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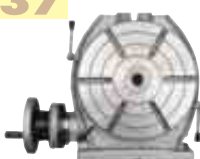
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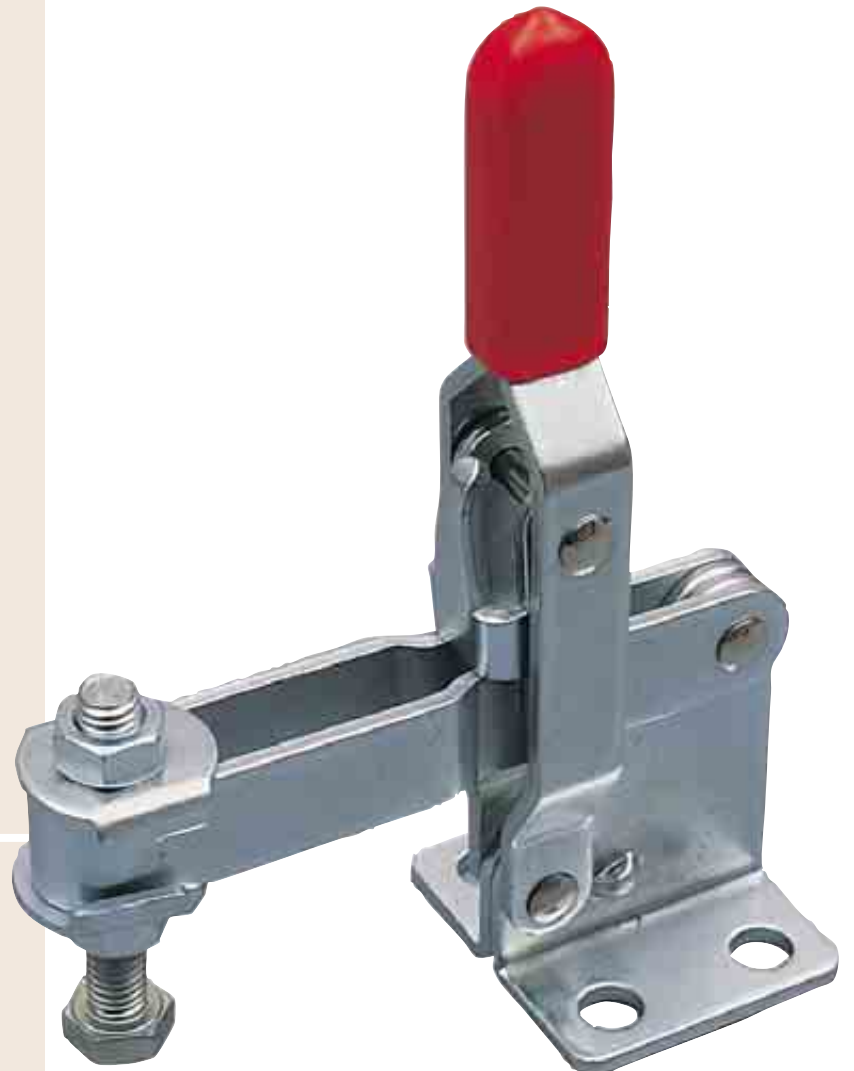
## Section 4 Contents

# 4

## Workshop Equipment

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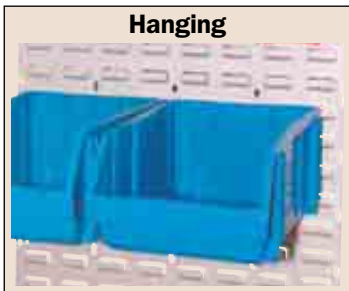
**MATLOCK** Plastic Storage Bins

Manufactured from high strength polypropylene. Fit on standard louvre panel, interlocking design.



**EXTENDED RANGE**

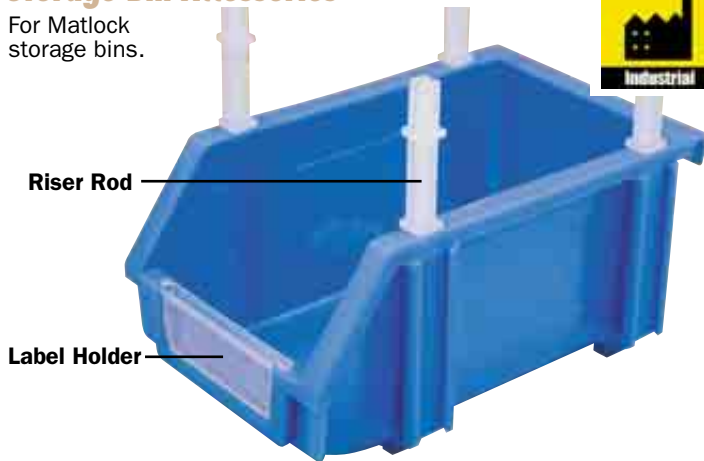
Workshop Equipment



Size	Dimensions L x W x H (mm)	Colour	Box Qty	Order Code MTL-404
No.0	130x85x53	Blue	300	-1000B
		Green		-1000G
		Red		-1000R
		Yellow		-1000Y
No.1	163x104x80	Blue	100	-1010B
		Green		-1010G
		Red		-1010R
		Yellow		-1010Y
No.2	237x157x132	Blue	64	-1020B
		Green		-1020G
		Red		-1020R
		Yellow		-1020Y
No.3	278x222x165	Blue	24	-1030B
		Green		-1030G
		Red		-1030R
		Yellow		-1030Y
No.3A	350x280x184	Blue	8	-1035B
		Green		-1035G
		Red		-1035R
		Yellow		-1035Y
No.4	425x280x184	Blue	12	-1040B
		Green		-1040G
		Red		-1040R
		Yellow		-1040Y
No.5	425x280x260	Blue	8	-1050B
		Green		-1050G
		Red		-1050R
		Yellow		-1050Y

**Storage Bin Accessories**

For Matlock storage bins.

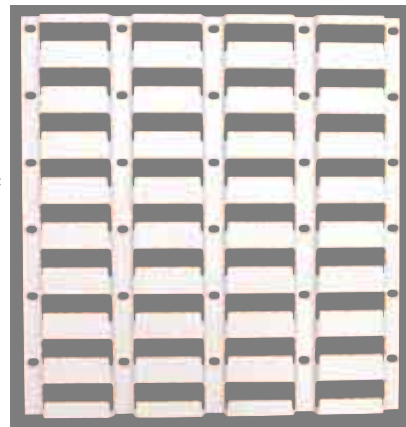


Description	Order Code MTL-404
Set of 4 Riser Rods	-9010K
Single Riser rod for No.3A, 4 & 5 Bins	-9020K
Label Holder For No.0 Bins	-3500K
Label Holder For No.1 Bins	-3510K
Label Holder For No.2 Bins	-3520K
Label Holder For No.3 & 4 Bins	-3530K
Label Holder For No.3A & 5 Bins	-3540K

**Steel Louvred Panels**

**NEW**

Pressed steel panels with high frequency louvres that will accept most makes of plastic storage bin. High frequency louvres allow bins to be hung in a high-density configuration in any mix of sizes/colours. The lip on the rear of the plastic storage bin sits securely over the louvre of the panel. The modular design allows storage bins to be easily removed and replaced when required.



**Bins supplied separately.**

Type	Width x Height (mm)	Order Code MTL-404
LP450	450 x 450	-2004P
LP900	450 x 900	-2009P
LP1600	450 x 1600	-2016P
LP1800	450 x 1800	-2018P

**Parts, Component & Tool Storage Bins**

High strength polypropylene Euro boxes with reinforced corners and rims and integral interlocking hinged lids. Smooth flat base allows silent movement on conveyors making them suitable for use in distribution centres or warehouse storage.

All containers feature ergonomic hand and can be sealed using security tags.

**NEW**

Available in 20, 40 or 54ltr capacities.



Capacity	Size (L x W x H) (mm)	Colour	Order Code MTL-404
20ltr	400 x 300 x 260	Blue	-2500K
40ltr	600 x 400 x 250		-2520K
54ltr	600 x 400 x 335		-2530K
20ltr	400 x 300 x 260	Grey	-2600K
40ltr	600 x 400 x 250		-2620K
54ltr	600 x 400 x 335		-2630K



**SENATOR** Cabinet with Shelf & Workbench

Manufactured from cold rolled steel plate with a hard wearing corrosion resistant powder coated finish. Hard wearing solid wooden work surface. Two shelves. Adjustable feet. Supplied with assembly instructions.  
Maximum shelf capacity 20kg.  
Maximum cabinet capacity 150kg.



SELF ASSEMBLY  
Tools Required

Dimensions (W x D x H) Weight Order Code  
838x508x852 25.5kg **SEN-405**  
**-5030K**

**Locking Cabinet & Workbench**

Lockable storage cabinet with two shelves. Overall dimensions (W x D x H): 838 x 508 x 852mm.  
Max shelf capacity 20kg.  
Max cabinet capacity 150kg.



SELF ASSEMBLY  
Tools Required

Dimensions WxDxH (mm) Weight Order Code  
838x508x852 27.0kg **SEN-405**  
**-5020K**

**5 Drawer Cabinet & Workbench**

The five drawers have a smooth action sliding mechanism.



SELF ASSEMBLY  
Tools Required

Dimensions WxDxH (mm) Weight Order Code  
838x508x852 43.0kg **SEN-405**  
**-5010K**

**Locking Cabinet with Shelf and Workbench**

Lockable storage cabinet with two shelves and two open shelves for additional storage. Overall dimensions (W x D x H): 1372 x 508 x 865mm.  
Max shelf/drawer capacity 25kg.  
Max cabinet capacity 180kg.



NEW

Shelf Capacity  
**25kg**  
Uniformly Distributed Load

SELF ASSEMBLY  
Tools Required

Dimensions W x D x H (mm) Weight Order Code  
1372 x 508 x 865 48.5kg **SEN-405**  
**-5040K**

**5 Drawer Cabinet and Shelved Workbench**

The five drawers have a smooth action sliding mechanism. Two open shelves for additional storage. Overall dimensions (W x D x H): 1372 x 508 x 865mm.  
Max shelf drawer capacity 25kg.  
Max cabinet capacity 180kg.



NEW

Shelf Capacity  
**25kg**  
Uniformly Distributed Load

SELF ASSEMBLY  
Tools Required

Dimensions W x D x H (mm) Weight Order Code  
1372 x 508 x 865 61.0kg **SEN-405**  
**-5050K**

Workshop Equipment

**KENNEDY** 2 Drawer Workbench  
QUALITY INDUSTRIAL TOOLING

Professional quality two drawer workbench constructed from heavy gauge steel for sturdy long-term use. Ideal for a range of workshop and industrial applications. Drawers are lockable and fitted with smooth glide drawer runners. Full length storage shelf. Quick and easy assembly. Powder coated finish.

Dimensions (W x D x H):  
1500 x 640 x 865mm.



Shelf Capacity  
**40kg**  
Uniformly  
Distributed Load

**NEW**

SELF ASSEMBLY  
Tools  
Required

Dimensions (W x D x H)	Order Code <b>KEN-405</b>
1500 x 640 x 865	<b>-2320K</b>

Workshop Equipment

**SENATOR** Home Improver Workbench & Vice  
QUALITY TOOLING

Medium duty for hobby and DIY use. All steel body. Solid beech worktop with metric/imperial gauging scale and protractor markings. Easy to assemble. Sturdy splay legs with non-slip rubber feet. Four quick-change worktop functions. Supplied with four chuck blocks, assembly spanners and instructions.

Worktop width: 600mm.  
Worktop depth (individual): 115mm.  
Worktop depth (combined): 230mm.  
Overall height: 800mm.  
Width (when collapsed for storage): 280mm.  
Maximum opening capacity: 140mm.  
Maximum clamping capacity (with blocks): 285mm.  
Weight capacity: 200kg/440lbs.



Transforms to an upright vice with jaws set at 90°.



Transforms to a versatile sawhorse with jaws set at 45°.

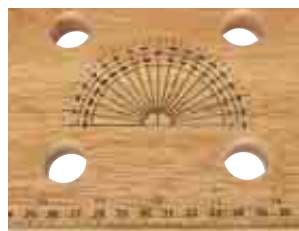


Ideal for clamping pipe and other convex workpieces.



Transforms to a T vice.

Independent arm adjustment allows the clamping of tapered objects.



Solid Beech worktop with protractor and rule markings.

Height (mm)	Width (mm)	Order Code <b>SEN-405</b>
800	600	<b>-9650K</b>

**KENNEDY** Industrial  
QUALITY INDUSTRIAL TOOLING **Key Steel**

High grade mild steel. Available in square or rectangular sections.  
Metric manufactured from: **BS4235 Part 7 1972 grade steel** equivalent to **DIN 6885**.  
Inch manufactured from: **BS46 PART 7 1958 grade steel**.  
**Length:** 300mm and 12".  
Other sizes available on request.

**EXTENDED RANGE**



**Set Metric Square**

**Contents:** 4, 5, 6, 8, 10 & 12m square.

No. of Pieces	Weight each	Order Code
6	850g	<b>-0500K</b>

**Square — Metric**

Type	Size	Weight each	Order Code
<b>mm</b>	2mm		<b>-0020K</b>
	3mm		<b>-0030K</b>
	4mm	40g	<b>-0040K</b>
	5mm	60g	<b>-0050K</b>
	6mm	90g	<b>-0060K</b>
	7mm	135g	<b>-0070K</b>
	8mm	160g	<b>-0080K</b>
	10mm	250g	<b>-0100K</b>
	12mm	350g	<b>-0120K</b>
	14mm	490g	<b>-0140K</b>
	16mm		<b>-0160K</b>
	18mm		<b>-0180K</b>
	20mm		<b>-0200K</b>
	22mm		<b>-0220K</b>
	25mm		<b>-0250K</b>

**Square — Inch**

Type	Size	Weight each	Order Code
<b>inch</b>	3/32"		<b>-3060K</b>
	1/8"	20g	<b>-3080K</b>
	5/32"		<b>-3100K</b>
	3/16"	60g	<b>-3120K</b>
	1/4"	100g	<b>-3160K</b>
	5/16"	160g	<b>-3200K</b>
	3/8"	220g	<b>-3240K</b>
	7/16"		<b>-3280K</b>
	1/2"	400g	<b>-3320K</b>
	3/4"	910g	<b>-3480K</b>
	5/8"		<b>-3400K</b>
	7/8"		<b>-3560K</b>
	1"		<b>-3640K</b>

**Rectangular — Metric**

Type	Size	Weight each	Order Code
<b>mm</b>	8 x 5mm		<b>-0850K</b>
	8 x 7mm	140g	<b>-0870K</b>
	10 x 8mm	200g	<b>-1080K</b>
	12 x 8mm	240g	<b>-1280K</b>
	12 x 10mm		<b>-1300K</b>
	14 x 9mm	310g	<b>-1490K</b>
	16 x 10mm	390g	<b>-1610K</b>
	18 x 11mm	490g	<b>-1910K</b>
	20 x 12mm	590g	<b>-2120K</b>
	22 x 14mm		<b>-2400K</b>
	25 x 14mm		<b>-2420K</b>
	28 x 16mm		<b>-2550K</b>
	32 x 18mm		<b>-2650K</b>
	36 x 20mm		<b>-2700K</b>

**INDEXA** Indexa T-Slot Clamping Kits

Designed to save set up time and solve most T-Slot clamping problems. All Components are manufactured from **S45C (JIS)/CK45 (DIN)** grade non-alloy carbon steel. Heat treated to HRC 28 - 32 and have a manganese phosphate surface finish. Supplied in a robust plastic case.

**Contents:**

**Engineers Studs;** (4 of each): 75, 100, 125, 150, 175 & 200mm long.

**Step Blocks;** (4 of each): 28, 35 & 98mm high.

**Step Clamps;** (2 off each): 64, 100 & 150mm long.

**Extension Nuts;** 4 off. **Flanged Nuts;** 6 off. **T- slot Nuts;** 6 off.



**Indexa Multi Clamping Kits**

Designed to save set up time and solve most machine clamping problems. All components are manufactured from **S45C (JIS)/CK45 (DIN)** grade non-alloy carbon steel. Heat treated to HRC 28 - 32 and have a manganese phosphate surface finish. Supplied in a robust plastic case.

**Contents:**

**Stepped Clamps;** (2 of each): 25 x 63mm, 100 x 32mm and 150 x 32mm.

**Stepped Blocks;** (2 of each): 1S, 2S and 3S.

**Tapped End Plain Clamps;** 100 x 30mm, 2 off.

**Tapped End 'U' Clamps;** 100mm long, 2 off.

**Swan Necked Clamps;** 120mm long, 2 off.

**Plain Clamps;** 100 x 30mm, 2 off.

**Engineer's Studs;** (4 of each): 50, 75, 100, 125, 150 and 200mm long.

**Extension Nuts;** 4 off. **Flanged Nuts;** 6 off. **T- slot Nuts;** 6 off.



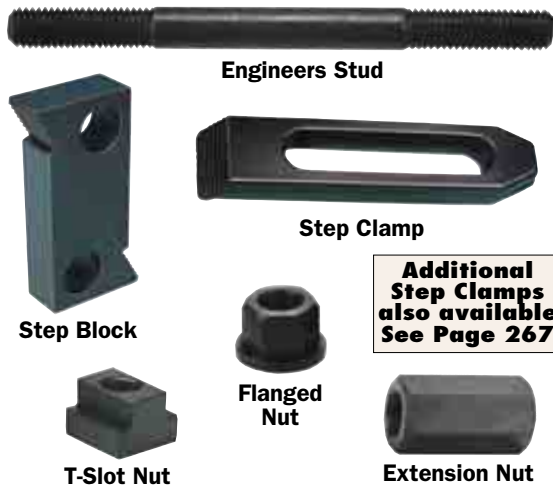
T-Slot Size	Thread Size	Part Number	Weight each	Order Code
12mm	M10	TK10	9kg	<b>-3610T</b>
14mm	M12	TK12	10kg	<b>-3612T</b>
16mm	M14	TK14	11kg	<b>-3614T</b>
18mm	M16	TK16	14kg	<b>-3616T</b>
20mm	M18	TK18	20.5kg	<b>-3618T</b>

T-Slot Size	Thread Size	Part Number	Weight each	Order Code
18mm	M16	MCK116	19.5kg	<b>-2966M</b>

**PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR**



Designed to save set up time and solve most clamping problems. Manufactured to high standards. All step clamps are forged and hardened and the step blocks are made from high quality steel. All components (other than the studs) are heat treated and finished in black oxide. Available to suit a full range of metric and imperial T-Slot widths. Supplied in steel racks which can be wall mounted or fitted to workbenches for ease of storage (except M16 set which is supplied in wooden box).



**Additional Step Clamps also available See Page 267**

**58 Pieces Metric Sets** (Quantity of each component part given in brackets)

Product Number	Table Slot Size x W x L (mm)	Thread Size	Engineers Stud L x Thread L (mm)	Step Clamp L x W x H (mm)	Extension Nuts	Flange Nuts	Step Blocks (Pairs) H Adj. Range	Weight each	Order Code <b>ATL-425</b>
CK120100	12 x 18 x 14 (6)	M10	75 x 30 (4) 100 x 30 (4) 125 x 30 (4) 150 x 30 (4) 175 x 30 (4) 200 x 30 (4)	52 x 25 x 12 (2) 88 x 25 x 16 (2) 128 x 28 x 19 (2)	M10 x 30mm Long (4)	M10 x 15mm (6)	28 20 - 38 (4) 35 28 - 64 (4) 98 64 - 152 (4)	10kg	<b>-1120K</b>
CK140120	14 x 22 x 16 (6)	M12	75 x 35 (4) 100 x 35 (4) 125 x 35 (4) 150 x 35 (4) 175 x 35 (4) 200 x 35 (4)	64 x 28 x 12 (2) 100 x 32 x 19 (2) 150 x 32 x 22 (2)	M12 x 36mm Long (4)	M12 x 18mm (6)	28 20 - 38 (4) 35 28 - 64 (4) 98 64 - 152 (4)	12kg	<b>-1140K</b>
CK160140	16 x 25 x 18 (6)	M14	75 x 35 (4) 100 x 35 (4) 125 x 35 (4) 150 x 35 (4) 175 x 35 (4) 200 x 35 (4)	64 x 28 x 12 (2) 100 x 32 x 19 (2) 150 x 32 x 22 (2)	M14 x 42mm Long (4)	M14 x 21mm (6)	28 20 - 38 (4) 35 28 - 64 (4) 98 64 - 152 (4)	12kg	<b>-1160K</b>
CK180140	18 x 25 x 18 (6)	M14	75 x 35 (4) 100 x 35 (4) 125 x 35 (4) 150 x 35 (4) 175 x 35 (4) 200 x 35 (4)	64 x 28 x 12 (2) 100 x 32 x 19 (2) 150 x 32 x 22 (2)	M14 x 42mm Long (4)	M14 x 21mm (6)	28 20 - 38 (4) 35 28 - 64 (4) 98 64 - 152 (4)	12kg	<b>-1180K</b>
CK200160	20 x 28 x 20 (6)	M16	75 x 35 (4) 100 x 35 (4) 125 x 35 (4) 150 x 35 (4) 175 x 35 (4) 200 x 35 (4)	64 x 31 x 12 (2) 100 x 38 x 20 (2) 150 x 38 x 22 (2)	M16 x 48mm Long (4)	M16 x 24mm (6)	28 20 - 38 (4) 35 28 - 64 (4) 98 64 - 152 (4)	14kg	<b>-1200K</b>

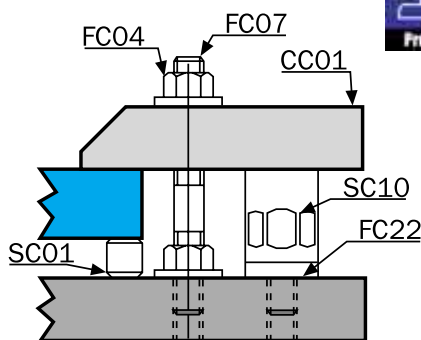
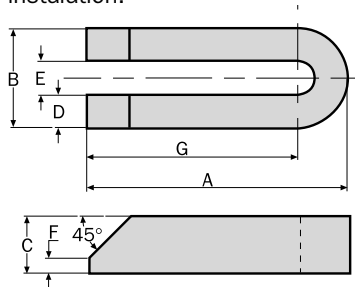
**58 Pieces Inch Sets** (Quantity of each component part given in brackets)

Product Number	Table Slot Size x W x L (mm)	Thread Size	Engineers Stud L x Thread L (mm)	Step Clamp L x H x W (mm)	Extension Nuts	Flange Nuts	Step Blocks (Pairs) H Adj. Range	Weight each	Order Code <b>ATL-425</b>
CK500375	1/2" x 1 1/16" x 17/32" (6)	3/8" UNC	3" x 1 1/4" (4) 4" x 1 1/4" (4) 5" x 1 1/4" (4) 6" x 1 1/4" (4) 7" x 1 1/4" (4) 8" x 1 1/4" (4)	2" x 1" x 1/2" (2) 3 1/2" x 1 1/4" x 3/4" (2) 5" x 1 1/4" x 7/8" (2)	3/8" UNC x 1" Long (4)	3/8" UNC 7/16" (6)	1 1/8" 3/4" - 1 1/2" (4) 1 3/4" 1 1/8" - 2 1/2" (4) 3 7/8" 2 1/2" - 6" (4)	10kg	<b>-1320K</b>
CK62500	9/16" x 7/8" x 6/8" (6)	1/2" UNC	3" x 1 1/4" (4) 4" x 1 1/2" (4) 5" x 1 1/2" (4) 6" x 1 1/2" (4) 7" x 1 1/2" (4) 8" x 1 1/2" (4)	2 1/2" x 1 1/8" x 1/2" (2) 2" x 1 1/4" x 3/4" (2) 6" x 1 1/4" x 7/8" (2)	1/2" UNC x 1 1/4" Long (4)	1/2" UNC 13/16" (6)	1 1/8" 3/4" - 1 1/2" (4) 1 3/4" 1 1/8" - 2 1/2" (4) 3 7/8" 2 1/2" - 6" (4)	12kg	<b>-1360K</b>
CK62550	5/8" x 7/8" x 6/8" (6)	1/2" UNC	3" x 1 1/4" (4) 4" x 1 1/2" (4) 5" x 1 1/2" (4) 6" x 1 1/2" (4) 7" x 1 1/2" (4) 8" x 1 1/2" (4)	2 1/2" x 1 1/8" x 1/2" (2) 2" x 1 1/4" x 3/4" (2) 6" x 1 1/4" x 7/8" (2)	1/2" UNC x 1 1/4" Long (4)	1/2" UNC 13/16" (6)	1 1/8" 3/4" - 1 1/2" (4) 1 3/4" 1 1/8" - 2 1/2" (4) 3 7/8" 2 1/2" - 6" (4)	12kg	<b>-1400K</b>
CK750625	3/4" x 1 3/8" x 1 1/8" (6)	5/8" UNC	3" x 1 1/4" (4) 4" x 1 1/2" (4) 5" x 1 1/2" (4) 6" x 1 1/2" (4) 7" x 1 1/2" (4) 8" x 1 1/2" (4)	2 1/2" x 1 1/8" x 1/2" (2) 2" x 1 1/4" x 3/4" (2) 6" x 1 1/4" x 7/8" (2)	5/8" UNC x 1 5/8" Long (4)	5/8" UNC 13/16" (6)	1 1/8" 3/4" - 1 1/2" (4) 1 3/4" 1 1/8" - 2 1/2" (4) 3 7/8" 2 1/2" - 6" (4)	12kg	<b>-1480K</b>

Workshop Equipment

# INDEXA CC01 - U-Clamp

Open end permits quick and easy installation.



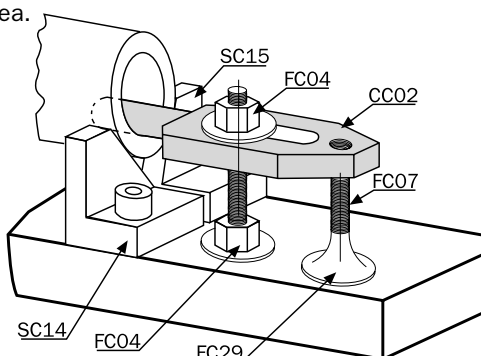
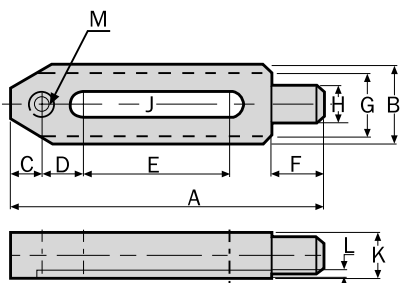
**Material:** Medium Carbon Steel.  
**Heat Treated To:** HRC 32 - 38.  
**Surface Finish:** Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)					Weight each	Order Code
		C	D	E	F	G		
CC010112	100 x 38mm	22	12.5	13	6	81	0.41kg	<b>-1005D</b>
CC010316	150 x 50mm	30	16.5	17	8	125	1.10kg	<b>-1005J</b>
CC010420	200 x 60mm	35	19.5	21	10	170	2.10kg	<b>-1005M</b>

# CC02 - Bore Clamp

The cylindrical pin minimizes the contact area. This clamp is for clamping inside horizontal bores and onto concave surfaces.



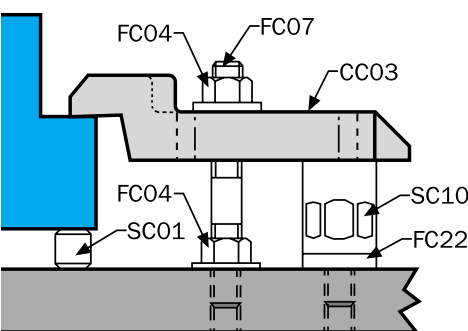
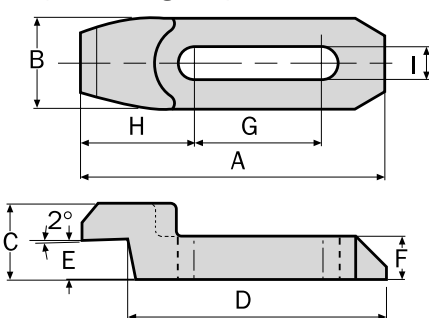
**Material:** Medium Carbon Steel.  
**Heat Treated To:** HR C32 - 38.  
**Surface Finish:** Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)									Weight each	Order Code	
		C	D	E	F	G	H	J	K	L			M
CC020112	150 x 38mm	15	20	70	25	30	18	13	22	4	M12	0.58kg	<b>-1010D</b>
CC020216	150 x 48mm	20	25	40	35	40	24	17	32	5	M16	1.12kg	<b>-1010G</b>

# CC03 - Swan Necked Clamp

Low profile design helps eliminate cutter interference.



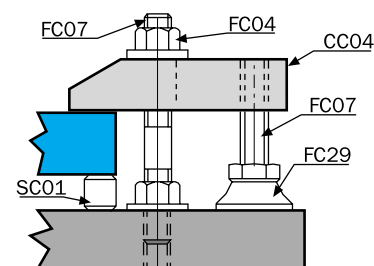
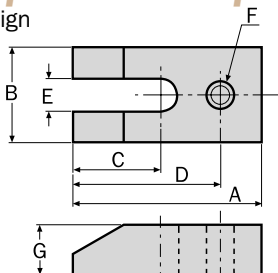
**Material:** Medium Carbon Steel.  
**Heat Treated To:** HRC 32 - 38.  
**Surface Finish:** Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)							Weight each	Order Code
		C	D	E	F	G	H	I		
CC030112	120 x 36mm	30	102	16	17	50	45	13	0.49kg	<b>-1015H</b>
CC030216	150 x 48mm	48	130	25	25	55	60	17	1.30kg	<b>-1015K</b>
CC030320	175 x 60mm	60	150	30	30	65	70	21	2.26kg	<b>-1015N</b>

# CC04 - Tapped End U-Clamp

Open end design permits easy assembly.



**Material:** Medium Carbon Steel.  
**Heat Treated To:** HRC 32 - 38.  
**Surface Finish:** Black Oxide.

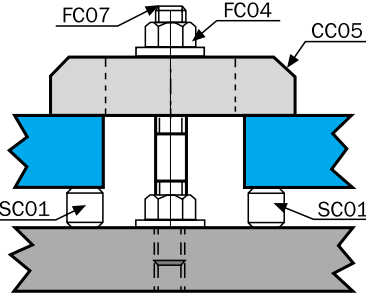
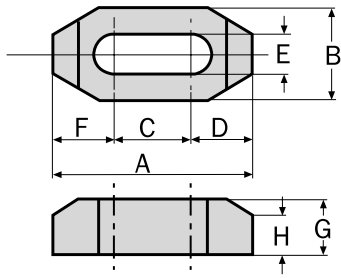


Product Number	Length x Width A x B	Dimensions (mm)					Weight each	Order Code
		C	D	E	F	G		
CC040616	150 x 50mm	95	130	17	M16	25	1.06kg	<b>-1020R</b>



**GROUP 425 CLAMPING FIXTURES**

**CC05 - Plain Clamp**



**Material:** Medium Carbon Steel.  
**Heat Treated To:** HRC 32 - 38.  
**Surface Finish:** Black Oxide.

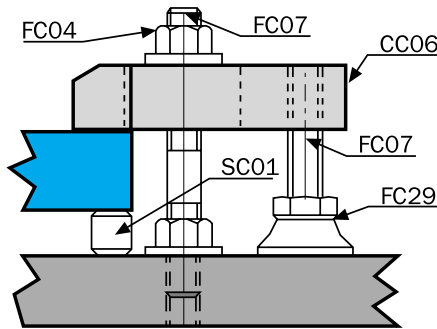
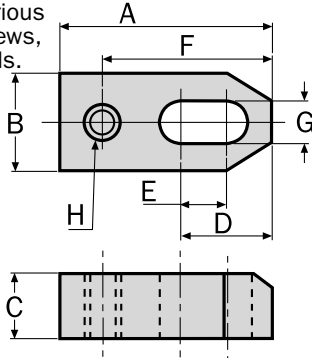


Product Number	Length x Width		Dimensions (mm)						Weight each	Order Code
	A x B	C	D	E	F	G	H			
CC050112	65 x 32mm	25	20.0	13	20.0	19	13	0.22kg	<b>-1025D</b>	
CC050212	100 x 32mm	40	30.0	13	30.0	19	13	0.33kg	<b>-1025G</b>	
CC050316	80 x 38mm	24	28.0	17	28.0	22	14	0.34kg	<b>-1025J</b>	
CC050416	125 x 38mm	41	42.0	17	42.0	22	14	0.57kg	<b>-1025M</b>	
CC050520	100 x 38mm	32	34.0	21	34.0	22	14	0.41kg	<b>-1025P</b>	
CC050620	125 x 38mm	40	42.5	21	42.5	25	15	0.62kg	<b>-1025R</b>	

Order Code  
**IND-425**

**CC06 - Tapped End Plain Clamp**

For use with various knobs, jack screws, clamps and pads.



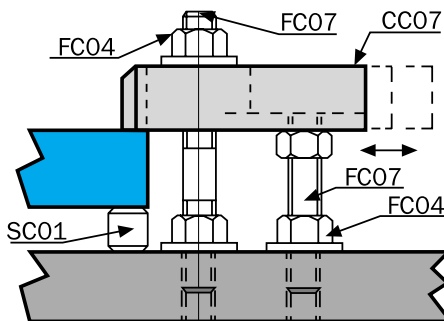
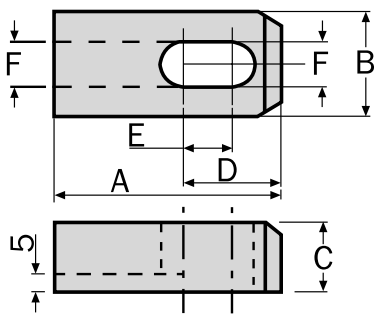
**Material:** Medium Carbon Steel.  
**Heat Treated To:** HRC 32 - 38.  
**Surface Finish:** Black Oxide.



Product Number	Length x Width		Dimensions (mm)						Weight each	Order Code
	A x B	C	D	E	F	G	H			
CC060112	65 x 32mm	19	32	14	52	13	M12	0.22kg	<b>-1030D</b>	
CC060212	80 x 32mm	19	48	25	69	13	M12	0.27kg	<b>-1030F</b>	
CC060312	100 x 32mm	19	60	40	89	13	M12	0.33kg	<b>-1030H</b>	
CC060416	80 x 38mm	19	40	17	65	17	M16	0.32kg	<b>-1030J</b>	
CC060516	100 x 38mm	25	55	30	85	17	M16	0.53kg	<b>-1030L</b>	
CC060616	125 x 38mm	25	70	45	110	17	M16	0.65kg	<b>-1030N</b>	
CC060720	150 x 50mm	25	82	50	134	21	M20	1.10kg	<b>-1030P</b>	
CC060820	200 x 50mm	25	112	80	184	21	M20	1.90kg	<b>-1030R</b>	

Order Code  
**IND-425**

**CC07 - Slotted End Clamp**



**Material:** Medium Carbon Steel.  
**Hardness:** HRC 32 - 38.  
**Surface Finish:** Black Oxide.

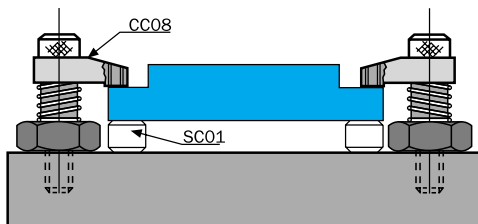
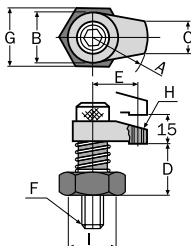


Product Number	Length x Width		Dimensions (mm)				Weight each	Order Code
	A x B	C	D	E	F			
CC070212	80 x 32mm	22	48	25	13	0.31kg	<b>-1035F</b>	
CC070616	125 x 38mm	25	70	45	17	0.65kg	<b>-1035N</b>	

Order Code  
**IND-425**

**CC08 - Swing Clamp**

A small clamp with good holding power, ideal for tight spaces, full swing away feature permits easy part loading.



**Material:** Case Hardened Steel.  
**Hardness:** HRC 38 - 42.  
**Surface Finish:** Black Oxide.



Product Number	Length x Width		Dimensions (mm)						Weight each	Order Code
	A x B	C	D	E	F	G	H	I		
CC080112	30 x 28mm	16	40	-	M12	29	-	21	0.29kg	<b>-1040D</b>
CC080212	50 x 32mm	20	45	40	M12	36	M12	26	0.50kg	<b>-1040G</b>
CC080316	60 x 40mm	25	45	45	M16	41	M16	32	0.75kg	<b>-1040J</b>

Order Code  
**IND-425**

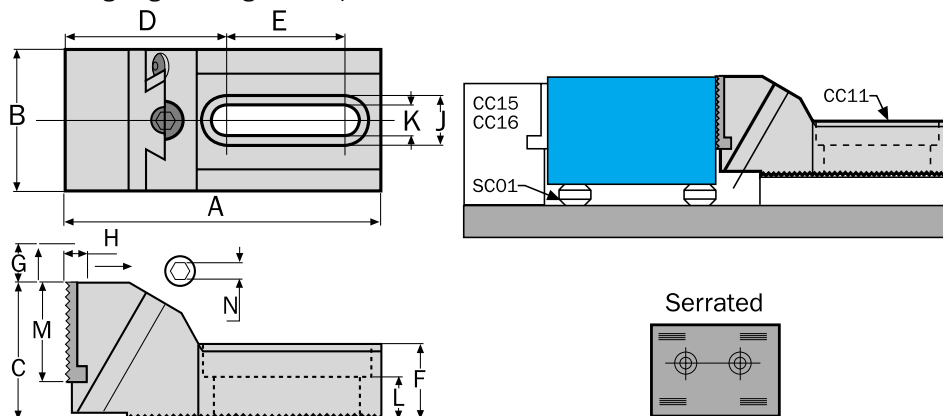
Workshop Equipment

**INDEXA** CC11 - Free Vice Jaw

Clamping force in 2 directions, with serrated jaws for holding large or irregular shapes.



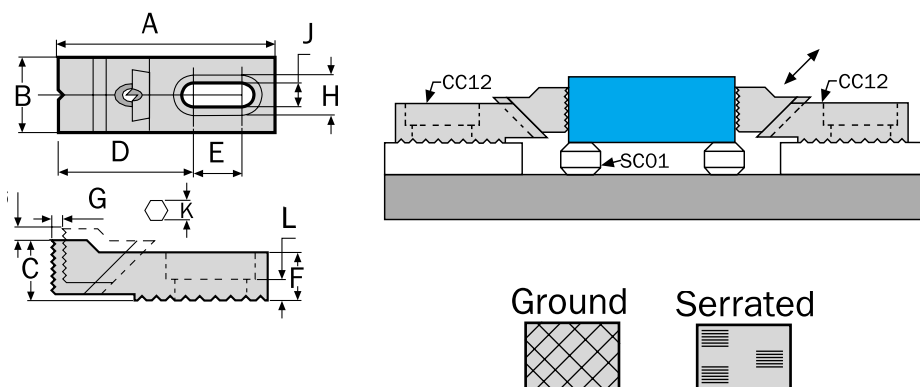
**Material:** Body: Grey Cast Iron.  
Jaw: Medium Carbon Steel EN8D.  
**Hardness:** Jaw Only: HRC 45 - 48.  
**Surface Finish:** Jaw: Black Oxide.



Product Number	Type	Length x Width A x B	Dimensions (mm)											Weight each	Order Code
			C	D	E	F	G	H	J	K	L	M	N		
CC110112	Serrated	133 x 60mm	54.5	68	50	32	16	6	22	13	16.8	42	10	2.0kg	<b>-1045D</b>

**CC12 —Adjustable Clamp**

Low profile clamp that keeps top surfaces clear for machining. Ideal for rough or finished parts.



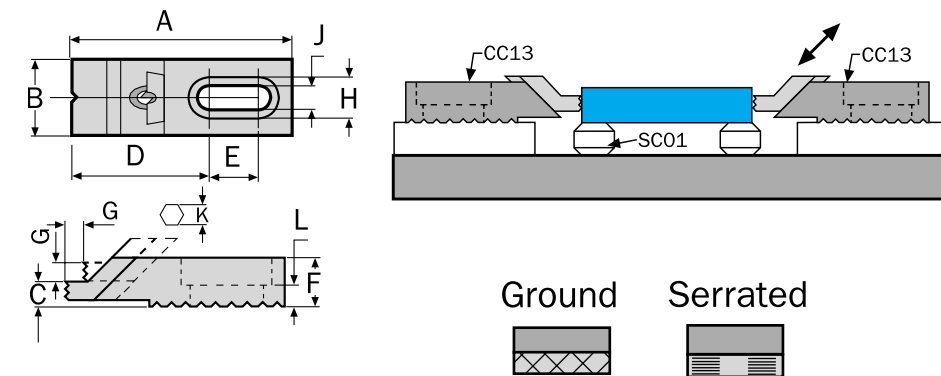
**Material:** Medium Carbon Steel.  
**Hardness:** Jaw Only: HRC 38.  
**Surface Finish:** Black Oxide.  
**Jaws:** Surface treated with high frequency quenching.



Product Number	Type	Length x Width x Height A x B x C	Dimensions (mm)											Weight each	Order Code
			D	E	F	G	H	J	K	L					
CC120108	Serrated	73.45 x 25 x 18mm	46.95	16.5	16	7	14	8.5	4	7	0.18kg	<b>-1050D</b>			
CC120212		106.64 x 35 x 27.5mm	62.14	30.0	22	12	20	13.5	6	9	0.52kg	<b>-1050F</b>			
CC120316		134.64 x 40 x 37.5mm	82.14	35.0	30	14	26	17.0	8	13	1.02kg	<b>-1050H</b>			
CC120512	Ground	104.64 x 35 x 27.5mm	62.14	30.0	22	12	20	13.5	6	9	0.52kg	<b>-1050M</b>			
CC120616		134.64 x 40 x 37.5mm	82.14	35.0	30	14	26	17.0	8	13	1.02kg	<b>-1050R</b>			

**CC13 - Adjustable Stepped Clamp**

Low profile clamp for holding thin parts and keeping top surfaces clear for machining.



**Material:** Medium Carbon Steel.  
**Heat Treated To:** HRC 38.  
**Surface Finish:** Black Oxide.  
**Jaws:** Surface treated with high frequency quenching.

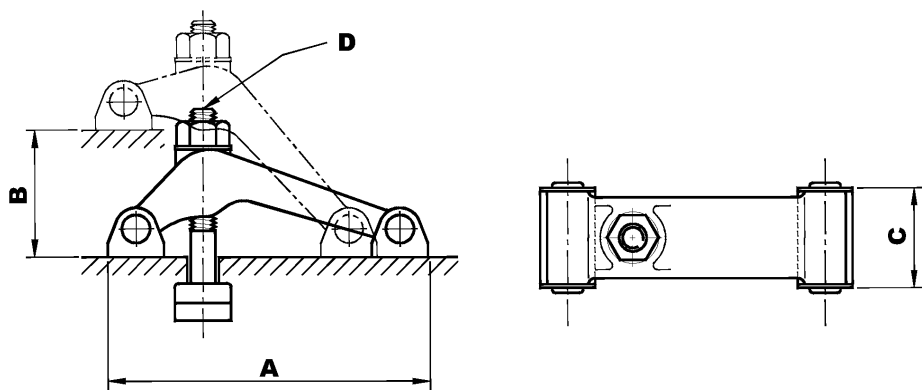


Product Number	Type	Length x Width x Height A x B x C	Dimensions (mm)											Weight each	Order Code
			D	E	F	G	H	J	K	L					
CC130108	Serrated	73.45 x 25 x 18mm	46.95	16.5	16.5	7	14	8.5	5	7	0.18kg	<b>-1055D</b>			
CC130212		106.64 x 35 x 27.5mm	64.14	30.0	22.0	12	20	13.5	6	9	0.52kg	<b>-1055F</b>			
CC130316		133.14 x 40 x 14mm	90.00	30.0	30.0	14	26	17.0	8	13	0.85kg	<b>-1055H</b>			
CC130512	Ground	105 x 35 x 27.5mm	64.14	26.0	22.0	12	20	13.5	6	9	0.52kg	<b>-1055M</b>			

**INDEXA** CC19 - Forged Swivel Clamp



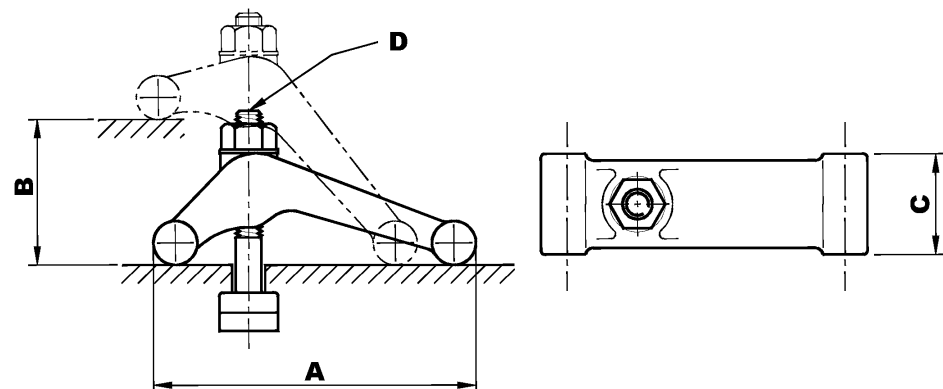
**Material:** Medium Carbon Steel/Steel Forging.  
**Heat Treated To:** 32 - 38°.  
**Surface Finish:** Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)		Weight each	Order Code
		C	D		
CC19-NC50	131 x 75mm	46.5	M12-125	1.50kg	<b>IND-425</b> <b>-1085D</b>

**CC20 - Forged Swivel Clamp**

Workshop Equipment

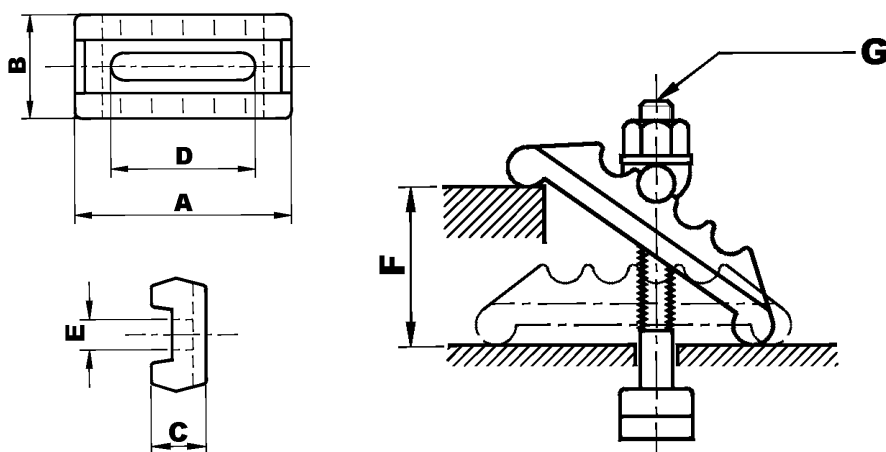


**Material:** Medium Carbon Steel/Steel Forging.  
**Heat Treated To:** 32 - 38°.  
**Surface Finish:** Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)		Weight each	Order Code
		C	D		
CC20-NC6	150 x 85mm	52	M16-150	2.42kg	<b>IND-425</b> <b>-1090M</b>
CC20-NC8	194 x 105mm	58	M20-175	4.50kg	<b>-1090T</b>

**CC21 - Swivel Rack Clamp**



**Material:** Medium Carbon Steel/Steel Forging.  
**Surface Finish:** Black Oxide.

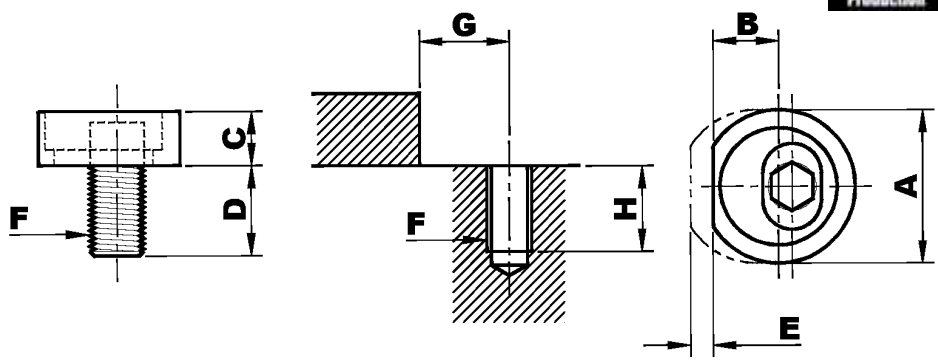


Product Number	Length x Width A x B	Dimensions (mm)					Weight each	Order Code
		C	D	E	F	G		
CC21-0216	125 x 56mm	33	84	18	65	M16	2.10kg	<b>IND-425</b> <b>-1095M</b>

**INDEXA** CC24 - Eccentric Cam Lock

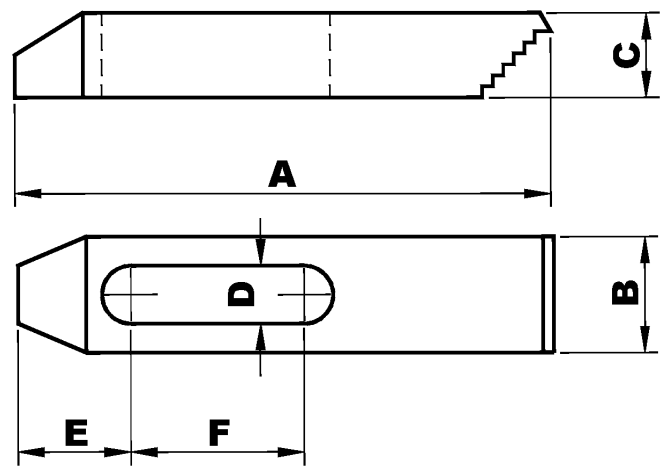


**Material:** Medium Carbon Steel.  
**Hardness:** HRC 35.  
**Surface Finish:** Black Oxide.



Product Number	Dimensions (mm)								Weight each	Order Code
	A	B	C	D	E	F	G	H		
CC240210	26	11.8	8	14.3	4	M10	12.5	22	.03kg	<b>-1110C</b>
CC240312	30	13.5	9	19	5	M12	14.5	22	.06kg	<b>-1110G</b>
CC240416	38	16.0	12	23	6	M16	17.5	26	.12kg	<b>-1110P</b>

**CC25 - Step Clamp**



**Material:** Medium Carbon Steel.  
**Hardness:** HRC 32 - 38.  
**Surface Finish:** Black Oxide.

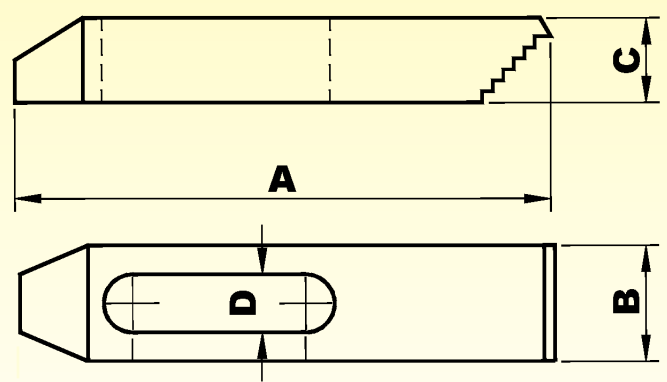


Product Number	Length x Width A x B	Dimensions (mm)				To Suit Stud Size	Weight each	Order Code
		C	D	E	F			
CC251463	63 x 25mm	13	15	20	14	M14	0.12kg	<b>-1130C</b>
CC2514100	100 x 32mm	19	15	29	34	M14	0.38kg	<b>-1130G</b>
CC2514150	150 x 32mm	22	15	32	50	M14	0.68kg	<b>-1130J</b>
CC2516100	100 x 32mm	19	17	31	26	M16	0.42kg	<b>-1135G</b>
CC2516150	150 x 30mm	22	17	40	47	M16	0.72kg	<b>-1135J</b>

**ATLAS** Step Clamp  
WORKHOLDERS



**Material:** Medium Carbon Steel.  
**Hardness:** HRC 32 - 38.  
**Surface Finish:** Black Oxide.

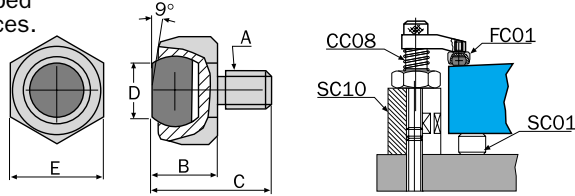


Product Number	To Suit Stud Size	Dimensions (mm)				Order Code
		A x B	C	D	ATL-425	
SC105225	M10/3/8" UNC	52 x 22	12	11	<b>-2020K</b>	
SC108825		88 x 25	16	11	<b>-2040K</b>	
SC1012828		128 x 28	19	11	<b>-2060K</b>	
SC126428	M12/1/2" UNC	64 x 28	12	13	<b>-2120K</b>	
SC1210032		100 x 32	19	13	<b>-2140K</b>	
SC1215032		150 x 32	22	13	<b>-2160K</b>	
SC146428	M14	64 x 28	12	15	<b>-2220K</b>	
SC1410032		100 x 35	19	15	<b>-2240K</b>	
SC1415032		150 x 32	22	15	<b>-2260K</b>	
CK180140	M14	64 x 28	12		<b>-2320K</b>	
CK180140		100 x 32	19		<b>-2340K</b>	
CK180140		150 x 32	22		<b>-2360K</b>	
SC166431	M16/5/8" UNC	64 x 32	12	17	<b>-2420K</b>	
SC1610038		100 x 38	20	17	<b>-2440K</b>	
SC1615038		150 x 38	22	17	<b>-2460K</b>	

**PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR**

**INDEXA** FC01 -  
Plain Ball End

Precision swivel ball that can be used either as a contact bolt or rest pad. As contact pads these swivel ball units are ideal for evenly distributing clamping pressure on sloped or uneven surfaces.



Product Number	Thread A	Dimensions (mm)					Weight each
		B	C	D	E		
FC010216	M16 x 2.00	26	42	14	27	0.14kg	



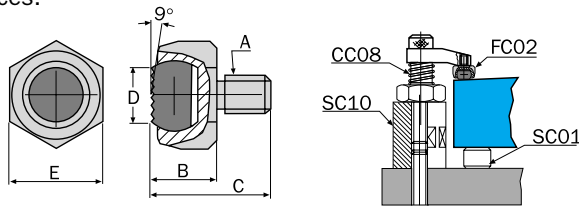
**Material:**  
Body - Medium Carbon Steel.  
Ball - Through Hardened Steel **EN 31**.  
**Hardness:**  
Bolt - HRC 35.  
Ball - HRC 62.  
**Surface Finish:**  
Black Oxide.



Order Code  
**IND-425**  
**-2010R**

**FC02 - Seratted Ball End**

Precision swivel ball that can be used either as a contact bolt or rest pad. As contact pads these swivel ball units are ideal for evenly distributing clamping pressure on sloped or uneven surfaces.



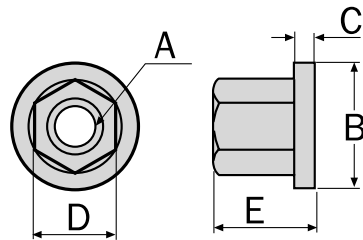
Product Number	Thread A	Dimensions (mm)					Weight each
		B	C	D	E		
FC010112	M12 x 1.75	22	35	12	22	0.070kg	
FC010216	M16 x 2.00	26	42	14	27	0.14kg	

**Material:**  
Body - Medium Carbon Steel.  
Ball - Through Hardened Steel **EN 31**.  
**Hardness:**  
Bolt - HRC 35.  
Ball - HRC 62.  
**Surface Finish:**  
Black Oxide.



Order Code  
**IND-425**  
**-2015J**  
**-2015R**

**FC04 Flanged Nut**



Product Number	Thread A	Dimensions (mm)					Weight each
		B	C	D	E		
FC040110	M10	22	3	17	13	0.020kg	
FC040212	M12	28	4	19	17	0.040kg	
FC040214	M14	28	4	22	17	0.040kg	
FC040316	M16	33	5	24	20	0.060kg	
FC040420	M20	40	6	30	25	0.110kg	

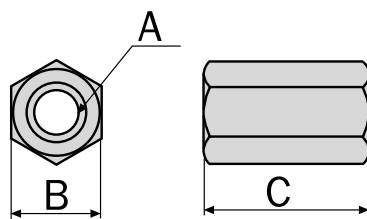
**Material:** Medium Carbon Steel.  
**Hardness:**  
HRC 30 - 35.  
**Surface Finish:**  
Black Oxide.



Order Code  
**IND-425**  
**-2025G**  
**-2025K**  
**-2025M**  
**-2025P**  
**-2025T**

**FC05 - Extension Nut**

Extends the length of clamping studs.



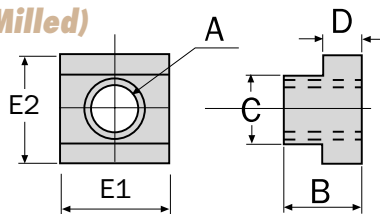
Product Number	Size A	Dimensions (mm)			Weight each
		B	C		
FC050110	M10	17	30	0.030kg	
FC050212	M12	19	36	0.046kg	
FC050314	M14	22	42	0.065kg	
FC050316	M16	24	48	0.110kg	
FC050420	M20	30	60	0.220kg	

**Material:** Medium Carbon Steel.  
**Hardness:** HRC 30 - 35.  
**Surface Finish:**  
Black Oxide.



Order Code  
**IND-425**  
**-2030F**  
**-2030K**  
**-2030M**  
**-2030N**  
**-2030R**

**FC06 - T-Slot Nut (Milled)**



Product Number	Size A	Dimensions (mm)						Weight each
		B	C	D	E1	E2		
FC060110	M10	14.0	11.8	7.0	22	18.0	0.022kg	
FC060212	M12	16.0	13.8	8.0	28	22.0	0.048kg	
FC050314	M14	16.0	15.8	8.0	28	25.0	0.057kg	
FC060316	M16	20.0	17.7	10.5	30	28.5	0.085kg	
FC060420	M20	25.0	22.0	14.0	38	36.0	0.190kg	

**Material:** Medium Carbon Steel.  
**Hardness:**  
HRC 30 - 35.  
**Surface Finish:**  
Black Oxide.



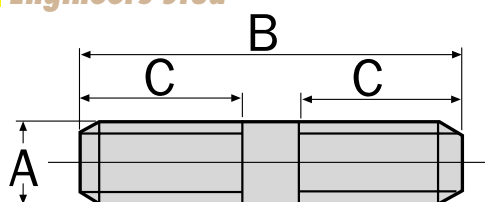
Order Code  
**IND-425**  
**-2035G**  
**-2035K**  
**-2035M**  
**-2035P**  
**-2035T**

Workshop Equipment

**INDEXA** FC07 - Engineers Stud



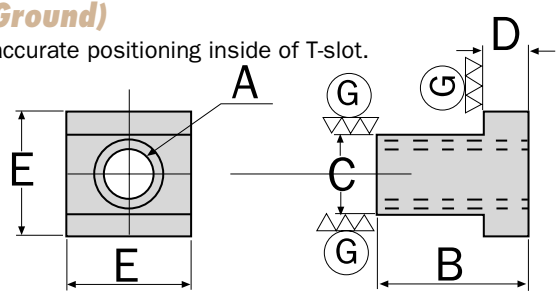
**Material:** Medium Carbon Steel.  
**Hardness:** HRC 30 - 35.  
**Surface Finish:** Black Oxide.



Product Number	Size A x B	Dimension C	Weight each	Order Code IND-425
FC070110	M10 x 50mm	22	30g	-2120S
FC070210	M10 x 75mm	30	42g	-2125S
FC070310	M10 x 100mm	38	55g	-2130S
FC070510	M10 x 150mm	50	90g	-2140S
FC070612	M12 x 50mm	22	40g	-2145S
FC070712	M12 x 75mm	30	60g	-2150S
FC070812	M12 x 100mm	38	80g	-2155S
FC070912	M12 x 125mm	38	100g	-2160S
FC071012	M12 x 150mm	50	125g	-2165S
FC071112	M12 x 200mm	65	160g	-2170S
FC071212	M12 x 300mm	80	240g	-2175S
FC071214	M14 x 75mm	30	65g	-2176S
FC071214	M14 x 100mm	38	85g	-2177A
FC071214	M14 x 125mm	38		-2177G
FC071214	M14 x 150mm	50	130g	-2177K
FC071214	M14 x 200mm	65	165g	-2177T
FC071316	M16 x 75mm	20	120g	-2180S
FC071416	M16 x 100mm	38	145g	-2185S
FC071516	M16 x 125mm	38	180g	-2190S
FC071616	M16 x 150mm	50	230g	-2195S
FC071616	M16 x 175mm	50	240g	-2197S
FC071716	M16 x 200mm	65	290g	-2200S
FC071816	M16 x 250mm	65	350g	-2205S
FC071916	M16 x 300mm	80	450g	-2210S
FC072016	M16 x 400mm	100	580g	-2215S
FC072116	M16 x 500mm	100	700g	-2220S
FC072220	M20 x 75mm	30	170g	-2225S
FC072320	M20 x 100mm	38	230g	-2230S
FC072420	M20 x 125mm	38	280g	-2235S
FC072520	M20 x 150mm	50	360g	-2240S
FC072620	M20 x 200mm	65	450g	-2245S
FC072720	M20 x 250mm	65	550g	-2250S
FC072820	M20 x 300mm	80	700g	-2255S
FC072920	M20 x 400mm	100	880g	-2260S
FC073020	M20 x 500mm	100	1100g	-2265S

**FC08 - T-Slot Nut (Ground)**

Ground surfaces provide accurate positioning inside of T-slot.



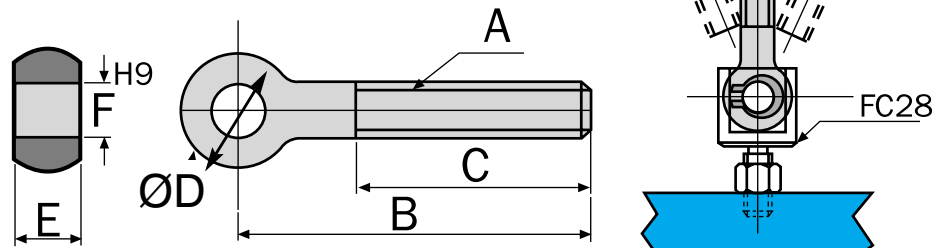
**Material:** Medium Carbon Steel.  
**Hardness:** HRC 30 - 35.



Product Number	Thread A	Dimensions (mm)				Weight each	Order Code IND-425
		B	C (h6)	D	E		
FC008112	M12	22	14	8	22	45g	-2505J
FC008216	M16	30	18	10	28	80g	-2505R

**FC09 - Swing Bolt**

Reamed hole for smooth swivelling.



**Material:** Medium Carbon Steel.  
**Hardness:** HRC 30 - 35.



Product Number	Size A x B	Dimensions (mm)				Weight each	Order Code IND-425
		C	D	E	F		
FC040110	M10 x 75mm	40	20	12	10	60g	-2510E
FC090210	M10 x 100mm	40	20	12	10	80g	-2510H
FC090412	M12 x 100mm	60	25	14	12	120g	-2510N
FC090516	M16 x 125mm	60	32	17	16	250g	-2510P
FC090616	M16 x 150mm	75	32	17	16	300g	-2510R

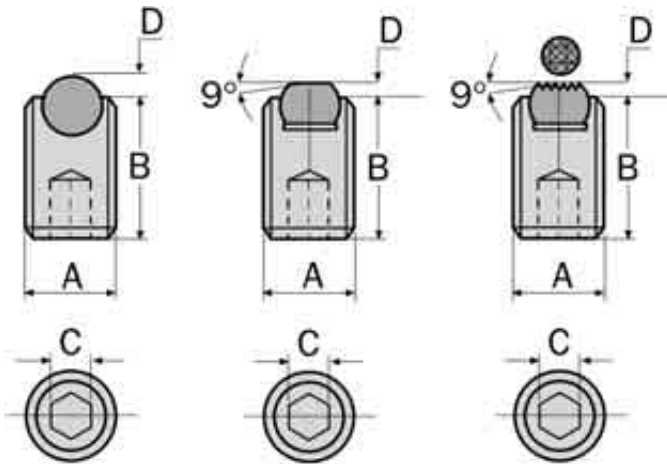
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Workshop Equipment

**INDEXA** FC16 - Swivel Clamping Screw



**Material:**  
Body - Medium Carbon Steel **EN198**.  
Point - Through Hardened Steel **EN 31**.  
**Hardness:**  
Body - HRC 32 - 38.  
Point - HRC 62.  
**Surface Finish:**  
Point - Hardened and Ground.



**EXTENDED RANGE**

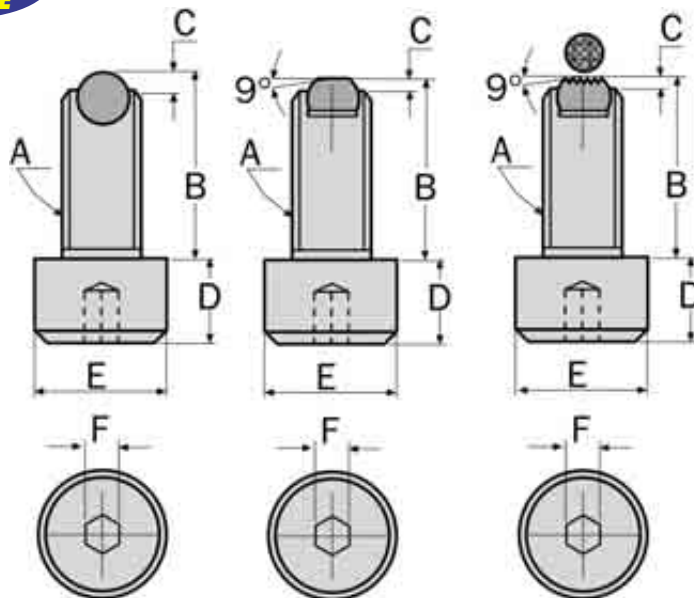


**Ball Point Dog Point Serrated Point**

Ball Point					Dog Point			Serrated Point			
Thread x Length A x B	mm C	Weight each	Product Number	mm D	Order Code IND-425	Product Number	mm D	Order Code IND-425	Product Number	mm D	Order Code IND-425
M6 x 15mm	3	2.4g	FC160206	1.4	<b>-2610H</b>						
M6 x 25mm	3	3.8g	FC160306	1.4	<b>-2610N</b>						
M8 x 12mm	4	3.2g	FC160408	1.9	<b>-2615D</b>	FC162208	0.6	<b>-2645D</b>			
M8 x 20mm	4	5.8g	FC160508	1.9	<b>-2615H</b>	FC162308	0.6	<b>-2645H</b>			
M8 x 30mm	4	9.0g	FC160608	1.9	<b>-2615N</b>						
M10 x 15mm	5	6.7g	FC160710	2.4	<b>-2620D</b>						
M10 x 25mm	5	11.2g	FC160810	2.4	<b>-2620H</b>	FC162610	0.7	<b>-2650H</b>			
M10 x 35mm	5	16.2g				FC162710	0.7	<b>-2650N</b>			
M12 x 30mm	6	20.0g				FC162912	0.9	<b>-2655H</b>			
M12 x 50mm	6	40.0g	FC161312	2.9	<b>-2625T</b>						
M16 x 55mm	8	55.0g				FC163516	1.0	<b>-2660R</b>			
M16 x 65mm	8	65.0g							FC165416	1.0	<b>-2690T</b>

**FC17 - Swivel Shoulder Clamping Screw**

**EXTENDED RANGE**



**Material:**  
Body - Medium Carbon Steel **EN198**.  
Point - Through Hardened Steel **EN 31**.  
**Hardness:**  
Body - HRC 32 - 38.  
Point - HRC 62.  
**Surface Finish:**  
Point - Hardened and Ground.



**Ball Point Dog Point Serrated Point**

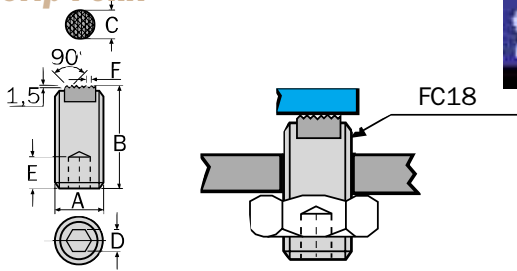
Ball Point					Dog Point			Serrated Point			
Thread x L A x B (mm)	Dimensions D E F	Weight each	Product Number	mm C	Order Code IND-425	Product Number	mm C	Order Code IND-425	Product Number	mm C	Order Code IND-425
M6 x 25	6 10 5	7.4g							FC173606	0.5	<b>-2770H</b>
M8 x 40	8 13 6	24g	FC170608	1.9	<b>-2725N</b>						
M12 x 45	12 18 10	50g				FC172812	0.9	<b>-2760H</b>	FC174512	0.9	<b>-2785H</b>
M12 x 65	12 18 10	70g	FC171212	2.9	<b>-2735N</b>						
M12 x 80	12 18 10	83g				FC173012	0.9	<b>-2760R</b>			
M16 x 40	16 24 14	90g	FC171212	2.9	<b>-2740D</b>						
M16 x 50	16 24 14	110g				FC173216	1.0	<b>-2765H</b>			

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Workshop Equipment

**INDEXA** FC18 - Grip Point Screw

Multipurpose work support and clamping unit, ideal for rough parts.



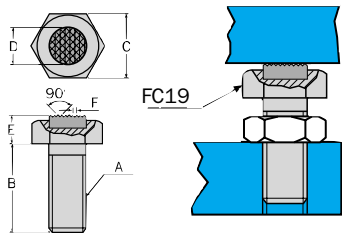
**Material:** Medium Carbon Steel **EN19B**.  
**Hardness:** HRC 32 - 38.  
 Tooth plate HRC 60.  
**Serrated Surface:** Induction Hardened.  
**Surface Finish:** Black Oxide.



Product Number	Thread x Length A x B	Dimensions (mm)				Weight each	Order Code <b>IND-425</b>
		C	D	E	F		
FC180110	M10 x 25mm	6.5	5	4	2.3	15g	<b>-2825D</b>
FC180616	M16 x 50mm	11.5	8	6	3.0	78g	<b>-2825R</b>

**FC19 - Grip Head Screw**

Multipurpose work support and clamping unit, ideal for rough parts.



**Material:** Medium Carbon Steel **EN19B**.  
**Hardness:** HRC 32 - 38.  
 Tooth plate HRC 60.

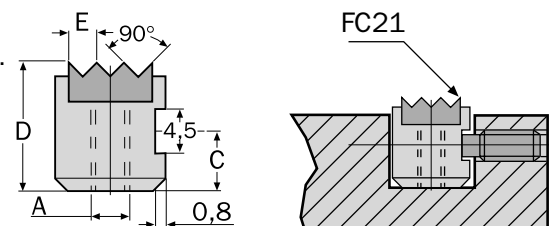
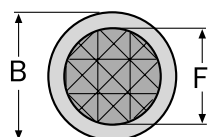
**Serrated Surface:** Induction Hardened.  
**Surface Finish:** Black Oxide.



Product Number	Thread x Length A x B	Dimensions (mm)				Weight each	Order Code <b>IND-425</b>
		C	D	E	F		
FC190208	M8 x 25mm	13	9.5	7.3	3.0	15g	<b>-2830G</b>
FC190310	M10 x 25mm	17	12.7	8.4	3.0	30g	<b>-2830J</b>
FC190512	M12 x 25mm	19	15.9	9.5	3.0	35g	<b>-2830N</b>
FC190816	M16 x 50mm	24	19.1	12.0	3.0	100g	<b>-2830T</b>

**FC21 - Round Grip Pad**

Multipurpose work support and clamping unit, ideal for rough parts.



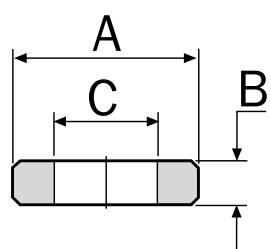
**Material:** Hardened Steel **EN16M**.  
**Hardness:** HRC 60.  
**Surface Finish:** Black Oxide.



Product Number	Thread x Dia A x B	Dimensions (mm)				Weight each	Order Code <b>IND-425</b>
		C	D	E	F		
FC210110	M5 x 10mm	3.4	10	2.3	8.1	5g	<b>-2840D</b>
FC210212	M6 x 12mm	4.0	12	3.0	9.6	8g	<b>-2840G</b>
FC210525	M6 x 25mm	4.0	12	3.0	19.5	40g	<b>-2840P</b>

**FC22 - Spacer**

For use with jig components for increasing height or extending length.

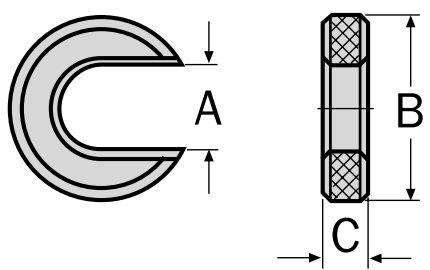


**Material:** Medium Carbon Steel.  
**Hardness:** HRC 40.



Product Number	Dimensions (mm)			Weight each	Order Code <b>IND-425</b>
	A	B	C		
FC220616	50	5	17	70g	<b>-2845P</b>
FC220716	50	10	17	350g	<b>-2845T</b>

**FC23 - 'C' Washer**



**Material:** Medium Carbon Steel.  
**Hardness:** HRC 40.  
**Surface Finish:** Black Oxide.

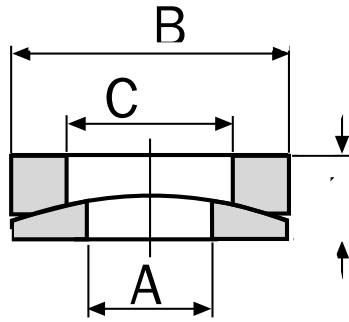


Product Number	Dimensions (mm)			Weight each	Order Code <b>IND-425</b>
	A	B	C		
CC010212	13	55	10	150g	<b>-2850G</b>



**INDEXA** FC25 - Spherical Washer Set

2 piece washer set that compensates whenever a stud and clamping surface are not exactly perpendicular.



**Material:** Medium Carbon Steel.  
**Hardness:** HRC 38.  
**Surface Finish:** Black Oxide.

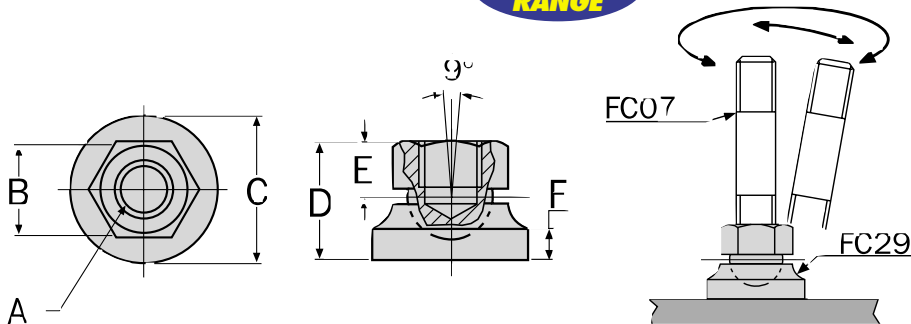


Product Number	Dimensions (mm)				Weight each	Order Code
	A	B	C	D		
FC250112	13	26	15	7.5	20g	<b>-2860D</b>
FC250216	17	32	19	9.0	30g	<b>-2860G</b>
FC250320	21	40	23	12.0	50g	<b>-2860L</b>

**FC29 - Swivel Foot**

Used for supporting uneven surfaces.

**EXTENDED RANGE**

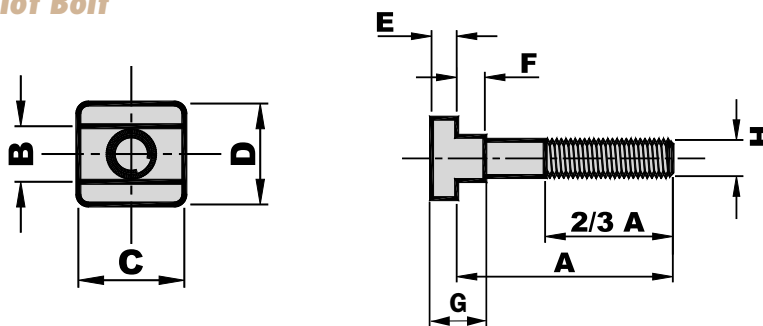


**Material:** Medium Carbon Steel.  
**Hardness:** HRC 32 - 38.  
**Surface Finish:** Black Oxide.



Product Number	Size A	Dimensions (mm)					Weight each	Order Code
		B	C	D	E	F		
FC290112	M12	19	35	24	11	7	80g	<b>-2870D</b>
FC290216	M16	24	40	29	13	8	150g	<b>-2870G</b>

**FC40 - T-Slot Bolt**



**Material:** Medium Carbon Steel.  
**Hardness:** HRC 32 - 38.  
**Surface Finish:** Black Oxide.



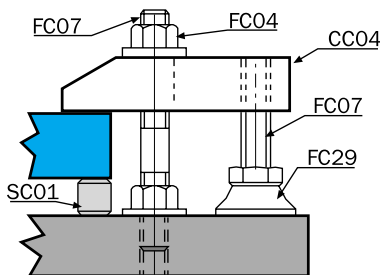
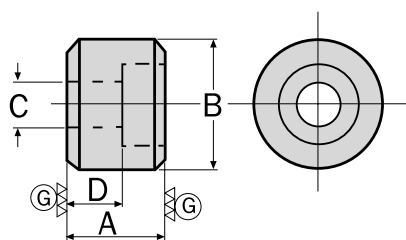
Product Number	Dimensions (mm)								Weight each	Order Code	
	A	B	C	D	E	F	G	H			
FC40-1250	50									54g	<b>-2900D</b>
FC40-1275	75									57g	<b>-2900F</b>
FC40-12100	100									110g	<b>-2900H</b>
FC40-12125	125	12	26	22	7	6	13	M12		125g	<b>-2900K</b>
FC40-12150	150									140g	<b>-2900M</b>
FC40-12175	175									170g	<b>-2900P</b>
FC40-12200	200									185g	<b>-2900R</b>
FC40-1650	50									130g	<b>-2910D</b>
FC40-1675	75									160g	<b>-2910F</b>
FC40-16100	100									200g	<b>-2910H</b>
FC40-16125	125	16	32	27	8	8	16	M16		230g	<b>-2910K</b>
FC40-16150	150									270g	<b>-2910M</b>
FC40-16175	175									305g	<b>-2910P</b>
FC40-16200	200									325g	<b>-2910R</b>
FC40-2075	75									290g	<b>-2920F</b>
FC40-20100	100									350g	<b>-2920H</b>
FC40-20125	125	20	40	30	11	11	22	M20		400g	<b>-2920K</b>
FC40-20150	150									455g	<b>-2920M</b>
FC40-20175	175									505g	<b>-2920P</b>
FC40-20200	200									560g	<b>-2920R</b>
FC40-24150	150	24	50	44	16	15	31	M24		775g	<b>-2930M</b>
FC40-24200	200									925g	<b>-2930R</b>

Workshop Equipment

**INDEXA** SC01 - Support Spacer

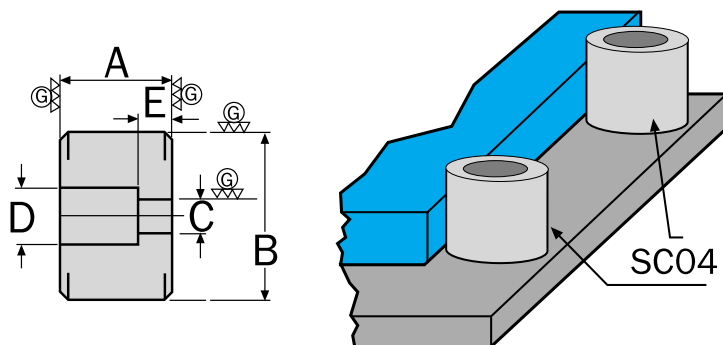


**Material:** Medium Carbon Steel.  
**Hardness:** HRC 40.  
**Surface Finish:** Black Oxide.



Product Number	Height x Diameter A (±0.01) x B	Dimensions (mm)		Weight each	Order Code
		C	D		
SC010112	30 x 40mm	M12	17	240g	<b>IND-425</b> <b>-3005D</b>

**SC04 - Location Collar**

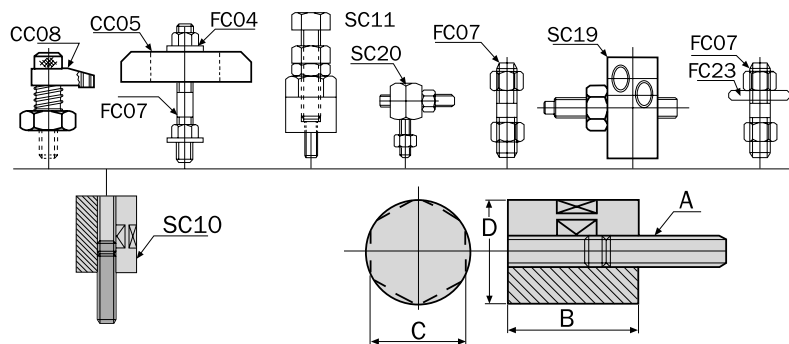


**Material:** Medium Carbon Steel.  
**Hardness:** HRC 40.  
**Surface Finish:** Black Oxide.



Product Number	Height x Diameter A (±0.01) x B (±0.01)	Dimensions (mm)			Weight each	Order Code
		C	D	E		
SC040112	30 x 40mm	∅ 12	∅ 20	12	240g	<b>IND-425</b> <b>-3020D</b>
SC040212	40 x 40mm	∅ 12	∅ 20	12	320g	<b>IND-425</b> <b>-3020F</b>

**SC10 - Extension Pillar**

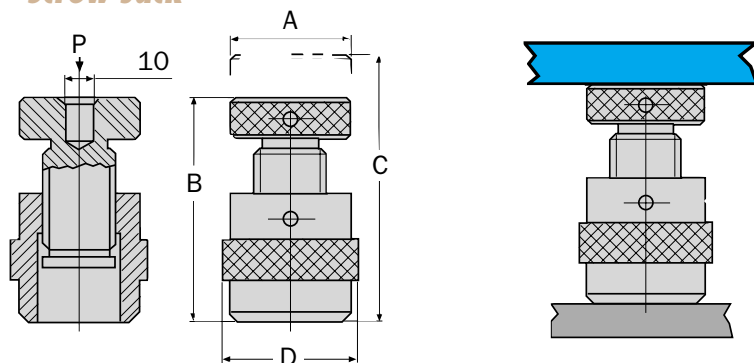


**Material:** Medium Carbon Steel.  
**Hardness:** HRC 40.  
**Surface Finish:** Black Oxide.



Product Number	Height x Diameter A x B	Dimensions (mm)		Weight each	Order Code
		C	D		
SC100265	M12 x 65	36	40	540g	<b>IND-425</b> <b>-3050F</b>
SC100450	M16 x 50	46	50	820g	<b>IND-425</b> <b>-3050J</b>

**SC11A - Screw Jack**



**Material:** Medium Carbon Steel.  
**Hardness:** HRC 40.  
**Surface Finish:** Black Oxide.



Product Number	Diameter x Height A x B (Min)	Dimensions (mm)		Holding Load (kN)	Weight each	Order Code
		C	D			
SC20032050	32 x 40mm	60	32	72	230g	<b>IND-425</b> <b>-3057D</b>
SC20070140	65 x 100mm	165	70	135	274g	<b>IND-425</b> <b>-3057P</b>

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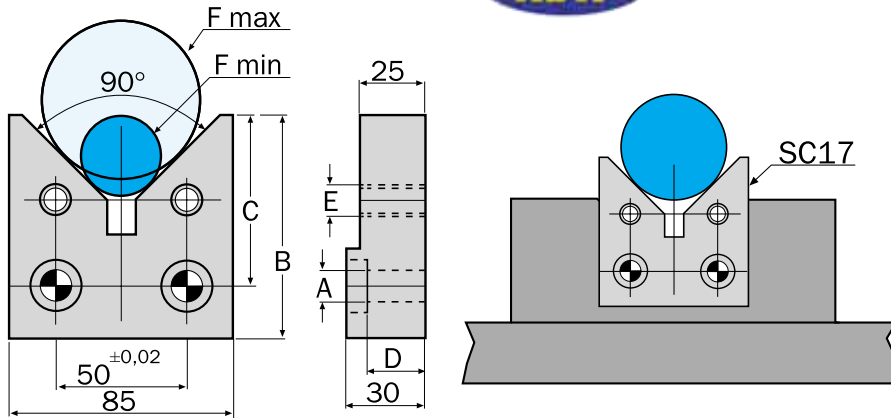
Workshop Equipment

**INDEXA** SC17 - Vee Block

**NEW**

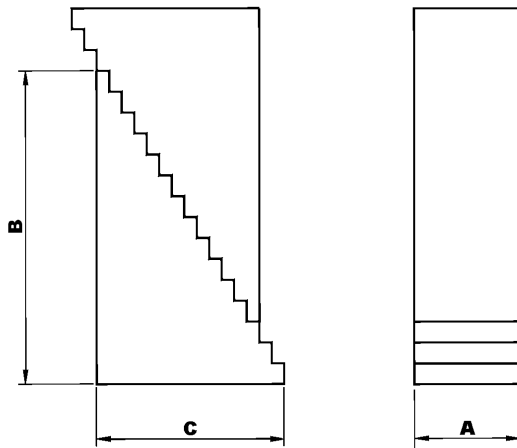


**Material:** Medium Carbon Steel EN9. Induction Hardened.



Product Number	Size A (F7) x B x C	Dimensions (mm)				Weight each	Order Code
		E	D	F (max)	F (min)		
SC170112	Ø 12 x 85 x 65mm	M12	22	80	15	1.25kg	<b>IND-425</b> <b>-3085E</b>

**SU25 - Step Block**

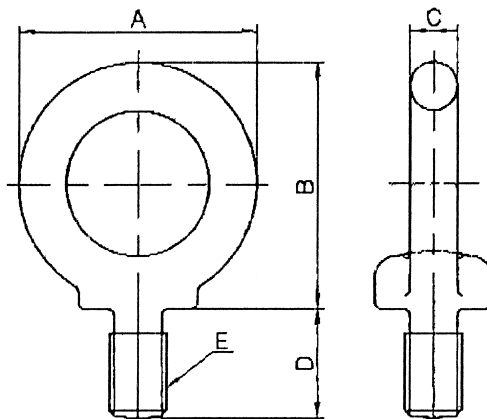


**Material:** Medium Carbon Steel.  
**Hardness:** HRC 32 - 36.  
**Surface Finish:** Black Oxide.



Product Number	Supporting Height	Dimensions (mm)			Weight each	Order Code
		A	B	C		
SU252530	19 - 49		29	17	0.05kg	<b>-3125E</b>
SU252545	28 - 68	25	45	27	0.12kg	<b>-3125H</b>
SU252597	58 - 150		97.5	57	0.50kg	<b>-3125L</b>
SU253259	38 - 90		59	35	0.24kg	<b>-3132J</b>
SU253297	58 - 150	32	97.5	57	0.62kg	<b>-3132L</b>
SU2532139	82 - 210		139	81	1.32kg	<b>-3132P</b>

**SEB - Shoulder Eye Bolt**



Product Number	Thread (E)	Dimensions (mm)				Load	Weight each	Order Code
		A	B	C	D			
SEB1017	M10	41	41.5	8	18	150kg	0.063kg	<b>IND-425</b> <b>-3210S</b>
SEB1220	M12	50	51	10	22	220kg	0.125kg	<b>-3212S</b>
SEB1525	M16	60	60	12.5	27	450kg	0.216kg	<b>-3216S</b>
SEB2030	M20	72	71	16	30	630kg	0.4kg	<b>-3220S</b>

Workshop Equipment



**INDEXA** Type 5821 Horizontal & Vertical Indexing Unit

Ideal for milling, drilling, jig boring and related tool room machining operations. Indexing accuracy  $\pm 120$  sec.

Simple and compact construction allows two types of dividing:

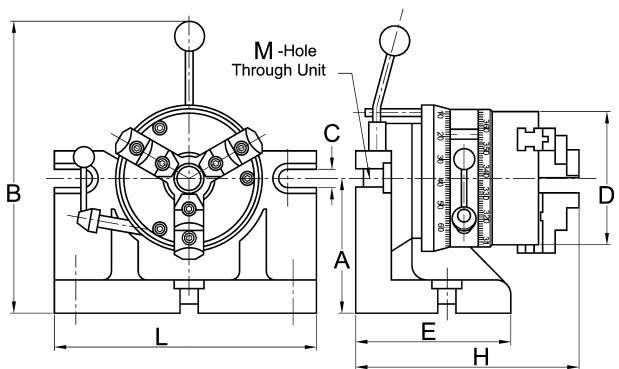
**Angular Indexing**

Through the graduation ring from 0° to 360° in increments of 1°.

**Basic Indexing**

By means of catch device. This permits divisions of 2, 3, 4, 6, 8, 12 and 24 without disassembly.

Fitted with standard 3-jaw self-centring scroll chuck with 2-piece reversible jaws, model - 0400K has a special design allowing the use of 5C collets.



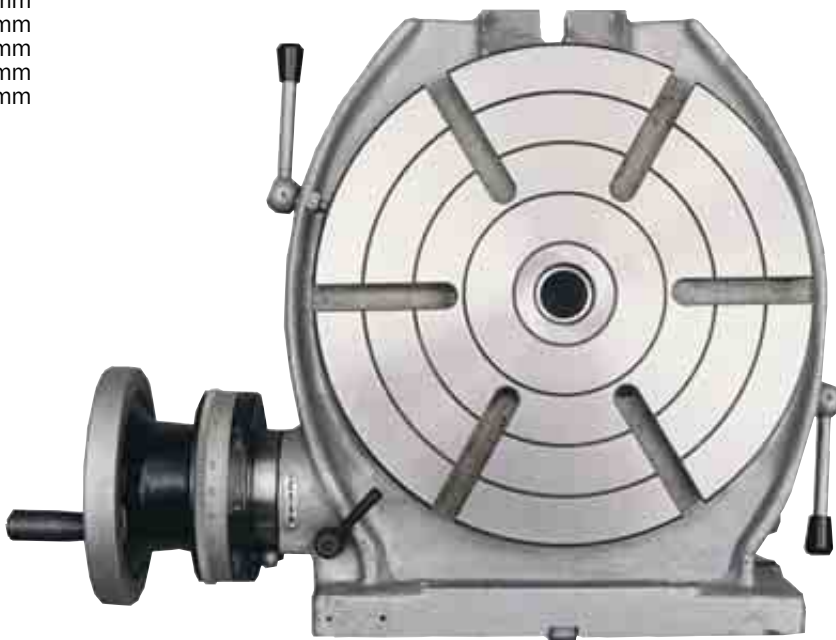
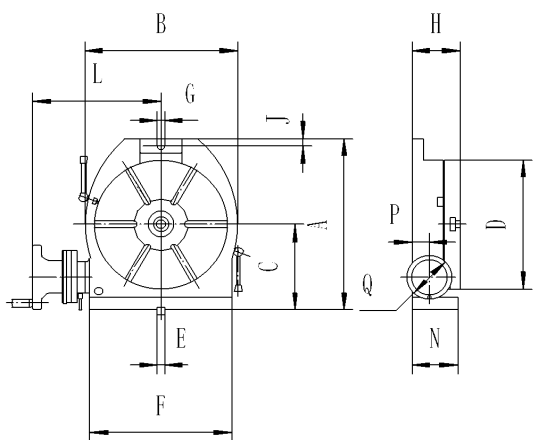
Chuck Diameter	Dimensions (mm)										Weight each	Order Code
	A	G	B	C	E	F	H	L	M			
125mm	100	167	254	14	14	130	215	206	25.0	17.8kg	<b>-0400K</b>	
160mm	125	210	303	14	14	145	245	214	20.2	34.0kg	<b>-0410K</b>	
200mm	160	265	384	18	18	160	300	244	26.5	58.0kg	<b>-0420K</b>	
250mm	200	330	473	18	18	185	340	277	38.2	94.0kg	<b>-0430K</b>	

**Type SOPP Horizontal & Vertical Rotary Table**

With a disengageable worm gear which allows rapid indexing. One rotation of handle equals four degrees on collar. The table is made of high grade cast iron. Works as an indexing unit in the vertical position as well as a conventional rotary table for circular cutting, boring or angle setting, etc. Optional dividing plates are available separately.

**Accuracy:**

- Parallelism of clamping surface to base: 0.020mm
- Flatness of clamping surface: 0.015mm
- True running cylindrical centre bore: 0.020mm
- True running of tapered centre bore: 0.020mm
- Squareness of clamping surface to centre slot: 0.010mm



**Optional Extras**

Description	Order Code
Dividing Plate for INDEXA Rotary Tables	<b>IND-437</b> <b>-1000K</b>

**Rotary Tables**

Diameter D	Max. Capacity C	Centre Hole M	Dimensions (mm)											No. of T-slots	Weight each	Order Code
			A	B	E	F	G	H	J	L	N	P	Q			
200mm	150	3 MT	285	236	14	208	14	100	15	211	99	48	125	4	42kg	<b>-0500K</b>
250mm	170	3 MT	328	286	14	253	14	110	16	241	106	48	125	6	57kg	<b>-0510K</b>
320mm	210	4 MT	410	360	18	320	18	120	16	273	118	48	140	6	92kg	<b>-0520K</b>

**KOBE**  **Drill Chuck**

Fully hardened and ground for durability and wear resistance. Suitable for use with portable power tools.



Capacity (mm)	Mount	Weight each	Order Code <b>KBE-440</b>
1.0 - 10.0	3/8" - 24F		<b>-2010A</b>
1.5 - 13.0	3/8" - 24F		<b>-2020B</b>
1.5 - 13.0	1/2" - 20F		<b>-2030C</b>

**Drill Chuck**

For use with portable power tools. Female mount. Supplied with key. UNF keyed chuck, hardened and ground for durability and wear resistance. For use with reversible drills. Excellent value for money.



Capacity (mm)	Mount	Weight each	Order Code <b>KBE-440</b>
1.0 - 10.0	3/8" - 24F	135g	<b>-1010A</b>
1.5 - 13.0	3/8" - 24F	270g	<b>-1020B</b>
1.5 - 13.0	1/2" - 20F	270g	<b>-1030C</b>

**KENNEDY**  **Extra Keyless Drill Chuck**

Designed for use on cordless screwdrivers, cordless and corded drills. Unique gripping mechanism engages automatically when tightened. Fully hardened and ground jaws protect against work surface abrasion. Through drilled for use on reversible drills.



Capacity (mm)	Mount	Weight each	Order Code <b>KEN-440</b>
1 - 10	3/8" - 24F		<b>-4720K</b>
1.5 - 13	3/8" - 24F		<b>-4760K</b>
1 - 10	1/2" - 20F		<b>-4700K</b>
1.5 - 13	1/2" - 20F		<b>-4740K</b>

**Standard Duty Industrial Keyed Drill Chuck**

Fully hardened and ground for durability and wear resistance. Suitable for use with portable power tools. Supplied with key. Manufactured to **DIN 6349**.



\*Primarily for use with hand operated machines

Capacity (mm)	Mounting	Maximum Diameter	Weight each	Order Code <b>KEN-440</b>
0.5 - 8	3/8" x 24F	30.0	140g	<b>-2260K</b>
0.8 - 10.0	3/8" x 24F	34.0	240g	<b>-2360K</b>
0.8 - 10.0*	3/8" x 24M	34.0	250g	<b>-2370K</b>
0.8 - 10.0*	1/2" x 20F	34.0	220g	<b>-2380K</b>
1.5 - 13.0	3/8" x 24F	42.7	390g	<b>-2460K</b>
1.5 - 13.0	3/8" x 24M	42.7	430g	<b>-2470K</b>
1.5 - 13.0	1/2" x 20F	42.7	390g	<b>-2480K</b>

**Heavy Duty Industrial Keyed Drill Chuck**

Fully hardened and ground working parts. The jaws are centre ground for alignment and concentricity. Key holes and teeth are fully hardened for durability and wear resistance. To correctly tighten your keyed drill chuck use all key holes in turn to guarantee even pressure and maximum grip. Suitable for use on machine tools and all types of industrial power tools. Supplied with key. Manufactured to **DIN 6349**.



\* Primarily for use with hand operated machines.  
† Not suitable for reversing drills.

Capacity (mm)	Mounting	Maximum Diameter	Weight each	Order Code <b>KEN-440</b>
0.5 - 4	0JT	26.0	110g	<b>-1060K</b>
0.5 - 6.5	1JT	30.0	140g	<b>-1110K</b>
0.5 - 6.5	3/8"-24F †	30.0	140g	<b>-1160K</b>
1.0 - 10.0	2JT	42.7	430g	<b>-1320K</b>
1.0 - 10.0*	3/8"-24F †	38.0	270g	<b>-1360K</b>
1.0 - 10.0*	1/2"-20F †	38.0	270g	<b>-1380K</b>
1.0 - 10.0	1/2"-20F †	42.7	420g	<b>-1390K</b>
0.8 - 10.0	DIN-B12	42.7	400g	<b>-5020K</b>
1.0 - 13.0	2JT	52.0	760g	<b>-1420K</b>
1.0 - 13.0	6JT	52.0	730g	<b>-1440K</b>
1.0 - 13.0	33JT	52.0	740g	<b>-1450K</b>
1.5 - 13.0	DIN-B12	52.7	750g	<b>-5060K</b>
1.0 - 13.0	DIN-B16	52.7	780g	<b>-5080K</b>
1.0 - 16.0	3JT	56.5	970g	<b>-1530K</b>
1.5 - 13.0	1/2"-20F	42.8	270g	<b>-4640K</b>
1.5 - 13.0	3/8"-24F †	42.5	420g	<b>-1460K</b>
1.5 - 13.0	1/2"-20F †	46.0	530g	<b>-1480K</b>
3.0 - 16.0	DIN-B16	56.5	890g	<b>-5100K</b>
3.0 - 16.0*	1/2"-20F †	50.0	610g	<b>-1580K</b>
5.0 - 20.0	3JT	65.0	1300g	<b>-1630K</b>
5.0 - 20.0	DIN-B22	65.0	1335g	<b>-5120K</b>

**Spiro-Rapid Clamping Keyless Drill Chuck**

Allows quick tool change, while maintaining high precision and high concentricity. Fully hardened jaws, sleeve and retaining ring for durability and wear resistance. Self-tightening.



Capacity (mm)	Mount	Maximum Diameter	Weight each	Order Code <b>KEN-440</b>
4.0	1JT	28.0	150g	<b>-3010K</b>
8.0	1JT	38.0	440g	<b>-3110K</b>
10.0	2JT	43.0	720g	<b>-3220K</b>
13.0	2JT	50.0	1000g	<b>-3320K</b>
13.0	6JT	50.0	1000g	<b>-3340K</b>
16.0	6JT	55.0	1200g	<b>-3440K</b>

**Supra-Rapid Clamping Industrial Keyless Drill Chuck**

Fully hardened and ground working parts. The jaws are centre ground for alignment concentricity. Robustly designed for durability and wear resistance in the most arduous of industrial applications on stationary drilling machines. Unsuitable for reversing drills.

**EXTENDED RANGE**



Capacity (mm)	Mount	Maximum Diameter	Weight each	Order Code <b>KEN-440</b>
10.0	2JT	42.5	670g	<b>-4120K</b>
10.0	DIN-B12	42.5	670g	<b>-5220K</b>
10.0	DIN-B16	42.5	690g	<b>-5240K</b>
13.0	6JT	46.0	920g	<b>-4240K</b>
13.0	1/2" - 20F	46.0	660g	<b>-4280K</b>
13.0	DIN-B12	46.0	900g	<b>-5260K</b>
13.0	DIN-B16	46.0	940g	<b>-5280K</b>
16.0	6JT	51.0	1100g	<b>-4340K</b>
16.0	DIN-B16	51.0	1090g	<b>-5300K</b>

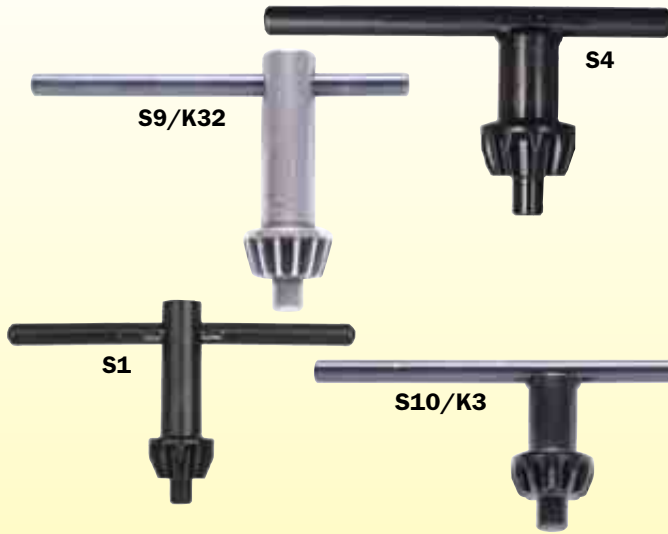
**Extra-RV Drill Chuck**

Radial locking. Suitable for use on impact drills. Maintains full gripping pressure on the drill bit during hammer drilling. Compensates and absorbs the vibration and forces produced when hammer drilling, unlike rigid gripping chucks, preventing drill slippage and providing consistent performance under severe conditions. Fully hardened and ground jaws protect against work surface abrasion. Through drilled for use on reversible drills.



Capacity (mm)	Mount	Maximum Diameter	Weight each	Order Code <b>KEN-440</b>
13.0	3/8" - 24F	42.8	310g	<b>-3860K</b>
13.0	1/2" - 20F	42.8	310g	<b>-3880K</b>

Suitable for use with all industrial keyed chucks (including Rohm\* and Jacobs).



Ref No.	For Use With Chuck Number	Jacobs Equivalent	Weight each	Order Code <b>KEN-441</b>
S1	440-106/111/116 & 226 *4, 6, 6M & 8M	-	20g	<b>-0020K</b>
S2	440-132/136/138/139/146/148/236/237/238/246/247/248 & all Supercraft Chucks *10S, 10, 10M, 13S & 13M	K8/10	50g	<b>-0040K</b>
S3	440-142/144/145/153 & 158	-	70g	<b>-0060K</b>
S4	440-163 *20 & 26	-	160g	<b>-0080K</b>
S7	1 Series	K1	20g	<b>-0140K</b>
S8	31 Series & 8½N	K30S	50g	<b>-0160K</b>
S9	32 & 33 Series, 11N	K32	60g	<b>-0180K</b>
S13	36 Series, 16, 18N	K4	150g	<b>-0260K</b>
S14	¼", ⅝", ⅜" Multicraft	KG	20g	<b>-0280K</b>
S18	7 Series	K7	30g	<b>-0360K</b>
S10	3 & 6 Series, 14N	K3	90g	<b>-0400K</b>
K2	2 Series	K2	40g	<b>-1020K</b>

**Industrial Drill Chuck Arbors**

Precision machined, fully hardened and ground to give maximum surface contact.

**Morse Taper Drive to Jacobs Taper**



Description	Overall Length	Weight each	Order Code <b>KEN-442</b>
No.1 MT x 1JT	90mm	70g	<b>-9110K</b>
No.1 MT x 2JT	95mm	80g	<b>-9120K</b>
No.1 MT x 6JT	96mm	100g	<b>-9160K</b>
No.1 MT x 33JT	95mm	90g	<b>-9190K</b>
No.2 MT x 1JT	100mm	150g	<b>-9210K</b>
No.2 MT x 2JT	105mm	160g	<b>-9220K</b>
No.2 MT x 3JT	115mm	220g	<b>-9230K</b>
No.2 MT x 4JT	125mm	370g	<b>-9240K</b>
No.2 MT x 6JT	110mm	180g	<b>-9260K</b>
No.2 MT x 33JT	110mm	180g	<b>-9290K</b>
No.3 MT x 1JT	120mm	310g	<b>-9310K</b>
No.3 MT x 2JT	125mm	330g	<b>-9320K</b>
No.3 MT x 3JT	135mm	380g	<b>-9330K</b>
No.3 MT x 4JT	145mm	520g	<b>-9340K</b>
No.3 MT x 6JT	130mm	340g	<b>-9360K</b>
No.3 MT x 33JT	125mm	340g	<b>-9390K</b>
No.4 MT x 2JT	135mm	700g	<b>-9420K</b>
No.4 MT x 3JT	160mm	730g	<b>-9430K</b>
No.4 MT x 6JT	155mm	690g	<b>-9460K</b>
No.4 MT x 33JT	155mm	680g	<b>-9490K</b>
No.5 MT x 3JT	190mm	1700g	<b>-9530K</b>

**Bridgeport Drive to Jacobs Taper**



Description	Overall Length	Weight each	Order Code <b>KEN-442</b>
R8 x 1JT	130mm	420g	<b>-9610K</b>
R8 x 2JT	135mm	440g	<b>-9620K</b>
R8 x 3JT	145mm	510g	<b>-9630K</b>
R8 x 6JT	135mm	450g	<b>-9660K</b>
R8 x 33JT	135mm	460g	<b>-9690K</b>

**Morse Taper Drive to Threaded**



Description	Overall Length	Weight each	Order Code <b>KEN-442</b>
No.1 MT ½ x 20	92mm	100g	<b>-1120K</b>
No.1 MT ⅜ x 24	95mm	80g	<b>-1380K</b>
No.2 MT ½ x 20	105mm	170g	<b>-2120K</b>
No.2 MT ⅜ x 24	105mm	170g	<b>-2380K</b>
No.2 MT ⅝ x 16	105mm	180g	<b>-2580K</b>
No.3 MT ½ x 20	125mm	360g	<b>-3120K</b>
No.3 MT ⅝ x 16	125mm	370g	<b>-3580K</b>

**KD Type - Morse Taper Shank to Din Taper Arbors**

Fully hardened and ground Morse Taper to **DIN 228**. Chuck taper to **DIN 238**.



Morse Taper	Chuck Taper	Overall length	Order Code <b>KEN-442</b>
No.2 MT	B12	106.5mm	<b>-5220K</b>
No.2 MT	B16	111.5mm	<b>-5260K</b>
No.3 MT	B12	125.0mm	<b>-5320K</b>
No.3 MT	B16	134.0mm	<b>-5360K</b>
No.4 MT	B16	159.0mm	<b>-5420K</b>
No.4 MT	B22	176.0mm	<b>-5460K</b>

**SDS Adaptor**

Complete with retaining screw for reserve action. Suitable for use in rotary mode only.

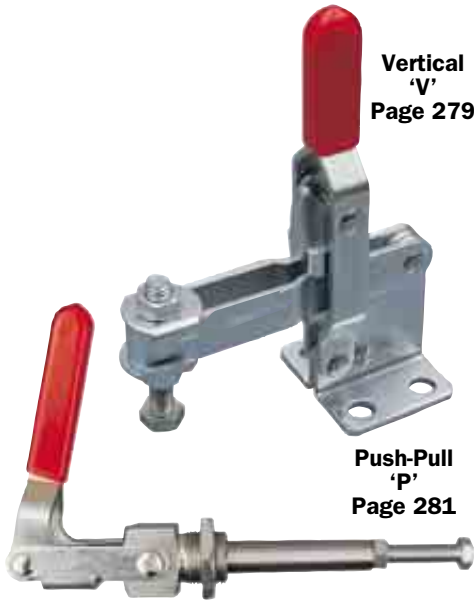


Description	Overall Length	Weight each	Order Code <b>KEN-442</b>
SDS ½"x20	75mm	40g	<b>-9000K</b>

Workshop Equipment

Indexa-Seiki fixed grip toggle clamps form a complete range suitable for countless applications including holding components in jigs and fixtures, clamping loads etc.

**Selection - Clamp Type**



**Vertical 'V'**  
Page 279

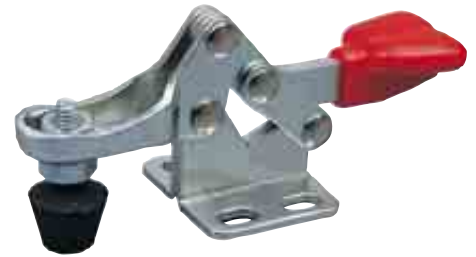
**Push-Pull 'P'**  
Page 281

**Vertical**  
For general application in automotive and other heavy industries where trouble free life and robust construction are required. Force applied downward, 90° to bar.

**Horizontal**  
For general application in areas where a lower profile and unobstructiveness are required. Force applied downward, 90° to bar.

**Push-Pull**  
Clamps lock in extended and retracted positions. Force applied in line with spindle (straight line action).

**Latch**  
Suitable for applications such as sealing chamber doors, lids of mould closures. Latch bolts are threaded to allow easy adjustment.

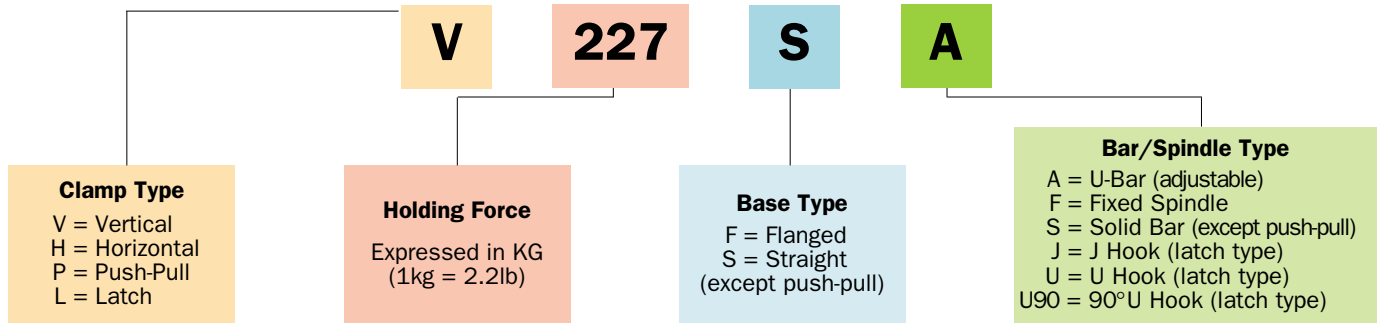


**Horizontal 'H'**  
Page 280



**Latch 'L'**  
Page 280

**Selection by Product Number**



**Flanged 'F'**

**Selection - Base Type**

**Flanged**  
Suitable for bolting or welding the clamp on to a flat surface.

**Straight**  
Suitable for mounting on to an outside face or edge of workpiece.



**Straight 'S'**

**Selection - Bar/Spindle Type**

**U-Bar**

Clamping spindle can be adjusted along length of bar.

**Fixed Spindle**

Clamping spindle is in a fixed position on the arm.

**Solid Bar**

Clamping spindle and retainer are supplied loose to allow the arm to be cut to length and welded in desired position.

**Threaded Spindle**

Used for push-pull type of clamp.

**U-Hook**

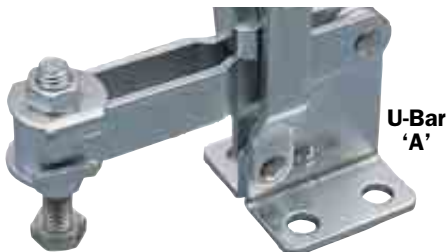
Threaded for easy adjustment.

**J-Hook**

Locks directly regardless of angle of hook.

**90° U Hook**

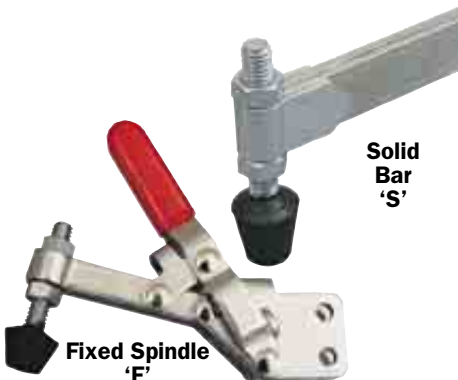
Locks at 90° to clamp.



**U-Bar 'A'**



**Threaded Spindle 'handle position'**



**Solid Bar 'S'**

**Fixed Spindle 'F'**



**U-Hook 'U'**

**90° U-Hook 'U90'**



**J-Hook 'J'**

Workshop Equipment



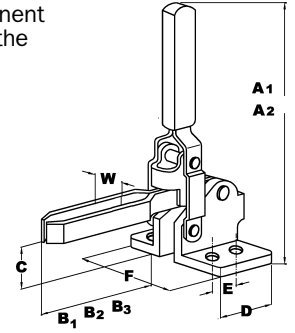
# INDEXA Vertical Industrial Toggle Clamp

Designed to improve performance in fabrication and engineering clamping applications. The rapid clamping/unclamping made possible by the use of toggle clamps can greatly reduce machine/operator 'down-time' during all stages of production.

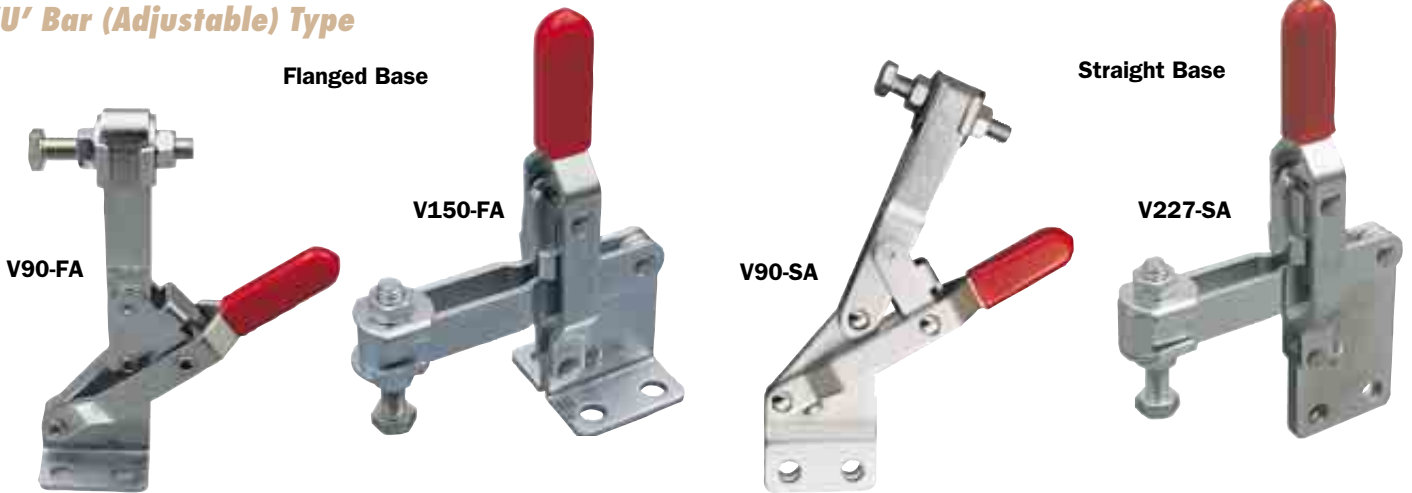
**Clamping Capacity** - the forces stated are the maximum loads that can be applied without causing permanent deformation. Due to leverage ratios, the holding capacity will be greatest at the point on the bar nearest to the handle of the clamp and forces stated have been achieved at this point.

### Vertical Clamp Dimensions (mm)

Holding Capacity	A <sub>1</sub> Flanged Base	A <sub>2</sub> Straight Base	B <sub>1</sub> Adj. Bar	B <sub>2</sub> Fixed Bar	B <sub>3</sub> Solid Bar	C Flanged Base	D	E	F Flanged Base	W
50kg	75.0	83.8	24.5	—	—	19.0	25.4	15.9	33.3	5.2
90kg	95.2	107.1	33.2	33.2	—	23.0	25.4	12.7	39.7	6.4
150kg	139.0	160.0	63.0	—	—	38.0	43.0	33.0	50.0	11.0
227kg	139.7	154.0	71.4	—	57.2	31.8	34.9	31.8	46.0	8.3
300kg	285.0	330.0	120.0	—	—	50.0	60.0	30.0	77.0	13.5
450kg	225.4	257.5	125.4	—	—	50.8	50.8	31.8	64.2	13.5
550kg	304.8	352.4	153.0	—	153.0	82.6	76.2	50.8	95.2	16.7

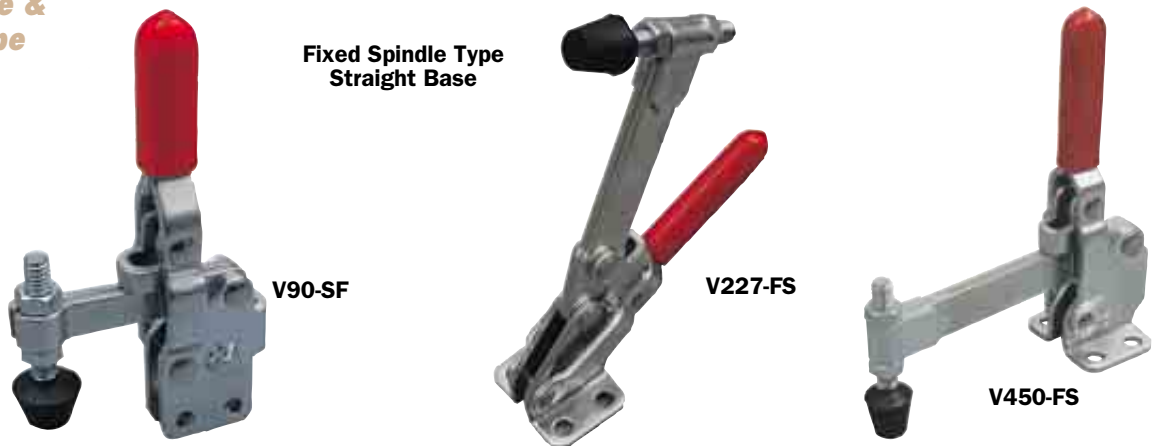


### 'U' Bar (Adjustable) Type



Product Number	Holding Capacity	Movement		Base Type	Supplied With	Weight each	Order Code IND-443
		Handle	Bar				
V50-FA	50kg	56°	100°	Flanged	Tipped Spindle (No.10) and Flanged Washer	60g	-1020K
V90-FA	90kg	60°	100°		Spindle (1/4") and Flanged Washer	170g	-1220K
V150-FA	150kg	45°	94°		Hex Head Spindle (M8) and Bolt Retainer	320g	-1320K
V227-FA	227kg	60°	100°		Tipped Spindle (5/16") and Flanged Washer	355g	-1420K
V300-FA	300kg	67°	140°		Hex Head Spindle (M10)	1250g	-1620K
V450-FA	450kg	70°	135°	Straight	Hex Head Spindle (1/2") and Flanged Washer	1140g	-1720K
V550-FA	550kg	60°	140°		Hex Head Spindle (5/8") and Flanged Washer	2540g	-1920K
V340-FA	340kg	58°	105°		Tipped Spindle (3/8") and Flanged Washer	635g	-1590K
V90-SA	90kg	60°	100°		Spindle (1/4") and Flanged Washer	170g	-1270K
V150-SA	150kg	45°	94°		Hex Head Spindle (M8) and Bolt Retainer	320g	-1370K
V227-SA	227kg	60°	100°	Tipped Spindle (5/16") and Flanged Washer	355g	-1470K	
V450-SA	450kg	70°	135°	Hex Head Spindle (5/8") and Flanged Washer	1250g	-1770K	

### Fixed Spindle & Solid Bar Type



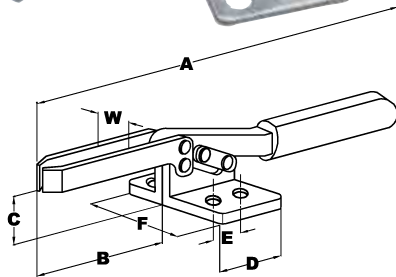
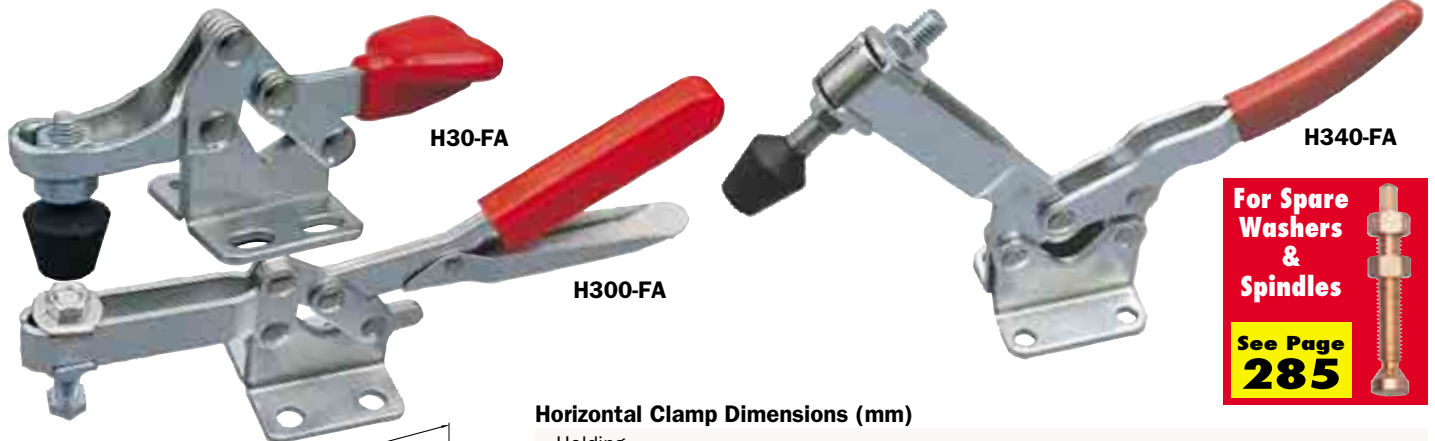
Product Number	Holding Capacity	Movement		Base Type	Supplied With	Weight each	Order Code IND-443
		Handle	Bar				
V90-FF	90kg	60°	100°	Flanged	Fixed Spindle (1/4")	170g	-1120K
V90-SF	90kg	60°	100°	Straight	Fixed Spindle (1/4")	170g	-1170K
V227-FS	227kg	60°	100°	Flanged	Solid Bar Hex Head (5/16") and Bolt Retainer*	340g	-1520K
V450-FS	450kg	70°	135°		Solid Bar Hex Head Spindle (1/2") and Bolt Retainer*	1250g	-1820K
V550-FS	550kg	60°	140°		Solid Bar Hex Head Spindle (5/8") and Bolt Retainer*	2540g	-1940K
V227-SS	227kg	60°	100°	Straight	Solid Bar Tipped Spindle (5/16") and Bolt Retainer*	340g	-1570K
V450-SS	450kg	70°	135°		Solid Bar Hex Head Spindle (5/8") and Bolt Retainer*	1250g	-1870K

\* Bolt retainer supplied to be welded by user



**INDEXA** Horizontal Industrial Toggle Clamp

With a low profile design suitable for use in applications requiring increased access to the actual workpiece. Available in eight sizes for general application in areas where a lower profile is required. Force applied downwards 90° to bar.



Horizontal Clamp Dimensions (mm)

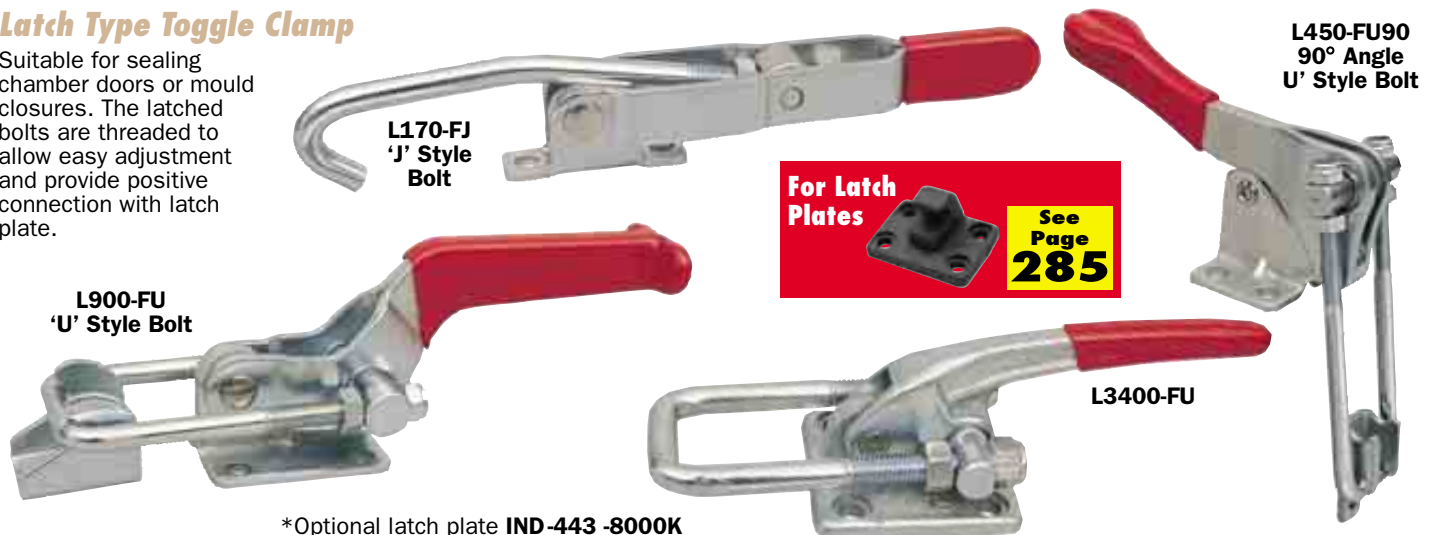
Holding Capacity	A	B	C	D	E	F	W
30kg	76.5	28.0	12.5	24.0	11.5	28.5	8.5
90kg	138.0	55.0	25.4	37.0	25.4	36.0	7.4
227kg	168.0	70.0	34.9	38.0	25.4	35.0	8.3
300kg	270.0	85.0	36.5	58.0	34.0	60.0	11.0
340kg	262.0	107.5	46.9	57.1	41.3	57.2	11.0
400kg	240.0	60.0	54.0	70.0	42.0	50.0	12.6
500kg	270.0	91.2	38.0	58.0	37.0	70.0	11.0
636kg	272.0	76.2	51.0	90.0		48.0	12.7

Product Number	Holding Capacity	Movement Handle	Bar	Base Type	Supplied with	Weight each	Order Code
H65-FA	75kg	76°	94°	Flanged	Hex Head Spindle (M5) Moulded PVC Handles	100g	<b>-1960K</b>
H86-FA	150kg	76°	94°		Hex Head Spindle (M6) Moulded PVC Handles	230g	<b>-1970K</b>
H217-FA	250kg	76°	94°		Hex Head Spindle (M8) Moulded PVC Handles	430g	<b>-1980K</b>
H30-FA	30kg	88°	80°	Flanged	Tipped Spindle (M4)	40g	<b>-2020K</b>
H90-FA	90kg	60°	85°		Tipped Spindle (1/4") and Flanged Washer	130g	<b>-2120K</b>
H227-FA	227kg	65°	90°		Tipped Spindle (9/16") and Flanged Washer	255g	<b>-2220K</b>
H300-FA	300kg	85°	80°		Hexagon Head Spindle (3/8") and Flanged Washer	490g	<b>-2320K</b>
H340-FA	340kg	50°	85°		Tipped Spindle (3/8") and Flanged Washer	640g	<b>-2420K</b>
H400-FA	400kg	85°	84°		Tipped Spindle (3/8") and Flanged Washer	600g	<b>-2520K</b>
H500-FA	500kg	85°	65°		Hexagon Head Spindle (M10) and Flanged Washer	450g	<b>-2620K</b>
H636-FA	636kg	94°	91°		Hexagon Head Spindle (1/2") and Flanged Washer**	1220g	<b>-2720K</b>

\*\*Single mounting centre hole 13mm diameter for 'Tee' bolt mounting

**Latch Type Toggle Clamp**

Suitable for sealing chamber doors or mould closures. The latched bolts are threaded to allow easy adjustment and provide positive connection with latch plate.



\*Optional latch plate **IND-443-8000K**

Product Number	Holding Capacity	Drawing Movement	Drawing Adjust	Base Type	Description	Weight each	Order Code
L164-FU	164kg	30mm	9.9mm	Flanged	U-Style Bolt	80g	<b>-4070K</b>
L318-FU	318kg	45mm	9.6mm		U-Style Bolt	225g	<b>-4010K</b>
L900-FU	900kg	80mm	23.8mm		U-Style Bolt	680g	<b>-4130K</b>
L1818-FU	1818kg	88.9mm	19mm		U-Style Bolt*	1260g	<b>-4170K</b>
L3400-FU	3400kg	55.6mm	28.6mm	Flanged	U-Style Bolt*	1480g	<b>-4210K</b>
L170-FJ	170kg	100mm	6.5mm		J-Style Bolt	270g	<b>-4030K</b>
L170-FJ	170kg	105mm	35mm		J-Style Bolt	255g	<b>-4050K</b>
L340-FJ	340kg	140mm	40mm		J-Style Bolt	340g	<b>-4190K</b>
L225-FU90	225kg	25mm	15mm	Flanged	90° Angle U-Style Bolt	113g	<b>-4090K</b>
L450-FU90	450kg	65mm	33mm		90° Angle U-Style Bolt	250g	<b>-4110K</b>
L900-FU90	900kg	45mm	40mm		90° Angle U-Style Bolt	700g	<b>-4150K</b>

Workshop Equipment



**INDEXA** Push Pull Industrial Toggle Clamp

The straight line action which gives these plunger-style clamps extremely high loading capacities whilst maintaining compactness. These clamps also lock in the open position which allows a 'pull' to be exerted (for instance, in use with foam moulds). All models have tapped spindles for use with adjustable spindles.

**Base Mounted Type (Flanged)**

Base Mounted Type - 45° Handle

P227-F45  
P386-F45  
P680-F45



Base Mounted Type - 45° Handle

P386-180F



Base Mounted Type - 90° Handle

P227-F90  
P386-F90  
P680-F90



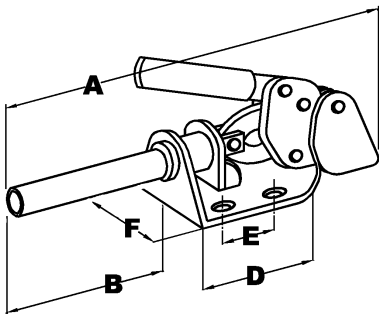
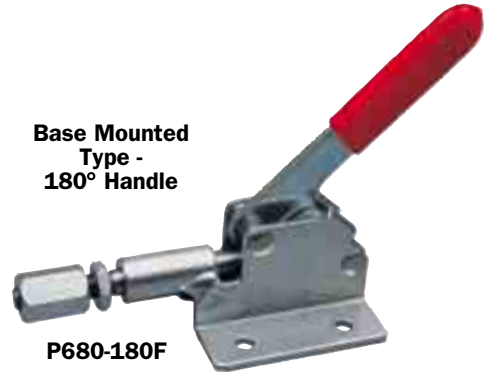
For More Spindles



See Page 285

Base Mounted Type - 180° Handle

P680-180F

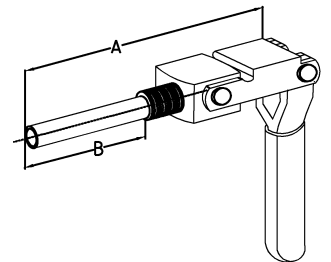
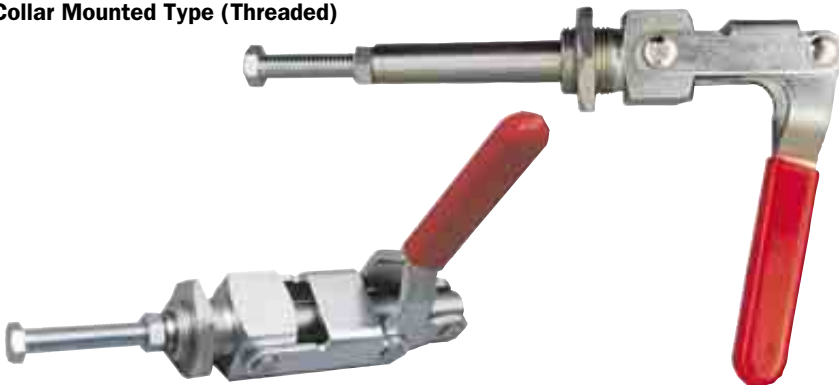


**Dimensions (mm)**

Holding Capacity	A — Excluding Handle	B	C	D	E	F
45kg	72.2	38.9	9.5	33.3	15.0	27.0
50kg	71.9	16.9	13.0	49.0	24.0	42.0
136kg	138.0	47.0	24.6	48.0	35.0	56.0
160kg	146.0	76.0	15.5	70.0	40.0	72.0
200kg	124.5	41.5	14.0	48.0	40.0	50.0
227kg	125.4	52.4	19.0	52.4	35.0	57.2
295kg	204.0	112.0	17.7	92.0	60.0	83.0
386kg	158.8	81.0	23.8	58.8	41.4	57.2
680kg	238.2	120.8	35.0	73.2	50.8	71.4
1136kg	178.6	50.8	12.5	127.8	34.9	56.2
1136kg	178.6	50.8	12.5	127.8	41.3 (6 holes)	56.2
1600kg	310.0	87.0	47.0	227.0	80.0	107.0

Product Number	Holding Capacity	Spindle Thread	Handle Movement	Handle Position	Base Type	Supplied With	Weight each	Order Code
P45-F45	45kg	1/4" UNC x 12 Deep	190°			Nylon Spindle	50g	-3030K
P136-F45	136kg	M8	180°			Hexagon Head Spindle	300g	-3060K
P200-F45	180kg	M8 x 1.25	144.5°			Hexagon Head Spindle	345g	-3090K
P180-FA	180kg	M8 x 1.25	145°			Hexagon Head Spindle	35g	-3100K
P227-F45	227kg	M8	180°	45°	Flanged	Hexagon Head Spindle	340g	-3120K
P386-F45	386kg	M10	180°	Extended	Flanged	Hexagon Head Spindle	580g	-3180K
P680-F45	680kg	M12	180°			Hexagon Head Spindle	1480g	-3240K
P1136-F45	1136kg	M10	180°			Hexagon Head Spindle	935g	-3300K
P227-F90	227kg	M8 x 30 Deep	180°	90°	Flanged	Hexagon Head Spindle	340g	-3150K
P386-F90	386kg	M10 x 40 Deep	180°	Extended	Flanged	Hexagon Head Spindle	580g	-3210K
P680-F90	680kg	M12 x 50 Deep	180°			Hexagon Head Spindle	1480g	-3270K
P50-180F	50kg	M5	66°	180°	Flanged	Hexagon Head Spindle	100g	-3700K
P386-180F	160kg	M10	45°	Extended	Flanged	Hexagon Head Spindle	454g	-3730K
P680-180F	295kg	1/2" UNC	45°			Hexagon Head Spindle	1270g	-3760K

**Collar Mounted Type (Threaded)**



**Dimensions (mm)**

Holding Capacity	A — Excluding Handle	B
91kg	30.3	20.6
136kg	115.0	37.7
318kg	169.5	65.3

Product Number	Holding Capacity	Spindle Thread	Collar Thread	Handle Movement	Base Type	Supplied with	Weight each	Order Code
P91-FT	91kg	1/4" UNC	M16	180°		Nylon Spindle	113g	-3530K
P136-FT	136kg	5/16" UNC	M20	180°	Flanged	Hexagon Head Spindle	270g	-3560K
P318-FT	318kg	3/8" UNC	M27	180°		Hexagon Head Spindle	690g	-3590K

\* Bolt retainer supplied to be welded by user

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GROUP  
**443 TOGGLE CLAMPS**

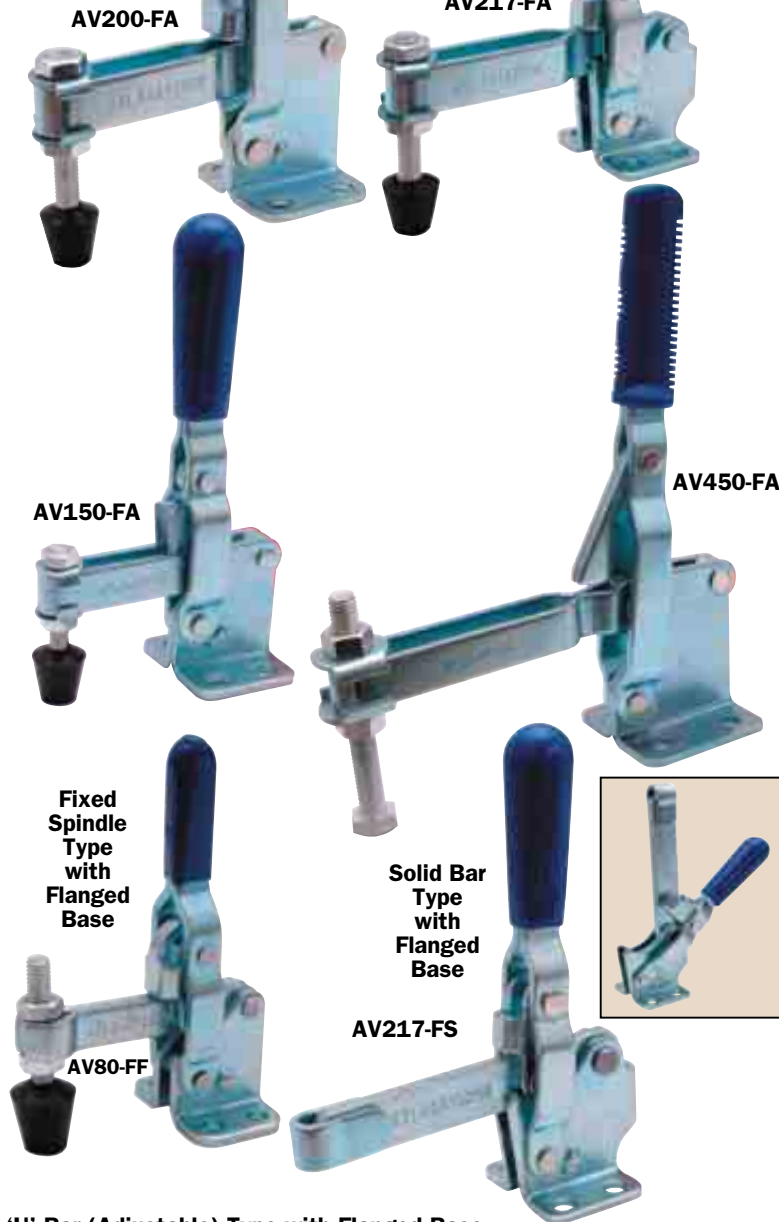
**ATLAS** Vertical Industrial  
WORKHOLDERS Toggle Clamp

Designed to improve performance in fabrication and engineering clamping applications. The rapid clamping/unclamping made possible by the use of toggle clamps can greatly reduce machine/operator 'down-time' during all stages of production.

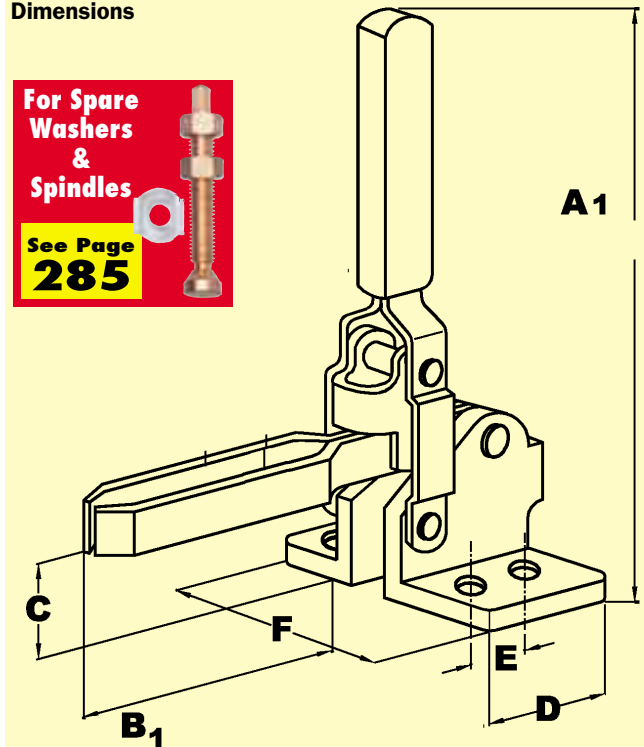


'U' Bar (Adjustable) Type with Flanged Base

'U' Bar (Adjustable) Type with Side Facing Flanged Base



**Dimensions**



**'U' Bar (Adjustable) Type with Flanged Base**

Product Number	A1 Flanged Base	B1 Flanged Base	C Flanged Base	D	E	F Flanged Base
AV50-FA	75.0	24.5	19.0	25.4	15.9	39.7
AV90-FA	93.0	39.0	23.0	29.0	14.0	28.0
AV150-FA	143.0	44.0	31.0	19.0	12.7	42.0
AV200-FA	139.0	63.0	38.0	43.0	24.0	50.0
AV217-FA	139.7	71.4	31.8	34.9	19.0	46.0
AV450-FA	272.0	125.0	62.0	70.0	40.0	70.0

**Fixed Spindle Type with Flanged Base**

Product Number	A1 Flanged Base	B1 Flanged Base	C Flanged Base	D	E	F Flanged Base
AV80-FF	100.0	27.0	23.8	25.4	12.7	39.7
AV217-FS	139.7	57.2	31.8	34.9	19.0	46.0

**'U' Bar (Adjustable) Type with Flanged Base**

Product Number	Holding Capacity	Movement Handle	Bar	Base Type	Supplied With	Weight each	Order Code
AV50-FA	50kg	56°	100°	Flanged	Tipped Spindle (M5) and Flanged Washers	60g	<b>-1020K</b>
AV90-FA**	90kg	60°	100°		Spindle (M6) and Bolt Retainer	115g	<b>-1220K</b>
AV150-FA	150kg	70°	108°		Hex Head Spindle (M6) Moulded PVC Handle	230g	<b>-1970K</b>
AV200-FA	200kg	45°	94°		Hex Head Spindle (M8) and Flanged Washers	370g	<b>-1320K</b>
AV217-FA	217kg	60°	100°		Tipped Spindle (M8) and Flanged Washers	310g	<b>-1420K</b>
AV450-FA	450kg	70°	135°		Hex Head Spindle (M12) and Flanged Washers	1220g	<b>-1720K</b>

\*\* Model AV90-FA has Side Flange - All other FA models listed have Flat Flanges

**Fixed Spindle Type with Flanged Base**

Product Number	Holding Capacity	Movement Handle	Bar	Base Type	Supplied With	Weight each	Order Code
AV80-FF	90kg	60°	100°	Flanged	Fixed Spindle (M8)	170g	<b>-1120K</b>
AV217-FS	217kg	60°	100°		Solid Bar and Bolt Retainer (M8)*	310g	<b>-1520K</b>

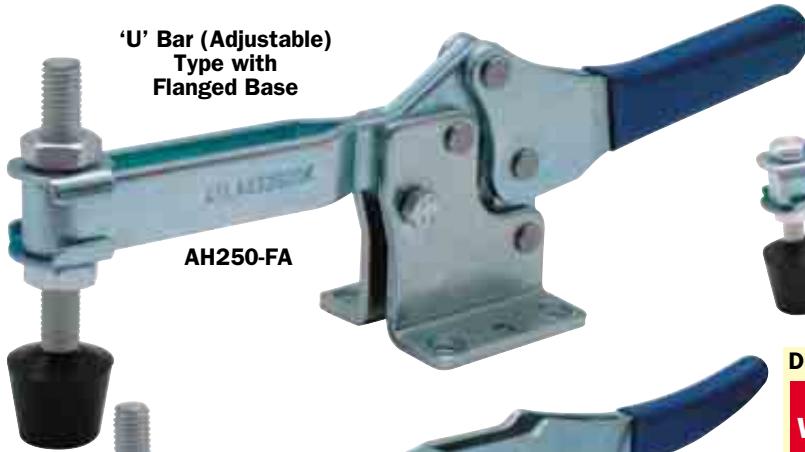
\* Please Note that the bolt retainer supplied needs to be welded in to position by the user

Workshop Equipment

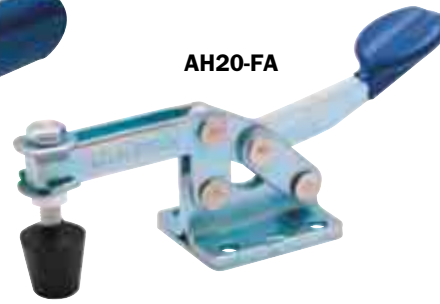


**ATLAS** Horizontal Industrial  
WORKHOLDERS Toggle Clamps

With a low profile design suitable for use in applications requiring increased access to the actual workpiece. Available in eight sizes for general application in areas where a lower profile is required. Force applied downwards 90° to bar.



AH250-FA



AH20-FA



AH340-FA

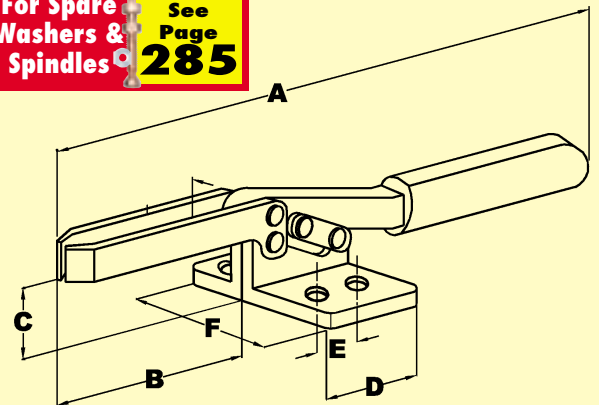


AH80-FA



Dimensions

For Spare Washers & Spindles See Page 285



Product Number	A	B	C	D	E	F
AH20-FA	110.0	37.5	24.8	36.5	24.0	30.0
AH80-FA	138.1	55.0	25.4	36.5	25.4	38.0
AH217-FA	168.0	70.0	34.9	38.0	53.4	35.0
AH250-FA	274.0	108.0	45.0	59.0	41.2	59.0
AH340-FA	263.5	108.0	44.4	57.2	41.3	57.2

Product Number	Holding Capacity	Movement Handle	Movement Bar	Base Type	Supplied with	Weight each	Order Code
AH20-FA	30kg	88°	80°	Flanged	Tipped Spindle (M6) and Flanged Washers	100g	-2020K
AH80-FA	80kg	60°	85°		Tipped Spindle (M6) and Flanged Washers	130g	-2120K
AH217-FA	217kg	65°	90°		Tipped Spindle (M8) and Flanged Washers	312g	-2220K
AH250-FA	250kg	94°	76°		Hexagon Head Spindle (M10) and Flanged Washers	500g	-2620K
AH340-FA	340kg	50°	85°		Tipped Spindle (M10) and Flanged Washers	265g	-2420K

Latch Type Toggle Clamps

Suitable for sealing chamber doors or mould closures. The latched bolts are threaded to allow easy adjustment and provide positive connection with latch plate.



'U' Style Bolt Type with Flanged Base

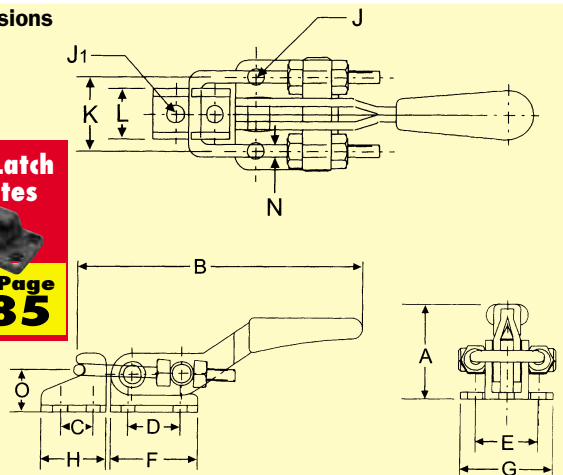
AL900-FU

AL165-FU

AL320-FU

Dimensions

For Latch Plates See Page 285



Product Number	A	B	C	D	E	F	G	H	J	J <sub>1</sub>	K	L	N	O
AL165-FU	36	88	9.9	16	19	26	28	45	4.3	4.3	19	13.2	3.3	12
AL320-FU	45	151.6	14	19	31.8	39.6	44.5	25	6.8	6.8	25.4	17.5	4	17
AL900-FU	70.6	190	19	41.4	38	60.5	54	38	8.4	8.4	44.5	30.0	8	24

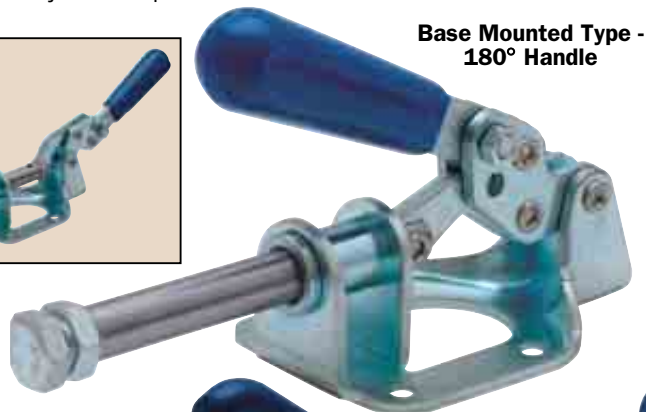
Product Number	Holding Capacity	Drawing Movement	Drawing Adjust	Base Type	Description	Weight each	Order Code
AL165-FU	165kg	30mm	9.9mm	Flanged	U-Style Bolt	68g	-4070K
AL320-FU	320kg	45mm	9.6mm		U-Style Bolt	225g	-4010K
AL900-FU	900kg	80mm	23.8mm		U-Style Bolt	650g	-4130K

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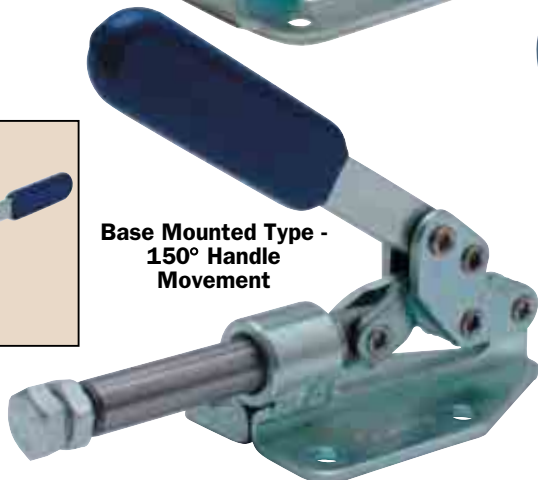
**GROUP 443 TOGGLE CLAMPS**

**ATLAS Push Pull Industrial WORKHOLDERS Toggle Clamps**

The straight line action which gives these plunger-style clamps extremely high loading capacities whilst maintaining compactness. These clamps also lock in the open position which allows a 'pull' to be exerted (for instance, in use with foam moulds). All models have tapped spindles for use with adjustable spindles.



**Base Mounted Type - 180° Handle**

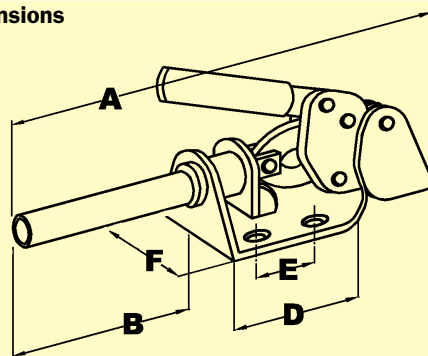


**Base Mounted Type - 150° Handle Movement**



**Base Mounted Type - 190° Handle Movement**

**Dimensions**



Product Number	A—Excl. Handle	B	C	D	E	F
AP136	138.1	49.2	24.6	88.9	34.9	55.6
AP200	124.5	41.5	14.0	83.0	40.0	50.0
AP227	151.0	63.0	15.0	88.0	32.0	63.0

**For Spare Spindles**

**See Page 285**



Product Number	Holding Capacity	Spindle Thread	Handle Movement	Handle Position	Base Type	Supplied With	Weight each	Order Code
AP136	136kg	M8	180°			Hexagon Head Spindle	285g	<b>-3060K</b>
AP200	200kg	M8 x 1.25	150°	45°	Flanged	Hexagon Head Spindle	330g	<b>-3090K</b>
AP227	227kg	M8 x 30 Deep	190°	Extended		Hexagon Head Spindle	540g	<b>-3150K</b>

**INDEXA Heavy Duty Weldable Toggle Clamps**

Hold down action suitable for high production automotive type applications. Heavy duty forged components with hardened and ground pivot points. The users provide their own handle and bar and weld them to the clamp which is then welded to a base. The flexible mounting of these clamps allows them to be used in situations where standard clamps are not effective.



**For Welders**

**See Group 880**



Holding Capacity	Base Width	Clamp Height with Handle	Weight each	Order Code
700kg	28mm	110mm	808g	<b>-5010K</b>
700kg	45mm	130mm	915g	<b>-5030K</b>
1100kg	35mm	140mm	1468g	<b>-5050K</b>
1100kg	50mm	170mm	1574g	<b>-5070K</b>





**INDEXA** Latch Plates

For use with latch type toggle clamps.



Base Size	Hook Width	Order Code
80 x 55mm	22mm	<b>-8000K</b>

**Flanged Washers**

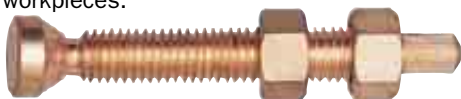
For use in conjunction with all spindles on clamps with adjustable 'U' bars.



To fit Spindle	Weight each	Order Code
$3/16$ " (No. 10)	2g	<b>-8720K</b>
$1/4$ "	4g	<b>-8740K</b>
$5/16$ " (M8)	10g	<b>-8780K</b>
$3/8$ " (M10)	15g	<b>-8800K</b>

**Swivel Foot Spindles**

As Neoprene capped but suitable for clamping onto irregular shapes or angled workpieces.



Size	Length	Weight each	Order Code
$1/4$ " UNC	2 1/4"	18g	<b>-8500K</b>
$5/16$ " UNC	2 3/4"	31g	<b>-8520K</b>
$3/8$ " UNC	3"	47g	<b>-8540K</b>
$1/2$ " UNC	4"	115g	<b>-8560K</b>

**Neoprene Capped Spindles**

For use with adjustable 'U' bar type clamps and solid bar type clamps that have bolt retainers.



Size	Length	Weight each	Order Code
M4 x 0.7	25mm	5g	<b>-8020K</b>
M8 x 1.25	63mm	34g	<b>-8100K</b>
M10 x 1.5	85mm	64g	<b>-8140K</b>
No 10UNC	1 3/8"	9g	<b>-8200K</b>
$1/4$ " UNC	1 3/4"	16g	<b>-8220K</b>
$5/16$ " UNC	2 1/2"	31g	<b>-8260K</b>
$3/8$ " UNC	3 1/2"	58g	<b>-8300K</b>

**Neoprene Caps**

For standard adjustable spindles.



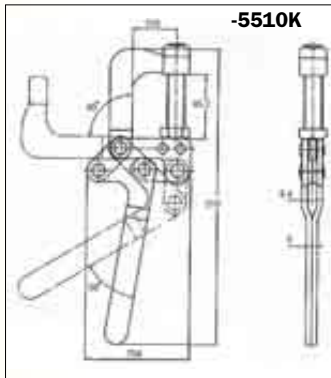
To fit Spindle	Weight each	Order Code
$1/4$ "	8g	<b>-8600K</b>
$5/16$ "	15g	<b>-8620K</b>
$3/8$ "	24g	<b>-8640K</b>
$1/2$ "	45g	<b>-8660K</b>

**Cam Type Toggle G-Clamp (Pull Back Clamp)**

To securely fix the clamp into position the base can be welded to the work surface.

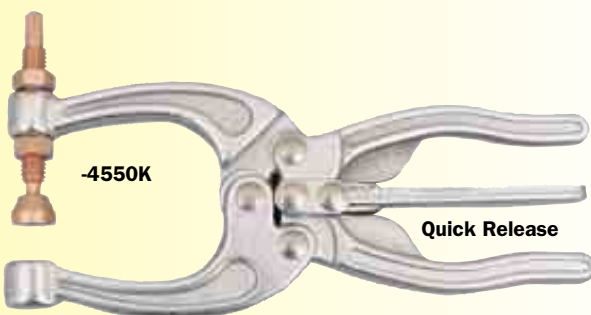


Holding Capacity	Jaw Opening	Jaw Movement	Handle Movement	Order Code
340kg	45.2mm	90°	50°	<b>-5510K</b>

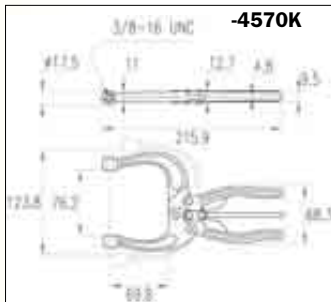
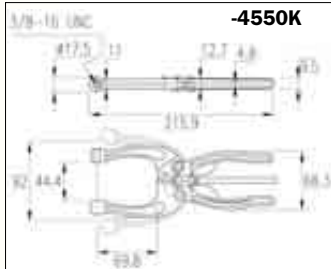
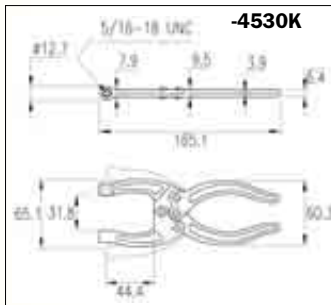
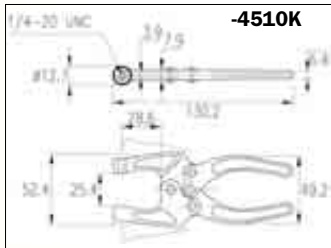


**Toggle Pliers**

Toggle pliers have the advantage of a pivoting jaw mechanism to allow a deep throat depth to open and close easily when clamping awkward profiles such as steel angle section. The jaw spindle can be pre-set to achieve the optimum clamping distance and pressure and so is most useful for repetitive clamping applications.



Holding Capacity	Jaw Min	Jaw Max	Standard Spindle Supplied	Order Code
90kg	25.4	52.4	Hex. Head	<b>-4510K</b>
159kg	31.8	65.1	Hex. Head	<b>-4530K</b>
318kg	44.4	92.0	Swivel	<b>-4550K</b>
318kg	76.2	123.8	Hex. Head & Swivel	<b>-4570K</b>



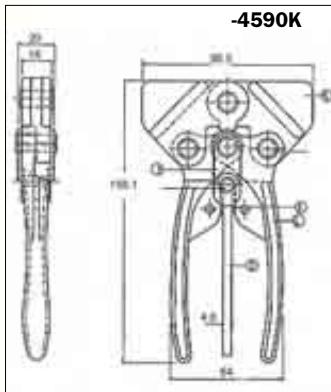
**"Stub" Type Toggle Pliers**

With two stub arms for easy linking to special jaw extensions.

**NEW**



Holding Capacity	Closed Head Width (mm)	Overall Length	Order Code
318kg	95.6	156.1	<b>-4590K</b>



Workshop Equipment