

clamps & accessories

Side & top clamps plus t-nuts, studs, bolts & more.



SERRATED SIDE CLAMPS (WEDGE TYPE)

- ▶ Made from hardened steel
- ▶ Wedge type clamps with serrated faces for best gripping
- ▶ Set contains 2pcs serrated clamps, 2pcs serrated stops, 10pcs t-nuts, 10pcs clamping bolts, allen key and t-slot scraper



Serrated wedge clamp

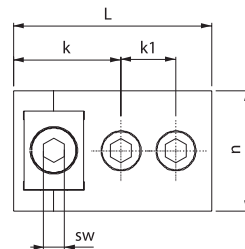
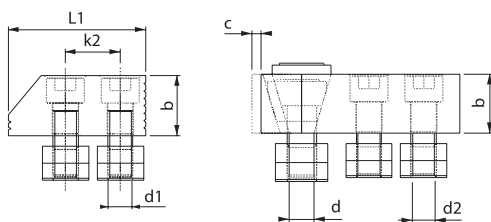


Serrated clamp stop

ER-EL



Serrated wedge clamp kit



T-Nut	c	L	b	n	k	k1	k2	L1	d	d1	d2	sw	Clamp Force Kgf	Allowable Screw Torque	Kit kg	ORDER CODES					
																KIT	PRICE	CLAMP	PRICE	STOP	PRICE
14	5	90	23	47	47	26	26	65	M12	M12	M12	10	2000	35	3.4	2030-14	£166.92	2035-14	£75.73	2040-14	£75.73
16	5	90	23	47	47	26	26	65	M12	M12	M12	10	2000	35	3.6	2030-16	£174.28	2035-16	£79.04	2040-16	£79.04
18	5	95	28	57	52	26	26	65	M12	M12	M12	10	2000	35	5	2030-18	£194.51	2035-18	£88.01	2040-18	£88.01
20	5	95	28	57	52	26	26	65	M12	M12	M12	10	2000	35	5.3	2030-20	£203.54	2035-20	£93.93	2040-20	£93.93
22	5	95	28	57	52	26	26	65	M12	M12	M12	10	2000	35	5.7	2030-22	£211.17	2035-22	£100.74	2040-22	£100.74
24	5	95	28	57	52	26	26	65	M12	M12	M12	10	2000	35	6.12	2030-24	£219.77	2035-24	£103.35	2040-24	£103.35
28	5	95	28	57	52	26	26	65	M12	M12	M12	10	2000	35	6.7	2030-28	£231.62	2035-28	£104.87	2040-28	£104.87

SERRATED SIDE CLAMPS (PARALLEL TYPE)

- ▶ Made from hardened steel
- ▶ Parallel clamps with serrations for through hole drilling
- ▶ Set contains 2pcs parallel clamps, 2pcs parallel stops, 10pcs t-nuts, 10pcs clamping bolts, allen key and t-slot scraper



Serrated parallel clamp

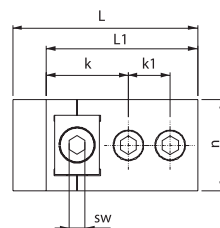
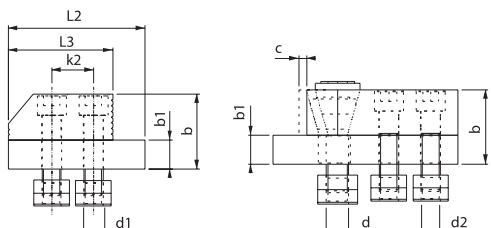


Serrated parallel clamp stop

ER-EL



Serrated wedge clamp kit

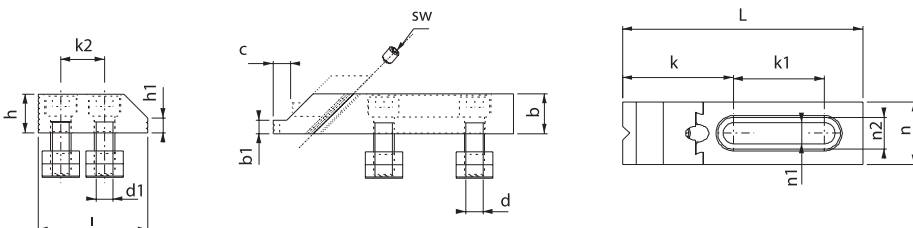


T-Nut	c	L	L1	L2	L3	b	b1	n	k	k1	k2	d, d1 d2	sw	Clamp Force Kgf	Allowable Screw Torque	Kit kg	ORDER CODES					
																	KIT	PRICE	CLAMP	PRICE	STOP	PRICE
14	5	110	90	85	65	41	18	47	47	26	26	M12	6	1000	15	5.9	2050-14	£207.82	2055-14	£88.20	2060-14	£31.56
16	5	110	90	85	65	41	18	47	47	26	26	M12	6	1000	15	6.2	2050-16	£217.77	2055-16	£90.62	2060-16	£32.96
18	5	115	95	85	65	46	18	57	52	26	26	M12	8	1250	20	8.0	2050-18	£239.35	2055-18	£103.28	2060-18	£34.36
20	5	115	95	85	65	46	18	57	52	26	26	M12	8	1250	20	8.4	2050-20	£246.01	2055-20	£107.42	2060-20	£36.53
22	5	115	95	85	65	46	18	57	52	26	26	M12	8	1250	20	8.8	2050-22	£253.69	2055-22	£110.66	2060-22	£38.69
24	5	115	95	85	65	46	18	57	52	26	26	M12	8	1250	20	10.1	2050-24	£263.04	2055-24	£113.91	2060-24	£40.85
28	5	115	95	85	65	46	18	57	52	26	26	M12	8	1250	20	10.7	2050-28	£273.59	2055-28	£119.00	2060-28	£42.64

SIDE CLAMPS

**SLIDING SIDE CLAMPS
(LOW PROFILE)**

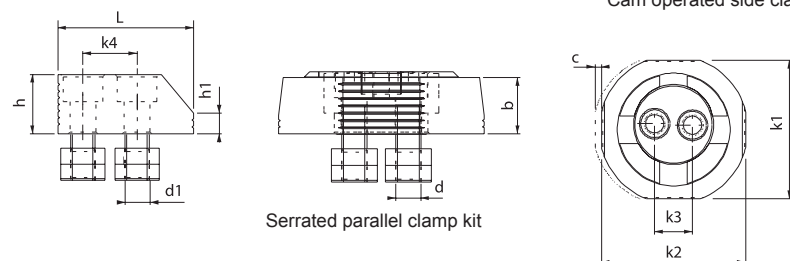
- ▶ Made from hardened steel
- ▶ Sliding side clamp creates radial and axial clamping forces, pushing the workpiece against the stop and the machine bed
- ▶ Set contains 2pcs sliding side clamps, 2pcs serrated stops, 8pcs t-nuts, 8pcs clamping bolts, allen key and t-slot scraper



T-Nut	c	L	b	b1	n	n1	n2	k	k1	k2	sw	i	h	h1	d	d1	Clamp Force Kgf	Allowable Screw Torque	Kit kg	ORDER CODES					
																				KIT	PRICE	CLAMP	PRICE	STOP	PRICE
14	10	142	24	8	37	12.5	18.5	65	54	26	6	65	23	10	M12	M12	850	15	3.6	2070-14	£150.37	2075-14	£57.65	2040-14	£20.94
16	10	142	24	8	37	12.5	18.5	65	54	26	6	65	23	10	M12	M12	850	15	3.7	2070-16	£153.08	2075-16	£59.69	2040-16	£22.27
18	14	145	28	10	48	12.5	18.5	74	56	26	8	65	28	11	M12	M12	1000	35	5.2	2070-18	£163.46	2075-18	£64.85	2040-18	£23.29
20	14	145	28	10	48	12.5	18.5	74	56	26	8	65	28	11	M12	M12	1000	35	5.4	2070-20	£166.01	2075-20	£68.47	2040-20	£26.03
22	14	145	28	10	48	12.5	18.5	74	56	26	8	65	28	11	M12	M12	1000	35	5.6	2070-22	£172.28	2075-22	£71.21	2040-22	£28.19

**HIGH POWER SIDE CLAMPS
(CAM TYPE)**

- ▶ Made from hardened steel
- ▶ Eccentric cam tightening device (3.5mm movement)
- ▶ Side clamping allows lateral forces which does not change the state of the workpiece
- ▶ 3500kgf clamping force
- ▶ Set contains 2 eccentric clamps, 2 stops, 8 t-nuts, 8 bolts, 1 clamping wrench, 1 allen key and t-slot scraper



T-Nut	c	b	k1	k2	k3	k4	L	h	h1	d	d1	Clamp Force Kgf	Kit kg	ORDER CODES					
														KIT	PRICE	CLAMP	PRICE	STOP	PRICE
14	3.5	30	95	99	26	26	65	28	10	M12	M12	3500	7.9	2090-14	£265.27	2090-114	£106.11	2040-14	£20.94
16	3.5	30	95	99	26	26	65	28	10	M12	M12	3500	8.4	2090-16	£271.14	2090-116	£108.46	2040-16	£22.27
18	3.5	30	95	99	26	26	65	28	10	M12	M12	3500	8.6	2090-18	£275.91	2090-118	£110.37	2040-18	£23.29
20	3.5	30	95	99	26	26	65	28	10	M12	M12	3500	8.8	2090-20	£282.32	2090-120	£112.93	2040-20	£26.03
22	3.5	30	95	99	26	26	65	28	10	M12	M12	3500	9.0	2090-22	£288.49	2090-122	£115.40	2040-22	£28.19
24	3.5	30	95	99	26	26	65	28	10	M12	M12	3500	9.4	2090-24	£293.08	2090-124	£117.23	2040-24	£29.97
28	3.5	30	95	99	26	26	65	28	10	M12	M12	3500	9.8	2090-28	£304.57	2090-128	£121.83	2040-28	£31.31

SIDE CLAMPS



SIDE TOE CLAMPS (SERRATED)

- ▶ With its articulated design and serrated face, it makes safe clamping on uneven surfaces by taking the existing surface shape
- ▶ High clamping forces
- ▶ Contains 2pcs serrated toe clamps, 2pcs serrated stops, 10pcs t-nuts, 10pcs clamping bolts for 16mm or 18mm T-slot. Different sized t-nuts can be purchased separately



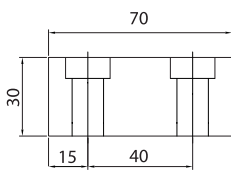
Serrated clamp stop



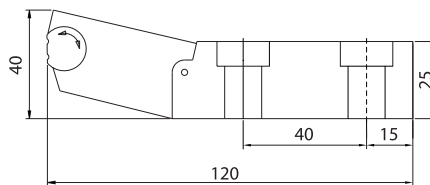
Serrated toe clamp



Serrated toe clamp kit



Width 40 mm.



Width 40 mm.



T-Nut	Clamp Force Kgf	Kit kg	Clamp kg	Stop kg	ORDER CODES					
					KIT	PRICE	CLAMP	PRICE	STOP	PRICE
16	2500	3.4	0.87	0.65	2070-MBS701216	£184.90	2070-MS701116	£73.63	2070-MD702116	£35.14
18	2500	3.6	0.87	0.65	2070-MBS701218	£186.94	2070-MS701118	£74.82	2070-MD702118	£36.34

SIDE TOE CLAMPS (SERRATED PARALLEL)

- ▶ With its articulated design and serrated face, it makes safe clamping on uneven surfaces by taking the existing surface shape
- ▶ Parallel type for raising workpiece above machine bed
- ▶ High clamping forces
- ▶ Contains 2pcs serrated parallel toe clamps, 2pcs serrated parallel stops, 10pcs t-nuts, 10pcs clamping bolts for 16mm or 18mm T-slot. Different sized t-nuts can be purchased separately



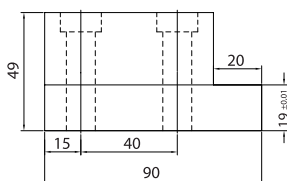
Serrated parallel clamp stop



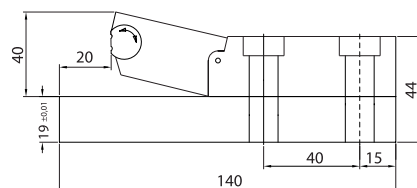
Serrated toe parallel clamp



Serrated parallel toe clamp kit



Width 40 mm.



Width 40 mm.

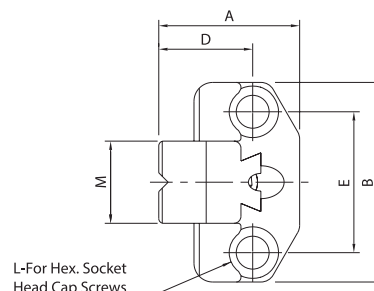
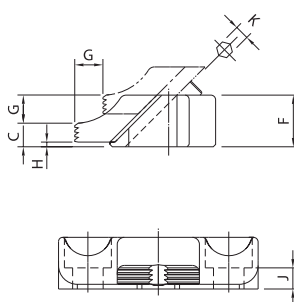


T-Nut	Clamp Force Kgf	Kit kg	Clamp kg	Stop kg	ORDER CODES					
					KIT	PRICE	CLAMP	PRICE	STOP	PRICE
16	2500	6.15	1.86	1.18	2070-MBS801116	£250.74	2070-MS801216	£96.10	2070-MD802216	£51.39
18	2500	6.15	1.86	1.18	2070-MBS801118	£252.78	2070-MS801218	£97.30	2070-MD802218	£52.59

SIDE CLAMPS

SIDE CLAMPS (LOW PROFILE)

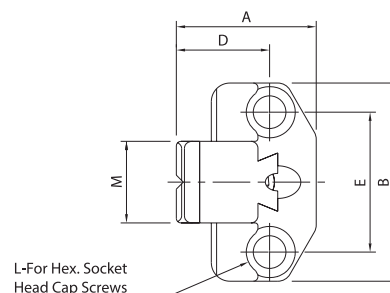
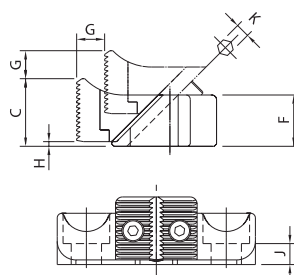
- ▶ Low profile clamp height from just 7.5mm leaving the top surface of the workpiece open
- ▶ Sliding clamp design create sideways and downwards clamping forces
- ▶ Serrated clamp face



A	B	C	D	E	F	G	H	J	K	L	M	Clamp Force Kgf	Allowable Screw Torque	kg	ORDER CODE	PRICE
39.5	65	7.5	25	45	16	7	1.5	7	4	M8	25	400	8	0.16	2072-08016	£116.00
60	85	10	40	60	22	12	2	9	6	M12	35	900	26	0.45	2072-12022	£163.88
77	100	14	50	70	30	14	2	13	8	M16	40	1700	60	0.90	2072-16030	£222.42

SIDE CLAMPS (HIGH PROFILE)

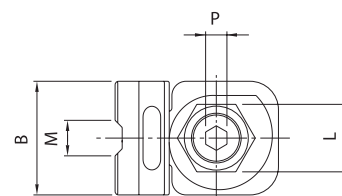
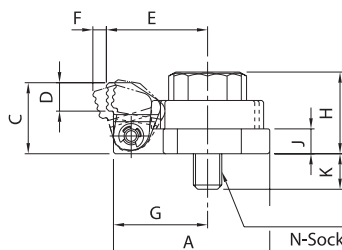
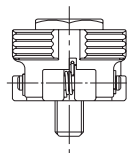
- ▶ High profile clamp height (clamp height from 19.5mm high)
- ▶ Sliding clamp design create sideways and downwards clamping forces
- ▶ Serrated clamp face



A	B	C	D	E	F	G	H	J	K	L	M	Clamp Force Kgf	Allowable Screw Torque	kg	ORDER CODE	PRICE
39.5	65	19.5	25	45	16	7	1.5	7	4	M8	25	400	8	0.18	2073-08016	£128.77
60	85	29	40	60	22	12	2	9	6	M12	35	900	26	0.50	2073-12022	£175.59
77	100	38	50	70	30	14	2	13	8	M16	40	1700	60	1.0	2073-16030	£257.54

CAM OPERATED SIDE CLAMPS

- ▶ Clamp force is actuated when cam is rotated using a wrench
- ▶ Operation: secure the body and the flanged collar with a socket head cap screw, and then turn the cam with a wrench to clamp the workpiece
- ▶ Serrated clamp face



A	B	C	D	E	F	G	H	J	K	L	M	N	P	Clamp Force Kgf	Allowable Screw Torque	kg	ORDER CODE	PRICE
44	32	20	8	28.5	4	26.5	23	7	15	19	10	M8x1.25	6	350	45	0.16	2077-08001	£103.23
54	40	25	10	35	5	33	29	9	16	24	12	M10x1.5	8	550	55	0.31	2077-10001	£114.93
62	46	30	12	39.5	5.5	37.5	35	11	17	27	14	M12x1.75	10	700	70	0.49	2077-12001	£128.77

SIDE CLAMPS

PULL DOWN SIDE CLAMPS (HIGH TYPE)

- ▶ Vertical down thrust and horizontal clamping force prevents workpiece lift
- ▶ Hardened jaw
- ▶ Serrated clamp face

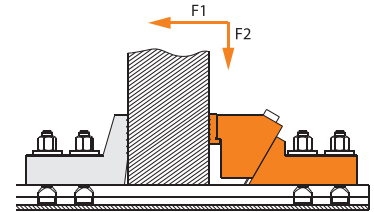
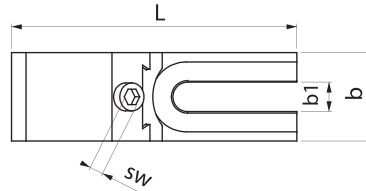
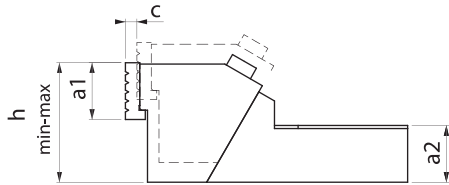


Table T-Slot Range	a1	a2	b	b1	c	h	L	SW	F1 Clamping Force Kgf	F2 Clamping Force Kgf	kg	ORDER CODE	PRICE
14-18	37	37	57	19	8	78-98	185	10	2250	350	3.68	2095-571	£126.03
20-28	37	45	76	26	11	98-110	240	14	3000	450	7.66	2095-761	£177.31

PULL DOWN SIDE CLAMPS (LOW TYPE)

- ▶ Vertical down thrust and horizontal clamping force prevents workpiece lift
- ▶ Hardened jaw
- ▶ Serrated clamp face

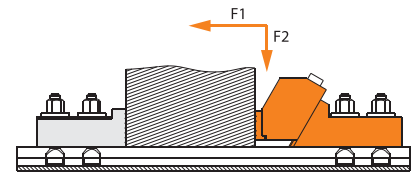
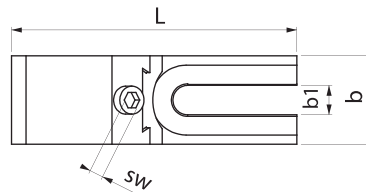


Table T-Slot Range	a1	a2	b	b1	c	h	L	SW	F1 Clamping Force Kgf	F2 Clamping Force Kgf	kg	ORDER CODE	PRICE
14-18	37	37	57	19	8	78-98	185	10	2250	350	3.68	2095-572	£124.84
20-28	37	45	76	26	11	98-110	240	14	3000	450	7.66	2095-766	£178.50

SIDE CLAMP FIXED STOP (HIGH TYPE)

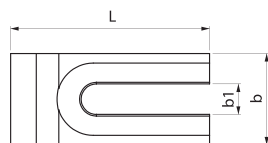
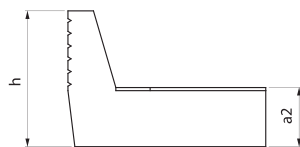
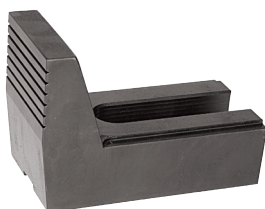


Table T-Slot Range	a2	b	b1	h	L	kg	ORDER CODE	PRICE
14-18	37	57	19	85	124	2.0	2098-571	£44.35
20-28	45	76	26	105	154	4.2	2098-761	£53.98

SIDE CLAMP FIXED STOP (LOW TYPE)

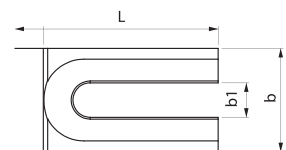
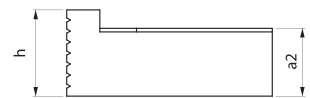


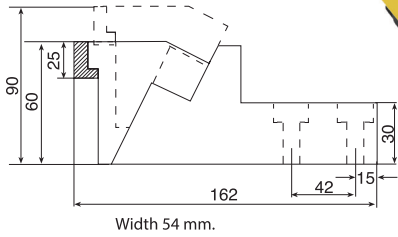
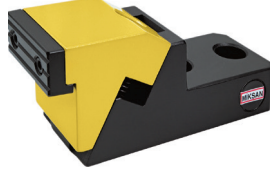
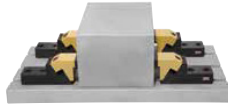
Table T-Slot Range	a2	b	b1	h	L	kg	ORDER CODE	PRICE
14-18	37	57	19	47	124	2.8	2098-572	£35.59
20-28	45	76	26	49	154	4.2	2098-762	£42.41

SIDE CLAMPS



**SIDE CLAMPS
(HIGH TYPE)**

- ▶ High clamping forces
- ▶ Hardened jaw
- ▶ Supplied with 16mm T-nut. Different sized t-nuts can be purchased separately



**SIDE CLAMP FIXED STOP
(HIGH TYPE)**

- ▶ Hardened jaw
- ▶ Serrated clamp face
- ▶ Supplied with 16mm T-nut. Different sized t-nuts can be purchased separately

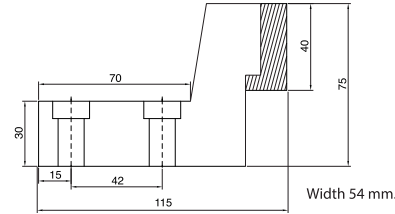
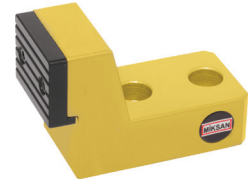
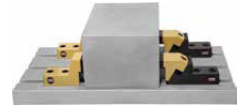
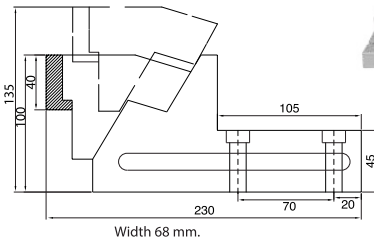
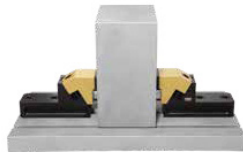


Table T-Slot Range	Clamping Force Kgf	kg	ORDER CODE	PRICE
14-24	2600	2.8	2105-MYB404116	£94.53

Table T-Slot Range	kg	ORDER CODE	PRICE
14-24	1.86	2105-MD404216	£59.90

**SIDE CLAMPS
(HEAVY DUTY HIGH TYPE)**

- ▶ High clamping forces
- ▶ Hardened jaw
- ▶ Supplied with 20mm T-nut. Different sized t-nuts can be purchased separately



**SIDE CLAMP FIXED STOP
(HEAVY DUTY HIGH TYPE)**

- ▶ Hardened jaw
- ▶ Serrated clamp face
- ▶ Supplied with 20mm T-nut. Different sized t-nuts can be purchased separately

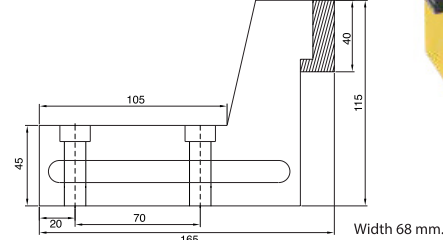
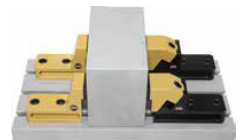
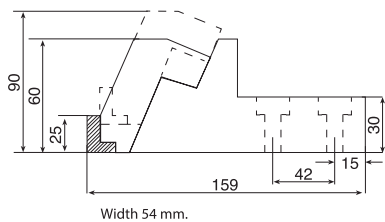


Table T-Slot Range	Clamping Force Kgf	kg	ORDER CODE	PRICE
20-28	6000	6.85	2105-MYB901120	£182.05

Table T-Slot Range	kg	ORDER CODE	PRICE
20-28	4.5	2105-MD902120	£109.83

**SIDE CLAMPS
(LOW TYPE)**

- ▶ High clamping forces
- ▶ Hardened jaw
- ▶ Supplied with 16mm T-nut. Different sized t-nuts can be purchased separately



**SIDE CLAMP FIXED STOP
(LOW TYPE)**

- ▶ Hardened jaw
- ▶ Serrated clamp face
- ▶ Supplied with 16mm T-nut. Different sized t-nuts can be purchased separately

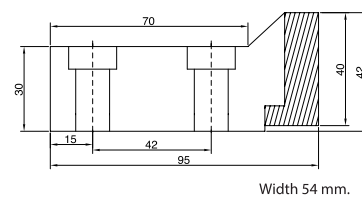


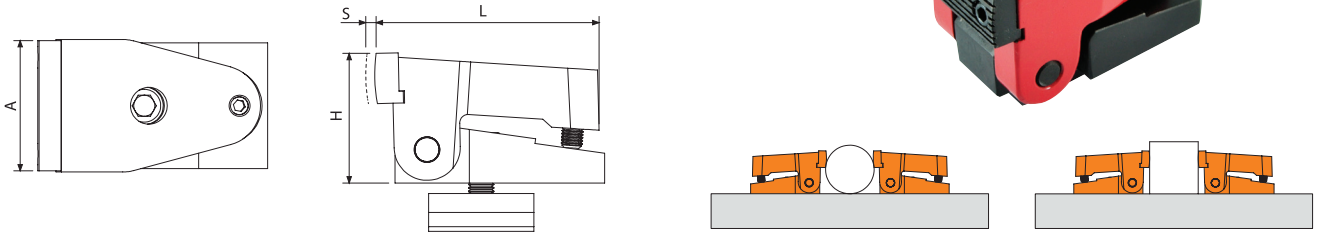
Table T-Slot Range	Clamping Force Kgf	kg	ORDER CODE	PRICE
14-24	3000	2.8	2105-MYB303116	£91.99

Table T-Slot Range	kg	ORDER CODE	PRICE
14-24	1.2	2105-MD303216	£85.00

SIDE CLAMPS

PULL DOWN SIDE CLAMPS

- ▶ Vertical down thrust and horizontal clamping force prevents workpiece lift
- ▶ Hardened jaw
- ▶ Serrated clamp face
- ▶ Supplied with 16mm or 18mm t-nut. Different sized t-nuts can be purchased separately



T-Nut	A	H	L	Clamp Force Kgf	Allowable Screw Torque	kg	ORDER CODE	PRICE
16	61	57	108	5	1500	1.8	2080-016	£85.11
18	61	57	108	5	1500	1.8	2080-018	£85.52

PULL DOWN DOUBLE SIDE CLAMPS

- ▶ Vertical down thrust and horizontal clamping force prevents workpiece lift
- ▶ Double clamping
- ▶ Hardened
- ▶ Serrated clamp face
- ▶ Can be used with 14-22mm t-nuts

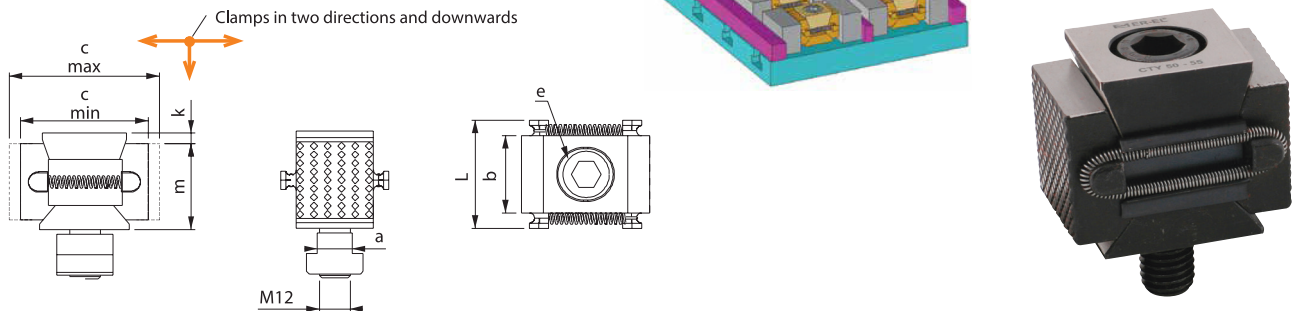


Table T-Slot Range	C min	C max	m	k	b	L	Clamp Force Kgf	kg	ORDER CODE	PRICE
14-22	50	55	35	4	30	42	1750	0.39	2190-5055	£42.19

DOUBLE SIDE CLAMPS

- ▶ Double clamping
- ▶ Hardened
- ▶ Serrated clamp face
- ▶ Can be used with 14-22mm t-nuts

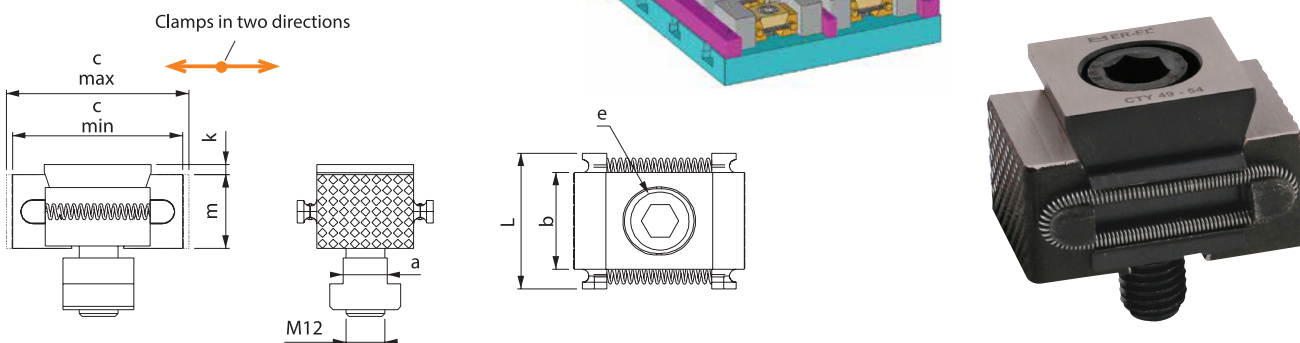
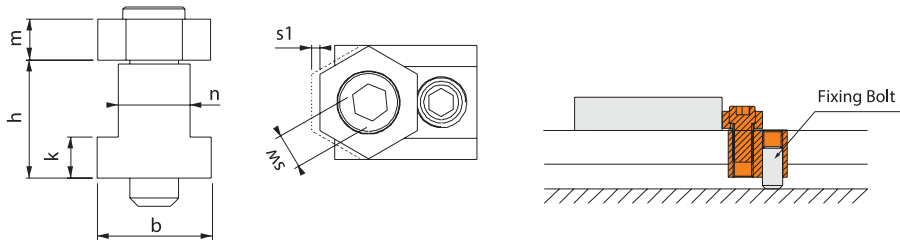


Table T-Slot Range	C min	C max	m	k	b	L	Clamp Force Kgf	kg	ORDER CODE	PRICE
14-22	49	54	23	4	30	42	1500	0.28	2210-4954	£36.89

SIDE CLAMPS

LOW PROFILE IN-SLOT SIDE CLAMPS

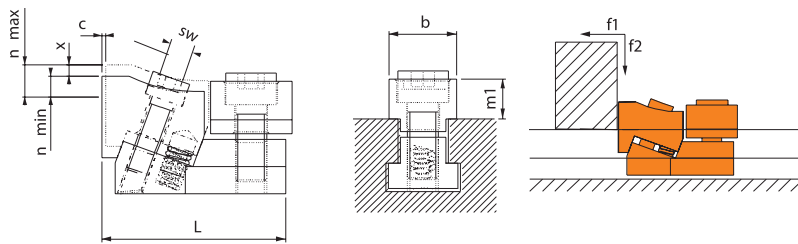
- ▶ T-nut of the product enters the slot of the table completely. Since only the eccentric headpiece remains on the surface of the table, this provides easy clamping of the thin pieces.
- ▶ Hardened



T-Slot Size	n	s1	m	sw	L	h	k	b	Clamp Force Kgf	kg	ORDER CODE	PRICE
12	11.7	1.2	7	5	28	15	7	18	340	0.060	2150-12	£22.18
14	13.7	1.7	7	7	30	22	8	22	800	0.095	2150-14	£24.02
16	15.7	1.7	10	8	30	22	9	25	1500	0.130	2150-16	£25.64
18	17.7	2	10	8	35	28	10	28	1500	0.190	2150-18	£28.02
20	19.7	2.5	13	10	40	32	12	32	2000	0.290	2150-20	£31.64
22	21.7	2.5	13	12	45	38	14	35	2000	0.390	2150-22	£36.46

LOW PROFILE IN-SLOT PULL DOWN JAW CLAMPS

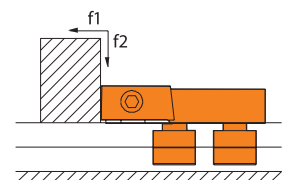
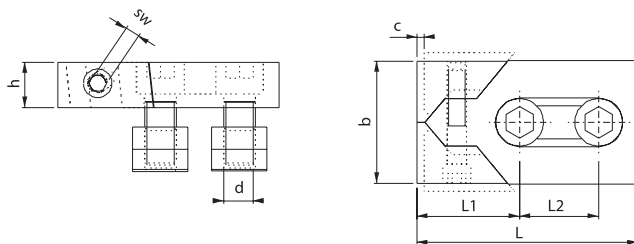
- ▶ Vertical down thrust and horizontal clamping force prevents workpiece lift
- ▶ Working in T-Slot provides height advantage
- ▶ Hardened



T-Slot Size	c	n min	n max	x	L	b	m1	sw	f1 Clamp Force Kgf	f2 Clamp Force Kgf	kg	ORDER CODE	PRICE
12	2	2	6	4	46	21	10	5	500	60	0.12	2170-12	£22.18
14	2.5	2.5	7.5	5	51	26	10	6	550	70	0.20	2170-14	£24.02
16	3	2.5	8.5	6	61	27.5	12	6	800	90	0.29	2170-16	£25.64
18	3	2	8	6	67	35	13	8	900	100	0.42	2170-18	£28.02
20	4	2.5	11	8.5	78	38	13	10	1200	140	0.64	2170-20	£31.64
22	4.5	2.5	12	9.5	87	39	16.5	10	1600	190	0.83	2170-22	£36.46

LOW PROFILE PULL DOWN DOUBLE CLAW CLAMPS

- ▶ Vertical down thrust and horizontal clamping force prevents workpiece lift
- ▶ Working in T-Slot provides height advantage, clamping screw is accessible from the side
- ▶ Hardened



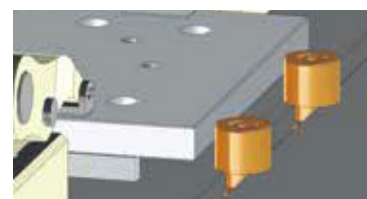
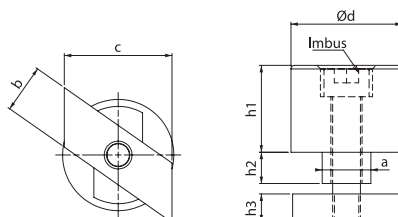
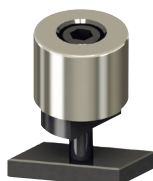
T-Slot Size	c	h	b	L	L1	L2	sw	d	f1 Clamp Force Kgf	f2 Clamp Force Kgf	kg	ORDER CODE	PRICE
12	3	20	40	80	39	26	6	M10	1600	60	0.41	2110-12	£63.67
14	3	20	40	80	39	26	6	M10	2200	90	0.42	2110-14	£65.58
16	4	25	50	100	46	34	8	M14	3200	120	0.78	2110-16	£78.38
18	4	25	50	100	46	34	8	M14	3600	140	0.81	2110-18	£84.77
20	4	25	50	100	46	34	8	M14	3600	140	0.85	2110-20	£87.97
22	5	28.5	78	140	65	50	10	M20	3600	140	2.27	2110-22	£135.96

WORKSTOPS



CYLINDER WORKSTOP

- ▶ Rhomboid t-nut enables quick and easy locating from the top of the table
- ▶ Hardened

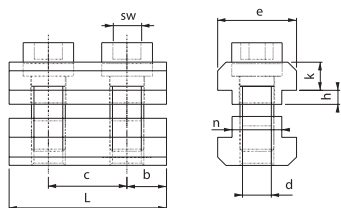


T-Slot Size	a (h6)	b (-0.6)	c (DIN650)	d (+/-0.1)	h1 (+/-0.1)	h1 (+/-0.2)	h2	h3	Bolt	kg	ORDER CODE	PRICE
14	0-0.011	14	24	32	25	-	9	8	M8x35	0.2	2120-1425	£39.81
14	0-0.011	14	24	32	-	50	9	8	M8x60	0.35	2120-1450	£42.61
18	0-0.011	18	30	40	25	-	15	10	M10x40	0.36	2120-1825	£57.23
18	0-0.011	18	30	40	-	50	15	10	M10x65	0.60	2120-1850	£58.47
22	0-0.013	22	38	40	25	-	15	14	M10x50	0.41	2120-2225	£57.23
22	0-0.013	22	38	40	-	50	15	14	M10x75	0.65	2120-2250	£58.47

RECTANGULAR FIXED STOP



- ▶ Work stop is used for reference taking longitudinal and cross-wise
- ▶ Hardened



T-Slot Size	n	e	c	d	b	h	k	L	sw	kg	ORDER CODE	PRICE
12	11.7	18	18	M8	9	3	7	36	6	0.10	2130-12	£15.79
14	13.7	22	22	M8	11	4	8	44	6	0.18	2130-14	£16.44
16	15.7	25	25	M12	12.5	5	9	50	10	0.27	2130-16	£18.55
18	17.7	28	28	M12	14	5	10	56	10	0.35	2130-18	£22.61
20	19.7	32	32	M16	16	5	12	64	14	0.57	2130-20	£23.96
22	21.7	35	35	M16	17.5	6	14	70	14	0.77	2130-22	£26.61

5D ADJUSTABLE PRO WORKSTOP



- ▶ Adjustable in 5 directions to give the perfect positional work piece stop
- ▶ Aluminium 6061 grade body with stainless steel pole
- ▶ 16mm t-nut M8 fixing
- ▶ Upper clamp is made of 3 parts which can be easily cleaned
- ▶ Size 235mm x 45mm x 40mm, Weight 1KG

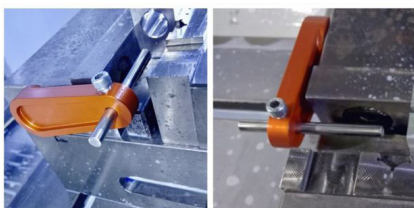


ORDER CODE	PRICE
A1-WORKSTOP	£33.00

MAGNETIC WORKSTOP



- ▶ Sticks to the vice or fixed jaw using finely positioned magnets, even suitable for the smallest of vices
- ▶ Adjustable pins for moving position in X axis
- ▶ Size 82mm x 30mm x 12mm



ORDER CODE	PRICE
A1-MAGWORKSTOP	£28.00

3D ADJUSTABLE PRO WORKSTOP



- ▶ Adjustable in 3 directions
- ▶ Aluminium body with stainless steel pole
- ▶ 16mm t-nut M8 fixing
- ▶ Upper clamp is made of 3 parts which can be easily cleaned
- ▶ Size 180mm x 37mm x 37mm, Weight 0.8KG



ORDER CODE	PRICE
A2-WORKSTOP	£23.00

CLAMP KITS

CLAMP KIT WITH SERRATED STEP BLOCKS



- ▶ Made from high quality steel
- ▶ Set contains: 6 T-nuts, 16 studs, 6 support nuts, 4 nuts with washer, 2 extension nuts, 4 thick washers, 4 serrated clamps, 8 clamps with support hole and 1 T-slot scraper



Bolt and T-Nut Size	kg	ORDER CODE	PRICE
M10x12	7.2	2010-1012	£93.98
M12x14	9.2	2010-1214	£108.74
M14x16	12.2	2010-1416	£151.81
M16x18	15.6	2010-1618	£172.58
M18x20	18.0	2010-1820	£201.60

CLAMP KIT WITH JACKS



- ▶ Made from high quality steel
- ▶ Set contains: 6 T-nuts, 16 studs, 6 support nuts, 4 nuts with washer, 2 extension nuts, 4 thick washers, 4 clamps with support holes, 8 threaded jacks and 1 T-slot scraper

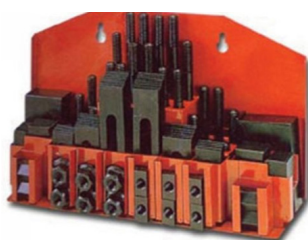


Bolt and T-Nut Size	kg	ORDER CODE	PRICE
M10x12	6.4	1990-1012	£90.31
M12x14	8.7	1990-1214	£116.58
M14x16	12.9	1990-1416	£152.52
M16x18	16.3	1990-1618	£173.04
M18x20	17.8	1990-1820	£203.59
M20x22	23.1	1990-2022	£251.49

52PC BASIC STEEL CLAMPING KIT



- ▶ Made from high quality steel
- ▶ Set contains: 6 T-nuts, 24 studs, 4 coupling nuts, 6 flange nuts, 6 step clamps and 6 serrated step blocks

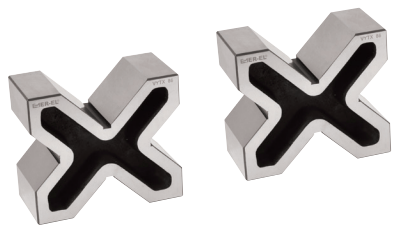


Bolt and T-Nut Size	Weight	ORDER CODE	PRICE
M8x10	8.0	CK-08	£64.78
M10x12	9.5	CK-10	£64.78
M12x14	12.8	CK-12A	£66.24
M14x16	15.9	CK-14	£71.99
M16x18	12.7	CK-16	£79.17
M20x22	18.0	CK-18	£165.58

CLAMPING ACCESSORIES

X BLOCK SET

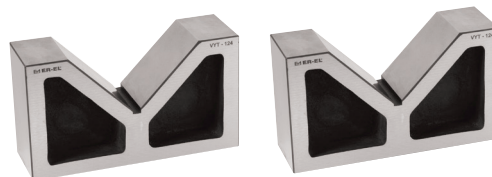
- ▶ 4 clamping positions
- ▶ 2pcs per set
- ▶ Tolerance +/-0.01mm



Width	Height	Min/Max Dia	ORDER CODE	PRICE
120	100	12-90	2290-120	£254.29
152	132	15-150	2290-150	£381.56

V BLOCK SET

- ▶ 2pcs per set
- ▶ Tolerance +/-0.01mm



Width	Height	Min/Max Dia	ORDER CODE	PRICE
140	82	20-110	2270-140	£141.78
204	115	15-150	2270-204	£246.65

ER COLLET BLOCK FOR WORKPIECE CLAMPING *CUTWEL PRO*

- ▶ ER32 collet size for clamping
- ▶ 1-20mm diameter workpiece
- ▶ Available in square or hexagon body
- ▶ Features threaded hole in base for adjusting Z height
- ▶ Fixture plate for holding up to 4 collet blocks



Type	Width	Height	ORDER CODE	PRICE
Square block	45x45	60	A1-ER32BLOCK	£39.00
Hex block	70-70	60	A1-ER32-HEXBLOCK	£39.00
Fixture plate	160x156	12	A1-ERFIXTURE	£45.00

PARALLEL SET GROUND & HARDENED 28pc SET

- ▶ Includes 2pcs: 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 35, 40, 45 & 50mm high
- ▶ Tolerance +/-0.01mm
- ▶ 150mm wide



ORDER CODE	PRICE
2230-028	£324.29

T-SLOT SCRAPER

- ▶ Made from aluminium
- ▶ Removes chips out of the machine bed t-slots



T-Slot Size	ORDER CODE	PRICE
12-14	1950-1214	£5.17
16-18	1950-1618	£6.68
20-22	1950-2022	£10.26
24-28	1950-2428	£11.74

T-SLOT COVERS

- ▶ Made from aluminium
- ▶ Prevents chips entering bed T-slots



Width (mm)	Length (mm)	Qty	ORDER CODE	PRICE
12	400	6	1955T012	£55.51
14	400	6	1955T014	£56.21
16	400	6	1955T016	£57.27
18	450	6	1955T018	£58.33

PARALLEL SET GROUND & HARDENED - 16pc SET

- ▶ Includes 2pcs: 20, 23, 28, 36, 42, 48, 58 & 65mm high
- ▶ Tolerance +/-0.01mm
- ▶ 20, 23 & 28 are 100mm wide, all others are 150mm wide



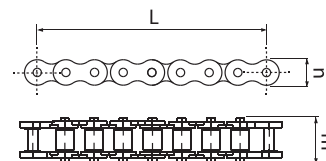
ORDER CODE	PRICE
2250-016	£211.15

FIXTURE CHAINS



FIXTURE CHAIN KIT

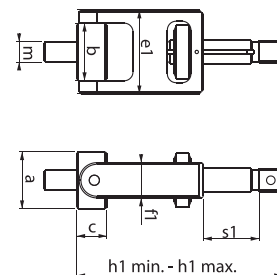
- ▶ Designed for clamping of cylindrical and oval workpieces
- ▶ Kit contains chain, setting unit and hook unit



T-Slot Range	Bolt	Torque Nm	Clamp Force Kgf	L	m	n	kg	ORDER CODE	PRICE
14-18	M12	45	1500	125	20	15	1.41	2020-120125	£419.05
14-18	M12	45	1500	250	20	15	1.52	2020-120250	£421.91
14-18	M12	45	1500	500	20	15	1.75	2020-120500	£426.68
14-18	M12	45	1500	1000	20	15	2.21	2020-121000	£433.36
18-24	M16	90	4000	125	33	21	3.49	2020-160125	£560.32
18-24	M16	90	4000	250	33	21	3.81	2020-160250	£564.14
18-24	M16	90	4000	500	33	21	4.48	2020-160500	£567.95
18-24	M16	90	4000	1000	33	21	5.82	2020-161000	£571.77

FIXTURE CHAIN SETTING UNIT

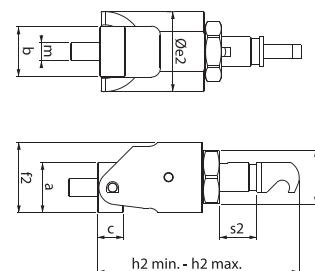
- ▶ Spare setting units for ER-EL fixture chains



T-Slot Range	a	b	c	e1	f1	h1 min	h2 max	m	s1	Clamp Force Kgf	ORDER CODE	PRICE
14-18	36	36	18	49	21	96	125	M12	35	1500	2020-12125	£139.84
18-24	37	44	25	64	29	117	162	M16	45	4000	2020-16162	£162.08

FIXTURE CHAIN HOOK UNIT

- ▶ Spare hook units for ER-EL fixture chains



T-Slot Range	a	b	c	e2	f2	h2 min	h2 max	m	s2	sw	Torque Nm	Clamp Force Kgf	ORDER CODE	PRICE
14-18	36	36	18	54	49	111	127	M12	16	36	45	1500	2020-12127	£296.86
18-24	37	44	25	70	62	140	170	M16	30	46	90	4000	2020-16170	£371.32

TOP CLAMPS



3-WAY MULTI COMBINED TOP CLAMP

- ▶ Versatile clamp can be used in 3 different positions:
 - a) 50-90mm height range
 - b) 25-65mm height range
 - c) 5-45mm height range
- ▶ 10-60mm clamping length
- ▶ 60mm wide compact design
- ▶ Different size T-Nuts on request (*Supplied with 16mm T-Nuts, see first column for possible range)

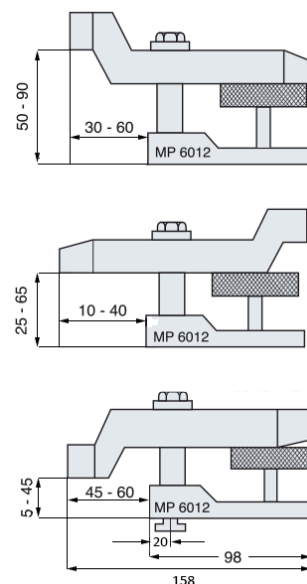
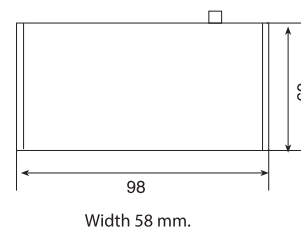


Table Slot Size Range*	Width	kg	Clamping Force (kgf)	ORDER CODE	PRICE
14-20 (16*)	60	2.50	2200	1168-MP601216	£90.28

3 WAY MULTI COMBINED TOP CLAMP RISER

- ▶ 60mm high
- ▶ Multiple supports can be used
- ▶ For 1168-MP601216 clamps



Applicable Top Clamp	Height	ORDER CODE	PRICE
1168-MP601216	60	1168-MY602116	£36.97

HEAVY DUTY COMBINED TOP CLAMP

- ▶ Heavy duty powerful top clamp
- ▶ Fixed type for increased power
- ▶ Different size T-Nuts on request (*Supplied with 16mm T-Nuts, see first column for possible range)

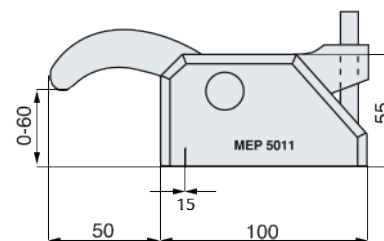
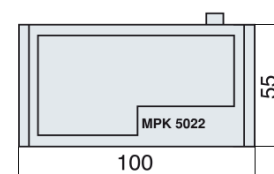
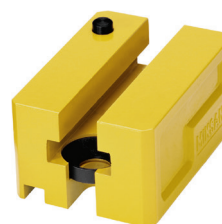


Table Slot Size Range*	Height Range	Reach	Width	Clamp Force (kgf)	ORDER CODE	PRICE
16-24 (16*)	0-60	50	72	5000	1168-MEP501116	£92.19

HEAVY DUTY COMBINED TOP CLAMP RISER

- ▶ 55mm high
- ▶ Multiple supports can be used
- ▶ For 1168-MPK5022 clamps



Applicable Top Clamp	Height	Width	ORDER CODE	PRICE
1168-MPK5022	48	72	1168-MPK5022	£38.56

TOP CLAMPS



SLIMLINE COMBINED TOP CLAMP

- ▶ Powerful clamping
- ▶ Up to 125mm high clamping (or higher with bottom supports)
- ▶ 40mm wide compact design
- ▶ Different size T-Nuts on request (*Supplied with 16mm T-Nuts, see first column for possible range)

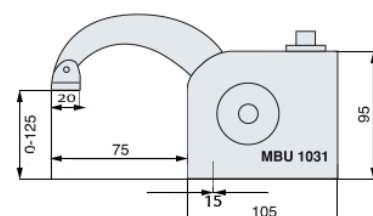
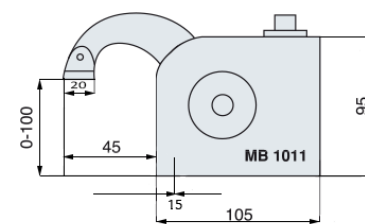
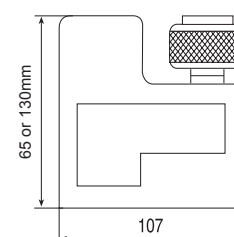


Table Slot Size Range*	Height Range	Reach	Width	Clamping Force (kgf)	ORDER CODE	PRICE
12-20 (16*)	0-100	45	40	1600	1168-MB101116	£91.44
	0-125	75	40	1600	1168-MBU103116	£99.84

SLIMLINE COMBINED TOP CLAMP RISER

- ▶ 65 or 130mm high
- ▶ Multiple supports can be used
- ▶ For 1168-MB101116 or MBU103116 clamps



Width 40 mm.

Applicable Top Clamp	Height	Width	ORDER CODE	PRICE
1168-MB101116 or 1168-MBU103116	65	40	1168-MK1021	£42.48
	130	40	1168-MK1022	£49.17

SLIMLINE COMBINED TOP CLAMP

- ▶ Powerful clamping
- ▶ Up to 130mm high clamping (or higher with bottom supports)
- ▶ 40mm wide compact design
- ▶ Different size T-Nuts on request (*Supplied with 16mm T-Nuts, see first column for possible range)

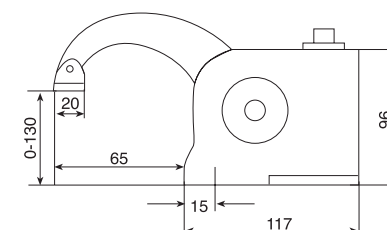
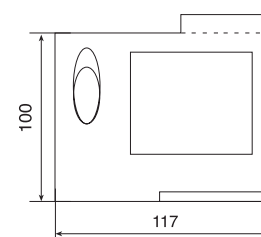


Table Slot Size Range*	Height Range	Reach	Width	Clamping Force (kgf)	ORDER CODE	PRICE
12-20 (16*)	0-130	65	40	1600	1168-MFB204116	£104.09

SLIMLINE COMBINED CLAMP RISER

- ▶ 100mm high
- ▶ Multiple supports can be used
- ▶ For 1168-MFB204116 clamps



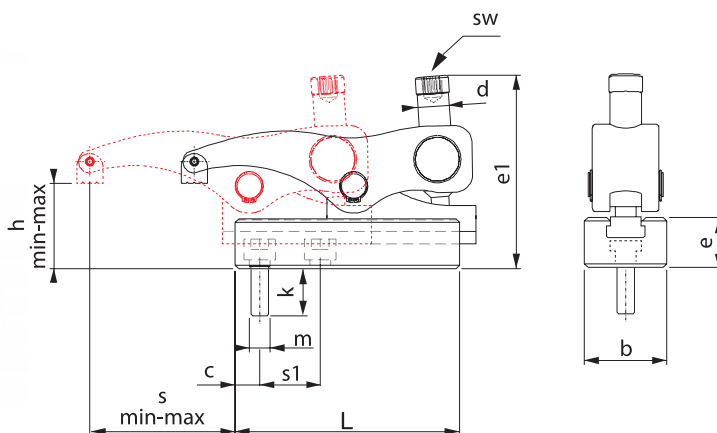
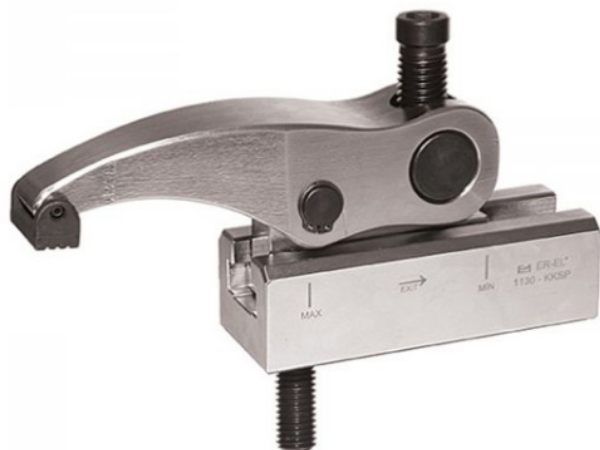
Width 40 mm.

Applicable Top Clamp	Height	Width	Clamping Force (kgf)	ORDER CODE	PRICE
1168-MFB204116	100	40	1600	1168-MFK204216	£35.70

SLIDING TOP CLAMPS

SLIDING TOP CLAMPS

- ▶ Versatile and powerful top clamp
- ▶ Sliding type for increased forward and backward clamping range
- ▶ Various height ranges
- ▶ Different size T-Nuts on request (*T-nut supplied in brackets)



T-Slot Range	m	Clamp Series	h min	h max	s	s1	e1	d	sw	L	e	b	c	Clamp Force Kgf	Nm	kg	ORDER CODE	PRICE
12-18	M10	1120	0	50	12-66	25	100	M14	8	104	35.5	38	13	1600	50	1.74	1120-010M	£87.63
14-18 (*16)	M12		0														1120-016T	£89.36
12-18	M10		0	50	12-81	25	100	M14	8	130	35.5	38	13				1120-010LM	£113.92
14-18 (*16)	M12		0														1120-016LT	£116.17
14-22 (*16)	M12	1130	0	60	15-83	30	113	M18	10	130	39	48	17,5	2000	100	3.06	1130-016T	£99.53
18-28	M16		0														1130-016M	£97.36
14-22 (*16)	M12		0	60	15-107	30	113	M18	10	170	39	48	17,5				1130-016LT	£129.39
18-28	M16		0														1130-016LM	£126.57
18-28 (*18)	M16	1150	0	65	18-96	35	125	M20	12	140	43	55	19,5	2500	150	4.41	1150-118T	£107.10
22-28	M20		0														1150-120M	£109.26
18-28 (*18)	M16		0	65	18-128	35	125	M20	12	200	43	55	19,5				1150-118LT	£139.23
22-28	M20		0														1150-120LM	£142.04
22-28 (*24)	M20	1160	20	80	17-92	41.5	175	M24	12	178	55	74	24	5500	200	9.12	1160-224T	£233.67
22-28 (*24)	M20		20														1160-224LT	£303.99

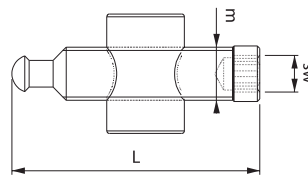
*Part numbers ending in T supplied with T-Nut, part numbers ending in M supplied without T-Nut



SLIDING TOP CLAMP SPARES

LIFTING BOLT & NUT

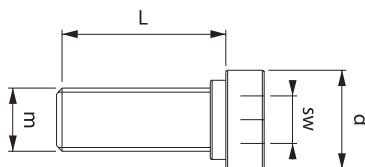
► Spare bolt and nut for sliding top clamp



m	CLAMP SERIES	L	SW	ORDER CODE	PRICE
M14	1120	72	8	1120-0714	£18.07
M18	1130	83	12	1130-0818	£20.24
M20	1150	96	12	1150-0920	£24.69
M24	1160	134	12	1160-1024	£38.12

IMBUS BOLTS

► Spare imbus fixing bolt for sliding top clamp



m	Clamp Series	L	d	sw	ORDER CODE	PRICE
M10	1120	29	16.5	8	1120-310	£5.03
M12		29	16.5	8	1120-312	£5.22
M10	1130	30	20.5	10	1130-412	£5.22
M12		34	20.5	10	1130-416	£5.98
M16	1150	34	24.5	12	1150-516	£6.49
M18		38	24.5	12	1150-518	£7.45
M20		38	24.5	12	1150-520	£7.95
M20	1160	45	34	12	1160-620	£8.72
M22		49	34	12	1160-622	£10.69
M24		45	34	12	1160-624	£11.90
M24		55	34	12	1160-724	£12.35

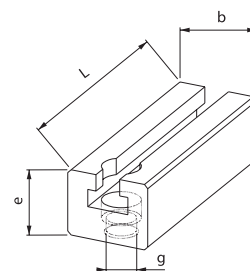
SLIDING TOP CLAMP JAWS

► Spare jaws for sliding top clamp



Clamp Series	a	b	c	Type	ORDER CODE	PRICE
1120	72	8	8	DP	1120-DP	£5.22
	83	12	12	BSP	1120-BSP	£8.27
	96	12	12	ESP	1120-ESP	£8.27
1130	134	12	12	DP	1130-DP	£5.60
	72	8	8	BSP	1130-BSP	£9.04
1150	83	12	12	ESP	1130-ESP	£9.04
	96	12	12	DP	1150-DP	£5.85
	72	8	8	BSP	1150-BSP	£9.35
1160	83	12	12	ESP	1150-ESP	£9.35
	96	12	12	DP	1160-DP	£12.47
	134	12	12	BSP	1160-BSP	£15.72
	134	12	12	ESP	1160-ESP	£15.72

SLIDING TOP CLAMP RISERS

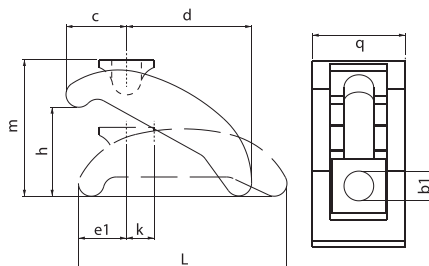


g	Applicable Clamps	T-Slot	L	b	e	kg	ORDER CODE	PRICE
M10/M12	1120-010M 1120-016T	14	104	38	38	0.8	1120-040	£30.42
M10/M12	1120-010LM 1120-016LT	14	130	38	38	1.3	1120-140	£46.33
M12/M16	1130-016T 1130-016M	14	130	48	45	1.6	1130-045	£36.08
M12/M16	1130-016LT 1130-016LM	14	170	48	45	2.1	1130-145	£55.75
M16/M18/M20	1150-118T 1150-120M	18	140	55	48	2.1	1150-048	£39.96
M16/M18/M20	1150-118LT 1150-120LM	18	200	55	48	2.1	1150-148	£59.31
M20/M22/M24	1160-224T	28	178	74	55	3.9	1160-059	£73.82
M20/M22/M24	1160-224LT	28	256	74	55	3.9	1160-159	£101.75

TOP CLAMPS

STEPPED COUPLING CLAMP

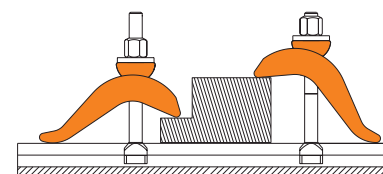
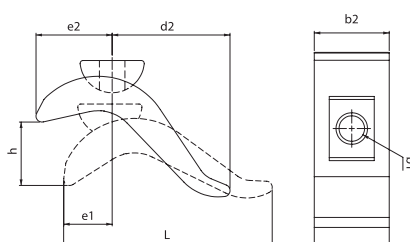
- ▶ Forged steel, hardened, zinc coated
- ▶ Features 4 step positions (dimension K) on underside of clamp



b1	m	h	b2xL	c	d	e1	k (x3)	ORDER CODE	PRICE
13	52	0-40	40x90	28	48	23	14	1210-013	£20.43
18	80	0-60	58x130	38	74	29	18	1210-017	£26.94

S CLAMP

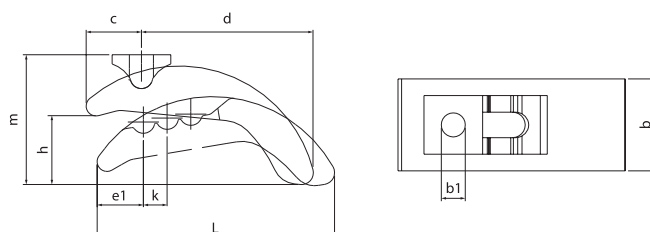
- ▶ Forged steel, hardened, zinc coated



b1	b2xL	d	e1	e2	h	ORDER CODE	PRICE
17	50x140	60	30	55	75	1200-50140	£25.07
21	60x175	80	40	70	85	1200-60175	£35.89

STEPPED COUPLING CLAMP

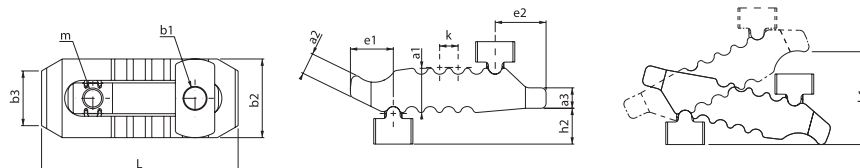
- ▶ Forged steel, hardened, zinc coated
- ▶ Features 3 step positions (dimension K) on underside of clamp



b1	m	h	b2xL	c	d	e1	k (x3)	ORDER CODE	PRICE
17	93	15-50	65x165	39	125	30	17	1205-017	£32.33
21	111	20-65	75x189	43	146	33	19	1205-021	£42.76

STEPPED CROCODILE CLAMP

- ▶ Forged steel, hardened
- ▶ The clamp support and clamping shoe are retained in the clamp, the unit can be turned over depending on use

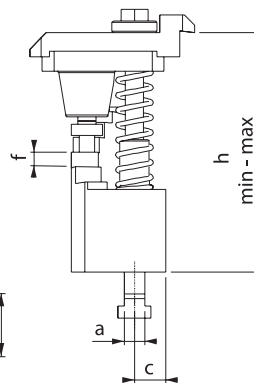
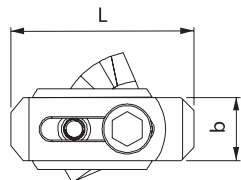


T-Slot Range	a1	a2	a3	b2xL	b3	e1	e2	h2	k	b1	m	h1	Clamp Force Kgf	kg	ORDER CODE	PRICE
10-12-14	27	12.5	12	44x115	30	25	30	21	11	13	M12	0-55	3000	0.5	1195-44115	£31.82
12-14-16-18	36	18	17	55x150	41	35	36	23	12	17	M16	0-70	4000	1.4	1195-55150	£38.18
16-18-20-22	42	25	20	63x187	30	44	44	32.5	14	21	M20	0-80	6000	2.2	1195-63187	£49.64
20-22-24-28	51	36.5	24	70x235	30	60	47	34	17	25	M20	0-100	7500	3.5	1195-70235	£72.55

TOP CLAMPS

STEPPED COMBINED TOP CLAMP

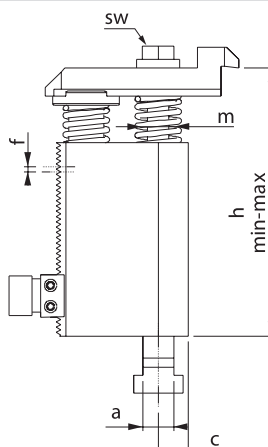
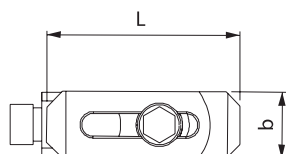
- ▶ Double sided sliding top clamp
- ▶ Step positions enable a range of clamping heights
- ▶ Spring loaded
- ▶ T-nut not provided (M12 bolt)



a (T-Slot Range)	h (min-max)	f	c	L	b	kg	ORDER CODE	PRICE
14-22	40 - 80	5	16	110	38	1.2	1230-01	£48.15
	70 - 125	10	16	110	38	1.5	1230-02	£49.83
	120 - 175	10	18	110	38	2.7	1230-03	£59.72
	170 - 225	10	23	110	38	4.2	1230-04	£70.38

COMBINED COUPLING TOP CLAMP

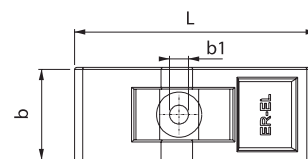
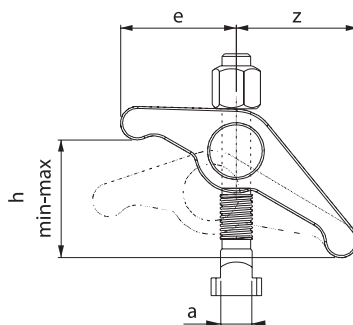
- ▶ Double sided top clamp
- ▶ Spring loaded
- ▶ T-nut not provided (M12 bolt)



a (T-Slot Range)	h (min-max)	f	c	L	b	Clamping Force Kgf	Nm	kg	ORDER CODE	PRICE
14-22	80-137	3	17	110	38	2250	85	2.0	1250-02	£91.41
	125-224	3	17	110	38	2250	85	2.8	1250-03	£149.02
	160-300	3	17	110	38	2250	85	3.9	1250-04	£172.01

UNSUPPORTED SUSPENSION TOP CLAMP

- ▶ Forged steel, hardened
- ▶ The clamp pivots and can be used at different heights on either side

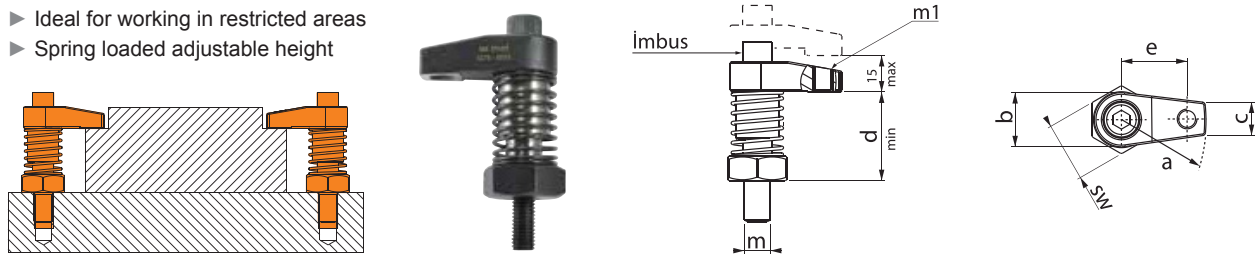


T-Nut	h min-max	Bolt	b1	e	z	L	b	kg	ORDER CODE	PRICE
12	0-45	M10x12x125	11	48	61	109	40	0.6	1270-1012	£21.36
14	0-45	M12x14x125	13	48	61	109	40	0.7	1270-1214	£24.19
16	0-55	M14x16x125	15	57	72	129	50	1.2	1270-1416	£28.56
18	0-55	M16x18x125	17	57	72	129	50	1.3	1270-1618	£29.82

COMBINED TOP CLAMPS & ACCESSORIES

COMBINED TOP CLAMP (1275)

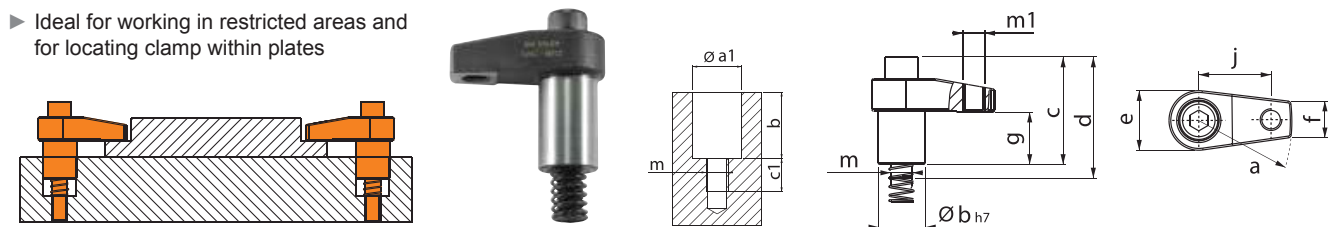
- ▶ Hardened
- ▶ Ideal for working in restricted areas
- ▶ Spring loaded adjustable height



a	b	c	d	e	m	sw	m1	bolt	Clamp Force Kgf	Nm	kg	ORDER CODE	PRICE
30	28	16	40	23	M12	30	M8	M10	750	20	0.3	1275-3012	£40.35
50	32	20	45	40	M12	36	M12	M12	1000	30	0.5	1275-5012	£46.45
50	32	20	45	40	M16	36	M12	M12	1000	30	0.5	1275-5016	£49.45

COMBINED TOP CLAMP (1280)

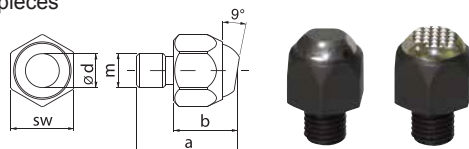
- ▶ Hardened
- ▶ Ideal for working in restricted areas and for locating clamp within plates



a	ø b h7	c	d	e	f	g	m	m1	j	Clamp Force Kgf	a1 F7	b	c1	kg	ORDER CODE	PRICE
30	22	58	80	28	16	30	M10	M8	23	750	22	30	20	0.22	1280-3010	£22.72
50	26	70	90	32	20	40	M12	M12	40	1000	26	40	25	0.40	1280-5012	£31.95
60	32	74	95	40	25	40	M16	M16	45	1000	32	40	25	0.61	1280-6016	£43.02

SHORT LENGTH PIVOTING PAD

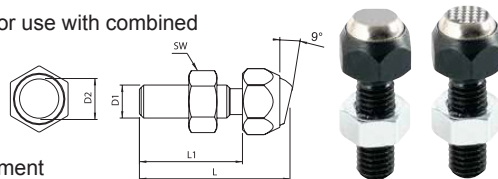
- ▶ Smooth or serrated pad for use with combined top clamps
- ▶ For uneven or sloped workpieces
- ▶ Head can pivot up to 9°



a	b	m	d	sw	ORDER CODES		PRICE
					SMOOTH	SERRATED	
25	12	M8	8	14	1282-0825	1283-0825	£17.72
30	17	M10	10	17	1282-1030	1283-1030	£22.23
35	22	M12	12	22	1282-1235	1283-1235	£25.45
42	26	M14	14	27	1282-1642	1283-1642	£29.27

LONG LENGTH PIVOTING PAD

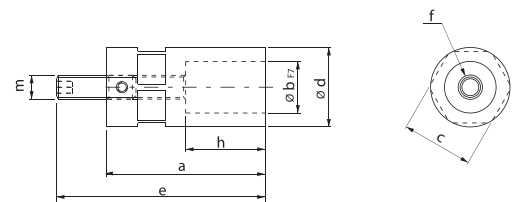
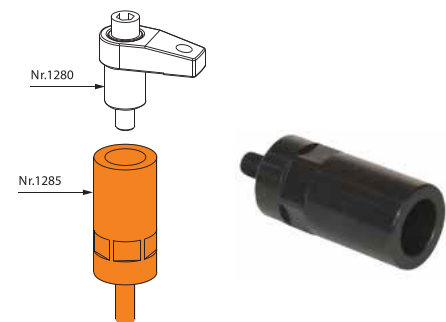
- ▶ Smooth or serrated pad for use with combined top clamps
- ▶ For uneven or sloped workpieces
- ▶ Head can pivot up to 9°
- ▶ With nut for length adjustment



L	L1	D1	D2	sw	ORDER CODES		PRICE
					SMOOTH	SERRATED	
36.6	25	M8	8	13	1283-25T	1283-0825	£22.32
45.7	30	M10	10	17	1283-30T	1283-1030	£24.75
50.7	35	M12	12	17	1283-35T	1283-1235	£27.49
60.7	40	M16	14	24	1283-40T	1283-1642	£34.57

TOP CLAMP EXTENSION (1285)

- ▶ For use with combined top clamp 1280

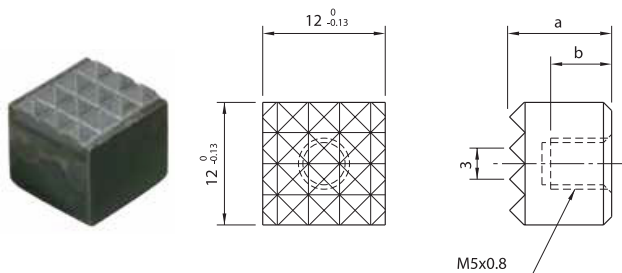


a	b	c	d	e	f	m	h	ORDER CODE	PRICE
80	26	36	40	110	M12	M12	40	1285-12080	£30.06
100	26	36	40	130	M12	M12	40	1285-12100	£30.79
80	32	46	50	110	M16	M16	40	1285-16080	£31.75
100	32	46	50	130	M16	M16	40	1285-16100	£35.88

PRESSURE PAFS

SQUARE SERRATED PRESSURE PAD (1287CT)

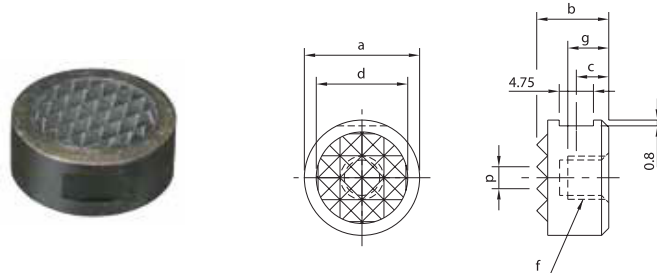
► Threaded blind hole on underside



a	b	ORDER CODE	PRICE
12	7.8	1287-CT9120	£19.21

ROUND SERRATED PRESSURE PAD (1288CT)

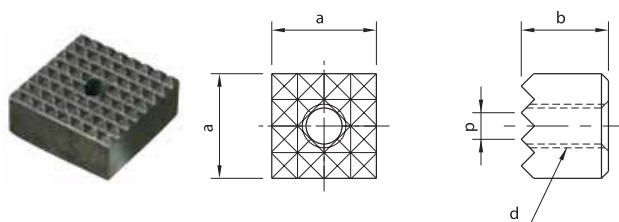
► Threaded blind hole on underside



a	b	c	d	f	g	p	ORDER CODE	PRICE
10	12	6	7.9	M5	8	2.3	1288-CT102	£13.72
12	12	6	9.5	M5	8	3	1288-CT122	£14.27
16	12	6	12.7	M6	7.8	3	1288-CT162	£15.92
20	12	6	15.9	M6	7.8	3	1288-CT202	£18.11
25	12	6	19.1	M6	7.8	3	1288-CT252	£19.21

SQUARE SERRATED PRESSURE PAD (1287HS)

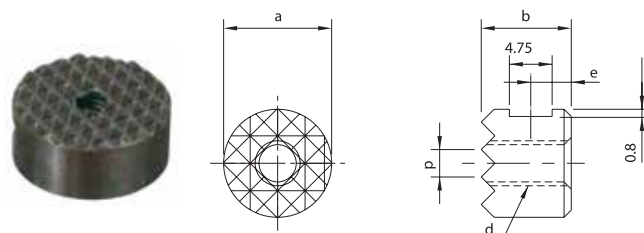
► Threaded through hole



a	b	d	p	ORDER CODE	PRICE
10	12	M5	2.3	1287-HS9102	£18.11
12	12	M5	3	1287-HS9122	£19.76
16	12	M6	3	1287-HS9160	£21.40
20	12	M5	3	1287-HS9202	£24.15
25	12	M6	3	1287-HS9252	£26.13

ROUND SERRATED PRESSURE PAD (1288HS)

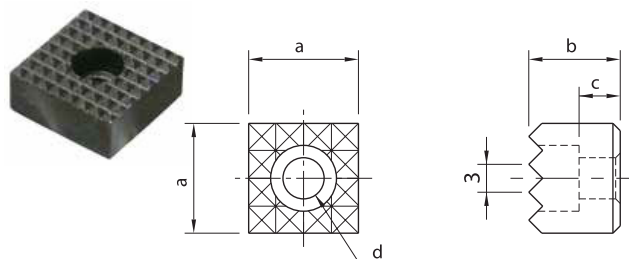
► Threaded through hole



a	b	d	e	p	ORDER CODE	PRICE
10	12	M5	6	2.3	1288-HS102	£14.27
12	12	M5	6	3	1288-HS122	£15.37
16	12	M6	6	3	1288-HS162	£16.46
20	12	M6	6	3	1288-HS202	£18.66
25	12	M6	6	3	1288-HS252	£21.40

SQUARE SERRATED PRESSURE PAD (1287HSC)

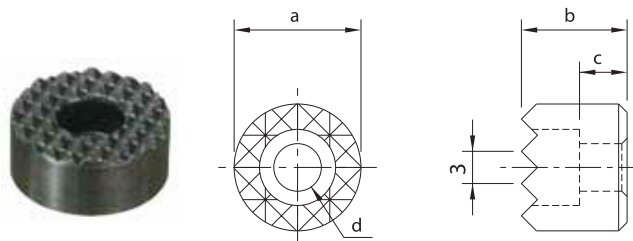
► Countersunk threaded through hole



a	b	c	d	ORDER CODE	PRICE
12	12	6.5	M4	1287-HS9122C	£20.31
16	12	4.5	M4	1287-HS9160C	£22.50
20	12	5.5	M5	1287-HS9202C	£24.70
25	12	4.5	M6	1287-HS9252C	£26.68

ROUND SERRATED PRESSURE PAD (1288HSC)

► Countersunk threaded through hole



a	b	c	d	ORDER CODE	PRICE
12	12	6.5	M4	1288-HS122C	£15.92
16	12	6.5	M4	1288-HS162C	£17.56
20	12	6.5	M5	1288-HS202C	£19.76
25	12	6.5	M6	1288-HS252C	£21.40

CLAMPING ELEMENTS

STRAIGHT CLAMP WITH STEP



SLIDING PLATE CLAMP



FORK CLAMP



Z NECK CLAMP



STEP BLOCK CLAMP

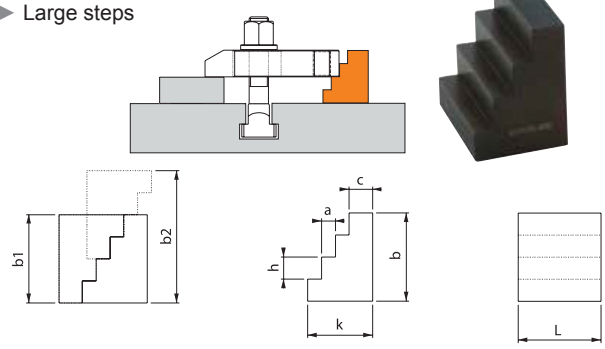


PIN HEAD FORK CLAMP



STEP BLOCK (1580)

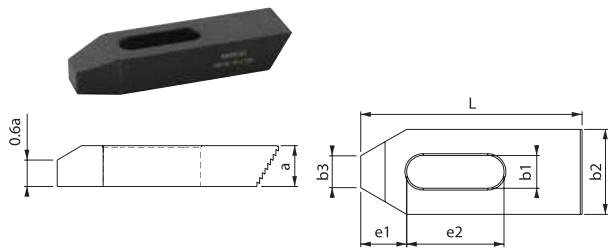
► Large steps



h	a	c	k	b	L	b1	b2	ORDER CODE	PRICE
13	8	13	37	52	50	52	78	1580-050	£16.93
16	10	17	47	64	60	64	96	1580-060	£20.34
19	13	18	57	76	70	76	114	1580-070	£27.24

SERRATED STEP BLOCK CLAMP (1290)

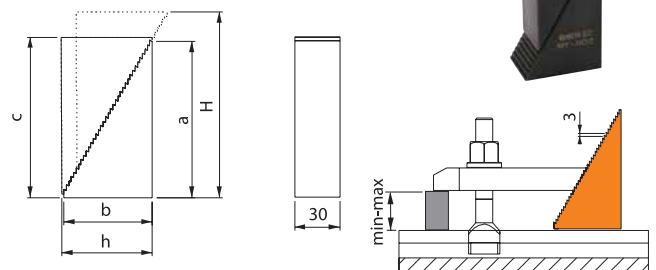
- Clamp for use with step block
- 3mm steps



L	Bolt Size	b1	a	b2	b3	e1	e2	ORDER CODE	PRICE
50	M6	6.6	10	20	8	10	20	1290-06050	£6.62
80	M6	6.6	10	20	8	10	30	1290-06080	£10.05
60	M8	9	12	25	10	13	22	1290-08060	£7.76
80	M10	11	15	30	12	15	30	1290-10080	£7.76
100	M12-M14	14.5	20	40	14	21	45	1290-12100	£11.58
125	M16-M18	18.5	25	50	18	26	55	1290-12100	£11.58

SERRATED STEP BLOCK (1310)

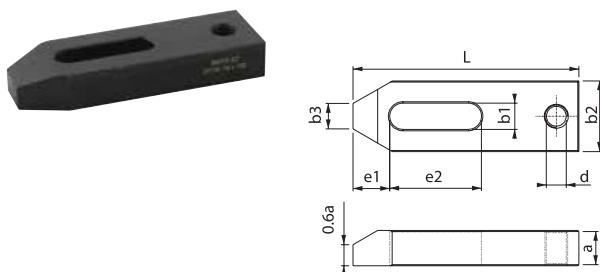
- Block support for use with step block clamp (1290)
- 3mm steps



h-H	a	b	c	min-max	kg	ORDER CODE	PRICE
37-85	57	35	60	0-40	0.5	1310-01	£11.07
48-112	73	45	76	0-60	0.8	1310-02	£12.70
58-139	90	55	93	0-75	1.2	1310-03	£17.69
66-165	108	64	111	0-90	1.6	1310-04	£19.03

STRAIGHT CLAMP (1330)

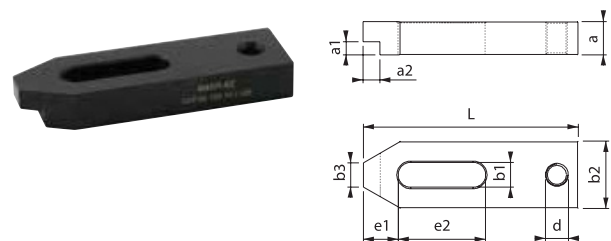
► Straight clamp with slot and threaded hole



Bolt Size	L1	b1	a	b2	b3	e1	e2	d	ORDER CODE	PRICE
M6	50	6.6	10	20	8	10	20	M8	1330-06050	£3.95
M8	60	9	12	25	10	13	22	M8	1330-08060	£5.24
M10	80	11	15	30	12	15	30	M10	1330-10080	£5.45
M12-M14	100	14.5	20	40	14	21	40	M12	1330-12100	£6.68
M16-M18	125	18.5	25	50	18	26	45	M16	1330-16125	£9.83
M20-M22	160	22.5	30	60	22	30	60	M20	1330-20160	£17.31
M24	160	26	30	70	26	35	60	M24	1330-24160	£19.85

STRAIGHT CLAMP WITH STEP

- Stepped clamp with slot and threaded hole
- Ideal for clamping in restricted areas



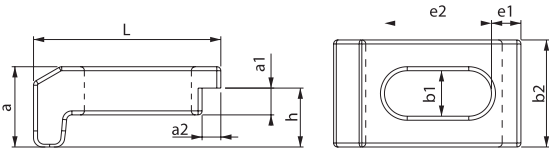
Bolt Size	L	b1	a	b2	a1xa2	b3	e1	e2	d	ORDER CODE	PRICE
M10	80	11	15	30	5x8	12	15	30	M10	1370-10080	£6.17
M12-M14	100	14.5	20	40	8x10	14	21	40	M12	1370-12100	£7.25
M12-M14	125	14.5	20	40	8x10	14	21	50	M12	1370-12125	£8.37
M16-M18	125	18.5	25	50	10x12.5	18	26	45	M16	1370-16125	£10.95
M16-M18	160	18.5	25	50	10x12.5	18	26	60	M16	1370-16160	£12.60
M20-M22	160	22.5	30	60	12x15	22	30	60	M20	1370-20160	£19.35
M24	160	26	30	70	12x15	26	35	60	M24	1370-24160	£21.89

CLAMPING ELEMENTS

WORKHOLDING
CLAMPS & ACCESSORIES

SLIDING PLATE CLAMP (1387)

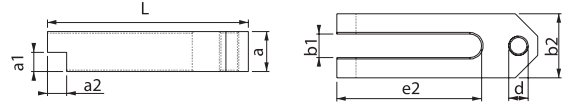
- ▶ Ideal for clamping vices to machine table
- ▶ Can be used with support



Bolt Size	L1	b1	a	b2	a1xa2	e1	e2	h	ORDER CODE	PRICE
M12	70	13	21.5	40	8x6	11	40	14	1387-12070	£8.58
M16	70	17	29.5	40	10x7	11	40	22	1387-16070	£9.13

FORK CLAMP WITH STEP (1400)

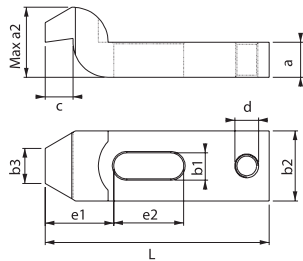
- ▶ Step forked clamp with slot and threaded hole
- ▶ Ideal for clamping in restricted areas



Bolt Size	L	b1	a	e2	a1xa2	b2	d	ORDER CODE	PRICE
M10	100	11	20	70	10x10	30	M10	1400-10100	£12.60
M12-14	125	14.5	25	90	12x12	40	M12	1400-12125	£13.94
M16-18	160	18.5	30	110	15x15	50	M16	1400-16160	£22.15
M20-22	200	22.5	40	135	20x20	60	M20	1400-20200	£32.96

Z NECK CLAMP (1450)

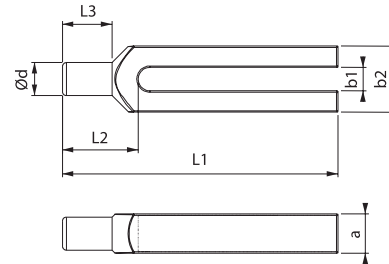
- ▶ Z neck clamp with slot and threaded hole
- ▶ Clamp design provides machining clearance from the clamping bolt



Bolt Size	L1	b1	a	a2	b2	b3	c	e1	e2	d	ORDER CODE	PRICE
M6	60	6.6	10	20	20	10	8	20	20	M8	1450-06060	£7.22
M8	80	9	12	24	25	12	9	25	25	M8	1450-08080	£8.02
M10	100	11	15	30	30	15	12	32	32	M10	1450-10100	£8.78
M12-M14	125	14.5	19	40	38	20	16	40	40	M12	1450-12125	£11.33
M16-M18	160	18.5	24	50	48	25	20	49	50	M16	1450-16160	£14.95
M20-M22	200	22.5	29	58	58	30	24	55	70	M20	1450-20200	£24.51
M24	200	26	33	70	70	35	25	72	60	M24	1450-24200	£33.73

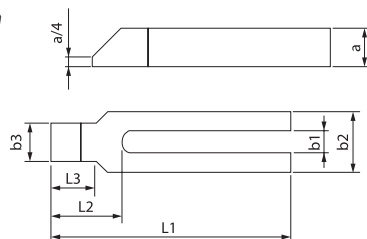
PIN HEAD FORK CLAMP (1470)

- ▶ Pin head of clamp is designed for locating in a hole



Bolt Size	L1	b1	a	b2	Ød	L2	L3	ORDER CODE	PRICE
M8	100	6.6	15	30	12	30	18	1470-08100	£13.75
M10	125	11	20	30	16	36	24	1470-10125	£15.02
M12-M14	160	11	25	40	20	45	30	1470-12160	£17.79
M16-M18	200	18.5	30	50	24	55	36	1470-16200	£19.35
M20-M22	250	22.5	40	60	30	65	45	1470-20250	£30.67
M24	250	26	40	70	38	80	56	1470-24250	£41.87

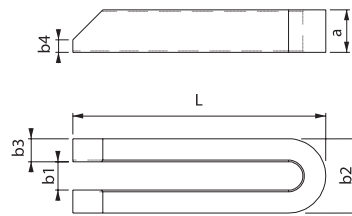
SLOTTED CLAMP (1320)



Bolt Size	L1	a	b1	b2	b3	L2	L3	ORDER CODE	PRICE
M8	100	15	9	30	16	32	18	1320-08100	£9.55
M10	125	20	11	30	20	38	24	1320-10125	£12.60
M12-M14	160	25	14.5	40	24	47	30	1320-12160	£12.98
M12-M14	200	25	14.5	40	24	47	30	1320-12200	£14.70
M16-M18	200	30	18.5	50	28	57	36	1320-16200	£18.96
M16-M18	250	30	18.5	50	28	57	36	1320-16250	£25.26
M20-M22	250	40	22.5	60	35	68	45	1320-20250	£34.87
M24	250	40	26	70	43	83	56	1320-24250	£37.93

FORK CLAMP (1390)

- ▶ Clamping bolt can be used in a wide range of positions

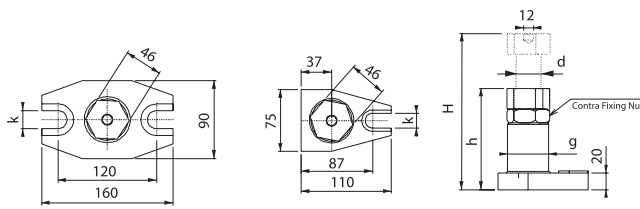


Bolt Size	L	b1	a	b2	b3	b4	ORDER CODE	PRICE
M6	60	6.6	12	19	6.2	3	1390-06060	£5.31
M8	80	9	15	25	8	4	1390-08080	£6.22
M10	100	11	20	30	9.5	5	1390-10100	£6.91
M12-M14	125	14.5	25	38	12	6	1390-12125	£7.39
M12-M14	200	14.5	25	38	12	6	1390-12200	£10.32
M16-M18	200	18.5	27	48	15	8	1390-16200	£12.96
M20-M22	250	22.5	37	62	20	10	1390-20250	£22.63
M24	250	26	37	66	20	10	1390-24250	£30.00

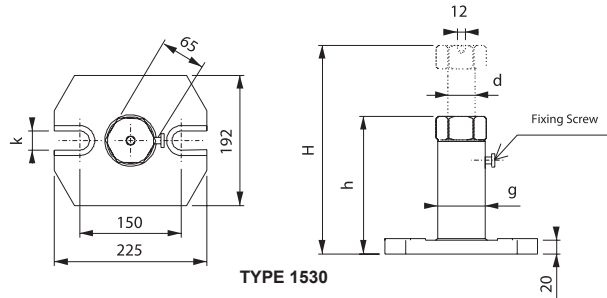
CLAMPING SUPPORTS

ADJUSTABLE SUPPORT JACK (1550/1530)

- ▶ Adjustable heavy duty support jack
- ▶ Ideal for horizontal machining
- ▶ 12mm hole in top of jack for attaching with clamps



TYPE 1550



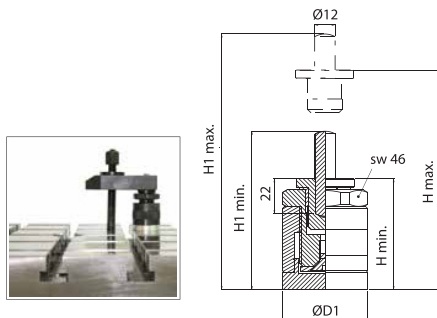
TYPE 1530



Height Range	d	Type	g	k	Max Force kgf ↓	kg	ORDER CODE	PRICE
100-140	Tr30x6	1550	49	18	6000	2.05	1550-100	£39.61
140-200	Tr30x6		49	18	6000	2.45	1550-140	£50.09
200-320	Tr30x6		49	22	4000	3.90	1550-200	£69.24
320-550	Tr30x6		49	22	2500	5.15	1550-320	£86.55
200-300	Tr40x7	1530	69	28	8000	10.0	1530-200	£110.98
280-460	Tr40x7		69	28	6000	11.8	1530-280	£137.45
430-750	Tr40x7		69	28	5000	14.2	1530-430	£179.20
710-1250	Tr40x7		69	28	4000	20.9	1530-710	£259.64

MAGNETIC CLAMP JACK (1515)

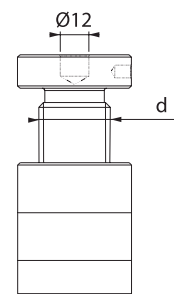
- ▶ Adjustable magnetic support jack
- ▶ Ideal for horizontal machining
- ▶ 12mm shank in top of jack for attaching with clamps



H min	H max	D1	Ø12x50 H1 min.- H1 max.	Ø12x80 H1 min.- H1 max.	Max Force kgf ↓	ORDER CODE	PRICE
65	85	50	93-113	123-143	3000	1515-065085	£95.51
85	125	50	113-153	143-183	3000	1515-085125	£103.04

ADJUSTABLE CLAMP JACK (1510)

- ▶ Adjustable support jack
- ▶ 12mm hole in top of jack for attaching with clamps or jack accessories

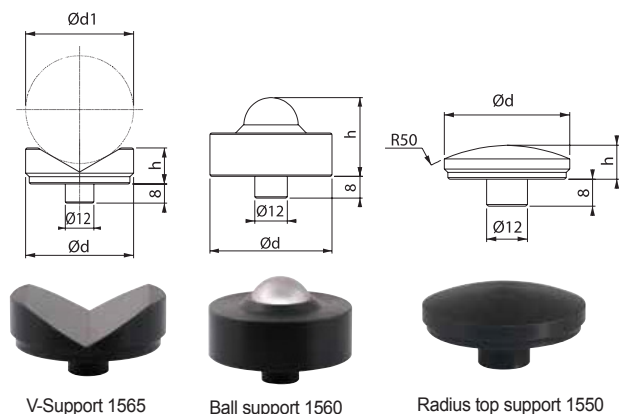


Height Range	d	Base Diameter	Top Diameter	Max Force kgf ↓	ORDER CODE	PRICE
23-30	M16	34	32	1000	1510-023030	£7.19
40-60	M16	34	32	1800	1510-040060	£8.08
42-52	Tr 30x4	50	50	6000	1510-042052	£12.22
50-70	Tr 30x4	50	50	6000	1510-050070	£16.80
70-100	Tr 30x4	50	50	6000	1510-070100	£20.81
100-140	Tr 30x4	50	50	6000	1510-100140	£27.87
140-220	Tr 30x4	54	54	6000	1510-140220	£36.27
210-330	Tr 30x6	58	58	8000	1510-210330	£76.30
260-430	Tr 30x6	68	68	8000	1510-260430	£110.60

CLAMPING SUPPORTS

JACK ACCESSORIES

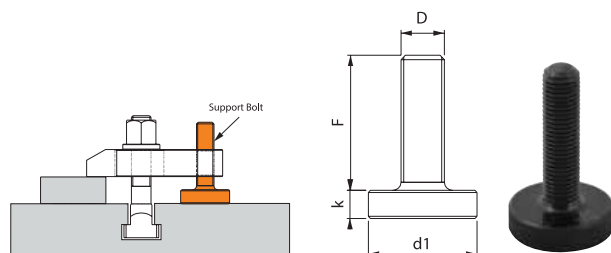
- ▶ Clamping supports for support jacks 1550, 1530, 1510, 1520 & 1517



h	Ø d	Ød min	Ød max	ORDER CODE	PRICE
10	37	-	-	ER-1550	£15.00
25	45	-	-	ER-1560	£15.00
15	45	10	50	ER-1565	£12.00

CLAMP SUPPORT (1490)

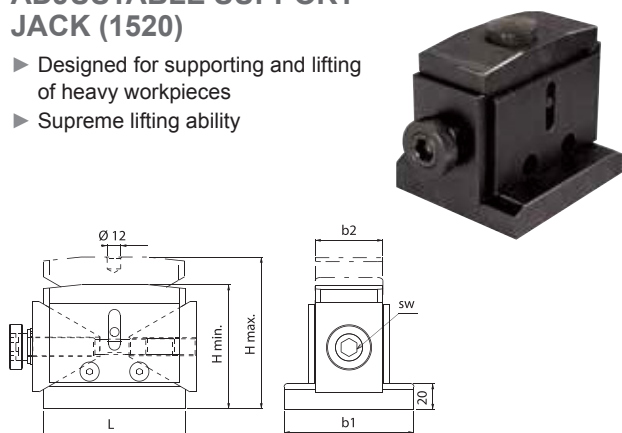
- ▶ Threaded support bolt for clamps



D x F	d1	k	ORDER CODE	PRICE
M8x32	25	8	1490-08032	£6.11
M10x42	30	8	1490-10042	£6.75
M12x50	36	10	1490-12050	£7.13
M12x95	36	10	1490-12095	£9.93
M16x62	45	13	1490-16062	£8.78
M16x97	45	13	1490-16097	£11.20
M16x117	45	13	1490-16117	£12.09
M20x62	50	13	1490-20062	£9.23
M20x97	50	13	1490-20097	£11.39
M20x117	50	13	1490-20117	£12.66
M24x81	50	14	1490-24081	£11.26
M24x116	50	14	1490-24116	£14.64

ADJUSTABLE SUPPORT JACK (1520)

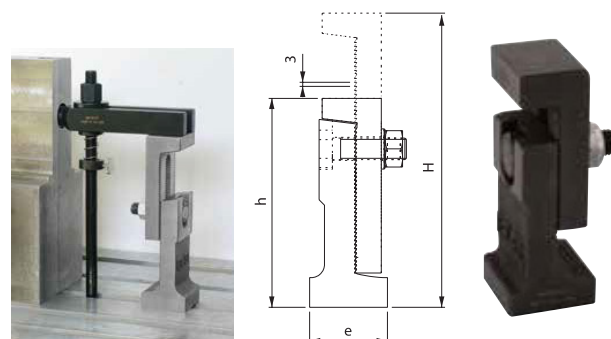
- ▶ Designed for supporting and lifting of heavy workpieces
- ▶ Supreme lifting ability



H Min/Max	b1	b2	L	sw	Max Lifting Force kgf ↑	kg	ORDER CODE	PRICE
50-63	-	40 63	63	8	4000	1.8	1520-050063	£143.87
100-125	115	125	125	14	10000	9.9	1520-100125	£303.83
170-190	145	175	175	22	25000	28	1520-170190	£711.71

ADJUSTABLE SUPPORT (1585)

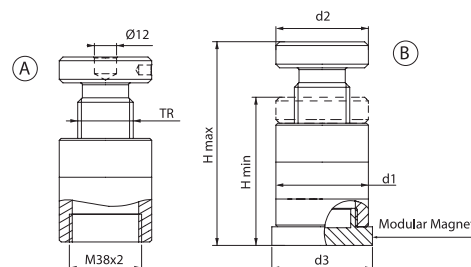
- ▶ With serrated teeth for secure support under high weight loads



h-H	e	Max Force kgf ↓	kg	ORDER CODE	PRICE
110-150	48x48	4000	1.1	1585-050	£33.22
155-220	60x58	5000	2.7	1585-060	£55.05
220-340	80x78	6000	6.6	1585-080	£101.05

MAGNETIC MODULAR JACK (1517)

- ▶ Adjustable support jack
- ▶ Can be used with or without magnet for different height ranges
- ▶ 12mm hole in top of jack for attaching with clamps or jack accessories



H Min/Max A	H Min/Max B	TR	d1	d2	d3	Max Force kgf ↓	kg	ORDER CODE	PRICE
42-52	52-62	30x4	50	50	53.5	6000	0.70	1517-04262	£49.64
50-70	60-80	30x4	50	50	53.5	6000	0.77	1517-05080	£53.45
70-100	80-110	30x4	50	50	53.5	6000	1.05	1517-70110	£54.73

STUDS

T-NUT STUD (1590)

- ▶ Threaded stud bolt with integrated t-nut
- ▶ Grade 12.9



Thread	T-Nut Size	Overall Length	Thread Length	Tightening Data		ORDER CODE	PRICE
				Nm	kN		
M10	12	50	35	79	51	1590-1012050	£4.31
		80	55			1590-1012080	£5.25
		100	60			1590-1012100	£5.54
		160	90			1590-1012160	£6.62
M12	12	50	35	141	74	1590-1212050	£4.65
		100	65			1590-1212100	£5.53
		160	100			1590-1212160	£5.85
		200	120			1590-1212200	£6.23
M12	14	50	35	141	74	1590-1214050	£4.97
		100	65			1590-1214100	£5.87
		160	100			1590-1214160	£6.94
		200	120			1590-1214200	£7.21
M14	16	63	45	223	101	1590-1416063	£6.02
		100	65			1590-1416100	£6.94
		160	100			1590-1416160	£7.70
		200	120			1590-1416200	£8.54
		250	150			1590-1416250	£9.66
M16	16	100	65	354	138	1590-1616100	£7.14
		160	100			1590-1616160	£8.12
		200	120			1590-1616200	£8.82
		250	150			1590-1616250	£10.05
M16	18	63	45	354	138	1590-1618063	£6.51
		100	65			1590-1618100	£7.42
		200	120			1590-1618200	£8.96
		250	150			1590-1618250	£10.07
M18	20	80	55	474	168	1590-1820080	£9.52
		160	110			1590-1820160	£10.85
		200	125			1590-1820200	£12.04
		250	150			1590-1820250	£13.58
M20	20	80	55	679	215	1590-2020080	£10.08
		160	110			1590-2020160	£11.17
		250	160			1590-2020250	£13.79
		315	190			1590-2020315	£15.40

RHOMBOID T-SLOT STUD (1650)

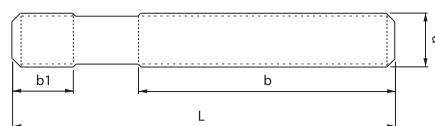
- ▶ Threaded stud bolt with integrated rhomboid t-nut
- ▶ T-nut bolt can be located from above the t-slot
- ▶ Grade 12.9



Thread	T-Nut Size	Overall Length	Thread Length	Tightening Data		ORDER CODE	PRICE
				Nm	kN		
M12	14	50	35	141	74	1650-1214050	£14.84
		80	55			1650-1214080	£15.33
		125	75			1650-1214125	£16.52
M16	18	63	45	354	138	1650-1618063	£17.01
		100	65			1650-1618100	£18.90
		160	100			1650-1618160	£21.14
M20	22	80	55	679	215	1650-2022080	£25.20
		125	85			1650-2022125	£27.51
		200	120			1650-2022200	£28.21

STANDARD STUD (1690)

- ▶ DIN 6379 Threaded stud
- ▶ Grade 12.9

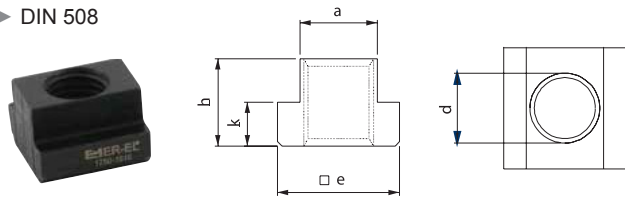


Thread d	L	b1	b	Tightening Data		ORDER CODE	PRICE
				Nm	kN		
M8	40	11	20	36	27	1690-08040	£0.71
	63		40			1690-08063	£0.74
	100		63			1690-08100	£0.90
	160		100			1690-08160	£1.34
			160			100	1690-08160
M10	50	13	25	67	43	1690-10050	£0.87
	80		50			1690-10080	£1.23
	100		63			1690-10100	£1.39
	160		100			1690-10160	£1.75
			200			125	1690-10200
M12	50	15	25	120	63	1690-12050	£1.05
	80		50			1690-12080	£1.30
	100		63			1690-12100	£1.61
	160		100			1690-12160	£1.96
			200			125	1690-12200
	M14		63			17	32
100		63	1690-14100	£1.74			
160		100	1690-14160	£2.31			
		200	125	1690-14200	£2.66		
250		160	1690-14250	£3.36			
M16	63	19	32	302	118	1690-16063	£1.82
	100		63			1690-16100	£2.14
	125		75			1690-16125	£2.44
			125			125	1690-16200
	315		180			1690-16315	£5.17
			500			315	1690-16500
M18	80	23	50	405	144	1690-18080	£2.73
	100		60			1690-18100	£3.15
	160		100			1690-18160	£4.14
			250			150	1690-18250
	315		180			1690-18315	£7.35
			315			180	1690-18315
M20	80	27	32	580	184	1690-20080	£2.94
	125		70			1690-20125	£3.99
	160		100			1690-20160	£5.18
			250			160	1690-20250
	315		200			1690-20315	£6.86
			400			250	1690-20400
M22	100	31	45	772	228	1690-22100	£4.69
	160		100			1690-22160	£5.95
	250		160			1690-22250	£8.96
			315			180	1690-22315
	400		250			1690-22400	£10.92
M24	100	35	45	994	263	1690-24100	£4.83
	160		100			1690-24160	£5.84
			200			125	1690-24200
	250		160			1690-24250	£8.19
			400			250	1690-24400
	500		315			1690-24500	£15.61

T-NUTS

STANDARD T-NUT (1750)

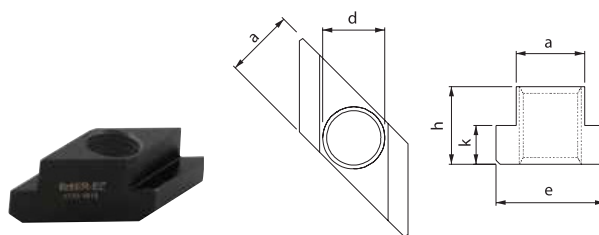
- ▶ Hardened (Grade 10)
- ▶ DIN 508



Thread d	T-Nut Size	a	e	h	k	ORDER CODE	PRICE
M5	6	5.7	10	8	4	1750-0506	£1.32
M6	8	7.7	13	10	6	1750-0608	£1.25
M8	10	9.7	15	12	6	1750-0810	£1.39
M8	12	11.7	18	14	7	1750-0812	£2.07
M10	12	11.7	18	14	7	1750-1012	£1.51
M8	14	13.7	22	16	8	1750-0814	£2.24
M10	14	13.7	22	16	8	1750-1014	£2.24
M12	14	13.7	22	16	8	1750-1214	£1.68
M8	16	15.7	25	18	9	1750-0816	£4.06
M10	16	15.7	25	18	9	1750-1016	£3.43
M12	16	15.7	25	18	9	1750-1216	£2.73
M14	16	15.7	25	18	9	1750-1416	£2.10
M8	18	17.7	28	20	10	1750-0818	£4.76
M10	18	17.7	28	20	10	1750-1018	£4.62
M12	18	17.7	28	20	10	1750-1218	£4.34
M14	18	17.7	28	20	10	1750-1418	£3.43
M16	18	17.7	28	20	10	1750-1618	£2.73
M16	20	19.7	32	24	12	1750-1620	£4.48
M18	20	19.7	32	24	12	1750-1820	£4.34
M16	22	21.7	35	28	14	1750-1622	£6.79
M18	22	21.7	35	28	14	1750-1822	£6.44
M20	22	21.7	35	28	14	1750-2022	£4.41
M16	24	23.7	40	32	16	1750-1624	£7.42
M20	24	23.7	40	32	16	1750-2024	£7.14
M22	24	23.7	40	32	16	1750-2224	£6.86
M16	28	27.7	44	36	18	1750-1628	£10.50
M20	28	27.7	44	36	18	1750-2028	£10.22
M22	28	27.7	44	36	18	1750-2228	£10.22
M24	28	27.7	44	36	18	1750-2428	£7.56
M24	36	35.6	54	44	22	1750-2436	£16.52
M30	36	35.6	54	44	22	1750-3036	£15.79
M36	42	41.6	65	52	26	1750-3642	£41.09
M42	48	47.6	75	60	30	1750-4248	£58.80

RHOMBOID T-NUT (1770)

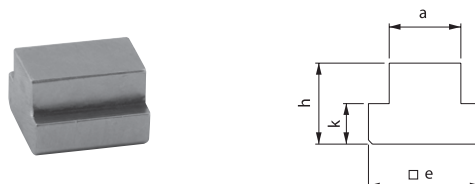
- ▶ Hardened (Grade 10)
- ▶ T-nut can be located from above the t-slot



Thread d	T-Nut Size	a	e	a	e	ORDER CODE	PRICE
M8	10	9.7	15	12	6	1770-0810	£3.30
M10	12	11.7	18	14	7	1770-1012	£3.78
M10	14	13.7	22	16	8	1770-1014	£4.61
M12	14	13.7	22	16	8	1770-1214	£5.04
M14	16	15.7	25	18	9	1770-1416	£5.74
M10	18	17.7	28	20	10	1770-1018	£3.99
M16	18	17.7	28	20	10	1770-1618	£8.12
M16	20	19.7	32	24	12	1770-1620	£7.84
M18	20	19.7	32	24	12	1770-1820	£7.56
M16	22	21.7	35	28	14	1770-1622	£6.34
M20	22	21.7	35	28	14	1770-2022	£11.41
M16	28	27.7	44	36	18	1770-1628	£8.68
M20	28	27.7	44	36	18	1770-2028	£11.06
M24	28	27.7	44	36	18	1770-2428	£10.64

T-NUT WITHOUT HOLE (1750)

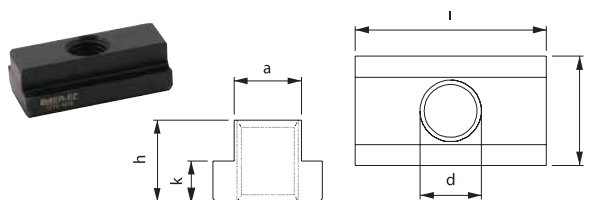
- ▶ Machinable



T-Nut Size	a	e	h	k	ORDER CODE	PRICE
6	5.7	10	8	4	1730-06	£1.02
8	7.7	13	10	6	1730-08	£1.04
10	9.7	15	12	6	1730-10	£1.25
12	11.7	18	14	7	1730-12	£1.32
14	13.7	22	16	8	1730-14	£1.39
16	15.7	25	18	9	1730-16	£1.40
18	17.7	28	20	10	1730-18	£2.10
20	19.7	32	24	12	1730-20	£2.94
22	21.7	35	28	14	1730-22	£3.64
24	23.7	40	32	16	1730-24	£5.60
28	27.7	44	36	18	1730-28	£6.86
36	35.6	54	44	22	1730-36	£17.46
42	41.6	65	52	26	1730-42	£33.18

LONG T-NUT (1710)

- ▶ Hardened (Grade 10)

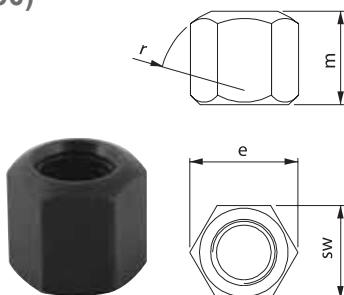


Thread d	T-Nut Size	a	e	l	h	k	ORDER CODE	PRICE
M8	10	7.7	13	26	10	6	1710-0608	£2.94
M10	12	9.7	15	30	12	6	1710-0810	£3.15
M10	14	11.7	18	36	14	7	1710-1012	£3.53
M12	14	13.7	22	44	16	8	1710-1214	£4.06
M14	16	15.7	25	50	18	9	1710-1416	£4.76
M16	18	17.7	28	56	20	10	1710-1618	£5.88
M18	20	19.7	32	64	24	12	1710-1820	£7.98
M20	22	21.7	35	70	28	14	1710-2022	£10.01
M22	24	23.7	40	80	32	16	1710-2224	£13.72
M24	28	27.7	44	88	36	18	1710-2428	£14.56
M30	36	35.6	54	108	44	22	1710-3036	£27.97

CLAMP NUTS

HEXAGON NUT (1790)

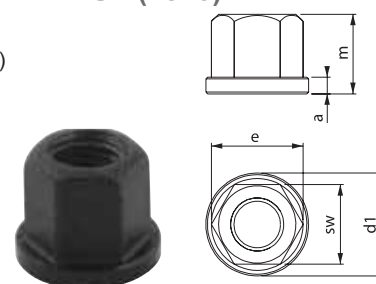
- ▶ DIN 6330B
- ▶ Hardened (Grade 10)
- ▶ Flat surface used with DIN 6340 washer
- ▶ Radius surface used with DIN 6319D or DIN 6319G washer



Thread	sw	e	m	r	ORDER CODE	PRICE
M6	10	11.5	9	9	1790-06	£0.64
M8	13	15	12	12	1790-08	£0.88
M10	17	19.6	15	15	1790-10	£0.97
M12	19	21.9	18	17	1790-12	£1.00
M14	22	25.4	21	20	1790-14	£1.50
M16	24	27.7	24	22	1790-16	£1.80
M18	27	31.2	27	24	1790-18	£2.45
M20	30	34.6	30	27	1790-20	£3.39
M22	32	36.9	33	30	1790-22	£4.71
M24	36	41.5	36	32	1790-24	£5.57
M30	46	53.1	45	41	1790-30	£12.20
M36	55	63.5	54	50	1790-36	£20.90
M42	65	75	63	58	1790-42	£46.96

HEXAGON WASHER NUT (1810)

- ▶ DIN 6331
- ▶ Hardened (Grade 10)



Thread	sw	e	m	a	d1	ORDER CODE	PRICE
M8	13	14.7	12	3.5	18	1810-08	£1.94
M10	17	19.2	15	4	22	1810-10	£2.15
M12	19	21.5	18	4	25	1810-12	£2.23
M14	22	24.9	21	4.5	28	1810-14	£2.86
M16	24	27.2	24	5	31	1810-16	£3.42
M18	27	30.6	27	5	34	1810-18	£4.61
M20	30	34	30	6	37	1810-20	£4.93
M22	32	36.3	33	6	40	1810-22	£6.20
M24	36	40.8	36	6	45	1810-24	£7.80
M30	46	52.3	45	8	58	1810-30	£17.82
M36	55	62	54	10	68	1810-36	£35.00
M42	65	75	63	12	80	1810-42	£62.92

EXTENSION NUT (1830)

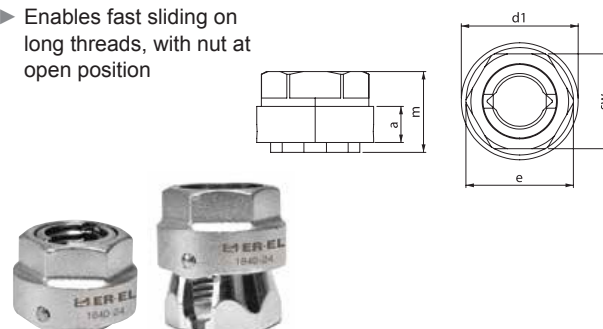
- ▶ DIN 6334
- ▶ Hardened (Grade 10)



Thread	sw	e	m	ORDER CODE	PRICE
M6	10	11.5	18	1830-06	£1.27
M8	13	15	24	1830-08	£1.78
M10	17	19.6	30	1830-10	£1.78
M12	19	21.9	36	1830-12	£2.00
M14	22	25.4	42	1830-14	£2.86
M16	24	27.7	48	1830-16	£3.50
M18	27	31.2	54	1830-18	£4.76
M20	30	34.6	60	1830-20	£6.83
M22	32	36.9	66	1830-22	£8.77
M24	36	41.5	72	1830-24	£10.01
M30	46	53.1	90	1830-30	£23.43
M36	55	63.5	108	1830-36	£36.37
M42	65	75	126	1830-42	£71.21

QUICK NUT (1840)

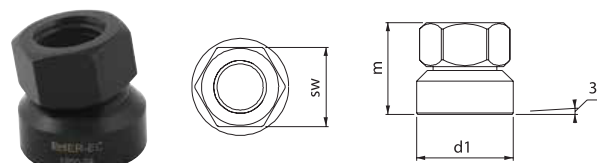
- ▶ Enables fast sliding on long threads, with nut at open position



Thread	a	d1	e	m	sw	ORDER CODE	PRICE
M16	11.5	34	30.7	27.5	27	1840-16	£25.86
M20	14	44	38.8	33	34	1840-20	£28.10
M24	18.5	50.4	46	35	41	1840-24	£29.63

BALL HEAD NUT (1850)

- ▶ Enables easier use on angled surface due to pivoting nut head

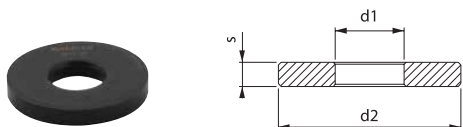


Thread	sw	d1	m	ORDER CODE	PRICE
M8	13	17	14	1850-08	£5.53
M10	17	21	18	1850-10	£5.53
M12	19	24	22	1850-12	£5.53
M16	24	30	28	1850-16	£7.70
M20	30	36	35	1850-20	£10.92
M24	36	44	43	1850-24	£16.10

WASHERS

PLAIN WASHER (1870)

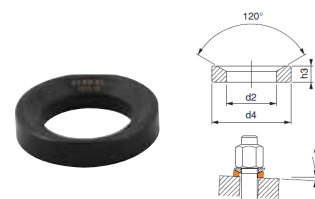
- ▶ DIN 6340
- ▶ Hardened



Bolt Size	d1	d2	s	ORDER CODE	PRICE
M6	6.4	17	3	1870-06	£0.56
M8	8.4	23	4	1870-08	£0.67
M10	10.5	28	4	1870-10	£0.83
M12	13	35	5	1870-12	£0.99
M14	15	40	5	1870-14	£1.21
M16	17	45	6	1870-16	£1.26
M18	19	45	6	1870-18	£1.59
M20	21	50	6	1870-20	£2.03
M22	23	50	8	1870-22	£2.94
M24	25	60	8	1870-24	£3.64
M30	31	68	10	1870-30	£5.46
M36	38	80	12	1870-36	£8.48
M42	44	98	15	1870-42	£23.64

CHAMFER TOP WASHER FEMALE (1910)

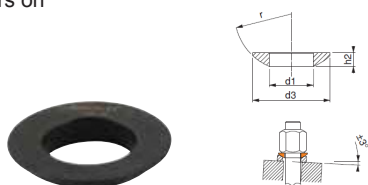
- ▶ DIN 6319D
- ▶ This washer is used with DIN 6319C washers on angled surfaces
- ▶ Hardened



Bolt Size	Max kN	d2	d4	h3	ORDER CODE	PRICE
M6	9	7.1	12	2.8	1910-06	£1.08
M8	17	9.6	17	3.5	1910-08	£1.18
M10	26	12	21	4.2	1910-10	£1.26
M12	38	14.2	24	5	1910-12	£1.26
M14	53	16.5	28	5.6	1910-14	£1.72
M16	73	19	30	6.2	1910-16	£1.88
M20	117	23.2	36	7.5	1910-20	£4.39
M24	168	28	44	9.5	1910-24	£6.00
M30	269	35	56	12	1910-30	£8.89
M36	394	42	68	15	1910-36	£17.88
M42	542	49	78	18	1910-42	£35.76

SPHERICAL SEATING WASHER MALE (1890)

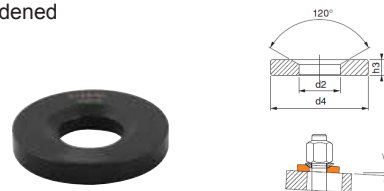
- ▶ DIN 6319C
- ▶ This washer is used with DIN 6319G washers on angled surfaces
- ▶ Hardened



Bolt Size	d1	d3	h2	r	ORDER CODE	PRICE
M6	6.4	12	2.3	9	1890-06	£0.81
M8	8.4	17	3.2	12	1890-08	£0.91
M10	10.5	21	4.0	15	1890-10	£0.99
M12	13	24	4.6	17	1890-12	£1.02
M14	15	28	5.0	22	1890-14	£1.46
M16	17	30	5.3	22	1890-16	£1.61
M20	21	36	6.3	27	1890-20	£2.42
M24	25	44	8.2	32	1890-24	£3.64
M30	31	56	11.2	41	1890-30	£6.67
M36	37	68	14.0	50	1890-36	£15.75
M42	43	78	17.0	58	1890-42	£29.40

CHAMFER TOP WASHER FEMALE (1930)

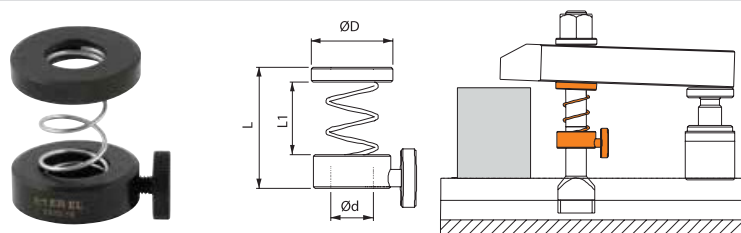
- ▶ DIN 6319G
- ▶ This washer is used with DIN 6319C washers on angled surfaces
- ▶ Hardened



Bolt Size	d2	d4	h3	ORDER CODE	PRICE
M6	7.1	12	4	1930-06	£1.48
M8	9.6	17	5	1930-08	£1.54
M10	12	21	5	1930-10	£1.64
M12	14.2	24	6	1930-12	£1.64
M14	16.5	28	6	1930-14	£2.23
M16	19	30	7	1930-16	£2.34
M20	23.2	36	8	1930-20	£5.44
M24	28	44	10	1930-24	£6.52
M30	35	56	10	1930-30	£10.72
M36	42	68	12	1930-36	£19.70
M42	49	78	15	1930-42	£35.76

SPRING LOADED WASHER (1970)

- ▶ Enables easier handling of clamps when removing the workpiece



Bolt Size	Ø D	Ø d	L	L1	ORDER CODE	PRICE
M10	27	10.5	35	20	1970-10	£7.32
M12	27	12.5	40	33	1970-12	£7.65
M14	28	14.5	40	30	1970-14	£8.19
M16	37	16.5	45	30	1970-16	£9.47
M18	37	18.5	45	40	1970-18	£10.50
M20	37	21	45	42	1970-20	£11.30
M22	37	23	45	45	1970-22	£12.17
M24	45	25	50	45	1970-24	£19.01