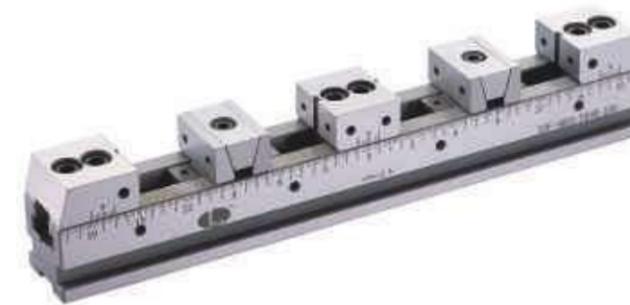
Maximum width of the workpieces which can be clamped

MODEL NO.	1 pcs	2 pcs	3 pcs	4 pcs
SVF-A-5030	203	71	27	--
SVF-A-5040	303	121	60	30
SVF-A-5050	403	171	94	55
SVF-A-5060	503	221	127	80
SVF-A-5070	603	271	160	105
SVF-A-7240	269	93	35	--
SVF-A-7250	369	143	68	30
SVF-A-7260	469	193	101	55
SVF-A-7270	569	243	135	80
SVF-A-10040	258	82	24	--
SVF-A-10050	358	132	57	19
SVF-A-10060	458	182	90	44
SVF-A-10070	558	232	124	69

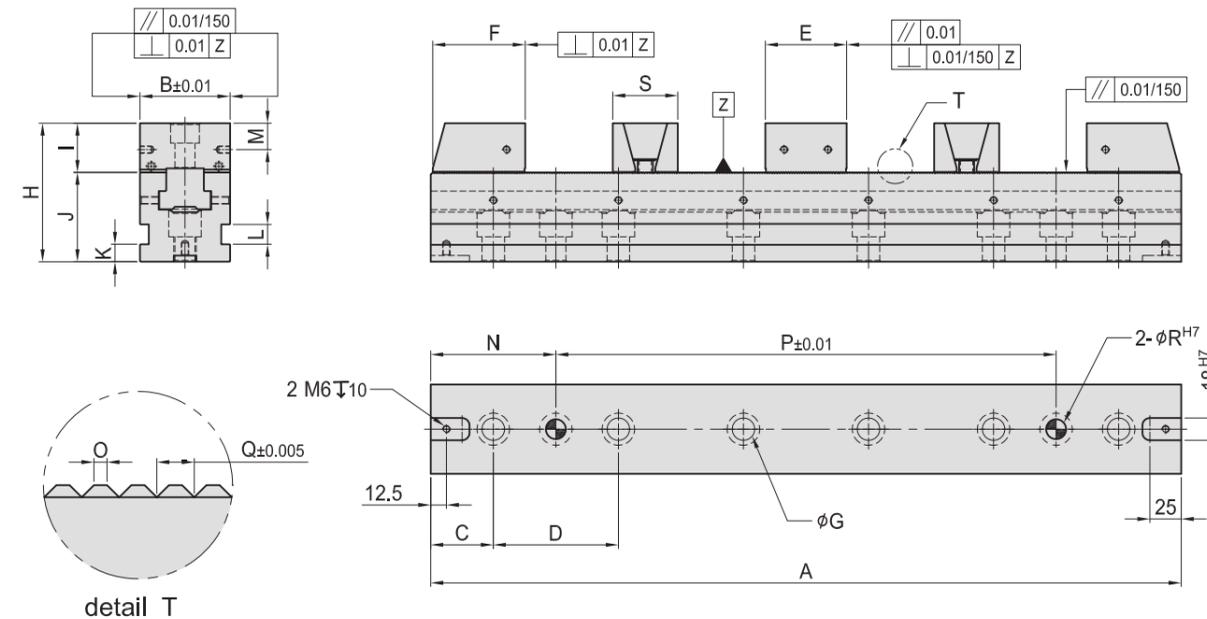
MODEL NO.	5 pcs	6 pcs	7 pcs	8 pcs	9 pcs
SVF-A-5030	--	--	--	--	--
SVF-A-5040	--	--	--	--	--
SVF-A-5050	32	16	--	--	--
SVF-A-5060	52	33	20	--	--
SVF-A-5070	72	50	34	22	13
SVF-A-7240	--	--	--	--	--
SVF-A-7250	--	--	--	--	--
SVF-A-7260	28	--	--	--	--
SVF-A-7270	48	26	--	--	--
SVF-A-10040	--	--	--	--	--
SVF-A-10050	--	--	--	--	--
SVF-A-10060	17	--	--	--	--
SVF-A-10070	37	--	--	--	--

- Two way clamping**
- Material 100% tool steel
 - Heat treated HRC 55° & ground

**High Capacity
High Flexibility**



SVF-50 : 1000 kgf
amping force: SVF-72 : 2000 kgf
SVF-100: 3000 kgf



Specification

MODEL NO.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	kg
SVF-B-5030-80	300	50	30	80	44	50	14	75	24.8	50	10	12	12.5	70	0.50	160	1.5	12	36	6.5
SVF-B-5030-100			100	240																
SVF-B-5040-80	400	50	40	80	44	50	14	75	24.8	50	10	12	12.5	80	0.50	240	1.5	12	36	7.6
SVF-B-5040-100			100	200																
SVF-B-5050-80	500	50	50	80	44	50	14	75	24.8	50	10	12	12.5	90	0.50	320	1.5	12	36	9.0
SVF-B-5050-100			100	300																
SVF-B-5060-80	600	50	60	80	44	50	14	75	24.8	50	10	12	12.5	100	0.50	400	1.5	12	36	10.5
SVF-B-5060-100			100	500																
SVF-B-5070-80	700	50	70	80	44	50	14	75	24.8	50	10	12	12.5	110	0.50	480	1.5	12	36	12.0
SVF-B-5070-100			100	500																
SVF-B-7240-100	400	72	50	100	65	74	18	112	39.7	72	14	16	21.3	100	0.70	200	2.0	16	52	19.0
SVF-B-7250-100	500															300				
SVF-B-7260-100	600	72	50	100	65	74	18	112	39.7	72	14	16	21.3	100	0.70	400	2.0	16	52	25.0
SVF-B-7270-100	700															500				
SVF-B-10040-100*	400	100	50	100	70	75	18	115	43.1	72	14	16	22.2	100	0.85	200	2.5	16	65	26.5
SVF-B-10050-100	500															300				
SVF-B-10060-100	600	100	50	100	70	75	18	115	43.1	72	14	16	22.2	100	0.85	400	2.5	16	65	36.6
SVF-B-10070-100	700															500				

(SVF vises listed above come equipped to clamp 1-4 parts, if additional part clamping is required please order optional accessories as listed on pages 7-14 ~ 7-19)

* these units will only hold up to 3 parts.

BP

BPA

BC

CP

SU

PT

SVF

ALV

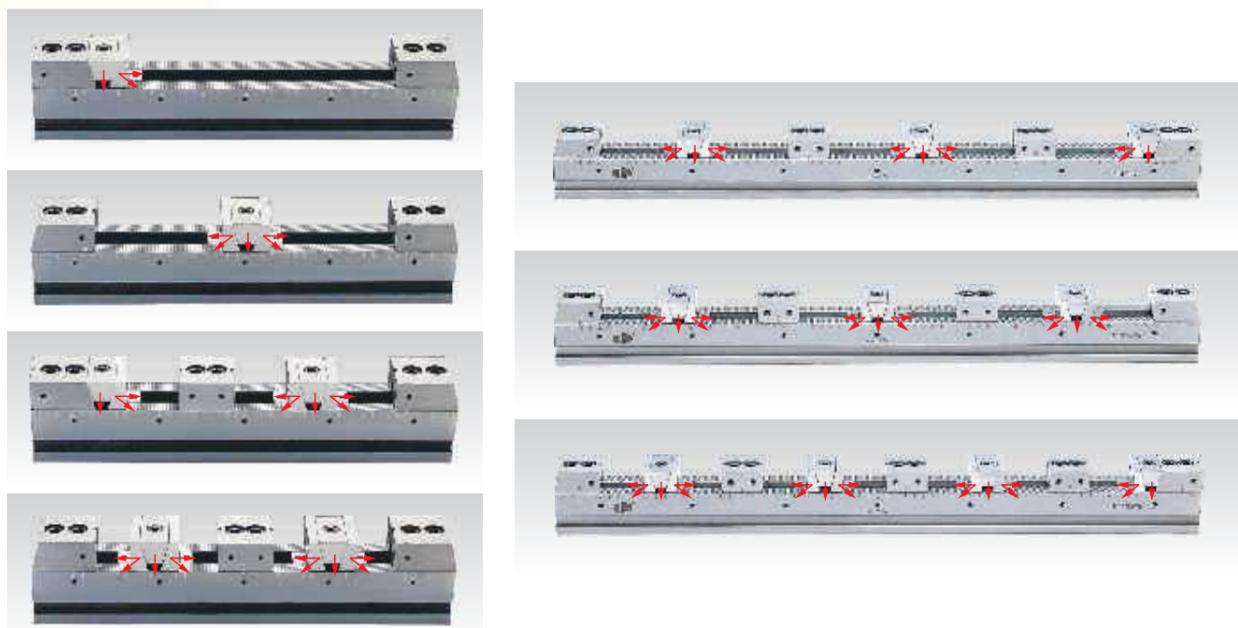
OK-
VISE

JER-
GENS

OTHER

Column
for
Technical
Data

Forcing direction



Maximum width of the workpieces which can be clamped

MODEL NO.	1 pcs	2 pcs	3 pcs	4 pcs	5 pcs	6 pcs
SVF-B-5030	176	82	32	21	--	--
SVF-B-5040	276	132	65	46	23	17
SVF-B-5050	376	182	98	71	43	34
SVF-B-5060	476	232	132	96	63	50
SVF-B-5070	576	282	165	121	83	67
SVF-B-7240	217	100	33	20	--	--
SVF-B-7250	317	150	65	45	16	--
SVF-B-7260	417	200	100	70	36	27
SVF-B-7270	517	250	133	95	56	44
SVF-B-10040	204	92	23	--	--	--
SVF-B-10050	304	142	56	37	--	--
SVF-B-10060	404	192	89	62	26	18
SVF-B-10070	504	242	123	87	46	35

MODEL NO.	7 pcs	8 pcs	9 pcs	10 pcs	11 pcs
SVF-B-5030	--	--	--	--	--
SVF-B-5040	--	--	--	--	--
SVF-B-5050	19	15	--	--	--
SVF-B-5060	33	28	17	14	--
SVF-B-5070	48	40	28	24	16
SVF-B-7240	--	--	--	--	--
SVF-B-7250	--	--	--	--	--
SVF-B-7260	--	--	--	--	--
SVF-B-7270	23	18	--	--	--
SVF-B-10040	--	--	--	--	--
SVF-B-10050	--	--	--	--	--
SVF-B-10060	--	--	--	--	--
SVF-B-10070	--	--	--	--	--

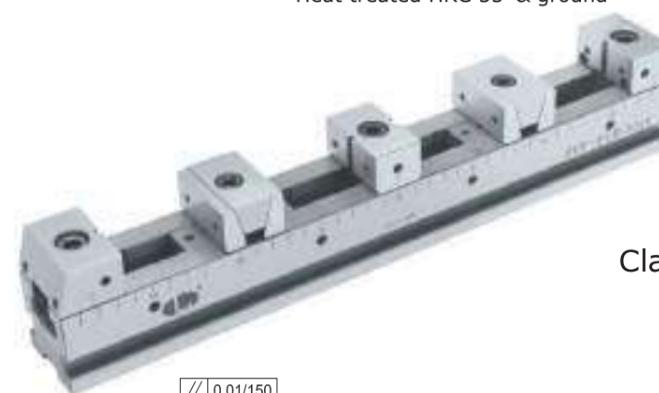
FLEXIBLE LINE UP VISE SERIES

Two way clamping

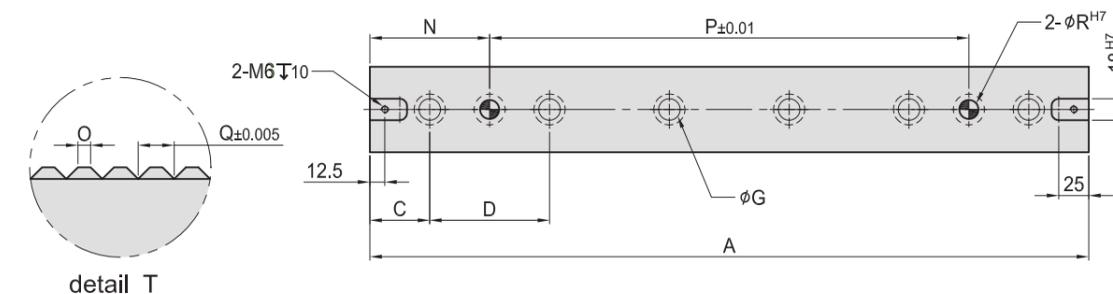
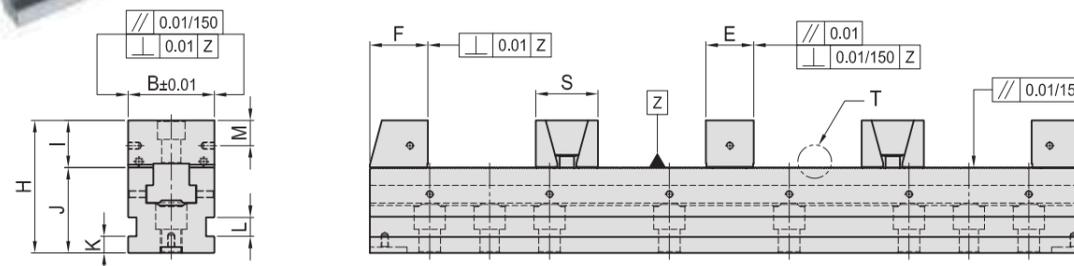
BE series offers more parts held & larger size parts held - compared to the "B" series

- Material 100% tool steel
- Heat treated HRC 55° & ground

**High Capacity
High Flexibility**



SVF-50 : 1000 kgf
Clamping force: SVF-72 : 2000 kgf
SVF-100: 3000 kgf



Specification

MODEL NO.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	kg
SVF-BE-5030-80	300	50	30	80	30	36	14	75	24.8	50	10	12	12.5	70	0.50	160	1.5	12	36	6.0
SVF-BE-5030-100			100	100																
SVF-BE-5040-80	400	50	40	80	30	36	14	75	24.8	50	10	12	12.5	80	0.50	240	1.5	12	36	7.5
SVF-BE-5040-100			100	100																
SVF-BE-5050-80	500	50	50	80	30	36	14	75	24.8	50	10	12	12.5	90	0.50	320	1.5	12	36	9.0
SVF-BE-5050-100			100	100																
SVF-BE-5060-80	600	50	60	80	30	36	14	75	24.8	50	10	12	12.5	100	0.50	400	1.5	12	36	10.2
SVF-BE-5060-100			100	100																
SVF-BE-5070-80	700	50	70	80	30	36	14	75	24.8	50	10	12	12.5	110	0.50	480	1.5	12	36	11.5
SVF-BE-5070-100			100	100																
SVF-BE-7240-100	400	72	50	100	40	48	18	112	39.7	72	14	16	21.3	100	0.70	200	2.0	16	52	18.0
SVF-BE-7250-100	500															300				21.0
SVF-BE-7260-100	600	72	50	100	40	48	18	112	39.7	72	14	16	21.3	100	0.70	400	2.0	16	52	24.0
SVF-BE-7270-100	700															500				26.0
SVF-BE-10040-100	400	100	50	100	44	48	18	115	43.1	72	14	16	22.2	100	0.85	200	2.5	16	65	27.0
SVF-BE-10050-100	500															300				31.0
SVF-BE-10060-100	600	100	50	100	44	48	18	115	43.1	72	14	16	22.2	100	0.85	400	2.5	16	65	35.0
SVF-BE-10070-100	700															500				39.0

(SVF vises listed above come equipped to clamp 1-4 parts, if additional part clamping is required please order optional accessories as listed on pages 7-14 ~ 7-19)

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

Column
for
Technical
Data

Forcing direction



Maximum width of the workpieces which can be clamped

MODEL NO.	1 pcs	2 pcs	3 pcs	4 pcs	5 pcs
SVF-BE-5030	203	96	45	31	14
SVF-BE-5040	303	146	79	56	34
SVF-BE-5050	403	196	112	81	54
SVF-BE-5060	503	246	145	106	74
SVF-BE-5070	603	296	179	131	94
SVF-BE-7240	269	126	59	40	17
SVF-BE-7250	369	176	92	65	37
SVF-BE-7260	469	226	125	90	57
SVF-BE-7270	569	276	159	115	77
SVF-BE-10040	258	119	49	32	--
SVF-BE-10050	358	169	83	57	28
SVF-BE-10060	458	219	116	82	48
SVF-BE-10070	558	269	149	107	68

MODEL NO.	6 pcs	7 pcs	8 pcs	9 pcs
SVF-BE-5030	--	--	--	--
SVF-BE-5040	26	15	--	--
SVF-BE-5050	43	29	24	15
SVF-BE-5060	60	43	36	26
SVF-BE-5070	76	58	49	37
SVF-BE-7240	--	--	--	--
SVF-BE-7250	28	--	--	--
SVF-BE-7260	44	27	22	--
SVF-BE-7270	61	41	34	22
SVF-BE-10040	--	--	--	--
SVF-BE-10050	19	--	--	--
SVF-BE-10060	36	18	--	--
SVF-BE-10070	53	32	26	--

MODEL NO.	10 pcs	11 pcs	12 pcs	13 pcs
SVF-BE-5030	--	--	--	--
SVF-BE-5040	--	--	--	--
SVF-BE-5050	--	--	--	--
SVF-BE-5060	22	15	--	--
SVF-BE-5070	32	24	21	16
SVF-BE-7240	--	--	--	--
SVF-BE-7250	--	--	--	--
SVF-BE-7260	--	--	--	--
SVF-BE-7270	18	--	--	--
SVF-BE-10040	--	--	--	--
SVF-BE-10050	--	--	--	--
SVF-BE-10060	--	--	--	--
SVF-BE-10070	--	--	--	--

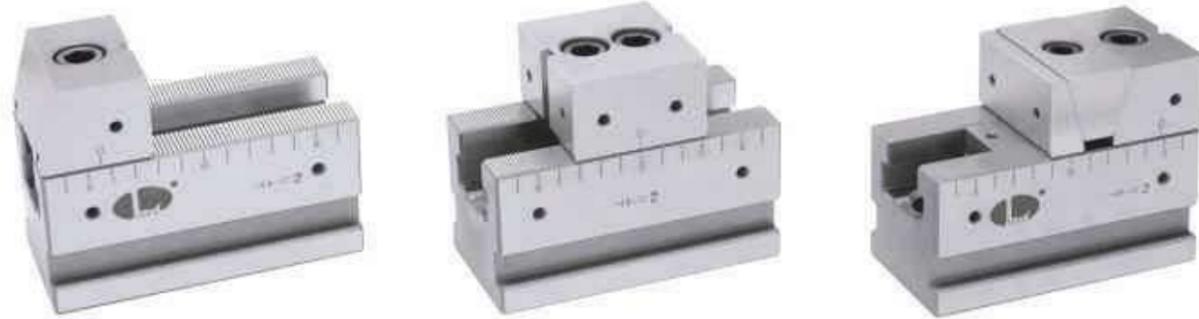
- BP
- BPA
- BC
- CP
- SU
- PT
- SVF**
- ALV
- OK-UISE
- JER-GENS
- OTHER
- Column for Technical Data



SVF-C FLEXIBLE LINE UP VISE SERIES

- Material 100% tool steel
- Heat treated HRC 55° & ground

**High Capacity
High Flexibility**

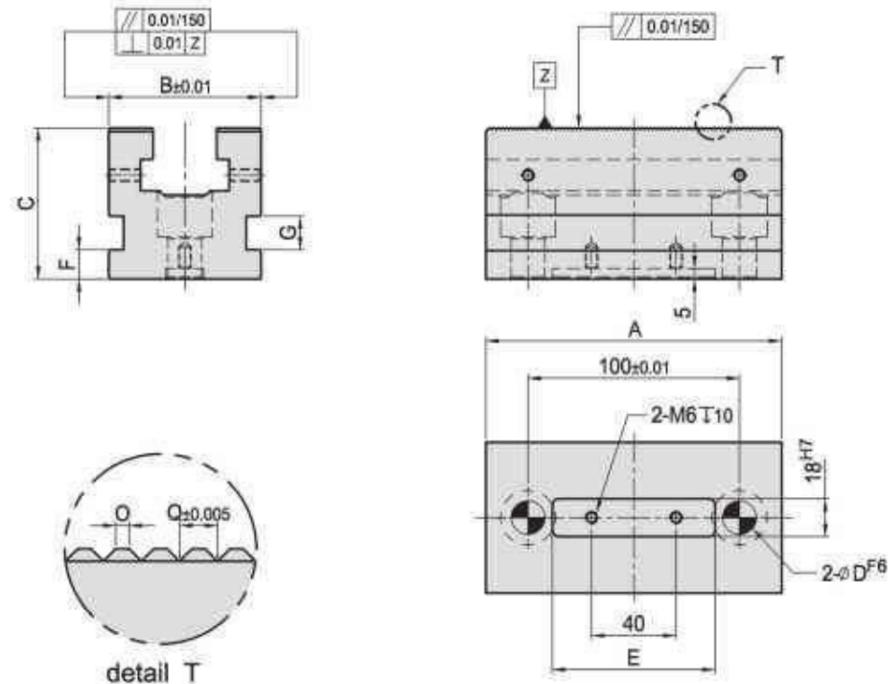


MODEL NO.	kg
SVF-C-5013-100-A	2.0
SVF-C-7214-100-A	5.0
SVF-C-10015-100-A	7.5

MODEL NO.	kg
SVF-C-5013-100-B	2.2
SVF-C-7214-100-B	5.7
SVF-C-10015-100-B	8.5

MODEL NO.	kg
SVF-C-5013-100-C	2.5
SVF-C-7214-100-C	6.2
SVF-C-10015-100-C	9.8

Main body

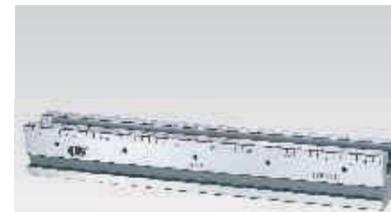


Specification

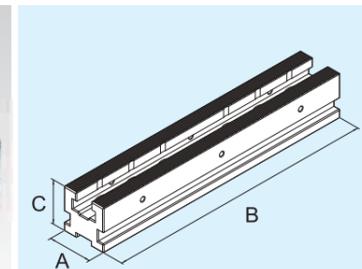
MODEL NO.	A	B	C	D	E	F	G	O	Q	kg
SVF-AB01-5013-100	130	50	50	12	77	10	12	0.50	1.5	1.6
SVF-AB01-7214-100	140	72	72	16	77	14	16	0.70	2.0	4.0
SVF-AB01-10015-100	148	100	72	16	77	14	16	0.85	2.5	5.8



SVF Optional accessory parts



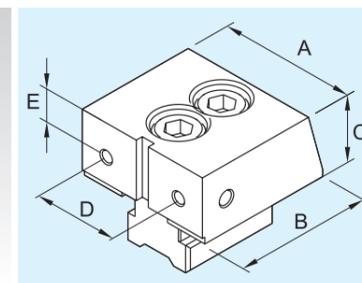
Main body (For use on A & B series)



TYPE	A	B	C	kg
SVF-AB01-5030-80	50	300	50	4.0
SVF-AB01-5030-100			50	5.3
SVF-AB01-5040-80	50	400	50	5.3
SVF-AB01-5040-100			50	6.7
SVF-AB01-5050-80	50	500	50	6.7
SVF-AB01-5050-100			50	8.0
SVF-AB01-5060-80	50	600	50	8.0
SVF-AB01-5060-100			50	9.5
SVF-AB01-5070-80	50	700	50	9.5
SVF-AB01-5070-100			50	11.2
SVF-AB01-7240-100	72	400	72	11.2
SVF-AB01-7250-100			500	14.0
SVF-AB01-7260-100	72	600	72	17.0
SVF-AB01-7270-100			700	20.0
SVF-AB01-10040-100	100	400	72	16.0
SVF-AB01-10050-100			500	20.0
SVF-AB01-10060-100	100	600	72	24.0
SVF-AB01-10070-100			700	28.0



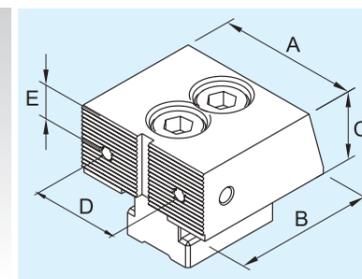
Stationary wedge-heavy duty (For use on B series)



TYPE	A	B	C	D	E	kg
SVF-AB02-50	50	50	25	30	12.5	0.6
SVF-AB02-72	72	74	40	44	21.5	2.0
SVF-AB02-100	100	75	43	64	22.0	2.6



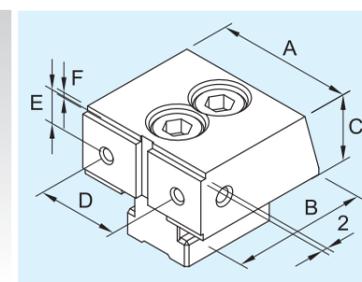
Serrated stationary wedge-heavy duty (For use on B series)



TYPE	A	B	C	D	E	kg
SVF-ABG02-50	50	50	25	30	12.5	0.6
SVF-ABG02-72	72	74	40	44	21.5	2.0
SVF-ABG02-100	100	75	43	64	22.0	2.6



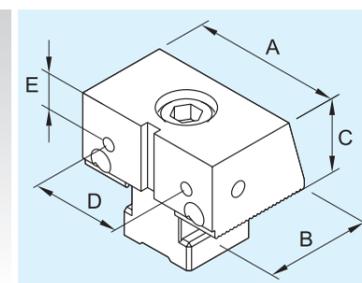
Step stationary wedge-heavy duty (For use on B series)



TYPE	A	B	C	D	E	F	kg
SVF-ABS02-502	50	50	25	30	12.5	2	0.6
SVF-ABS02-505						5	2.0
SVF-ABS02-722	72	74	40	44	21.5	2	2.0
SVF-ABS02-725						5	2.6
SVF-ABS02-1002	100	75	43	64	22.0	2	2.6
SVF-ABS02-1005						5	



Stationary wedge - standard duty (For use on A, BE & C series)



TYPE	A	B	C	D	E	kg
SVF-AB03-50	50	35	25	30	12.5	0.4
SVF-AB03-72	72	48	40	44	21.5	1.1
SVF-AB03-100	100	48	43	64	22.0	1.7

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-VISE

JERGENS

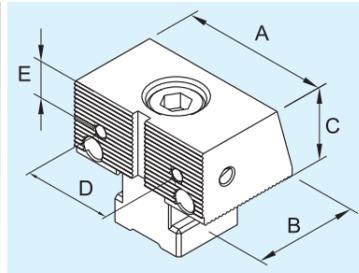
OTHER

Column for Technical Data

SVF Optional accessory parts



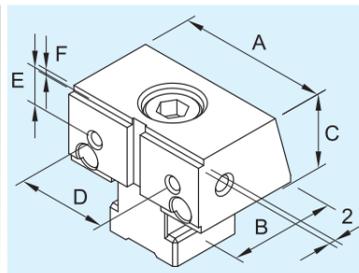
Serrated stationary wedge - standard duty
(For use on A, BE & C series)



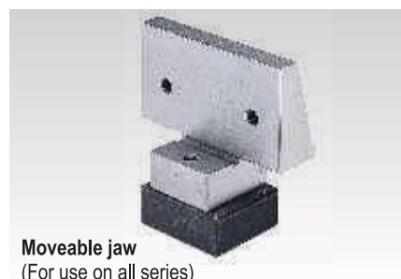
TYPE	A	B	C	D	E	kg
SVF-ABG03-50	50	35	25	30	12.5	0.4
SVF-ABG03-72	72	48	40	44	21.5	1.1
SVF-ABG03-100	100	48	43	64	22.0	1.7



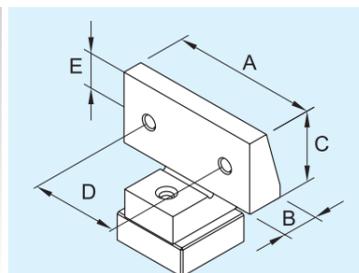
Step stationary wedge - standard duty
(For use on A, BE & C series)



TYPE	A	B	C	D	E	F	kg
SVF-ABS03-502	50	35	25	30	12.5	2	0.4
SVF-ABS03-505						5	
SVF-ABS03-722	72	48	40	44	21.5	2	1.1
SVF-ABS03-725						5	
SVF-ABS03-1002	100	48	43	64	22.0	2	1.7
SVF-ABS03-1005						5	



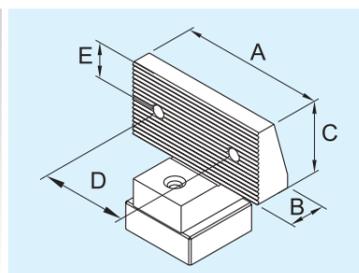
Moveable jaw
(For use on all series)



TYPE	A	B	C	D	E	kg
SVF-AB04-50	50	12	24.3	30	12.5	0.2
SVF-AB04-72	72	18	39.3	44	21.5	0.6
SVF-AB04-100	100	21	42.0	64	22.0	1.0



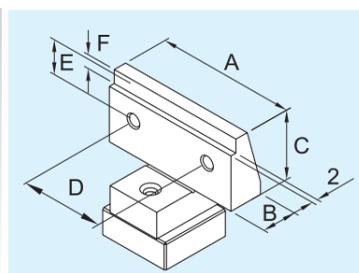
Serrated moveable jaw
(For use on all series)



TYPE	A	B	C	D	E	kg
SVF-ABG04-50	50	12	24.3	30	12.5	0.2
SVF-ABG04-72	72	18	39.3	44	21.5	0.6
SVF-ABG04-100	100	21	42.0	64	22.0	1.0



Step moveable jaw
(For use on all series)

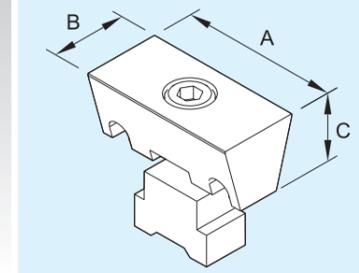


TYPE	A	B	C	D	E	F	kg
SVF-ABS04-502	50	12	24.3	30	12.5	2	0.2
SVF-ABS04-505						5	
SVF-ABS04-722	72	18	39.3	44	21.5	2	0.6
SVF-ABS04-725						5	
SVF-ABS04-1002	100	21	42.0	64	22.0	2	1.0
SVF-ABS04-1005						5	

SVF Optional accessory parts



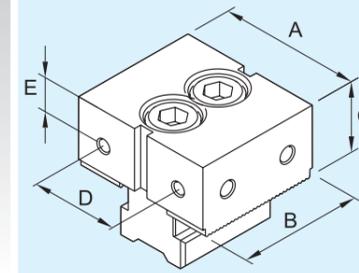
Moveable wedge (For use on A series)



TYPE	A	B	C	kg
SVF-A01-50	50	24	22	0.2
SVF-A01-72	72	35	35	0.6
SVF-A01-100	100	45	38	1.2



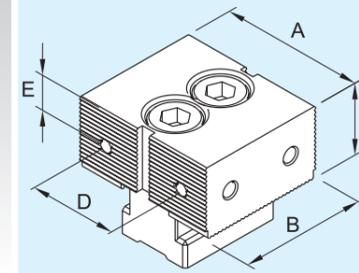
Fixed jaw-heavy duty
(For use on B & C series)



TYPE	A	B	C	D	E	kg
SVF-B01-50	50	44	25	30	12.5	0.5
SVF-B01-72	72	65	40	44	21.5	1.8
SVF-B01-100	100	70	43	64	22.0	2.6



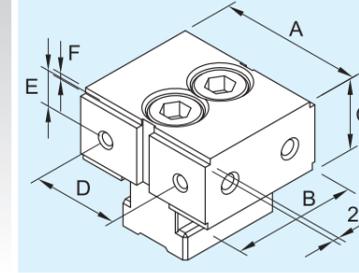
Serrated fixed jaw-heavy duty
(For use on B & C series)



TYPE	A	B	C	D	E	kg
SVF-BG01-50	50	44	25	30	12.5	0.5
SVF-BG01-72	72	65	40	44	21.5	1.8
SVF-BG01-100	100	70	43	64	22.0	2.6



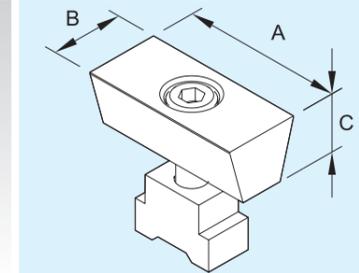
Step fixed jaw-heavy duty
(For use on B & C series)



TYPE	A	B	C	D	E	F	kg
SVF-BS01-502	50	44	25	30	12.5	2	0.5
SVF-BS01-505						5	
SVF-BS01-722	72	65	40	44	21.5	2	1.8
SVF-BS01-725						5	
SVF-BS01-1002	100	70	43	64	22.0	2	2.6
SVF-BS01-1005						5	



Moveable wedge
(For use on B & BE series)



TYPE	A	B	C	kg
SVF-B02-50	50	22.5	18.0	0.2
SVF-B02-72	72	35.0	29.0	0.6
SVF-B02-100	100	45.0	32.9	1.3

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

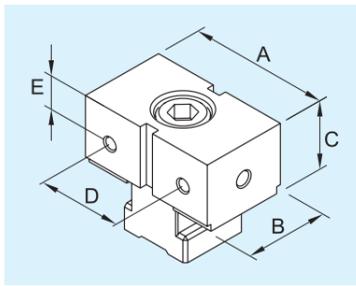
OTHER

Column
for
Technical
Data

SVF Optional accessory parts



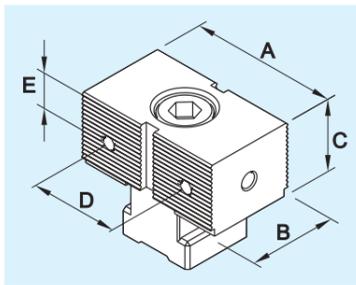
Fixed jaw-standard duty
(For use on B & BE series)



TYPE	A	B	C	D	E	kg
SVF-B03-50	50	30	25	30	12.5	0.4
SVF-B03-72	72	40	40	44	21.5	1.1
SVF-B03-100	100	44	43	64	22.0	1.7



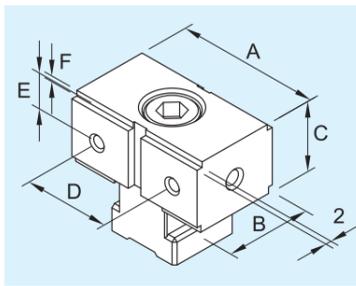
Serrated fixed jaw-standard duty
(For use on B & BE series)



TYPE	A	B	C	D	E	kg
SVF-BG03-50	50	30	25	30	12.5	0.4
SVF-BG03-72	72	40	40	44	21.5	1.1
SVF-BG03-100	100	44	43	64	22.0	1.7



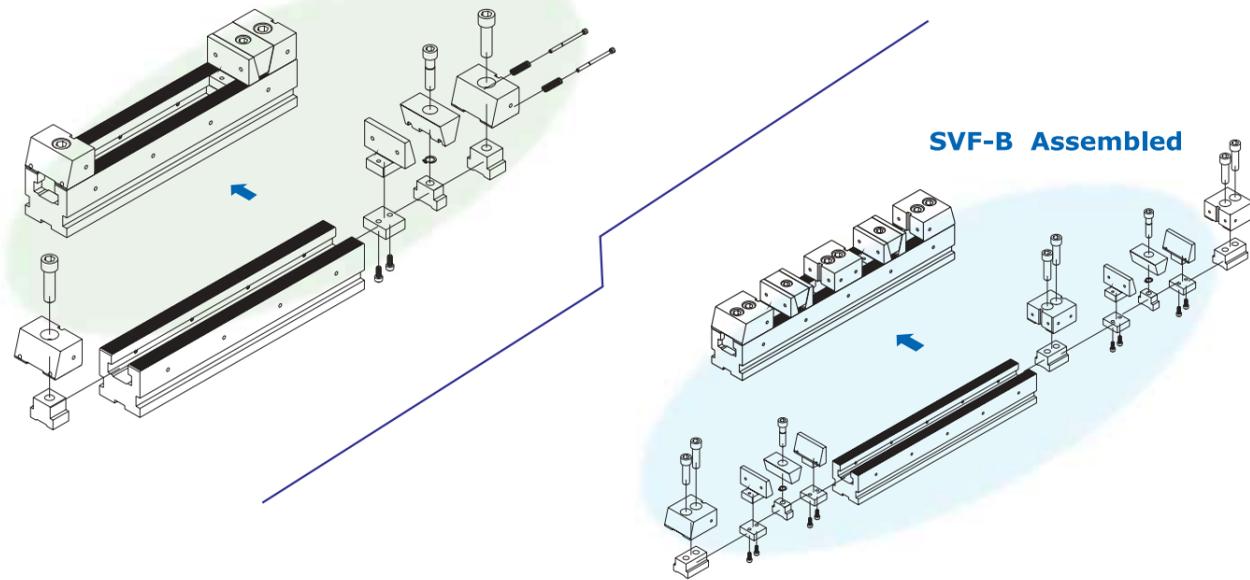
Step fixed jaw-standard duty
(For use on B & BE series)



TYPE	A	B	C	D	E	F	kg
SVF-BS03-502	50	30	25	30	12.5	2	0.4
SVF-BS03-505						5	
SVF-BS03-722	72	40	40	44	21.5	2	1.1
SVF-BS03-725						5	
SVF-BS03-1002	100	44	43	64	22.0	2	1.7
SVF-BS03-1005						5	

SVF-A Assembled

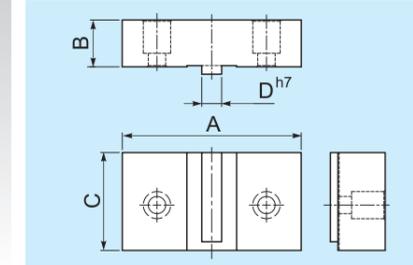
SVF-B Assembled



SVF Optional accessory parts



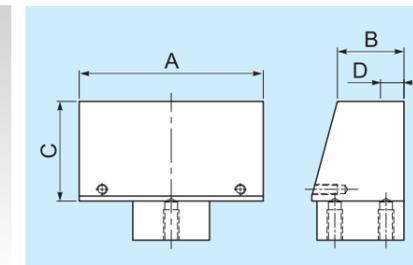
Fixed soft jaw



TYPE	A	B	C	D	kg
SVF-S01-50	50	17	25	5	0.2
SVF-S01-50W	80	27			0.4
SVF-S01-72	72	19	40	8	0.4
SVF-S01-72W	115	30			1.1
SVF-S01-100	100	25	43	10	0.9
SVF-S01-100W	150	35			1.8

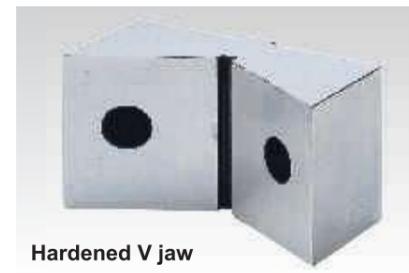


Moveable soft jaw

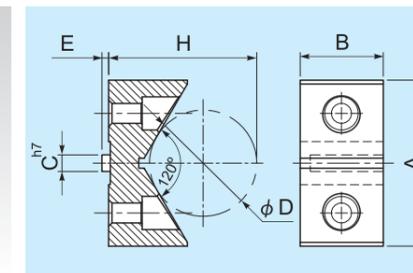


TYPE	A	B	C	D	kg
SVF-S02-50	50	21	24.5	13	0.3
SVF-S02-50W	80	34			0.7
SVF-S02-72	72	26	39.5	19	1.0
SVF-S02-72W	115	40			1.9
SVF-S02-100	100	35	42.5	25	2.0
SVF-S02-100W	150	50			3.2

D is the maximum dimension to be re-machined to accommodate the clamping requirement.



Hardened V jaw



TYPE	A	B	C	D
SVF-S03-50	50	25	5	42
SVF-S03-72	72	40	8	62
SVF-S03-100	100	43	10	62

TYPE	E	H	CLAMP (MAX)	kg
SVF-S03-50	2	54.98	phi 70	0.2
SVF-S03-72	3	82.45	phi 110	0.6
SVF-S03-100	4	90.24	phi 160	1.2

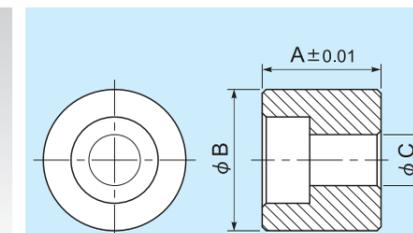


Parallel

TYPE	A	B	C	D	H	K	kg
SVF-S04-50-17	49.5	5	30	6	17	12.3	0.03
SVF-S04-50-20		5			20		0.04
SVF-S04-50-22		3			22		0.03
SVF-S04-72-25	71.5	5	44	7	25	18.4	0.07
SVF-S04-72-30		5			30		0.08
SVF-S04-72-35		5			35		0.10
SVF-S04-72-37		3			37		0.15
SVF-S04-100-29	99.5	8	64	9	29	21.0	0.18
SVF-S04-100-33		8			33		0.21
SVF-S04-100-38		8			38		0.24
SVF-S04-100-40		5			40		0.10



Spacer - work piece stop plate



TYPE	A	B	C	kg
SVF-S05-10	10	18	6.5	0.01
SVF-S05-15	15			0.02
SVF-S05-23	23			0.03
SVF-S05-100-15	15	25	9.0	0.03
SVF-S05-100-20	20			0.04
SVF-S05-100-25	25			0.05

- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JER-GENS
- OTHER

Column for Technical Data

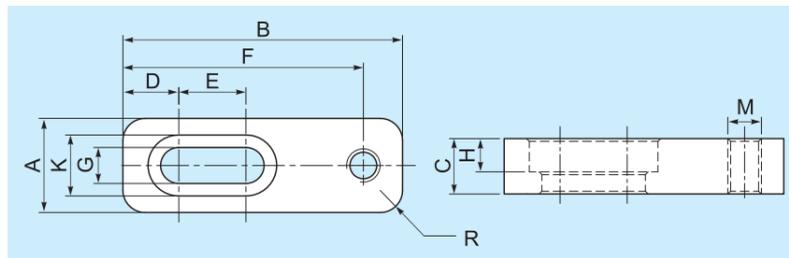


SVF

Optional accessory parts



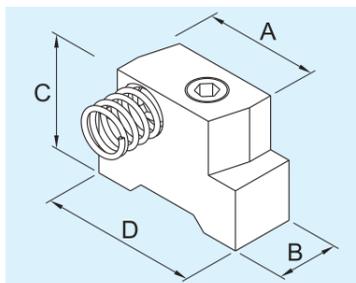
work piece stop plate



TYPE	A	B	C	D	E	F	G	H	K	M	R	kg
SVF-S06-50	17	45	10	10.0	12	38	6.5	6.0	11	M6	4	0.03
SVF-S06-72	17	50	10	10.0	12	43	6.5	6.0	11	M6	4	0.04
SVF-S06-100	25	55	15	11.5	16	45	9.0	8.5	14	M8	5	0.14



Spring loaded T nut
(For use on B & BE series)



TYPE	A	B	C	D	kg
SVF-S07-50	19	10.2	19	25	0.04
SVF-S07-72	30	12.2	29	40	0.05
SVF-S07-100	45	14.0	29	56	0.05

T-handle adjustable socket driver
(SKD-T 1/2 L10)



Socket



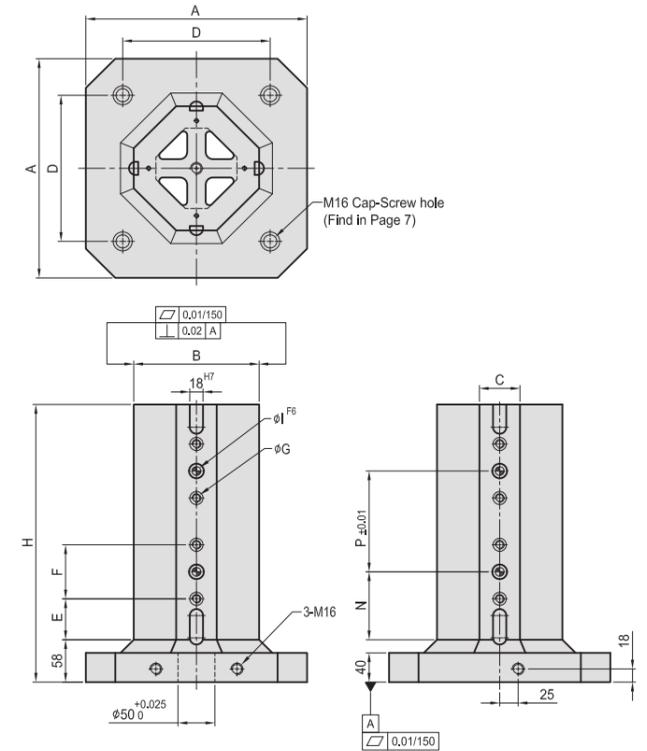
Standard parts included with SVF-A & SVF-B vises

For	T-slot nut		Clamp		Screw		Threaded dowel pin		Locating key		Hexagonal driver	
	MODEL NO.	QTY	MODEL NO.	QTY	MODEL NO.	QTY	MODEL NO.	QTY	MODEL NO.	QTY	MODEL NO.	QTY
50	PT06-1812	4 pcs	SVF-P01-50	4 pcs	CAP-M12-40L	Same as hole	PT11-1234	2 pcs	PT27-1810	2 pcs	SPN-M6HEX	1 pc
72	PT06-1816		SVF-P01-72		CAP-M16-50L		PT11-1642		SPN-M10HEX		1 pc	
100	PT06-1816		SVF-P01-72		CAP-M16-50L		PT11-1642		SPN-M12HEX		1 pc	
											SPN-M14HEX	1 pc



SVF-CB

M/C Octagonal cube



Specification

MODEL NO.	A	B	C	D	E	F	G	H	I	N	P	Mounting holes	kg
SVF-5030-300CB8-80	300	170	55	200	32	80	M12	360	12	72	160	4	61
SVF-5030-300CB8-100					52	100				102	100		
SVF-5030-320CB8-80	320	170	55	200	32	80	M12	360	12	72	160	4	65
SVF-5030-320CB8-100					52	100				102	100		
SVF-5040-300CB8-80	300	170	55	200	42	80	M12	460	12	82	240	4	73
SVF-5040-300CB8-100					52	100				102	200		
SVF-5040-320CB8-80	320	170	55	200	42	80	M12	460	12	82	240	4	76
SVF-5040-320CB8-100					52	100				102	200		
SVF-5050-400CB8-80	400	200	55	320	52	80	M12	560	12	92	320	4	118
SVF-5050-400CB8-100					100	100				102	300		
SVF-5050-500CB8-80	500	250	55	400	52	80	M12	560	12	92	320	8	163
SVF-5050-500CB8-100					100	100				102	300		
SVF-5060-400CB8-80	400	200	55	320	62	80	M12	660	12	102	400	4	132
SVF-5060-400CB8-100					52	100				102	400		
SVF-5060-500CB8-80	500	250	55	400	62	80	M12	660	12	102	400	8	181
SVF-5060-500CB8-100					52	100				102	400		
SVF-5070-400CB8-100	400	200	55	320	52	100	M12	760	12	102	500	4	188
SVF-5070-500CB8-80	500	250	55	400	72	80	M12	760	12	112	480	8	199
SVF-5070-500CB8-100					52	100				102	500		
SVF-7240-300CB8-100	300	170	75	200	52	100	M16	460	16	102	200	4	76
SVF-7240-320CB8-100	320												79
SVF-7250-400CB8-100	400	200	75	320	52	100	M16	560	16	102	300	4	117
SVF-7250-500CB8-100	500												167
SVF-7260-400CB8-100	400	200	75	320	52	100	M16	660	16	102	400	4	130
SVF-7260-500CB8-100	500												185
SVF-7270-400CB8-100	400	200	75	320	52	100	M16	760	16	102	500	4	186
SVF-7270-500CB8-100	500												204
SVF-7270-630CB8-100	630	300	75	500	52	100	M16	760	16	102	500	8	292
SVF-10050-400CB8-100	400	200	105	320	52	100	M16	560	16	102	300	4	130
SVF-10050-500CB8-100	500												172
SVF-10060-500CB8-100	500	250	105	400	52	100	M16	660	16	102	400	8	191
SVF-10060-630CB8-100	630												256
SVF-10070-500CB8-100	500	250	105	400	52	100	M16	760	16	102	500	8	211
SVF-10070-630CB8-100	630												279

(Order optional mounting cube as a separate item)

BP

BPA

BC

CP

SU

PT

SVF

ALV

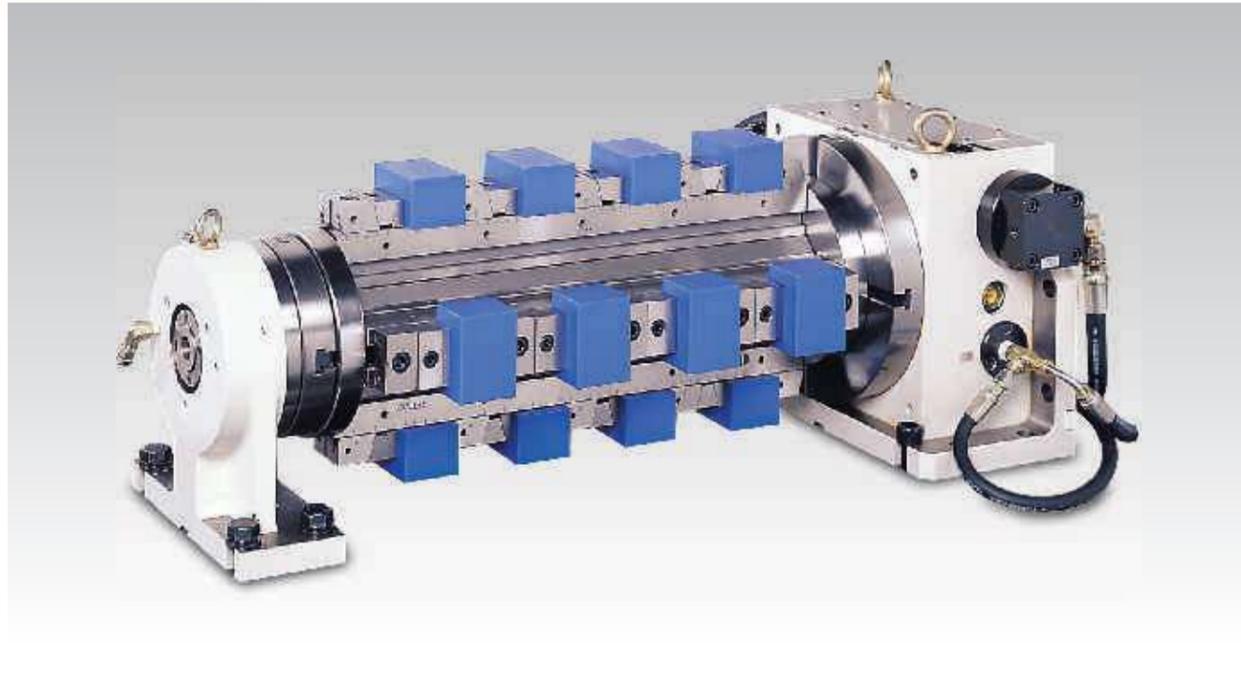
OK-
VISE

JER-
GENS

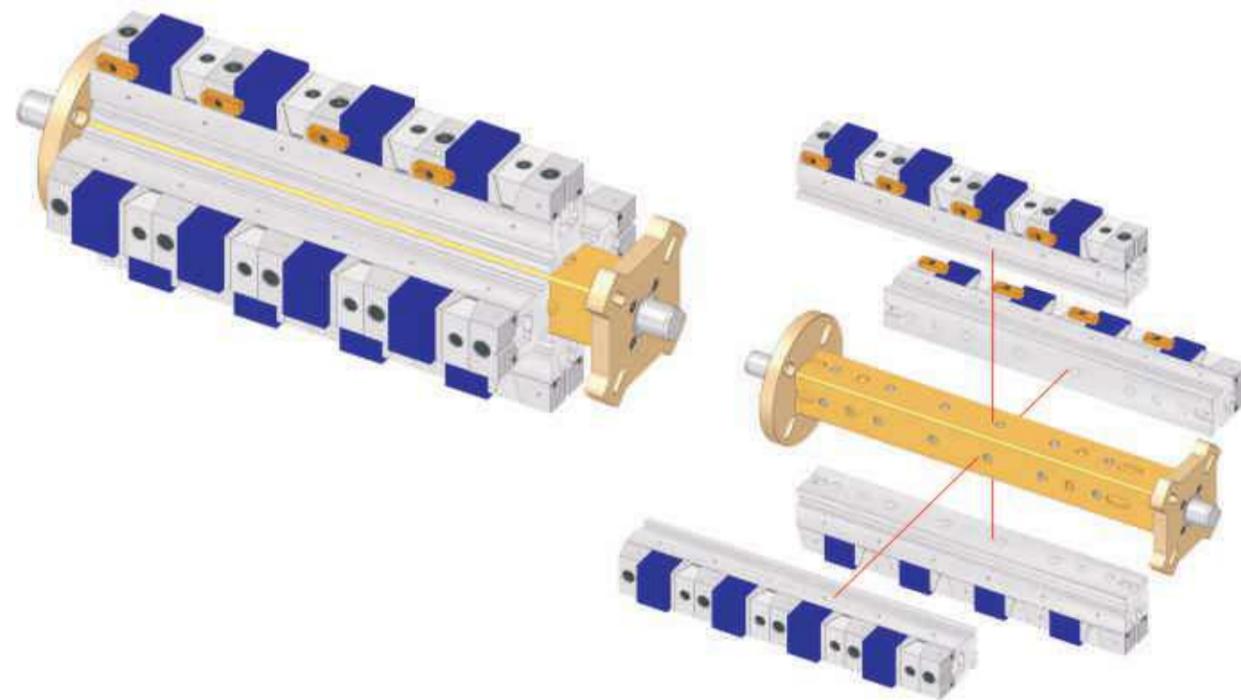
OTHER

Column
for
Technical
Data

APPLICATION EXAMPLE

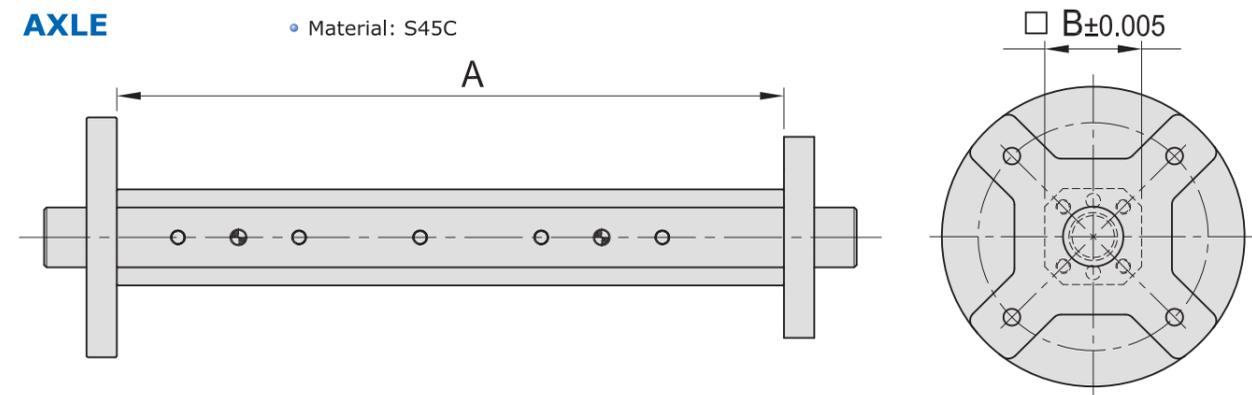


ASSEMBLED



AXLE

• Material: S45C

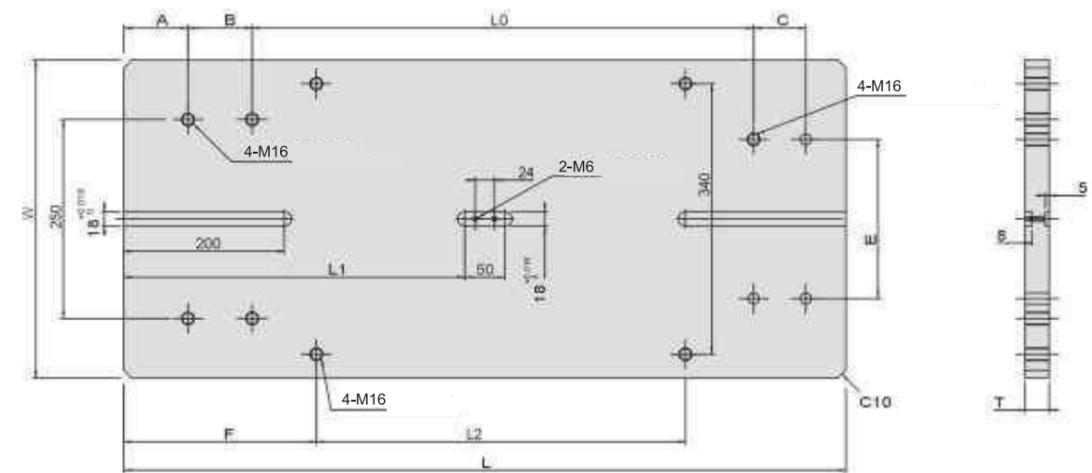


Model	A	B	kg	Model	A	B	kg
SVFX-5030-080	350	80	48.2	SVFX-7240-100	450	80	53.7
SVFX-5030-100				SVFX-7250-100	550		58.2
SVFX-5040-080	450	80	52.2	SVFX-7260-100	650	80	62.2
SVFX-5040-100				SVFX-7270-100	750		66.2
SVFX-5050-080	550	80	56.2	SVFX-10040-100	450	102	70.0
SVFX-5050-100				SVFX-10050-100	550		75.5
SVFX-5060-080	650	80	60.2	SVFX-10060-100	650	102	83.5
SVFX-5060-100				SVFX-10070-100	750		92.5
SVFX-5070-080	750	80	64.2				
SVFX-5070-100							

*Please offer the brand and model no. of the indexing table and the tail stock that you use when you place an order.

BASE PLATE

• Material: S45C



Model	L	L0	L1	L2	W	T	A	B	C	E	F
SVFX-5030BP	700	425	325	260	400	30	80	80	72	200	220
SVFX-5040BP	800	525	375	360							
SVFX-5050BP	900	625	425	460							
SVFX-5060BP	1000	725	475	560							
SVFX-5070BP	1100	825	525	660							
SVFX-7240BP	920	520	435	430							
SVFX-7250BP	1020	620	485	530							
SVFX-7260BP	1120	720	535	630							
SVFX-7270BP	1220	820	585	730							

*Special design welcome!

(Optional accessory available for being ordered separately)

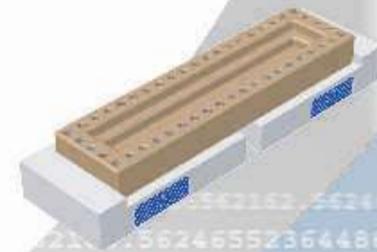
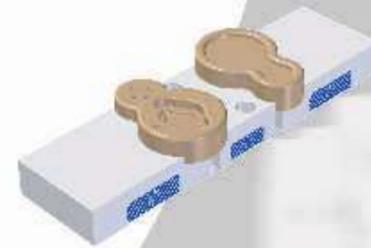
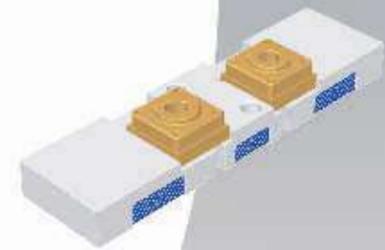
- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JERGENS
- OTHER

Column for Technical Data



ALV SERIES

HIGH STRENGTH ALUMINUM LINE UP VISE



HIGH STRENGTH ALUMINUM LINE UP VISE HIGH STRENGTH ALUMINUM LINE UP VISE HIGH STRENGTH ALUMINUM LINE UP VISE



ALV

HIGH STRENGTH ALUMINUM LINE UP VISE

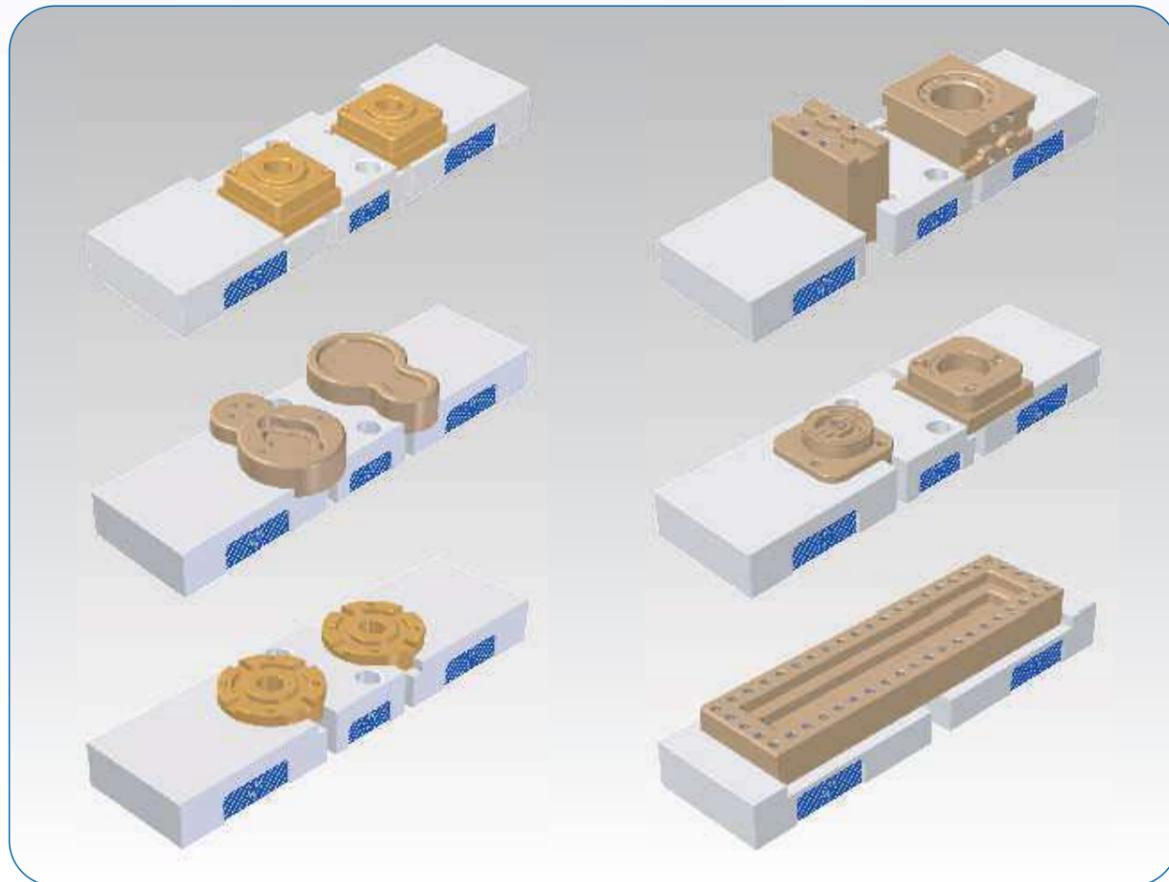
We are pleased to present to you our newly designed ALV Vise series. Many new features have been added to streamline the work holding process. The ALV vise will optimize your workspace, speed up cycle time and will give an overall increase in production. We have added quick change snap-in jaws and a rapid 1 part - 2 part change over system. As an added feature all internal parts are sealed to prevent chip contamination.



**LOWEST COST
HIGHEST QUALITY**

100% SATISFACTION GUARANTEE

Clamping Examples

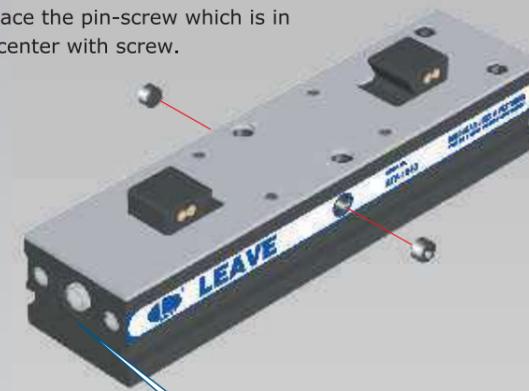


ALV

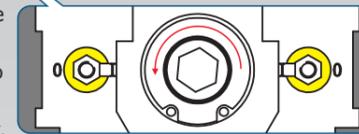
HIGH STRENGTH ALUMINUM LINE UP VISE

To Clamp Two Workpiece

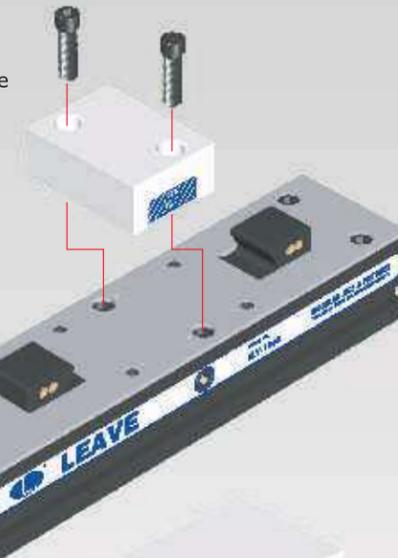
1 Replace the pin-screw which is in the center with screw.



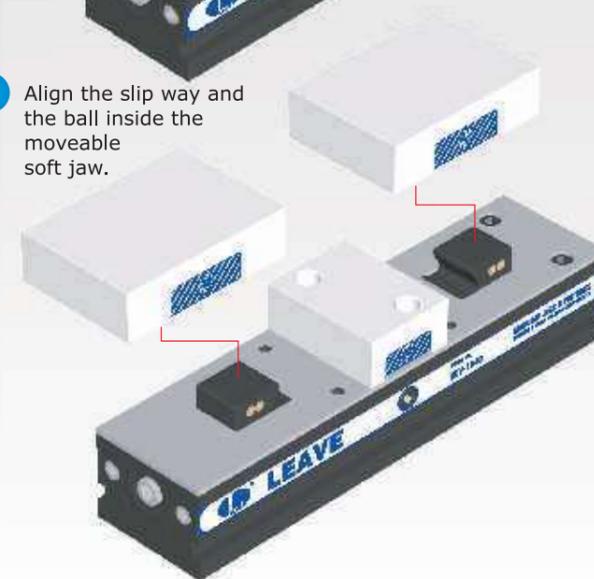
2 Turn counterclockwise the bolt to the end and turn the model to "I" which is on the side of the main body.



3 Install the fixed soft jaw and close it completely.



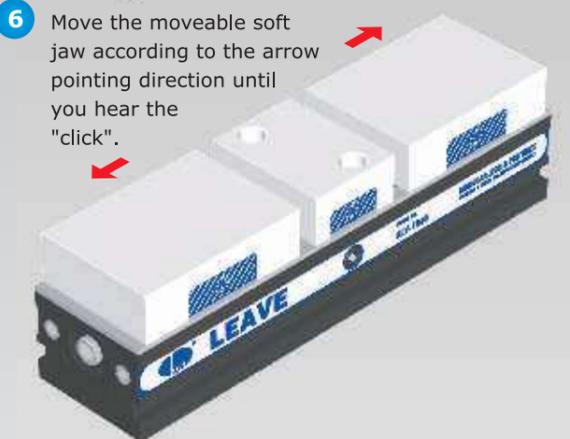
4 Align the slip way and the ball inside the moveable soft jaw.



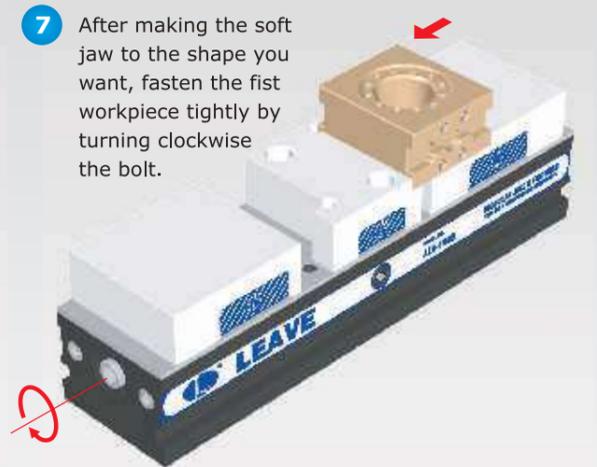
5 Press the moveable soft jaw until you hear the "click" sound.



6 Move the moveable soft jaw according to the arrow pointing direction until you hear the "click".



7 After making the soft jaw to the shape you want, fasten the fist workpiece tightly by turning clockwise the bolt.



8 Put the second workpiece then swivel the bolt until it gets tightened.



BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-VISE

JER-GENS

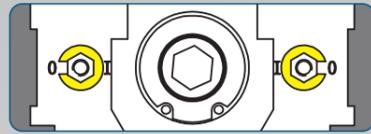
OTHER

Column for Technical Data

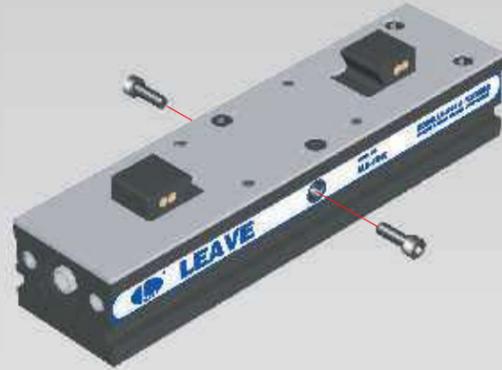
ALV HIGH STRENGTH ALUMINUM LINE UP VISE

To Clamp One Workpiece

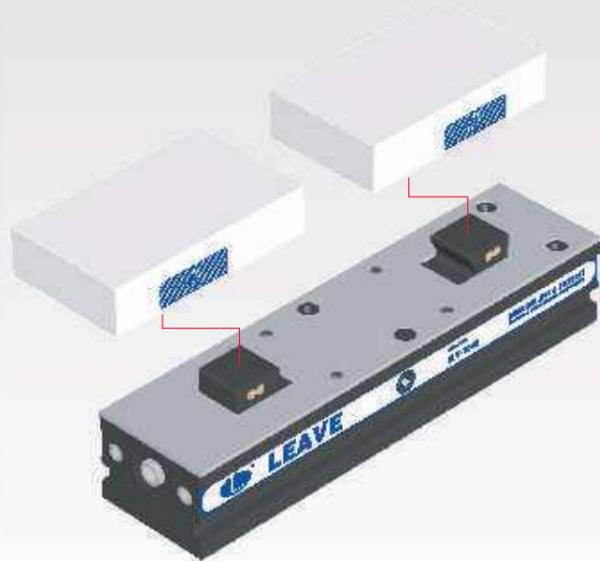
1 Turn the model to "O" which is on the side of the main body.



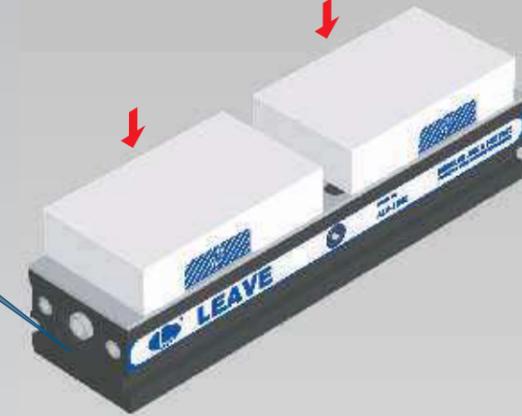
2 Turn counterclockwise the bolt to the end and replace the screw with pin-screw.



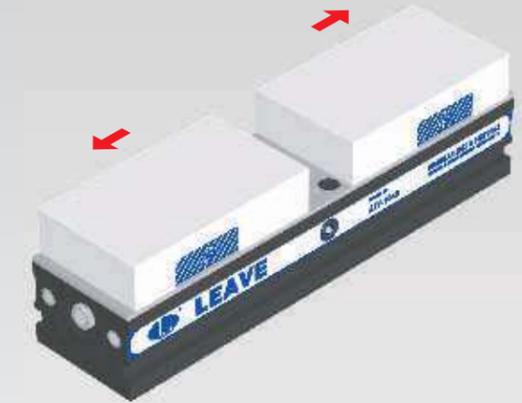
3 Align the slip way and the ball inside the moveable soft jaw.



4 Press the moveable soft jaw until you hear the "click" sound.



5 Move the moveable soft jaw according to the arrow pointing direction until you hear the "click".



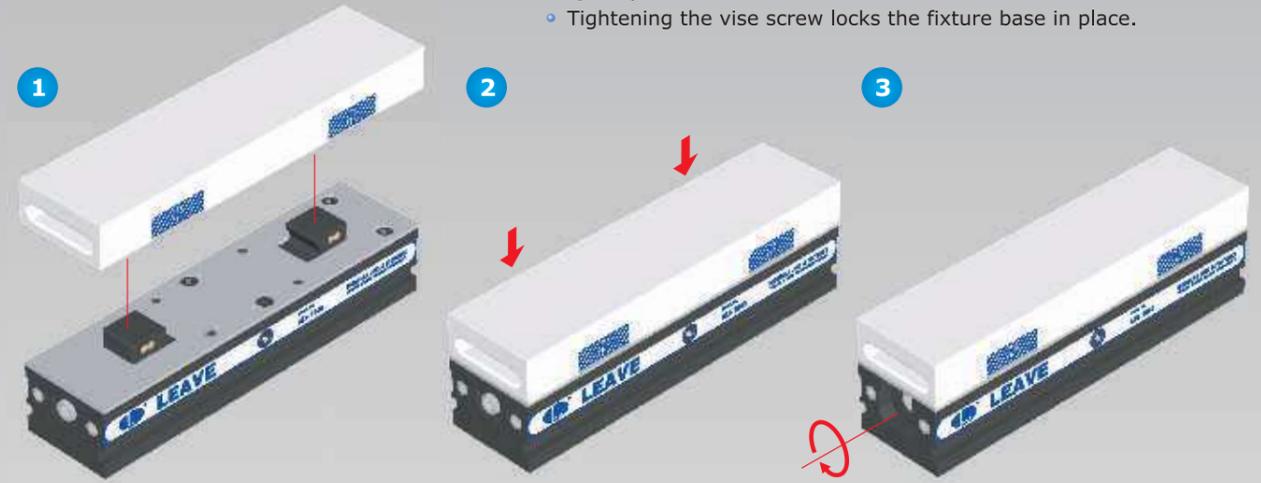
6 After making the soft jaw to the shape you want, the workpiece is clamped.



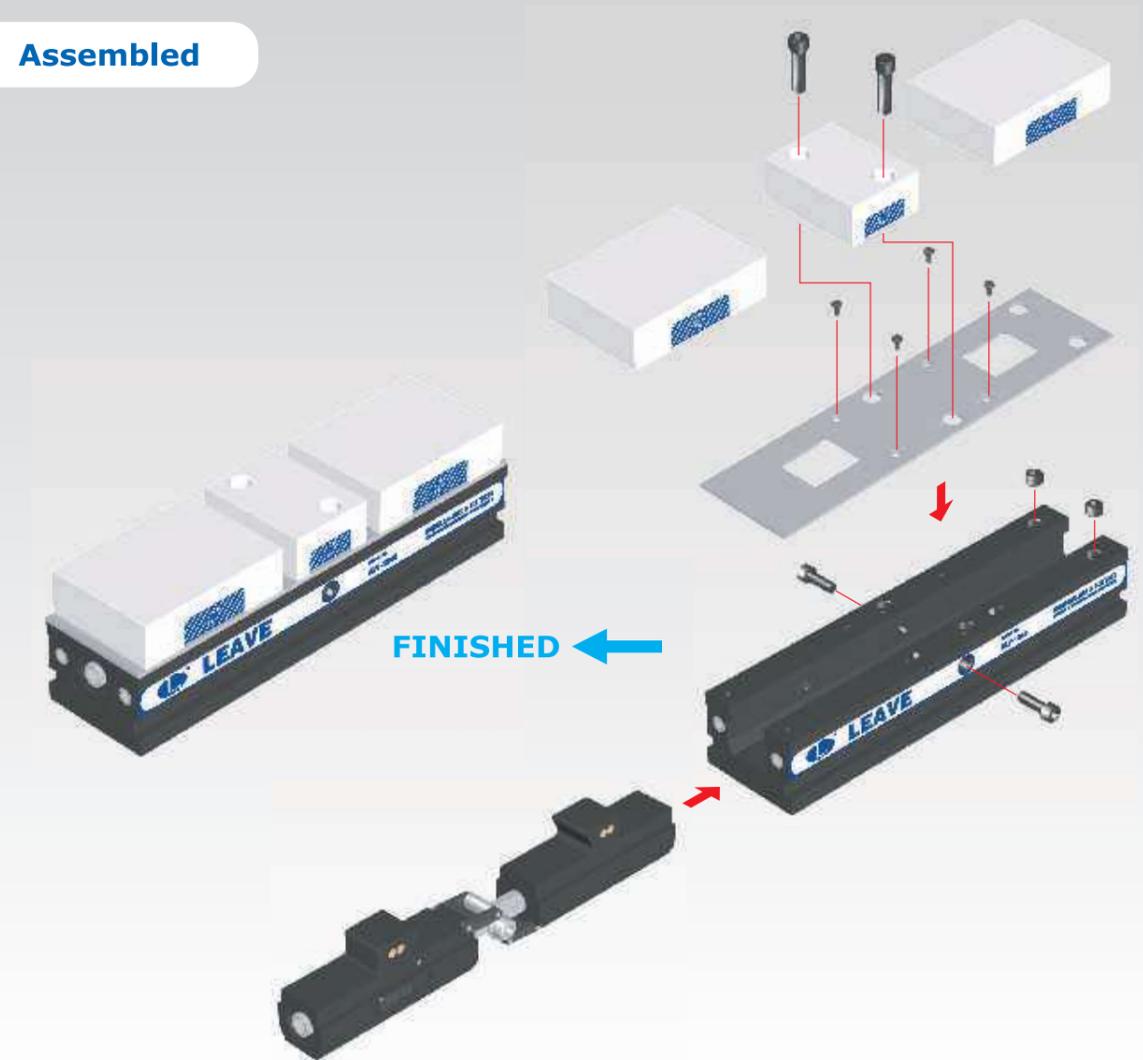
ALV HIGH STRENGTH ALUMINUM LINE UP VISE

Application for Quick Fixture Base

- Quickly convert the vise into a fixture base.
- Tightening the vise screw locks the fixture base in place.



Assembled



- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV**
- OK-VISE
- JERGENS
- OTHER
- Column for Technical Data



ALV

HIGH STRENGTH ALUMINUM LINE UP VISE

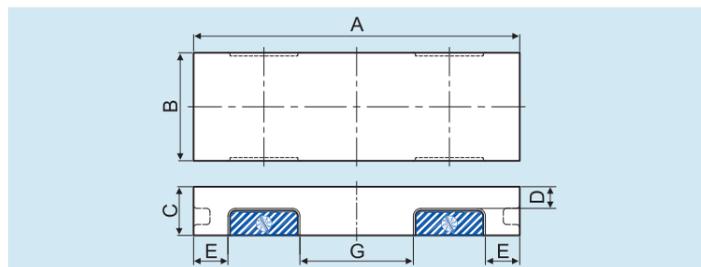
- Material: High strength aluminum A7075 (Hard coat surface)
Tool steel (Hardness: over HRC 55°)
- Application: Ideal for aluminum or irregular shaped work pieces.



Specification

MODEL NO.	A	B	C	F	G	H	J	K	kg
ALV-0620-0	64	60	200	199	43	21	72.0	60	2.9
ALV-1030-0	76	100	300	299	66	45	104.0	100	9.8
ALV-1030-0H						54		10.6	
ALV-1030-0WH						45		11.7	
ALV-1030-0WH						54		12.8	
ALV-1040-0	76	100	400	399	66	45	149.0	100	14.0
ALV-1040-0H						54		14.9	
ALV-1040-0WH						45		16.1	
ALV-1040-0WH						54		16.8	
ALV-1550-0	95	150	500	499	89	49	198.5	150	29.5
ALV-1550-0H						59		32.3	
ALV-1550-0WH						49		34.1	
ALV-1550-0WH						59		36.3	

Quick Fixture Base



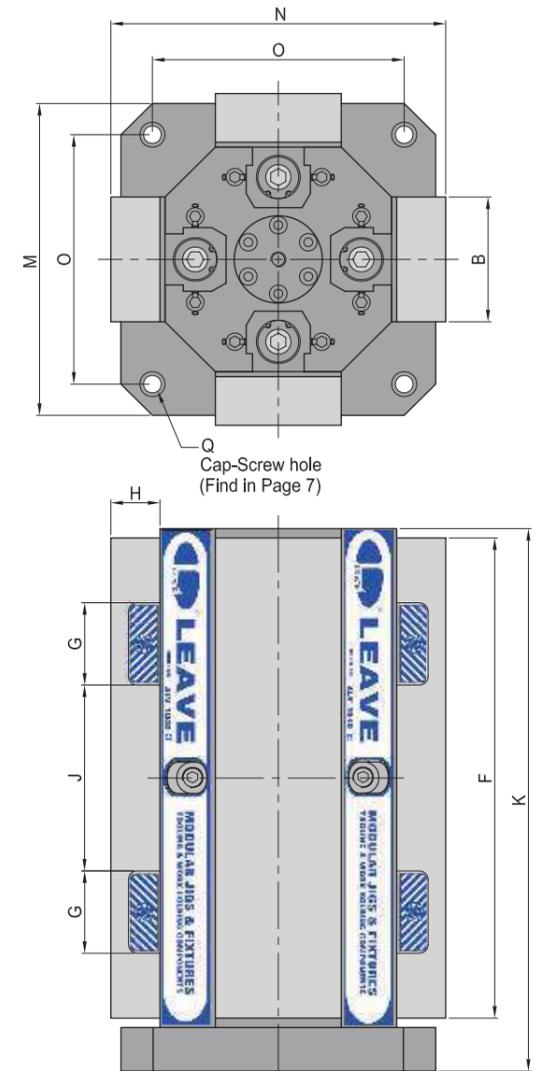
MODEL NO.	A	B	C	D	E	G	kg
ALV-0620-58	199	60	21	3	20.5	72.0	0.75
ALV-1030-58	299	100	45	20	31.5	104.0	3.25
ALV-1030-58H			54	29			4.00
ALV-1030-58W	299	150	45	20	31.5	104.0	5.10
ALV-1030-58WH			54	29			6.20
ALV-1040-58	399	100	45	20	59.0	149.0	4.50
ALV-1040-58H			54	29			5.42
ALV-1040-58W	399	150	45	20	59.0	149.0	6.63
ALV-1040-58WH			54	29			7.30
ALV-1550-58	499	150	49	19	61.3	198.5	10.20
ALV-1550-58H			59	29			11.80
ALV-1550-58W	499	200	49	19	61.3	198.5	13.60
ALV-1550-58WH			59	29			15.80



ALV

HIGH STRENGTH ALUMINUM LINE UP VISE

- Material: High strength aluminum A7075 (Hard coat surface)
Tool steel (Hardness: over HRC 55°)
- Application: Ideal for aluminum or irregular shaped work pieces.



Specification

MODEL NO.	B	F	G	H	J	K	M	N	O	Q	kg
ALV-1030-C-0	100	299	66	45	104.0	335	250	278	200	M12	47.00
ALV-1030-C-0H				54				296			50.00
ALV-1030-C-0WH				45				278			54.40
ALV-1030-C-0WH	150	399	66	54	149.0	435	250	296	200	M12	58.80
ALV-1040-C-0	45			278				60.70			
ALV-1040-C-0H	54			296				64.38			
ALV-1040-C-0WH	150	499	89	45	198.5	545	300	278	250	M16	69.22
ALV-1040-C-0WH	54			296				71.90			
ALV-1550-C-0	49			338				127.00			
ALV-1550-C-0H	59	358	138.20								
ALV-1550-C-0WH	49	338	145.40								
ALV-1550-C-0WH	59	358	154.20								

*ALL SIZE BASE PLATES ARE AVAILABLE FOR THE ALV VISE.

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

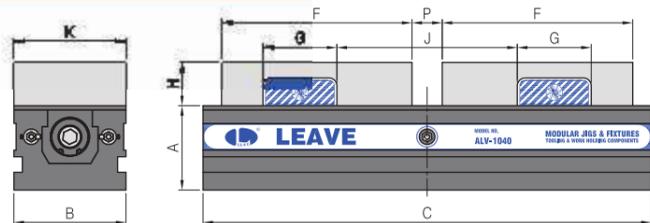
Column
for
Technical
Data



ALV

HIGH STRENGTH ALUMINUM LINE UP VISE

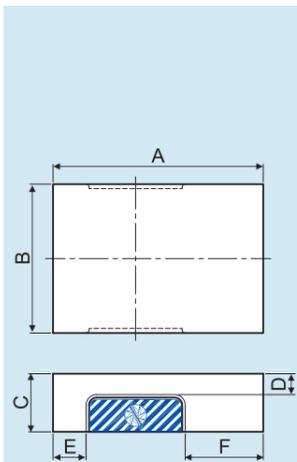
- Material: High strength aluminum A7075 (Hard coat surface)
Tool steel (Hardness: over HRC 55°)
- Application: Ideal for aluminum or irregular shaped work pieces.



Specification

MODEL NO.	A	B	C	F	G	H	J	K	P	kg
ALV-0620-1	64	60	200	93.0	43	21	82	60	0-14	3.0
ALV-0620-1H						31				3.0
ALV-0620-1W						21				3.1
ALV-0620-1WH						31				3.4
ALV-1030-1	76	100	300	140.0	66	39	114	100	0-20	9.2
ALV-1030-1H						54				10.4
ALV-1030-1W						39				10.8
ALV-1030-1WH						54				12.5
ALV-1040-1	76	100	400	170.0	66	39	149	100	15-45	13.0
ALV-1040-1H						54				14.3
ALV-1040-1W						39				14.7
ALV-1040-1WH						54				16.7
ALV-1550-1	95	150	500	207.5	89	49	176	150	35-80	27.9
ALV-1550-1H						59				28.6
ALV-1550-1W						49				29.5
ALV-1550-1WH						59				31.3

Extended Movable Soft Jaw



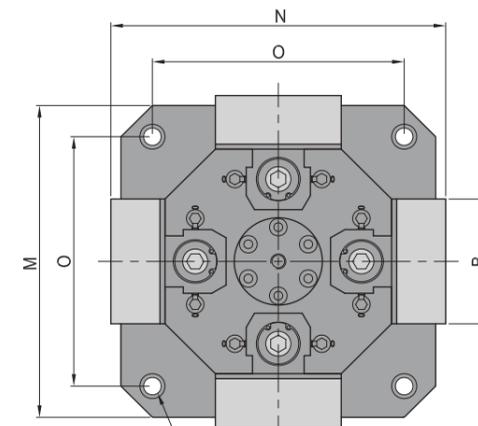
MODEL NO.	A	B	C	D	E	F	kg
ALV-0620-55	93.0	60	21	3	16	34.0	0.24
ALV-0620-55H			31	13			0.35
ALV-0620-55W	93.0	80	21	3	16	34.0	0.38
ALV-0620-55WH			31	13			0.56
ALV-1030-55	140.0	100	39	14	22	52.0	1.30
ALV-1030-55H			54	29			1.90
ALV-1030-55W	140.0	150	39	14	22	52.0	2.10
ALV-1030-55WH			54	29			2.96
ALV-1040-55	170.0	100	39	14	37	67.0	1.62
ALV-1040-55H			54	29			2.38
ALV-1040-55W	170.0	150	39	14	37	67.0	2.60
ALV-1040-55WH			54	29			3.60
ALV-1550-55	207.5	150	49	19	48	70.5	3.36
ALV-1550-55H			59	29			4.04
ALV-1550-55W	207.5	200	49	19	48	70.5	4.48
ALV-1550-55WH			59	29			5.39



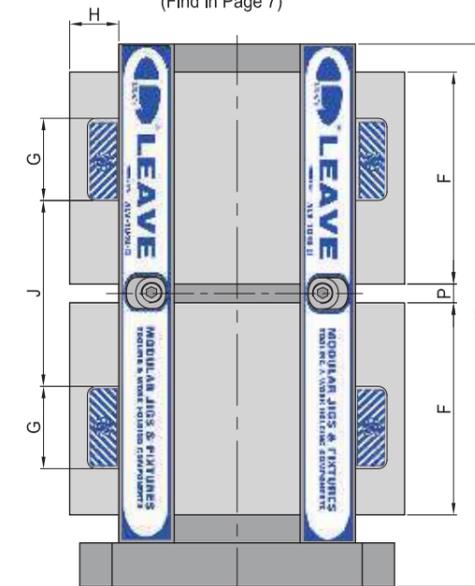
ALV

HIGH STRENGTH ALUMINUM LINE UP VISE

- Material: High strength aluminum A7075 (Hard coat surface)
Tool steel (Hardness: over HRC 55°)
- Application: Ideal for aluminum or irregular shaped work pieces.



Q
Cap-Screw hole
(Find in Page 7)



Specification

MODEL NO.	B	F	G	H	J	K	M	N	O	P	Q	kg
ALV-1030-C-1	100	140.0	66	39	114	335	250	266	200	0-20	M12	44.40
ALV-1030-C-1H				296				49.20				
ALV-1030-C-1W	266			50.80								
ALV-1030-C-1WH	296			57.68								
ALV-1040-C-1	100	170.0	66	39	149	435	250	266	200	15-45	M12	55.66
ALV-1040-C-1H				296				61.74				
ALV-1040-C-1W	266			63.50								
ALV-1040-C-1WH	296			71.50								
ALV-1550-C-1	150	207.0	89	49	176	545	300	338	250	35-80	M16	120.60
ALV-1550-C-1H				358				123.32				
ALV-1550-C-1W	338			126.84								
ALV-1550-C-1WH	358			134.12								

*ALL SIZE BASE PLATES ARE AVAILABLE FOR THE ALV VISE.

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

Column
for
Technical
Data



ALV

HIGH STRENGTH ALUMINUM LINE UP VISE

- Material: High strength aluminum A7075 (Hard coat surface)
Tool steel (Hardness: over HRC 55°)
- Application: Ideal for aluminum or irregular shaped work pieces.

MODEL NO.	A	B	C	D	E	G	H	I	K	P	kg
ALV-0620-2	64	60	200	75	36	43	21	25.0	60	0-7.0	2.9
ALV-0620-2H							31				3.0
ALV-0620-2W							21				3.1
ALV-0620-2WH							31				3.4
ALV-1030-2	76	100	300	110	60	66	39	37.5	100	0-10.0	9.0
ALV-1030-2H							54				10.3
ALV-1030-2W							39				10.7
ALV-1030-2WH							54				12.4
ALV-1040-2	76	100	400	140	75	66	39	65.0	100	0-15.0	12.8
ALV-1040-2H							54				14.3
ALV-1040-2W							39				14.7
ALV-1040-2WH							54				17.0
ALV-1550-2	95	150	500	185	80	89	49	86.0	150	0-22.5	28.7
ALV-1550-2H							59				30.3
ALV-1550-2W							49				31.5
ALV-1550-2WH							59				33.7

Fixed Jaw

MODEL NO.	A	B	C	D	E	kg
ALV-0620-57	36	60	21	7	2.0	0.10
ALV-0620-57H			31	17		0.15
ALV-0620-57W	36	80	21	7	2.0	0.15
ALV-0620-57WH			31	17		0.23
ALV-1030-57	60	100	39	17	5.5	0.60
ALV-1030-57H			54	32		0.80
ALV-1030-57W	60	150	39	17	5.5	0.90
ALV-1030-57WH			54	32		1.25
ALV-1040-57	75	100	39	17	13.0	0.72
ALV-1040-57H			54	32		1.04
ALV-1040-57W	75	150	39	17	13.0	1.14
ALV-1040-57WH			54	32		1.60
ALV-1550-57	80	150	49	21	15.5	1.45
ALV-1550-57H			59	31		1.75
ALV-1550-57W	80	200	49	21	15.5	2.00
ALV-1550-57WH			59	31		2.40

Movable Soft Jaw

MODEL NO.	A	B	C	D	E	kg
ALV-0620-56	75	60	21	3	16	0.20
ALV-0620-56H			31	13		0.28
ALV-0620-56W	75	80	21	3	16	0.30
ALV-0620-56WH			31	13		0.45
ALV-1030-56	110	100	39	14	22	1.00
ALV-1030-56H			54	29		1.45
ALV-1030-56W	110	150	39	14	22	1.62
ALV-1030-56WH			54	29		2.30
ALV-1040-56	140	100	39	14	37	1.35
ALV-1040-56H			54	29		1.90
ALV-1040-56W	140	150	39	14	37	2.04
ALV-1040-56WH			54	29		2.95
ALV-1550-56	185	150	49	19	48	3.35
ALV-1550-56H			59	29		4.00
ALV-1550-56W	185	200	49	19	48	4.48
ALV-1550-56WH			59	29		5.40



ALV

HIGH STRENGTH ALUMINUM LINE UP VISE

- Material: High strength aluminum A7075 (Hard coat surface)
Tool steel (Hardness: over HRC 55°)
- Application: Ideal for aluminum or irregular shaped work pieces.

Cap-Screw hole (Find in Page 7)

Specification

MODEL NO.	B	D	E	G	H	I	K	M	N	O	P	Q	kg
ALV-1030-C-2	100	110	60	66	39	32.5	335	250	266	200	0-10.0	M12	44.40
ALV-1030-C-2H					54				296				48.80
ALV-1030-C-2W					39				266				50.56
ALV-1030-C-2WH	150			54				296					57.40
ALV-1040-C-2	100	140	75	66	39	65.0	435	250	266	200	0-15.0	M12	56.38
ALV-1040-C-2H					54				296				62.06
ALV-1040-C-2W					39				266				63.58
ALV-1040-C-2WH	150			54				296					72.70
ALV-1550-C-2	150	185	80	89	49	86.0	545	300	338	250	0-22.5	M16	123.60
ALV-1550-C-2H					59				358				130.00
ALV-1550-C-2W					49				338				134.84
ALV-1550-C-2WH	200			59				358					143.80

*ALL SIZE BASE PLATES ARE AVAILABLE FOR THE ALV VISE.

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

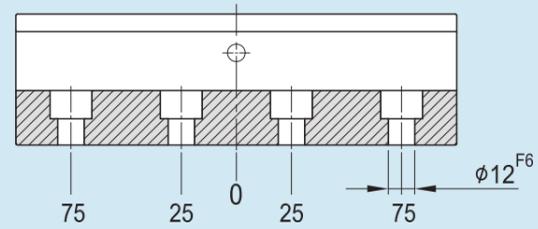
OTHER

Column
for
Technical
Data

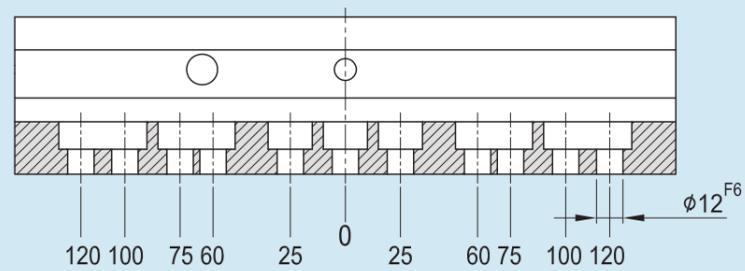
ALV HIGH STRENGTH ALUMINUM LINE UP VISE

The locating mounting holes for ALV main body

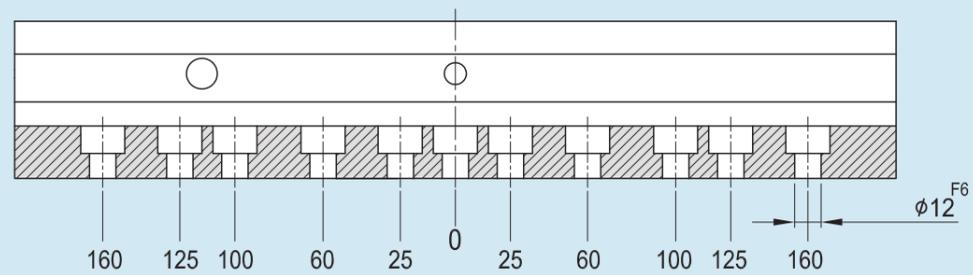
ALV-0620



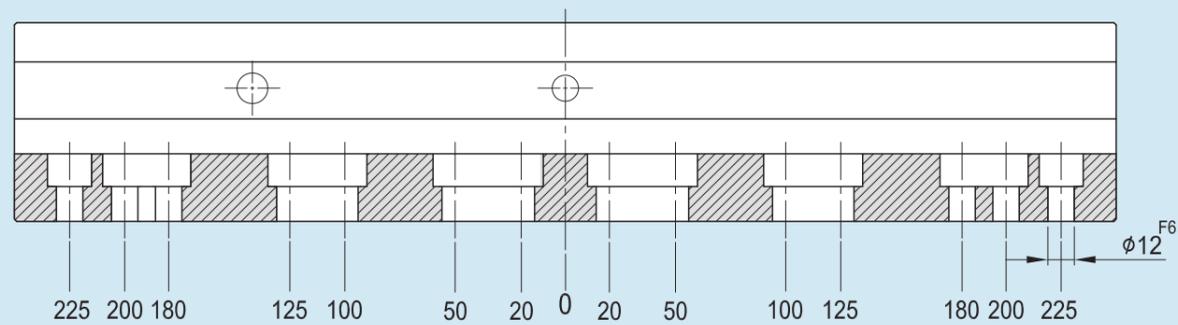
ALV-1030



ALV-1040



ALV-1550





OK-VISE

OK-VISE BK2-VT-B DK2-VT-B ...



CLAMPING METHOD CLAMPING METHOD CLAMPING METHOD CLAMPING METHOD

OK-VISE CLAMPING UNIT

**Smart design
Ultimate efficiency**



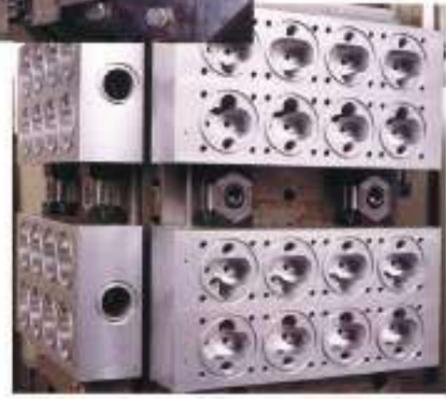
Accurate machining needs a free operative clamping unit. OK-VISE is a good solution for reaching such target because it is locked firmly in every direction as it is tightened down and this cuts out all possibilities of measurement error due to sliding.



OK-VISE low-profile clamp is flexible to operate on different pallets.



OK-VISE low-profile clamp extends the capacity of each pallets to be utilized.



OK-VISE low-profile clamp cuts down the cost of changing other machining jig and fixtures, which means that the clamp is possible to achieve the highest level of this effectiveness.

OK-VISE CLAMPING UNIT

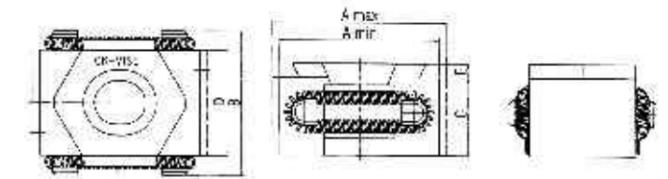
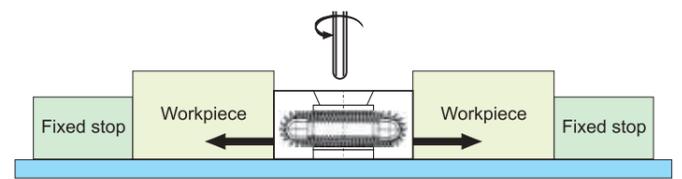
THE COST EFFICIENT CHOICE !

Accuracy of the fixture comes normally from the precision of the fixed stoppers, guideframes and location pins (so called 0-points) not from the clamp itself which job is to generate the clamping force to hold the

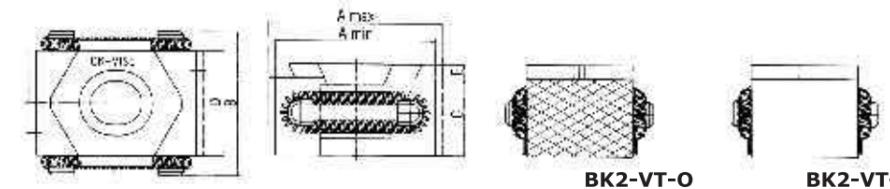
workpiece towards the 0-points. We have designed three models on this page to meet the demands of regular workholding when ultra precision is not a necessity.

Although not ground as precise as standard models these clamps are just as effective when it comes to clamping force. Same raw material is being used and bottom of the jaws are ground for precise locating on the fixture base.

AK2-VT-SO always comes with Viton o-rings but B-series clamps are also available with regular springs on request.



TYPE	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in kg approx.	Hardness of jaws HRC
	min	optimum	max									
AK2-VT-SO	20	23	25	22	11	15	4.2	M5x025	10	10	0.022	48-52



TYPE	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in kg approx.	Hardness of jaws HRC
	min	optimum	max									
BK2-VT-O	27	29	31	29	15	21	2.5	M8x020	25	44	0.055	48-52



TYPE	A			B	C	D	E	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Tightening torque, Nm	Weight in kg approx.	Hardness of jaws HRC
	min	optimum	max									
BK2-VT-SO	27	29	31	29	15	21	2.5	M8x020	25	44	0.055	48-52

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-VISE

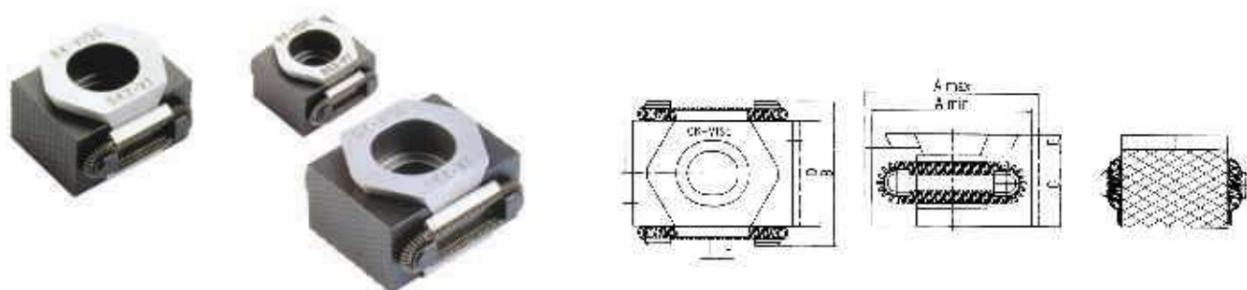
JER-GENS

OTHER

Column for Technical Data

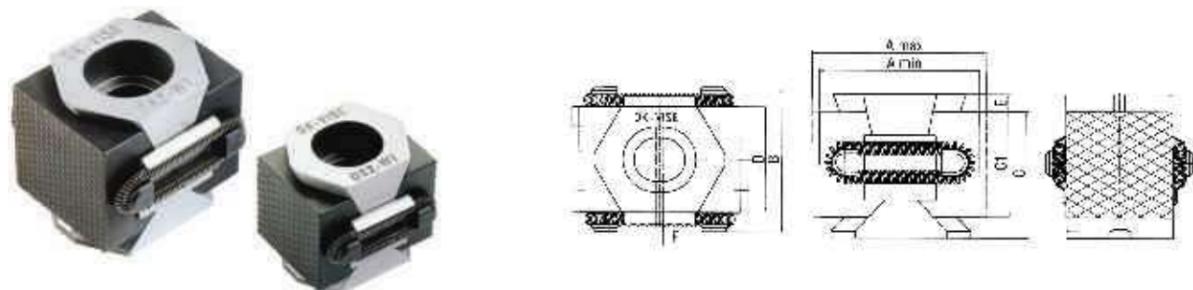


OK-VISE CLAMPING UNIT



TYPE	A			B	C	D	E	F	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Weight in kg approx.	Hardness of jaws HRC
	min	optimum	max									
BK2-VT	27	29	31	29	15	21	2.5	1	M 8x020	25	0.055	48-52
DK2-VT	42	45	49	41	22	30	4.0	2	M12x030	65	0.180	48-52
FK2-VT	57	61	66	56	29	42	5.0	3	M16x040	110	0.465	48-52

Notice : Standard jaw is serrated (as drawing), if U need flat-jaw, please add "-s" after the model number. For example : BK2-VT-S

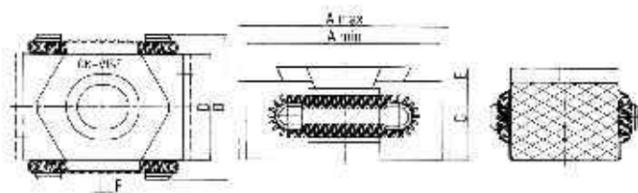


型號	A			B	C	C1	D	E	F	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Weight in kg approx.	Hardness of jaws HRC
	min	optimum	max										
DK2-WT	42	46	49	41	36	30	30	5	2	M12x040	90	0.275	48-52
FK2-WT	58	61	66	56	50	42	42	5	3	M16x060	150	0.730	48-52

Notice : Standard jaw is serrated (as drawing), if U need flat-jaw, please add "-s" after the model number. For example : BK2-WT-S

SPECIAL MODELS

Special models include machinable jaw models, additional piece models and models designed for castings. BK2-VT Stainless steel mode is specially designed for use on EDM machines.

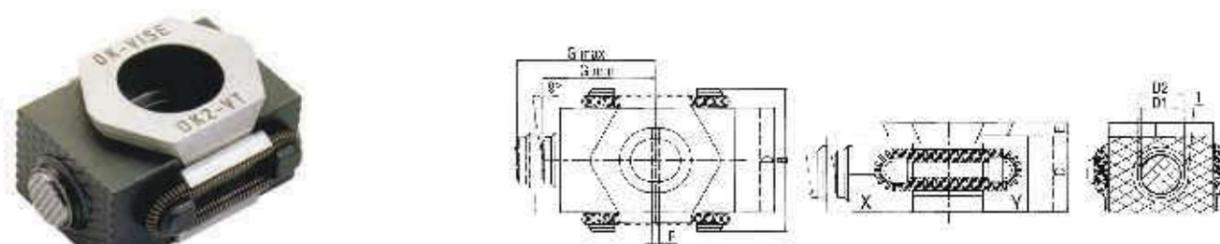


型號	A			B	C	D	E	F	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Weight in kg approx.	Hardness of jaws HRC
	min	optimum	max									
BK2-VT+3	33	35	37	29	15	21	2.5	1	M 8x020	22	0.070	30-34
DK2-VT+5	52	55	59	41	22	30	4.0	2	M12x030	55	0.235	30-34
FK2-VT+5	67	70	75	56	29	42	5.0	3	M16x040	100	0.550	30-34

Notice : Except BK2-VT+3 only with flat-jaw, others have flat or serrated jaw.

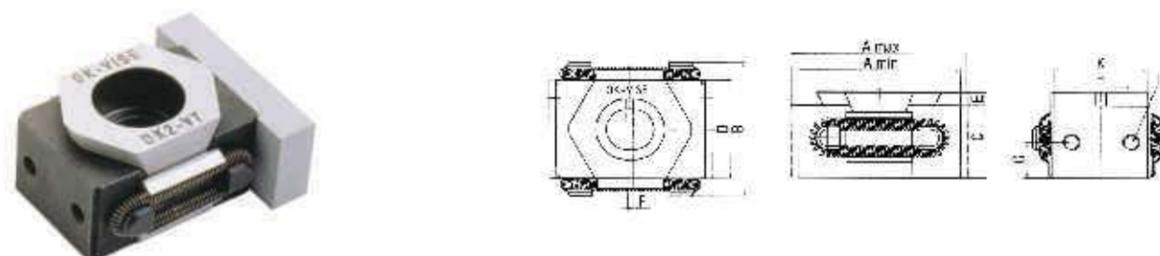


OK-VISE CLAMPING UNIT



TYPE	Thread (T)	Diameter of ball (D2)	Diameter of serration (D1)	G min	G opt	G max
BK2-VT-B	M12	8.5	7.2	19.5	20.5	21.5
DK2-VT-B	M16	12.0	10.7	31.0	32.5	34.5

TYPE	A			B	C	D	E	F	G	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Weight in kg approx.	Hardness of jaws HRC X	Hardness of jaws HRC Y
	min	optimum	max											
BK2-VT-B	33	35	37	29	15	21	2.5	1	3	M 8x020	22	0.064	30-34	48-52
DK2-VT-B	52	55	59	41	22	30	4.0	2	5	M12x030	55	0.212	30-34	48-52



TYPE	A			B	C	D	E	F	G	H	K	L	Socket Head Screw DIN 912	Pressing force of Jaws, kN	Weight in kg approx.	Hardness of jaws HRC
	min	optimum	max													
BK2-VT-T	33	35	37	29	15	21	2.5	1	7.5	12	-	4xM5	M 8x020	22	0.060	30-34
DK2-VT-T	46	49	53	41	22	30	4.0	2	11.0	18	28	4xM5	M12x030	55	0.200	30-34
FK2-VT-T	61	65	70	56	29	42	5.0	3	14.5	26	40	4xM5	M16x040	100	0.480	30-34

Notice : use the screw strength above 8.8



BP

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ALV

OK-VISE

JER-GENS

OTHER

Column for Technical Data



Jergens

BL-49655, BL-49556, BL-49755...

LOCATING AND CLAMPING SHANKS, FAST ACTING BALL LOCK TM SHANKS, LINERS, RECEIVER REBAR FINISHINGS

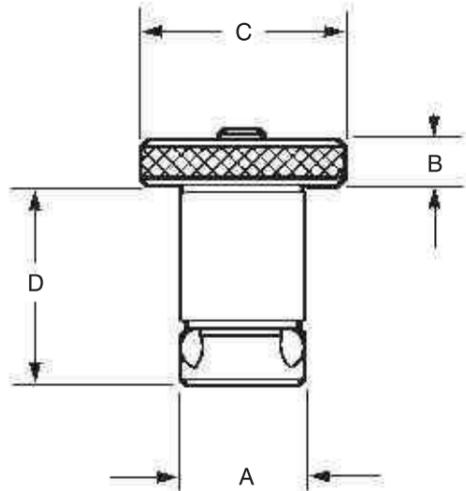


LOCATING AND CLAMPING SHANKS



- Material: Shank/Bushing, AISI 4340 Liner, 52100
- Finish: Black Oxide
- Heat Treat: Shanks, HRC 40°-45° Bushings, HRC 50°-54° Liners, HRC 62°-64°
- Operating Temperature Range: -30°C to 200°C
- Stainless Steel available in all sizes.

U.S. Patens: 3,498,653
4,135,418



Replacement Kits



- Each Kit Includes:
- Replacement Screw
 - Locking Balls
 - Drive Ball
 - O-Ring

Any Ball Lock application requires at least two sets of shanks, receiver bushings and liners. The liners are placed into the fixture plate to insure extremely accurate positioning. If more than two shanks are required (to provide additional hold down force), omit the liner bushing so that these additional holes will not interfere with your primary locating holes.

Shank Part Number	Shank Diameter (mm) A	Fixture Plate Thickness ± 0.13mm	Head of Shank		Hex Wrench Size for Set Screw	Maximum		Recommended		Repair Kit Part Number
			Height B	Diameter C		Screw Torque (N.m)	Holddown Force (KN)	Screw Torque (N.m)	Holddown Force (KN)	
BL-49655	13	13	6	22	27.6	1.2	3.3	1	2.7	49955
BL-49656		20			34.6					49956
BL-49657	16	20	8	32	36.5	4.5	5.3	3	3.5	49957
BL-49658		25			41.5					49958
BL-49651	20	20	10	40	39.5	5.3	13.3	4	10.0	49951
BL-49652		25			44.5					49952
BL-49661	25	20	10	45	44.0	11.0	30.0	9	23.0	49961
BL-49662		25			49.0					49962
BL-49671	30	20	13	50	49.0	18.0	44.0	15	35.0	49971
BL-49672		25			54.0					49972
BL-49681	35	20	13	60	51.0	33.0	68.0	25	52.0	49981
BL-49682		25			56.0					49982
BL-49683		40			71.0					49983
BL-49684		50			81.0					49984
BL-49691	50	20	20	75	64.0	65.0	88.0	50	67.0	49991
BL-49692		25			69.0					49992
BL-49693		40			84.0					49993
BL-49694		50			94.0					49994



FAST ACTING BALL LOCK™ SHANKS



Thumb Screw



Adjustable Handle

FAST ACTING BALL LOCK SHANKS				Ball Lock Shank Diameter (mm)	Fixture Plate Thickness (mm)
Shank with Thumb Screw		Shank with Adjustable Handle			
Part Number		Part Number			
Assembly	T-Screw	Assembly	Handle		
BL-49655-S	BL-43971	BL-49655-H	BL-34360	13	13
BL-49656-S	BL-43972	BL-49656-H	BL-34361		20
BL-49657-S	BL-43974	BL-49657-H	BL-34365	16	20
BL-49658-S	BL-43975	BL-49658-H	BL-34365		25
BL-49651-S	BL-43974	BL-49651-H	BL-34365	20	20
BL-49652-S	BL-43975	BL-49652-H	BL-34365		25
BL-49661-S	BL-43977	BL-49661-H	BL-34378	25	20
BL-49662-S	BL-43978	BL-49662-H	BL-34379		25
BL-49671-S	BL-43980	BL-49671-H	BL-34385	30	20
BL-49672-S	BL-43980	BL-49672-H	BL-34385		25
BL-49681-S	BL-43985	BL-49681-H	BL-34393	35	20
BL-49682-S	BL-43985	BL-49682-H	BL-34393		25

LINERS



Locating repeatability will determine if one primary and one secondary or two primary liners are needed. With two primary liners, repeatability of ±0.013mm can be maintained if the two holes for receiver bushings are held to a centerline distance of ±0.005mm tolerance.

Note on Installation of Back Mount Style:

To alleviate the possibility of binding the shank in the bore, the maximum interference fit between bore and bushing O.D. should not exceed 0.013mm.

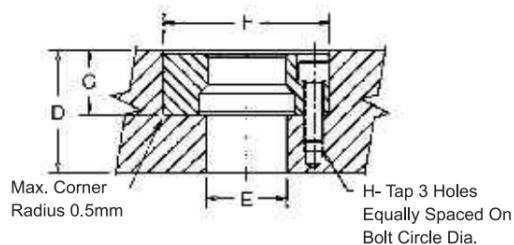
Primary Liner		Secondary Liner		Shank Diameter (mm)	Fixture Plate Thickness +0.13 -0.13	Liner O.D. +0.00 -0.01
Part Number	I.D.	Part Number	I.D.			
BL-49755	13.01	BL-49855	13.04	13	13	19.040
BL-49756		BL-49856			20	19.040
BL-49757	16.01	BL-49857	16.04	16	20	25.042
BL-49758		BL-49858			25	25.042
BL-49751	20.01	BL-49851	20.04	20	20	35.042
BL-49752		BL-49852			25	35.042
BL-49761	25.01	BL-49861	25.04	25	20	35.042
BL-49762		BL-49862			25	35.042
BL-49771	30.01	BL-49871	30.04	30	20	45.042
BL-49772		BL-49872			25	45.042
BL-49781	35.01	BL-49881	35.04	35	20	45.042
BL-49782		BL-49882			25	45.042
BL-49783		BL-49883			40	45.042
BL-49784		BL-49884			50	45.042
BL-49791	50.01	BL-49891	50.04	50	20	63.546
BL-49792		BL-49892			25	63.546
BL-49793		BL-49893			40	63.546
BL-49794		BL-49894			50	63.546



- Two styles of receiver bushings are available. Installed bushings should be approximately 0.3mm below subplate surface.



Face Mount



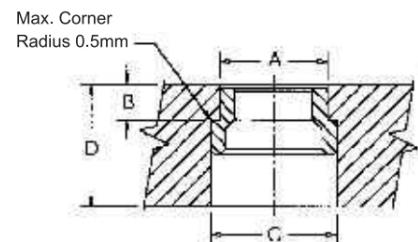
Face Mount Bushing Installation Instructions

*Generally, the face mount receiver bushing is utilized in blind hole applications (Slip Fit).

Face Mount Part Number	Shank Dia. (mm)	Actual O.D. -0.01 -0.02	Clearance Drill Diameter E	Bore +0.003 +0.010 F	Depth +0.025 -0.025 G	Tap Size & Depth H	Bolt Circle Diameter 3 PL Equally Spaced	Min. Subplate Thickness D
BL-49556	13	35	13.5	35	11.91	M4x0.7 x 7	25	20
BL-49557	16	37	21.0	37	11.91	M4x0.7 x 7	29	20
BL-49551	20	45	21.0	45	16.21	M5x0.8 x 9	35	25
BL-49552	25	55	25.5	55	20.32	M6x1.0 x 10	42	30
BL-49553	30	60	30.5	60	22.15	M6x1.0 x 11	48	35
BL-49554	35	70	40.0	70	22.99	M8x1.25 x 17	56	40
BL-49555	50	92	55.0	92	31.50	M10x1.5 x 18	75	50



Back Mount



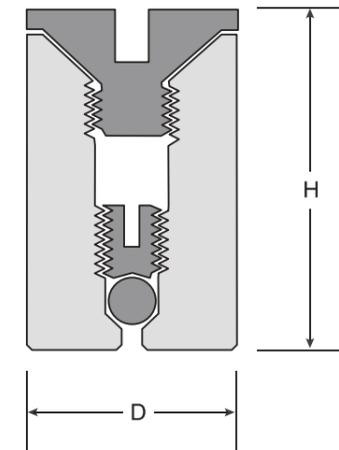
Back Mount Bushing Installation Instructions

*The back mount receiver bushing is used in through hole applications (Light Press Fit).

Back Mount Part Number	Shank Dia. (mm)	Actual O.D. +0.04 +0.03 A	Depth +0.025 -0.025 B	C-Bore ± 0.15 C	Min. Subplate Thickness D
BL-49566	13	20	6.92	26	20
BL-49567	16	22	7.24	29	20
BL-49561	20	28	8.74	33	25
BL-49562	25	35	10.54	41	25
BL-49563	30	42	10.95	49	30
BL-49564	35	48	12.50	55	35
BL-49565	50	67	15.75	76	45

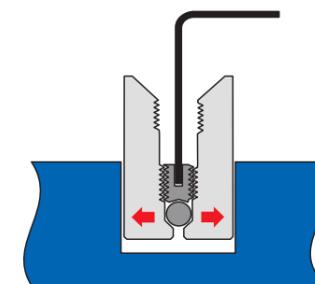


- Material: Steel, hardened to 50°-55° Rockwell C
- Self-Centering and Repeatable to within ±0.013mm
- Top and bottom half of dowel expand separately
- Patented



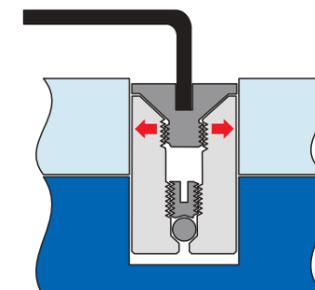
Part Number	Diameter D	Height H	Hex Size
PED-29451	10	20	4
PED-29452	12	24	5
PED-29453	14	28	5
PED-29454	16	32	6
PED-29455	20	40	8

Installation Instructions



Step 1

Remove the top screw, insert the dowel into the locating hole of the first part, and expand the bottom half with a hex wrench.



Step 2

Replace the top screw, slide the locating hole of the second part over the dowel and expand top half with a hex wrench.

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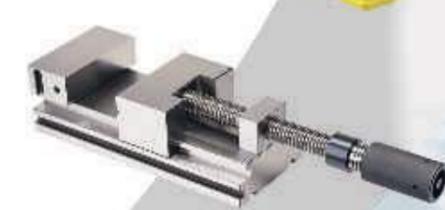
OTHER

Column for Technical Data



OTHERS

TCP, CF, PGV, NBK



TCP TOOL TIGHTENING FIXTURE CF MEASURING PROBE PGV PRECISION HYDRAULIC VISE NBK ROUND SUPER THIN CHUCK S

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0006562162.562465323644066256
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0006562162.562465323644066256
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TCP

TOOL TIGHTENING FIXTURE

Tool Holder is Changeable

Easy assemble and dis-assemble tool holder from main body while pressing the valve on the right hand side of the unit.



Tool Holder is Adjustable up to 360°

Easily adjusts tool holders for a full 360° (45° increments) by pushing the valve on the top of the tightening fixture.



4pcs of M10x40mm bolt can be fastened from the top of the mounting flange or 4pcs of M12 bolt can be fastened from the bottom of the mounting

Tightening Fixture Main Body



Model No.	kg
TCP-150	6

Tool Holder

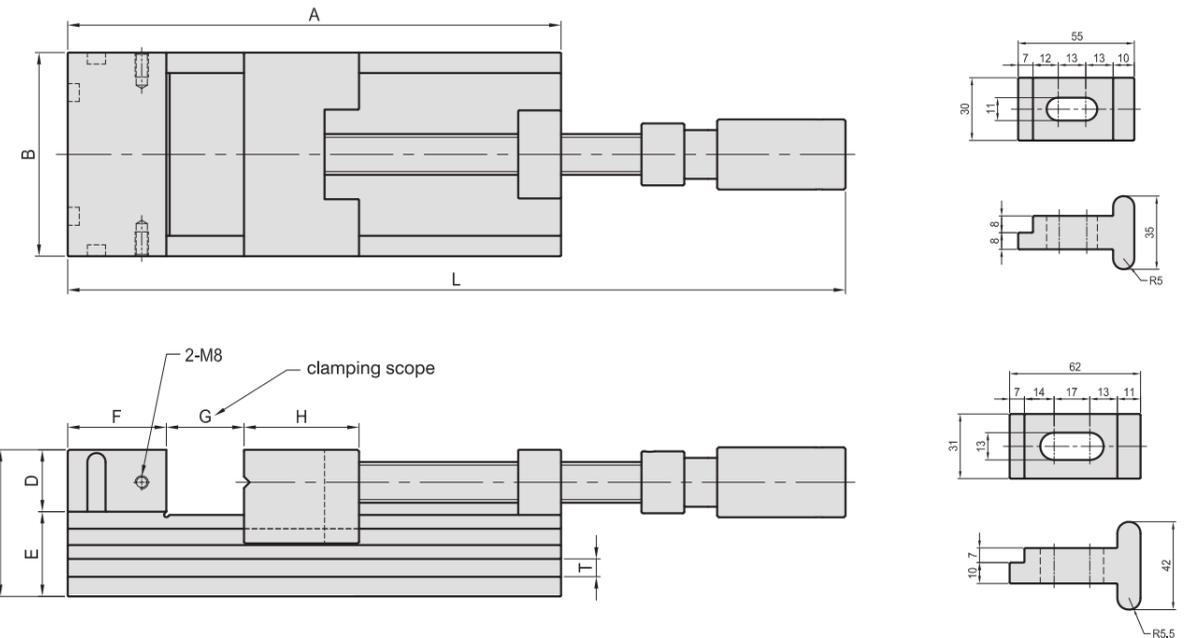
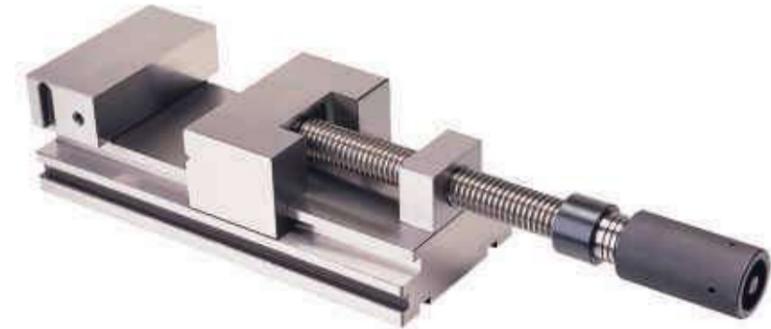


Model No.	kg	Model No.	kg
TCP-BT30	2.3	TCP-HSK-A-100	3.8
TCP-BT40	2.8	TCP-HSK-E-25	2.3
TCP-BT50	4.8	TCP-HSK-E-32	2.5
TCP-HSK-A-40	3.3	TCP-HSK-E-40	2.8
TCP-HSK-A-63	2.3	TCP-HSK-E-50	3.0
TCP-HSK-A-80	3.5	TCP-HSK-F-63	3.2

PGV

PGV PRECISION HYDRAULIC VISE

- Super precision: // ±0.005 / 100mm
⊥ ±0.005 / 100mm
- Heat treated: HRC 58°~60°
- Application: Multifunction tool makers vise, ideally suited for: inspection, grinding or edm work.



MODEL NO.	A	B	C	D	E	F	G	H	L		T	Material	Kg
									MIN	MAX			
PGV-100	220	100	80	40	40	40	0~110	50	344	455	9x7	SNCM21	10.0
PGV-100N												SKS3	
PGV-125	300	125	90	40	50	60	0~165	70	420	590	11x7	SNCM21	19.5
PGV-125N												SKS3	

BP

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VISE

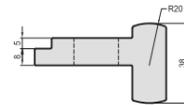
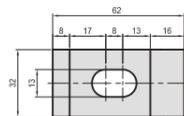
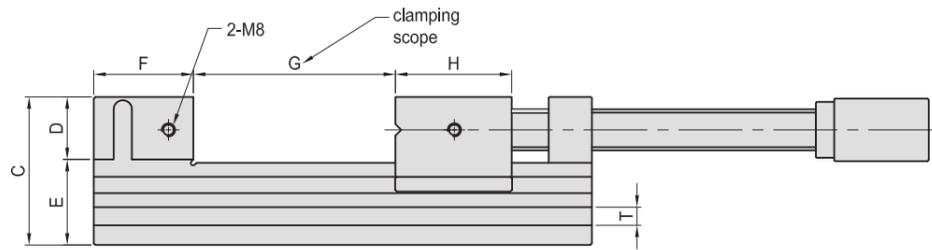
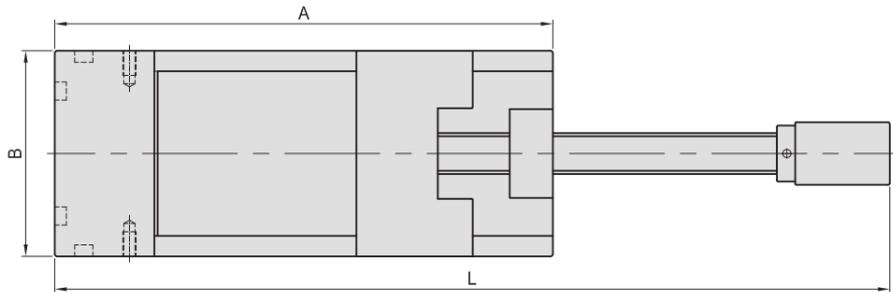
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TOOL MAKER VISE

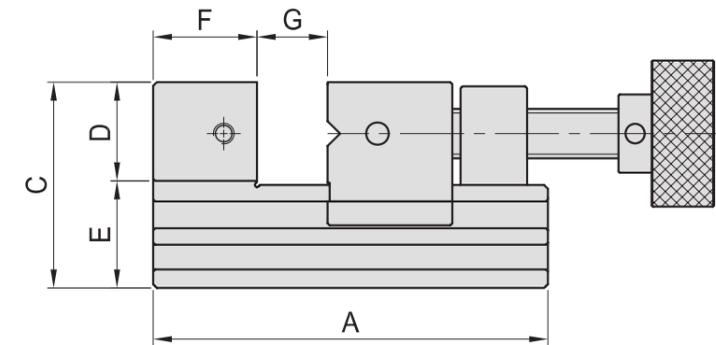
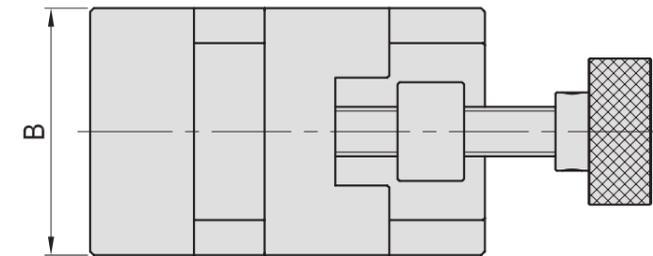
- Super precision: // $\pm 0.005 / 100\text{mm}$
 $\perp \pm 0.005 / 100\text{mm}$
- Heat treated: HRC 58°~60°
- Material: SKS3
- Application: Multifunction tool makers vise, ideally suited for: inspection, grinding or edm work.



MODEL NO.	A	B	C	D	E	F	G	H	L		T	Kg
									MIN	MAX		
PGV-125M	300	125	90	40	50	60	0~165	70	382	546	11x7	19

SUPER PRECISION TOOL MAKER VISE

- Super precision: // $\pm 0.003 / 100\text{mm}$
 $\pm 0.005 / 100\text{mm}$
- Heat treated: HRC 58°~60°
- Material: SKS3



MODEL NO.	A	B	C	D	E	F	G	Kg
GVS-AS60	95	60	50	25	25	26.0	0~30	1.7

BP

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SVF

ALV

OK-VISE

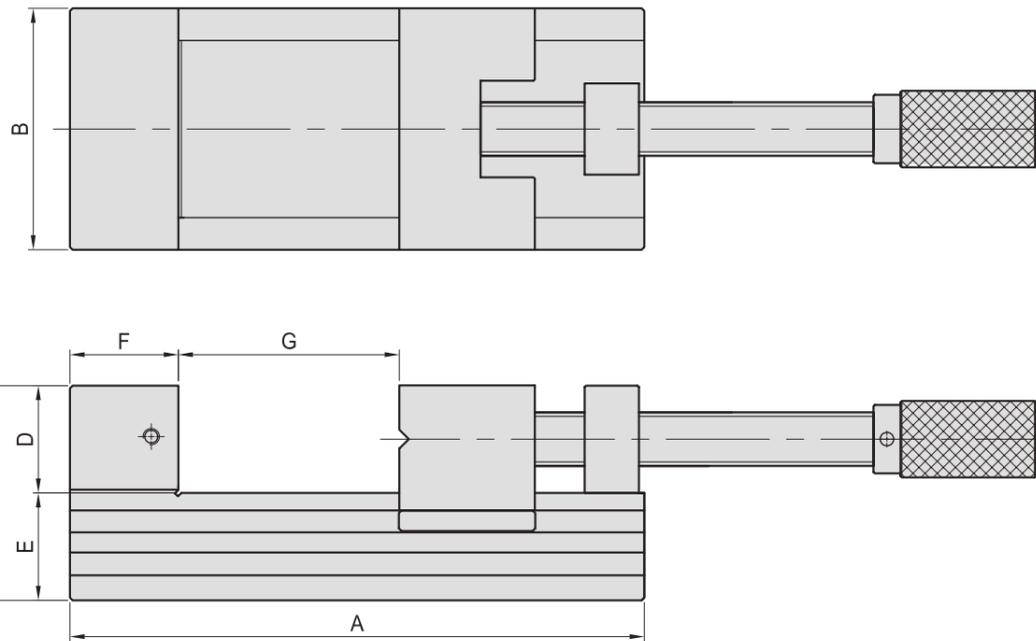
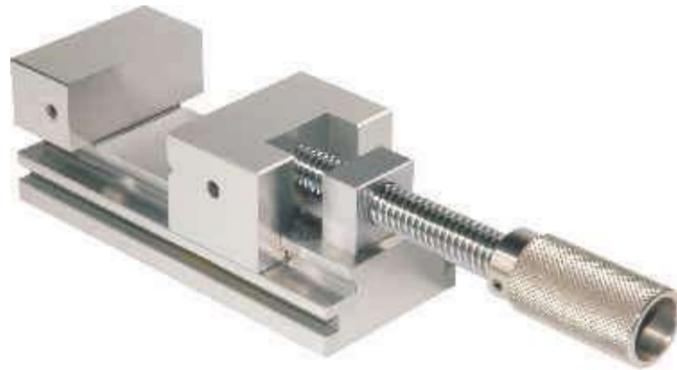
JER-GENS

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Column for Technical Data

**SUPER PRECISION TOOL
MAKER VISE**

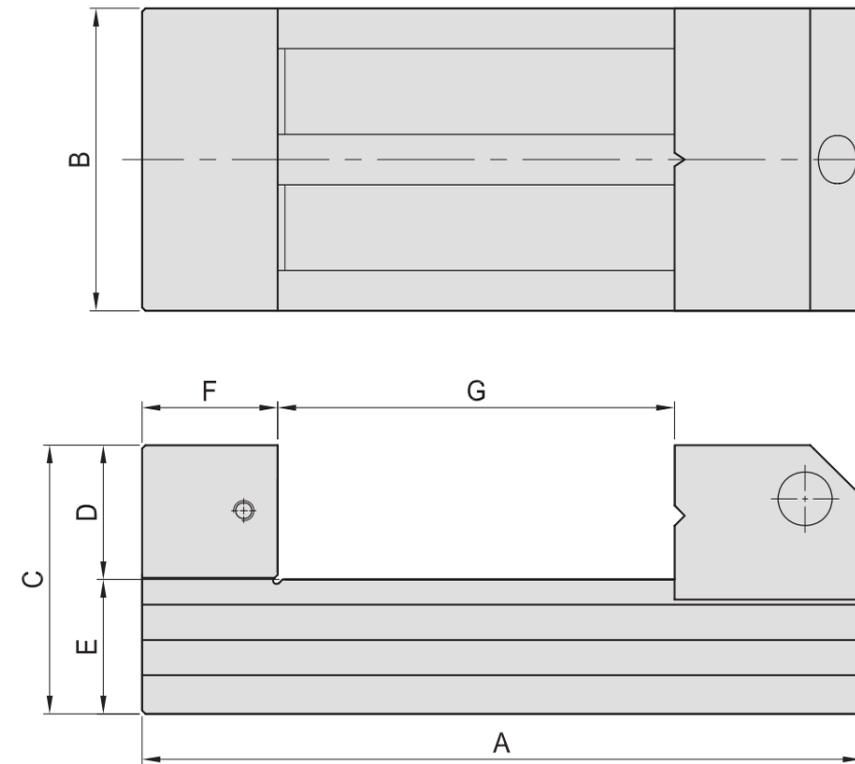
- Super precision: // $\pm 0.003 / 100\text{mm}$
 $\perp \pm 0.005 / 100\text{mm}$
- Heat treated: HRC 58°~60°
- Material: SKS3



MODEL NO.	A	B	C	D	E	F	G	Kg
GVS-AS70	165	70	62	30	32	33.0	0~80	4.5
GVS-AS90	212	90	80	40	40	41.2	0~120	8.5

**SUPER PRECISION TOOL
MAKER VISE**

- Super precision: // $\pm 0.003 / 100\text{mm}$
 $\perp \pm 0.005 / 100\text{mm}$
- Heat treated: HRC 58°~60°
- Material: SKS3



MODEL NO.	A	B	C	D	E	F	G	Kg
GVS-SV70	160	70	62	30	33	33.0	0~80	3.3
GVS-SV90	212	90	80	40	40	40.5	0~117	8.3

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-
VISE

JER-
GENS

OTHER

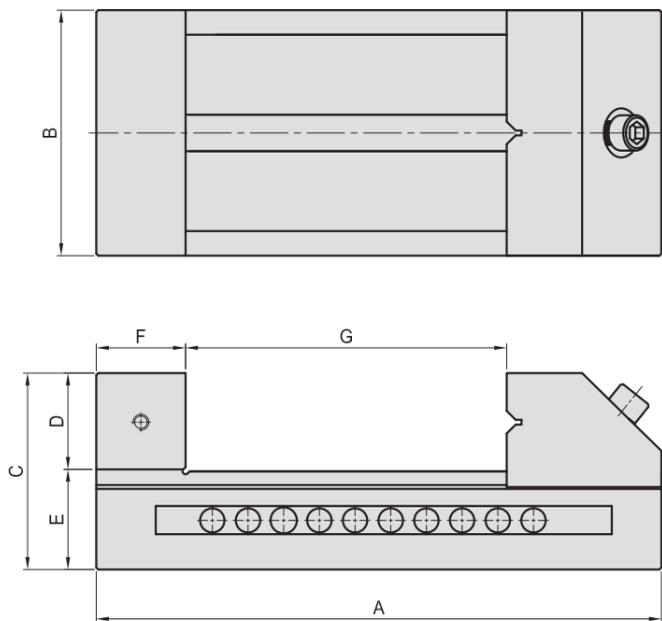
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GVS

TOOL MAKER VISE (LARGE)

- Super precision: // $\pm 0.003 / 100\text{mm}$
 $\perp \pm 0.005 / 100\text{mm}$
- Heat treated: HRC 58°~60°
- Material: SKS3



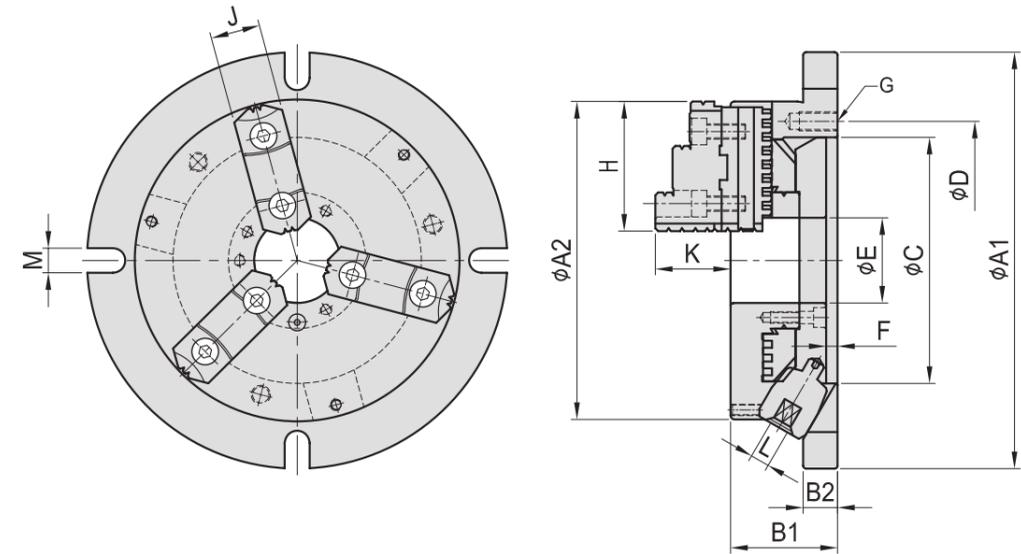
MODEL NO.	A	B	C	D	E	F	G	Kg
GVS-VS50	285	125	100	50	50	45	0~160	18



NBK

ROUND SUPER THIN CHUCK

- The handle with an angle of 30 degrees is much convenient for operations.
- The "super thin thickness" design of chucks increase the "allowable distance" of machining operations.
- Chuck flange makes loading and unloading operations simpler and more convenient.
- Hard jaws and Soft jaws can be used alternatively.



SPEC./MODEL	A1	A2	B1	B2	C	D	E	F	G	H	J	K	L	M	Max. Dia Gripped by		Kg
															external	internal	
NBK-06	220	170	58	18	130	147	45	6	3-M10	68	26	40	10	13	$\phi 8-\phi 160$	$\phi 48-\phi 150$	10.6
NBK-08	270	210	65	20	155	172	60	6	3-M10	82	28	43	11	13	$\phi 11-\phi 200$	$\phi 62-\phi 190$	18.1
NBK-10	315	255	73	20	190	210	80	6	3-M12	93	32	52	12	16	$\phi 12-\phi 250$	$\phi 72-\phi 240$	27.9
NBK-12	370	305	80	22	250	285	105	5	3-M12	118	40	59	14	18	$\phi 15-\phi 300$	$\phi 86-\phi 290$	42.9

BP

BPA

BC

CP

SU

PT

SVF

ALV

OK-VISE

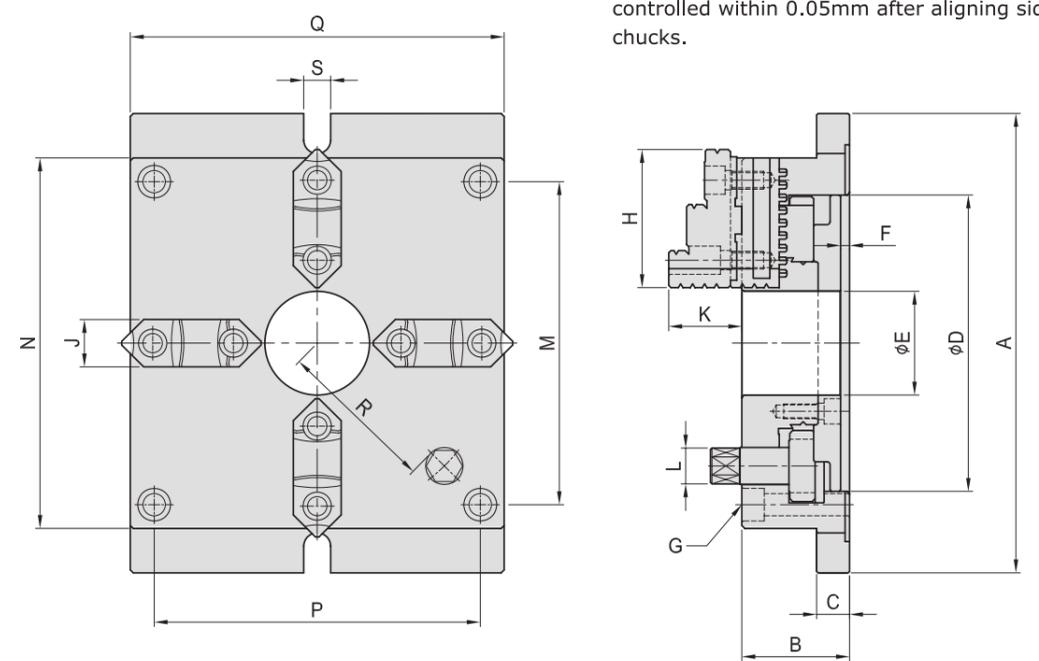
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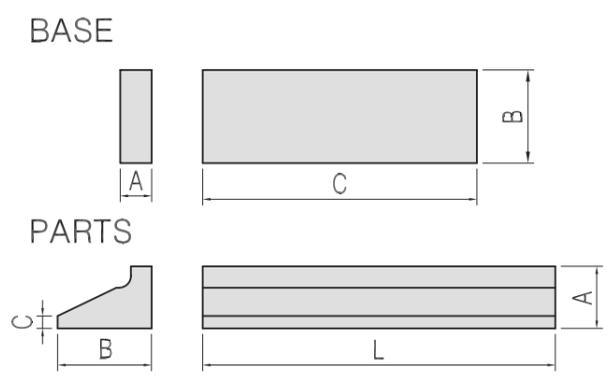
- MC chucks are precisely ground, the tolerances of W,X,Y,Z among chucks are within 0.05mm.
- Soft jaws can be used alternatively for machining special shaped work pieces, to substitute for designing and making a lot of jigs for this purpose.
- The repetitive gripping accuracy with the hard jaws are within 0.02mm.
- Parallel gripping accuracy with hard jaws can be controlled within 0.05mm after aligning sides of chucks.



SPEC./MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	Max. Dia Gripped by		kg
																		external	internal	
MCA-06	215	57	18	130	40	5.5	4-M10	68	26	39	14	144	165	144	165	66	18	φ4-φ128	φ55-φ128	11.4
MCA-08	250	65	20	160	55	6.0	4-M12	82	28	43	17	174	200	174	200	83	18	φ5-φ162	φ62-φ162	18.6
MCA-10	310	72	22	200	70	6.0	4-M14	93	32	50	21	218	250	218	250	104	18	φ6-φ200	φ72-φ200	31.6
MCA-12	380	85	25	260	100	7.0	4-M16	117	40	56	23	274	310	274	310	135	22	φ10-φ265	φ90-φ265	56.6



- Material: S45C(JIS) / CK45(DIN)
- Heat treated: HRC 45°.
- Accuracy: A ± 0.01
B ± 0.01
C ± 0.5



Model No.	BASE SIZE			PARTS SIZE				kg (1)
	A	B	C	A	B	C	L	
GP102-05	5	16	100	-	-	-	-	1 SET/11.6
GP102-06	6	18	100	-	-	-	-	
GP102-08	8	24	100	-	-	-	-	
GP102-10	10	30	100	-	-	-	-	
GP102-12	12	36	150	-	-	-	-	
GP102-14	14	48	150	-	-	-	-	
GP102-18	18	60	150	-	-	-	-	
GP102-22	22	62	150	-	-	-	-	
GP102-24				15	31	2.5	200	

BP

BPA

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OK-
VISE

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OTHER

Column
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Technical
Data

Column for Technical Data

LIMIT TOLERANCES FOR SCREW THREADS DIMENSIONAL TOLERANCE COORDINATING TABLE



LIMIT TOLERANCES FOR SCREW THREADS

1.METER SIZED COARSE SCREW THREAD

Nominal of screw	Minimum dimension	Maximum dimension
M 1 x 0.25	0.73	0.78
M 1.1 x 0.25	0.83	0.89
M 1.2 x 0.25	0.93	0.98
M 1.4 x 0.3	1.08	1.14
M 1.6 x 0.35	1.22	1.32
M 1.7 x 0.35	1.33	1.42
M 1.8 x 0.35	1.42	1.52
M 2 x 0.4	1.57	1.67
M 2.2 x 0.45	1.71	1.84
M 2.3 x 0.4	1.87	1.97
M 2.5 x 0.45	2.01	2.14
M 2.6 x 0.45	2.12	2.23
M 3 x 0.5	2.46	2.60
M 3.5 x 0.6	2.85	3.01
M 4 x 0.7	3.24	3.42
M 4.5 x 0.75	3.69	3.88
M 5 x 0.8	4.13	4.33
M 6 x 1	4.92	5.15
M 7 x 1	5.92	6.15
M 8 x 1.25	6.65	6.91
M 9 x 1.25	7.65	7.91
M 10 x 1.5	8.38	8.68
M 11 x 1.5	9.38	9.68
M 12 x 1.75	10.11	10.44
M 14 x 2	11.84	12.21
M 16 x 2	13.84	14.21
M 18 x 2.5	15.29	15.74
M 20 x 2.5	17.29	17.74
M 22 x 2.5	19.29	19.74
M 24 x 3	21.29	21.74
M 27 x 3	23.75	24.25
M 30 x 3.5	26.21	26.77
M 33 x 3.5	29.21	29.77
M 36 x 4	31.67	32.27
M 39 x 4	34.67	35.27
M 42 x 4.5	37.13	37.80
M 45 x 4.5	40.13	40.80
M 48 x 5	42.59	43.30

2.METER SIZED FINE THREAD

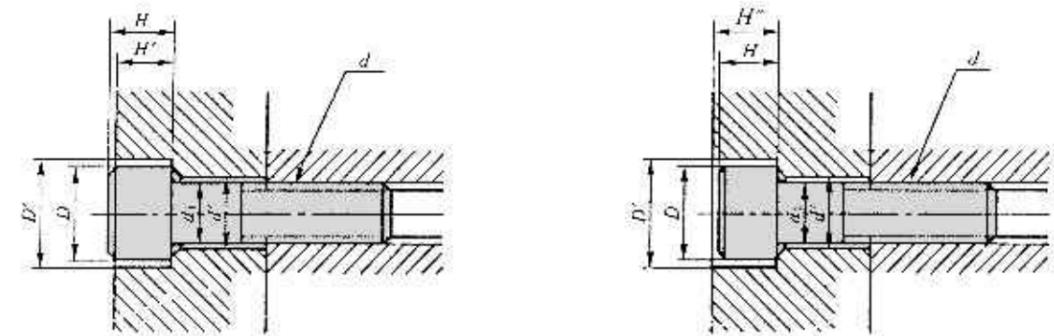
Nominal of screw	Minimum dimension	Maximum dimension
M 2.5 x 0.35	2.12	2.22
M 3 x 0.35	2.62	2.72
M 3.5 x 0.35	3.12	3.22
M 4 x 0.5	3.46	3.60
M 4.5 x 0.5	3.96	4.10
M 5 x 0.5	4.46	4.60
M 5.5 x 0.5	4.96	5.10
M 6 x 0.75	5.19	5.38
M 7 x 0.75	6.19	6.38
M 8 x 1	6.92	7.15
M 8 x 0.75	7.19	7.38
M 9 x 1	7.92	8.15
" x 0.75	8.19	8.38
M 10 x 1.25	8.65	8.91
" x 1	8.92	9.15
" x 0.75	9.19	9.38
M " x 1	9.92	10.15
" x 0.75	10.19	10.38
M 12 x 1.5	10.38	10.68
" x 1.25	10.65	10.91
" x 1	10.92	11.15
M 14 x 1.5	12.38	12.68
" x 1	12.92	13.15
M 15 x 1.5	13.38	13.68
" x 1	13.92	14.15
M 16 x 1.5	14.38	14.68
" x 1	14.92	15.15
M 17 x 1.5	15.38	15.68
" x 1	15.92	16.15
M 18 x 2	15.84	16.21
" x 1.5	16.38	16.68
M " x 1	16.92	17.15
M 20 x 2	17.84	18.21
" x 1.5	18.38	18.68
" x 1	18.92	19.15
M 22 x 2	19.84	20.21
" x 1.5	20.38	20.68
" x 1	20.92	21.15
M 24 x 2	21.84	22.21
" x 1.5	22.38	22.68
" x 1	22.92	23.15
M 25 x 2	22.84	23.21
" x 1.5	23.38	23.68

Nominal of screw	Minimum dimension	Maximum dimension
" x 1.5	23.92	24.15
M 26 x 1.5	24.38	24.68
M 27 x 2	24.84	25.21
" x 1.5	25.38	25.68
" x 1	25.92	26.15
M 28 x 2	25.84	26.21
" x 1.5	26.38	26.68
" x 1	26.92	27.15
M 30 x 3	26.75	27.25
" x 2	27.84	28.21
" x 1.5	28.38	28.68
" x 1	28.92	29.15
M 32 x 2	29.84	30.21
" x 1.5	30.38	30.68
M 33 x 3	29.75	30.25
" x 2	30.84	31.21
" x 1.5	31.38	31.68
M 35 x 1.5	33.38	33.68
M 36 x 3	32.75	33.25
" x 2	33.84	34.21
" x 1.5	34.38	34.68
M 38 x 1.5	36.38	36.68
M 39 x 3	35.75	36.25
" x 2	36.84	37.21
" x 1.5	37.38	37.68
M 40 x 3	36.75	37.25
" x 2	37.84	38.21
" x 1.5	38.38	38.68
M 42 x 4	37.67	38.27
" x 3	38.75	39.25
" x 2	39.84	40.21
" x 1.5	40.38	40.68
M 45 x 4	40.67	41.27
" x 3	41.75	42.25
" x 2	42.84	43.21
" x 1.5	43.38	43.68
M 48 x 4	43.67	44.27
" x 3	44.75	45.25
" x 2	45.84	46.21
" x 1.5	46.38	46.68
M 50 x 3	46.75	47.25
" x 2	47.84	48.21
" x 1.5	48.38	48.68

3.PIPE THREAD

Nominal of screw	RP(PS)		RC(PT)	
	Minimum dimension	Maximum dimension	Minimum dimension	Maximum dimension
1/16	6.49	6.63	6.10	6.24
1/8	8.50	8.64	8.11	8.25
1/4	11.34	11.55	10.76	10.96
3/8	14.85	15.05	14.24	14.24
1/2	18.49	18.77	17.70	17.98
5/8				
3/4	23.98	24.26	23.10	23.38
7/8				
1	30.11	30.47	29.10	29.46
1 1/8				
1 3/4	38.77	39.13	37.62	37.98
1 1/2	44.67	45.03	43.51	43.87
1 3/4				
2	56.48	56.84	55.05	55.41

THE DIMENSION OF THE SPOT FACING THE BOLT HOLE TO THE SOCKET HEAD CAP SCREW

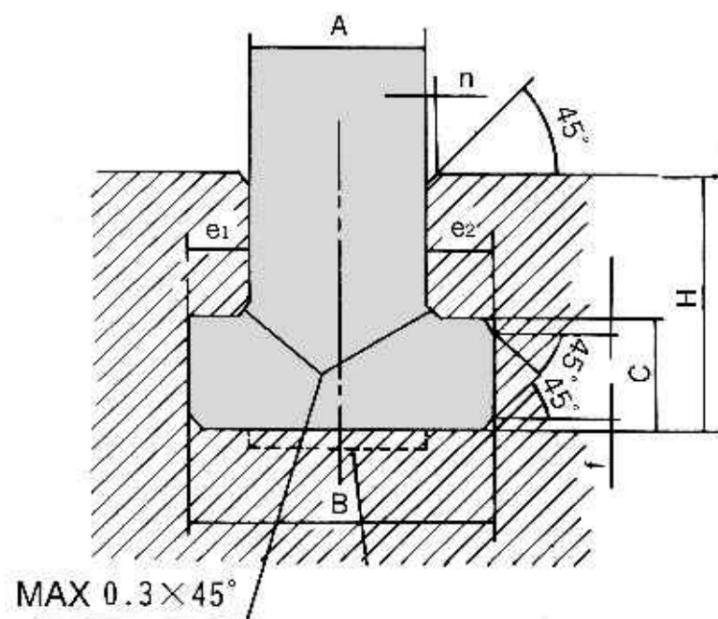


Mark	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30
d1	3.0	4.0	5.0	6.0	8.0	10.0	12	14.0	16.0	18.0	20.0	22.0	24.0	27	30
d'	3.4	4.5	5.5	6.6	9.0	11.0	14	16.0	18.0	20.0	22.0	24.0	26.0	30	33
D	5.5	7.0	8.5	10.0	13.0	16.0	18	21.0	24.0	27.0	30.0	33.0	36.0	40	45
D'	6.5	8.0	9.5	11.0	14.0	17.5	20	23.0	26.0	29.0	32.0	35.0	39.0	43	48
H	3.0	4.0	5.0	6.0	8.0	10.0	12	14.0	16.0	18.0	20.0	22.0	24.0	27	30
H'	2.7	3.6	4.6	5.5	7.4	9.2	11	12.8	14.5	16.5	18.5	20.5	22.5	25	28
H''	3.3	4.4	5.4	6.5	8.6	10.8	13	15.2	17.5	19.5	21.5	23.5	25.5	29	32

- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JER-GENS
- OTHER

Column for Technical Data

T SLOTS



VARIETY OF GEOMETRICAL TOLERANCE AND THE MARK

Available form	Variety of tolerance		
Individual form	Shape tolerance	Straightness rate tolerance	—
		Plane rate tolerance	▭
		Out of roundness	○
		Cylindrical rate tolerance	⊘
		Line contour rate tolerance	∩
Individual form or related form		Face contour rate tolerance	∪
Related form	Position tolerance	Parallel rate tolerance	//
		Perpendicularity	⊥
		Inclination rate tolerance	∠
	Location tolerance	Position rate tolerance	⊕
		Concentricity	⊙
		Symmetrical rate tolerance	≡
	Shake rate tolerance	Circumference shake tolerance	↗
		All shake tolerance	↗↘

Standard	A					B		C		H		.e1-e2 (2) Class Tolerance	reference n maximum	reference f minimum
	Class Tolerance					Standard	(1) Class Tolerance	Standard	(1) Class Tolerance	maximum	minimum			
	0 class H7	1 class H8	2 class H12	3 class H14	4 class									
5	+0.012	+0.018	+0.12	-	-	10.0	+1 0	3.5	+1 0	10	8	0.5	1.0	0.6
6	0	0	0	-	-	11.0	+1.5 0	5.0		13	11			
8	+0.015	+0.022	+0.15	-	-	14.5	0	7.0	+1 0	18	15			
10	0	0	0	-	-	16.0		7.0	0	21	17			
12						19.0	+2 0	8.0		25	20	1.0	1.6	1.0
14	+0.018 0	+0.027 0	+0.18 0	+0.43 0	+2.7	23.0	0	9.0		28	23			
18						30.0		12.0	+2 0	36	30			
22	+0.021 0	+0.033 0	+0.21 0	+0.52 0	+3.3	37.0	+3 0	16.0	0	45	38			
28						46.0		20.0		56	48	2.0	2.5	2.0
36						56.0	+4 0	25.0	+3 0	71	61			
42	+0.025 0	+0.039 0	+0.25 0	+0.62 0	+3.9	68.0	0	32.0	0	85	74			
48						80.0	+5 0	36.0	+4 0	95	84			
54	+0.030 0	+0.046 0	+0.30 0	+0.74 0		90.0	0	40.0	0	106	94			

BP

BPA

BC

CP

SU

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VISE

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GENS

OTHER

Column
for
Technical
Data

DIMENSIONAL TOLERANCE COORDINATING TABLE

■ TOLERANCE COORDINATING TABLE FOR BORE DIMENSION Unit : μ

Basic dim(mm)		GRADE																
Above	Under	B10	C9	C10	D8	D9	D10	E7	E8	E9	F6	F7	F8	G6	G7	H6	H7	H8
-	3	+180 +140	+85 +60	+100 +60	+34 +20	+45 +20	+60 +20	+24 +14	+28 +14	+39 +14	+12 +6	+16 +6	+20 +6	+8 +2	+12 +2	+6 0	+10 0	+14 0
3	6	+188 +140	+100 +70	+118 +70	+48 +30	+60 +30	+78 +30	+32 +20	+38 +20	+50 +20	+18 +10	+22 +10	+28 +10	+12 +4	+16 +4	+8 0	+12 0	+18 0
6	10	+208 +150	+116 +80	+138 +80	+62 +40	+76 +40	+98 +40	+40 +25	+47 +25	+61 +25	+22 +13	+28 +13	+35 +13	+14 +5	+20 +5	+9 0	+15 0	+22 0
10	14	+220	+138	+165	+77	+93	+120	+50	+59	+75	+27	+34	+43	+17	+24	+11	+18	+27
14	18	+150	+95	+95	+50	+50	+50	+32	+32	+32	+16	+16	+16	+6	+6	0	0	0
18	24	+244	+162	+194	+98	+117	+149	+61	+73	+92	+33	+41	+53	+20	+28	+13	+21	+33
24	30	+160	+110	+110	+65	+60	+65	+40	+40	+40	+20	+20	+20	+7	+7	0	0	0
30	40	+270 +170	+182 +120	+220 +120	+119	+142	+180	+75	+89	+112	+41	+50	+64	+25	+34	+16	+25	+39
40	50	+280 +180	+192 +130	+230 +130	+80	+80	+80	+50	+50	+50	+25	+25	+25	+9	+9	0	0	0
50	65	+310 +190	+214 +140	+260 +140	+146	+174	220	+90	+106	+134	+49	+60	+76	+29	+40	+19	+30	+46
65	80	+320 +200	+224 +150	+270 +150	+100	+100	+100	+60	+60	+60	+30	+30	+30	+10	+10	0	0	0
80	100	+360 +220	+257 +170	+310 +170	+174	+207	+260	+107	+126	+126	+58	+71	+90	+34	47	+22	+35	+54
100	120	+380 +240	+267 +180	320 +180	+120	+120	+120	+72	+72	+72	+36	+36	+36	+12	+12	0	0	0
120	140	+420 +260	+300 +200	+360 +200														
140	160	+440 +280	+310 +210	+370 +210	+208 +145	+245 +145	+305 +145	+125 +85	+148 +85	+148 +85	+68 +43	+83 +43	+106 +43	+39 +14	+54 +14	+25 0	+40 0	+63 0
160	180	+470 +310	+330 +230	+390 +230														
180	200	+525 +340	+355 +240	+425 +240														
200	225	+565 +380	+375 +260	+445 +260	+242 +170	+285 +170	+355 +170	+146 +100	+172 +100	+172 +100	+79 +50	+96 +50	+122 +50	+44 +15	+61 +15	+29 0	+46 0	+72 0
225	250	+605 +420	+395 +280	+465 +280														
250	280	+690 +480	+430 +300	+510 +300	+271 +190	+320 +190	+400 +190	+162 +110	+191 +110	+240 +110	+88 +56	+108 +56	+137 +56	+49 +17	+69 +17	+32 0	+52 0	+81 0
280	315	+750 +540	+460 +330	+540 +330	+190	+190	+190	+110	+110	+110	+56	+56	+56	+17	+17	0	0	0
315	355	+830 +600	+500 +360	+590 +360	+299 +210	+350 +210	+440 +210	+182 +125	+214 +125	+265 +125	+98 +62	+119 +62	+151 +62	+54 +18	+75 +18	+36 0	+57 0	+89 0
355	400	+910 +680	+540 +400	+630 +400	+210	+210	+210	+125	+125	+125	+62	+62	+62	+18	+18	0	0	0
400	450	+1010 +760	+595 +440	+690 +440	+327 +230	+385 +230	+480 +230	+198 +135	+232 +135	+232 +135	+108 +68	+131 +68	+165 +68	+60 +20	+83 +20	+40 0	+63 0	+97 0
450	500	+1090 +840	+635 +480	+730 +480														

DIMENSIONAL TOLERANCE COORDINATING TABLE

■ TOLERANCE COORDINATING TABLE FOR BORE DIMENSION Unit : μ

Basic dim(mm)		GRADE																		
Above	Under	H9	H10	JS6	JS7	K6	K7	M6	M7	N6	N7	P6	P7	R7	S7	T7	U7	X7		
-	3	+25 0	+40 0	± 3	± 5	0 -6	0 -10	-2 -8	-2 -12	-4 -10	-4 -14	-6 -12	-6 -16	-10 -20	-14 -24	-	-18 -28	-20 -30		
3	6	+30 0	+48 0	± 4	± 6	+2 -6	+3 -9	-1 -9	-0 -12	-5 -13	-4 -16	-9 -17	-8 -20	-11 -23	-15 -27	-	-19 -31	-24 -36		
6	10	+36 0	+58 0	± 4.5	± 7	+2 -7	+5 -10	-3 -12	0 -15	-7 -16	-4 -19	-12 -21	-9 -24	-13 -28	-17 -32	-	-22 -37	-28 -43		
10	14	+43	+70	± 5.5	± 9	+2 -9	+6 -12	-4 -15	0 -18	-9 -20	-5 -23	-15 -26	-11 -29	-16 -34	-21 -39	-	-26 -44	-51 -56		
14	18	0	0																	
18	24	+52	+84	± 6.5	± 10	+2 -11	+6 -15	-4 -17	0 -21	-11 -24	-7 -28	-18 -31	-14 -35	-20 -41	-27 -48	-	-33 -40	-46 -56		
24	30	0	0																	
30	40	+62	+100	± 8	± 12	+3 -13	+7 -18	-4 -20	0 -25	-12 -28	-8 -33	-21 -37	-17 -42	-25 -50	-34 -59	-39 -64	-51 -76	-		
40	50	0	0																	
50	65	+74	+120	± 9.5	± 15	+4 -15	+9 -21	-5 -24	0 -30	-14 -33	-9 -39	-26 -45	-21 -51	-30 -60	-42 -72	-55 -85	-76 -106	-		
65	80	0	0																	
80	100	+87	+140	± 11	± 17	+4 -18	+10 -25	-6 -28	0 -35	-16 -38	-10 -45	-30 -52	-24 -59	-38 -73	-58 -93	-78 -113	-111 -146	-		
100	120	0	0																	
120	140	+100	+160	± 12.5	± 20	+4 -21	+12 -28	-8 -33	0 -40	-20 -45	-12 -52	-36 -61	-28 -68	-48 -88	-77 -117	-107 -147	-	-		
140	160	0	0																	
160	180																			
180	200	+155	+185	± 14.5	± 23	+5 -24	+13 -33	-8 -37	0 -46	-22 -51	-14 -60	-41 -70	-33 -79	-60 -105	-105 -151	-111 -146	-	-		
200	225	0	0																	
225	250																			
250	280	+130	+210	± 16	± 26	+5 -24	+16 -36	-9 -41	0 -52	-25 -57	-14 -66	-47 -79	-36 -88	-74 -126	-126 -178	-144 -193	-	-		
280	315	0	0																	
315	355	+140	+230	± 18	± 28	+5 -27	+17 -40	-10 -46	0 -57	-26 -62	-16 -73	-51 -87	-41 -98	-87 -144	-144 -193	-150 -200	-	-		
355	400	0	0																	
400	450	+155	+250	± 20	± 31	+7 -29	+18 -45	-10 -50	0 -63	-27 -67	-17 -80	-55 -95	-45 -108	-103 -166	-166 -224	-199 -257	-	-		
450	500	0	0																	

- BP
- BPA
- BC
- CP
- SU
- PT
- SVF
- ALV
- OK-VISE
- JER-GENS
- OTHER

Column for Technical Data



DIMENSIONAL TOLERANCE COORDINATING TABLE

■ TOLERANCE COORDINATING TABLE FOR BORE DIMENSION

Unit : μ

Basic dim(mm)		GRADE														
Above	Under	b9	c9	d8	d9	e7	e8	e9	f6	f7	f8	g5	g6	h5	h6	h7
-	3	-140	-60	-20	-20	-14	-14	-14	-6	-6	-6	-2	-2	0	0	0
		-165	-85	-34	-45	-24	-28	-39	-12	-16	-20	-6	-8	-4	-6	-10
3	6	-140	-70	-30	-30	-20	-20	-20	-10	-10	-10	-4	-4	0	0	0
		-170	-100	-48	-60	-32	-38	-50	-18	-22	-28	-9	-12	-5	-8	-12
6	10	-150	-80	-40	-40	-25	-25	-25	-13	-13	-13	-5	-5	0	0	0
		-186	-116	-62	-76	-40	-47	-61	-22	-28	-35	-11	-14	-6	-9	-15
10	14	-150	-95	-50	-50	-32	-32	-32	-16	-16	-16	-6	-6	0	0	0
		-193	-138	-77	-93	-50	-59	-75	-27	-34	-43	-14	-17	-8	-11	-18
18	24	-160	-110	-65	-65	-40	-40	-40	-20	-20	-20	-7	-7	0	0	0
		-212	-162	-98	-117	-61	-73	-92	-33	-41	-53	-16	-20	-9	-13	-21
30	40	-170	-120	-80	-80	-50	-50	-50	-25	-25	-25	-9	-9	0	0	0
		-232	-182													
40	50	-180	-130	-119	-142	-75	-89	-112	-41	-50	-64	-20	-25	-11	-16	-25
		-242	-192													
50	65	-190	-140	-100	-100	-60	-60	-60	-30	-30	-30	-10	-10	-0	0	0
		-264	-214													
65	80	-200	-150	-146	-174	-90	-106	-134	-49	-60	-76	-23	-29	-13	-19	-30
		-274	-224													
80	100	-220	-170	-120	-120	-72	-72	-72	-36	-36	-36	-12	-12	-0	0	0
		-307	-257													
100	120	-240	-180	-174	-207	-107	-126	-159	-58	-71	-90	-27	-34	-15	-22	-35
		-327	-267													
120	140	-260	-200	-145	-145	-85	-85	-85	-43	-43	-43	-14	-14	0	0	0
		-360	-300													
140	160	-280	-210	-208	-245	-125	-148	-185	-68	-83	-106	-32	-39	-18	-25	-40
		-380	-310													
160	180	-310	-230	-170	-170	-100	-100	-100	-50	-50	-50	-15	-15	0	0	0
		-410	-330													
180	200	-340	-240	-242	-285	-146	-172	-215	-79	-96	-122	-35	-44	-20	-29	-46
		-455	-355													
200	225	-380	-260	-170	-170	-100	-100	-100	-50	-50	-50	-15	-15	0	0	0
		-495	-375													
225	250	-420	-280	-299	-350	-182	-214	-265	-98	-119	-151	-43	-54	-25	-36	-57
		-535	-395													
250	280	-480	-300	-210	-210	-125	-125	-125	-62	-62	-62	-18	-18	0	0	0
		-610	-430													
280	315	-540	-330	-271	-320	-162	-191	240	-88	-108	-137	-40	-49	-23	-32	-52
		-670	-500													
315	355	-600	-400	-299	-350	-182	-214	-265	-98	-119	-151	-43	-54	-25	-36	-57
		-740	-540													
355	400	-680	-440	-230	-230	-135	-135	-135	-68	-68	-68	-20	-20	0	0	0
		-820	-595													
400	450	-760	-480	-327	-385	-198	-290	-290	-108	-131	-165	47	-60	-27	-40	-63
		-915	-635													
450	500	-840		-327	-385	-198	-290	-290	-108	-131	-165	47	-60	-27	-40	-63
		-995														