

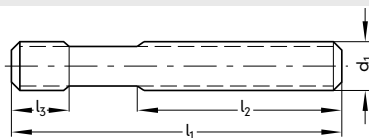
27003

Studs, DIN 6379



Design

Roller thread, tempered, strength class
M 6–M 12 = 10.9, M 14–M 24 = 8.8.



27003



d ₁ x l ₁ mm	l ₂ mm	l ₃ mm	27003	...
M 6 x 32	16	9	101	
M 6 x 50	30	9	103	
M 6 x 80	50	9	105	
M 8 x 40	20	11	106	
M 8 x 63	40	11	107	
M 8 x 100	63	11	109	
M 8 x 125	75	11	110	
M 8 x 160	100	11	111	
M 10 x 50	25	13	112	
M 10 x 80	50	13	113	
M 10 x 125	75	13	115	
M 10 x 160	100	13	116	
M 10 x 200	122	13	117	
M 12 x 50	25	15	118	
M 12 x 63	32	15	119	
M 12 x 80	50	15	120	
M 12 x 100	63	15	121	
M 12 x 125	75	15	122	
M 12 x 160	100	15	123	
M 12 x 200	122	15	124	
M 14 x 63	32	17	125	
M 14 x 100	63	17	126	
M 14 x 160	100	17	127	
M 14 x 200	122	17	128	
M 14 x 250	160	17	129	

d ₁ x l ₁ mm	l ₂ mm	l ₃ mm	27003	...
M 16 x 63	32	19	130	
M 16 x 80	50	19	131	
M 16 x 100	63	19	132	
M 16 x 125	75	19	133	
M 16 x 160	100	19	134	
M 16 x 200	122	19	135	
M 16 x 250	160	19	136	
M 16 x 315	180	19	137	
M 16 x 500	315	19	138	
M 20 x 80	32	27	145	
M 20 x 125	70	27	146	
M 20 x 160	100	27	147	
M 20 x 200	122	27	148	
M 20 x 250	160	27	149	
M 20 x 315	200	27	150	
M 20 x 400	250	27	151	
M 20 x 500	315	27	152	
M 24 x 160	100	35	161	
M 24 x 200	122	35	162	
M 24 x 250	160	35	163	
M 24 x 315	200	35	164	
M 24 x 400	250	35	165	
M 24 x 500	315	35	166	
M 24 x 630	315	35	167	

27004

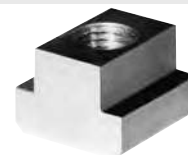
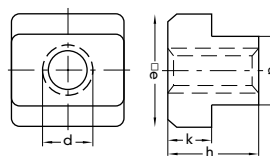
T-sliding blocks, DIN 508



Design

Tempered, strength class 10.

Nuts marked with A = old standard 1928.



27004

d x nominal groove size	a mm	e mm	h mm	k mm	27004	...
M 5 x 6	5.7	10	8	4	201	
M 6 x 8	7.7	13	10	6	202	
M 8 x 10	9.7	15	12	6	203	
M 10 x 12	11.7	18	14	7	205	
M 10 x 14 A	13.7	22	16	8	207	
M 10 x 16 A	15.7	25	18	9	240	
M 10 x 18 A	17.7	28	20	10	243	
M 12 x 14	13.7	22	16	8	208	
M 12 x 16 A	15.7	25	18	9	211	
M 14 x 16 A	15.7	25	18	9	212	

d x nominal groove size	a mm	e mm	h mm	k mm	27004	...
M 14 x 18 A	17.7	28	20	10	216	
M 16 x 18	17.7	28	20	10	217	
M 16 x 20 A	19.7	32	24	12	218	
M 18 x 20 A	19.7	32	24	12	219	
M 16 x 22 A	21.7	35	28	14	220	
M 20 x 22	21.7	35	28	14	222	
M 20 x 24 A	23.7	40	32	16	224	
M 20 x 28 A	27.7	44	36	18	227	
M 24 x 28	27.7	44	36	18	229	
M 24 x 36 A	35.6	54	44	22	232	

27005

T-sliding blocks, long form

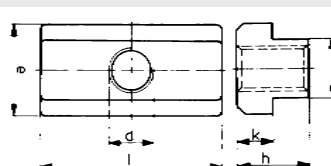


Design

Tempered, strength class 10.

Applications

This long form protects the table grooves
on precision machines.



27005

d x nominal groove size	a mm	e mm	l mm	h mm	k mm	27005	...
M 6 x 8	7.7	13	26	10	6	202	
M 8 x 10	9.7	15	30	12	6	203	
M 10 x 12	11.7	18	36	14	7	204	
M 12 x 14	13.7	22	44	16	8	205	
M 14 x 16	15.7	25	50	18	9	206	

d x nominal groove size	a mm	e mm	l mm	h mm	k mm	27005	...
M 16 x 18	17.7	28	56	20	10	207	
M 18 x 20	19.7	32	64	24	12	208	
M 20 x 22	21.7	35	70	28	14	209	
M 24 x 28	27.7	44	88	36	18	210	

27006

T-sliding blocks, blanks

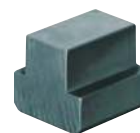
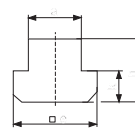


Design

Heat-treated steel, 0.35–0.45% C.

Applications

These blanks allow economical manufacture of nuts for T-grooves with non-standard threads.



27006

Nominal groove size	a mm	e mm	h mm	k mm	27006	...
8	7.7	13	10	6	202	
10	9.7	15	12	6	203	
12	11.7	18	14	7	204	
14	13.7	22	16	8	205	
16	15.7	25	18	9	206	
18	17.7	28	20	10	207	

Nominal groove size	a mm	e mm	h mm	k mm	27006	...
20	19.7	32	24	12	208	
22	21.7	35	28	14	209	
24	23.7	40	32	16	210	
28	27.7	44	36	18	211	
32	31.7	50	40	20	212	
36	35.6	54	44	22	213	

27007

T-sliding blocks, rhombic



Design

Tempered, strength class M 10–M 12 = 8.

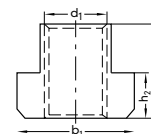
M 14–M 20 = 6.

Applications

Inserted into T-groove from above and turned.

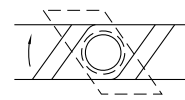
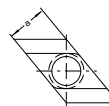
Note:

Additional clamping point when fixture already clamped. An additional clamping point can be set up retrospectively even if the T-groove on the machine table is already occupied.



27007

d x nominal groove size	a mm	b1 mm	h1 mm	h2 mm	27007	...
M 10 x 12	11.7	18	14	7	101	
M 12 x 14	13.7	22	16	8	102	
M 14 x 16	15.7	25	18	9	103	
M 16 x 18	17.7	28	20	10	104	
M 20 x 22	21.7	35	28	14	106	



27008

Nuts, H = 1.5 x d DIN 6330 B



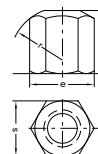
Design

Tempered, strength class 10.

() = old standard.

Applications

For studs and T-groove screws. Can also be used with conical washers, art. no. 27017–27018.



27008

Thread	s mm	e mm	m 1.5 x d	r mm	27008	...
M 6	10	11.05	9	9	301	
M 8	13	14.40	12	12	302	
M 10	16	17.80	15	15	303	
M 10	(17)	18.90	15	15	304	
M 12	18	20.03	18	17	305	
M 12	(19)	21.10	18	17	306	
M 14	21	23.40	21	20	307	

Thread	s mm	e mm	m 1.5 x d	r mm	27008	...
M 14	(22)	24.50	21	20	308	
M 16	24	26.80	24	22	309	
M 20	30	33.50	30	27	311	
M 22	34	37.70	33	30	313	
M 24	36	40.00	36	32	314	
M 27	41	45.60	40	36	315	

27009 - 27010

Nuts with collar, H = 1.5 x d DIN 6331



Design

Tempered, strength class 10.

() = old standard.

Applications

For studs and T-groove screws.

27009

Design

Turned and milled.

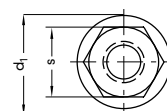
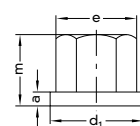
27009

27010

Design

Forged.

Thread	s mm	e mm	m 1.5 x d	a mm	d1 mm	27009	...	27010	...
M 6	10	11.05	9	3.0	14				201
M 8	13	14.40	12	3.5	18		202		202
M 10	16	17.80	15	4.0	22			203	203
M 10	(17)	18.90	15	4.0	22		204		
M 12	18	20.03	18	4.0	25			204	204
M 12	(19)	21.10	18	4.0	25		206		
M 14	21	23.40	21	4.5	28		207		
M 14	(22)	24.50	21	4.5	28		208		
M 16	24	26.80	24	5.0	31		209		205
M 18	27	30.10	27	5.0	34				206
M 20	30	33.50	30	6.0	37		211		207
M 22	34	37.70	33	6.0	40		213		
M 24	36	40.00	36	6.0	45		214		208
M 27	41	45.60	40	8.0	50		215		209



27013

Extension nuts, H = 3.0 x d



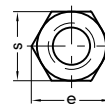
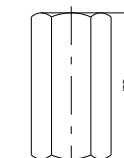
Design

Tempered, strength class 10.

() = old standard.

Applications

The extension nut will serve as any connection element between DIN 787 (screw for T-grooves, art. no. 27015) and DIN 6379 (stud screw art. no. 27003) and is not suitable for screw fixing. For functional and safety reasons, both screws should be screwed in to half the nut height. Minimum screw-in length = 1 x diameter.



27013



Thread	s mm	e mm	m 3.0 x d	27013	...
M 6	10	11.05	18		101
M 8	13	14.40	24		102
M 10	(17)	18.90	30		104
M 12	18	20.03	36		105
M 12	(19)	21.10	36		106
M 14	21	23.40	42		107
M 14	(22)	24.50	42		108
M 16	24	26.80	48		109
M 18	27	30.10	54		110
M 20	30	33.50	60		111
M 22	34	37.70	66		113
M 24	36	40.00	72		114
M 27	41	45.60	81		115

27014

Washers, DIN 6340



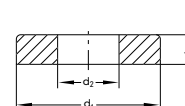
Design

Extra thick and large, stamped.

Tempered, 1200–1400 N/mm² strength.

Note:

Dimensions according to DIN, but stamped and flat-pressed. () DIN extended.



27014



For screws	d ₂ mm	d ₁ mm	h ₁ mm	27014	...
M 6	6.4	17	3		201
M 8	8.4	23	4		202
M 10	10.5	28	4		203
M 12	13.0	35	5		204
(M 14)	15.0	40	5		205
M 16	17.0	45	6		206
(M 18)	19.0	45	6		207
M 20	21.0	50	6		208
(M 22)	23.0	50	8		209
M 24	25.0	60	8		210
(M 27)	28.0	68	10		211
M 30	31.0	68	10		212

27015

T-groove screws (clamping screws), DIN 787



Design

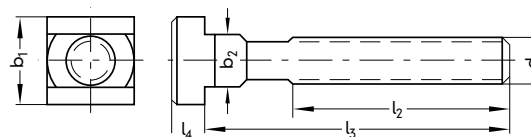
Includes nut and washer to DIN 6340 and high nut to DIN 6330 D. Forged, tempered, strength class M 8–M 12 = 10.9, M 14–M 28 = 8.8, head and screw in one piece.

Rolled thread, precisely milled groove guide.

Note:

T-groove screws to DIN 787 with other lengths and thread sizes, screws also deliverable without nut and washer, and with strength class 12.9 on request.

27015



Nominal groove size	d ₁ x l ₃ mm	l ₂ mm	b ₂ mm	b ₁ mm	l ₄ mm	27015	...
8	M 8 x 32	22	7.7	13	6	304	
8	M 8 x 50	35	7.7	13	6	305	
8	M 8 x 80	50	7.7	13	6	306	
10	M 10 x 63	45	9.7	15	6	308	
10	M 10 x 100	60	9.7	15	6	309	
12	M 12 x 50	35	11.7	18	7	310	
12	M 12 x 63	40	11.7	18	7	311	
12	M 12 x 80	55	11.7	18	7	312	
12	M 12 x 125	75	11.7	18	7	313	
12	M 12 x 200	120	11.7	18	7	314	
14	M 12 x 50	35	13.7	22	8	315	
14	M 12 x 63	45	13.7	22	8	316	
14	M 12 x 80	55	13.7	22	8	317	
14	M 12 x 125	75	13.7	22	8	318	
14	M 12 x 200	120	13.7	22	8	319	
16	M 14 x 63	45	15.7	25	9	320	
16	M 14 x 100	65	15.7	25	9	321	
16	M 14 x 160	100	15.7	25	9	322	
16	M 14 x 250	120	15.7	25	9	323	
16	M 16 x 63	45	15.7	25	9	324	
16	M 16 x 80	55	15.7	25	9	325	
16	M 16 x 100	65	15.7	25	9	326	

Nominal groove size	d ₁ x l ₃ mm	l ₂ mm	b ₂ mm	b ₁ mm	l ₄ mm	27015	...
16	M 16 x 160	100	15.7	25	9	327	
16	M 16 x 200	125	15.7	25	9	328	
16	M 16 x 250	150	15.7	25	9	329	
18	M 16 x 63	45	17.7	28	10	330	
18	M 16 x 100	65	17.7	28	10	332	
18	M 16 x 160	100	17.7	28	10	333	
18	M 16 x 200	125	17.7	28	10	334	
18	M 16 x 250	150	17.7	28	10	335	
20	M 20 x 80	55	19.7	32	12	336	
20	M 20 x 125	85	19.7	32	12	337	
20	M 20 x 160	110	19.7	32	12	338	
20	M 20 x 200	125	19.7	32	12	339	
22	M 20 x 100	65	21.7	35	14	342	
22	M 20 x 125	85	21.7	35	14	343	
22	M 20 x 160	110	21.7	35	14	344	
22	M 20 x 200	125	21.7	35	14	345	
24	M 24 x 160	110	23.7	40	16	346	
24	M 24 x 200	125	23.7	40	16	347	
28	M 24 x 100	70	27.7	44	18	348	
28	M 24 x 160	110	27.7	44	18	350	
28	M 24 x 250	150	27.7	44	18	352	

27016

Spherical washers, DIN 6319 C



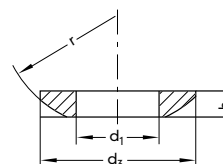
Design

Case-hardened and phosphated.

Note:

Spherical washers and conical washers are used to transmit clamping forces in cases where clamping elements need to be adapted to uneven clamping surfaces. Pairing spherical washers or nuts to DIN 6330 with conical washers enables the associated clamping bolt to be swivelled out by 3°.

27016



For screws	d ₁ mm	d ₃ mm	h ₂ mm	r mm	27016	...
M 6	6.4	12	2.3	9	101	
M 8	8.4	17	3.2	12	102	
M 10	10.5	21	4.0	15	103	
M 12	13.0	24	4.6	17	104	

For screws	d ₁ mm	d ₃ mm	h ₂ mm	r mm	27016	...
M 14	15.0	28	5.0	22	105	
M 16	17.0	30	5.3	22	106	
M 20	21.0	36	6.3	27	107	
M 24	25.0	44	8.2	32	108	

27017

Conical washers, DIN 6319 D



Design

Case-hardened and phosphated.

Suitable for screw strength according to 8.8.

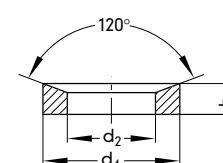
Applications

Use only for flat enclosed ring surfaces (not permitted for slotted holes; for this we recommend art. no. 27018).

Note:

See art. no. 27016.

27017



For screws	max. (kN)	d ₂ mm	d ₄ mm	h ₃ mm	27017	...
M 6	9	7.1	12	2.8	101	
M 8	17	9.6	17	3.5	102	
M 10	26	12.0	21	4.2	103	
M 12	38	14.2	24	5.0	104	

For screws	max. (kN)	d ₂ mm	d ₄ mm	h ₃ mm	27017	...
M 14	53	16.5	28	5.6	105	
M 16	73	19.0	30	6.2	106	
M 20	117	23.2	36	7.5	107	
M 24	168	28.0	44	9.5	108	



Design

Stamped, pressed and tempered.

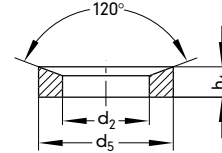
Applications

Due to the large diameter, this conical washer is particularly suitable for clamping over the slot in clamps.

Note:

Spherical washers and conical washers are used to transmit clamping forces in cases where clamping elements need to be adapted to uneven clamping surfaces. Pairing spherical washers or nuts to DIN 6330 with conical washers enables the associated clamping bolt to be swivelled out by 3°.

For screws	d ₂ mm	d ₅ mm	h ₄ mm	27018	...
M 6	7.1	17	4		101
M 8	9.6	24	5		102
M 10	12.0	30	5		103
M 12	14.2	36	6		104
M 14	16.5	40	6		105
M 16	19.0	44	7		106
M 20	23.2	50	8		107
M 24	28.0	60	10		108



Design

All parts tempered, strength classes 8 and 10. The extension nuts, art. no. 27013, and studs, art. no. 27003, enable any clamping heights to be achieved. In wooden box.

Nominal groove size	Thread	27020	...
10	M 10		101
12	M 12		102
14	M 12		103
16	M 14		104
18	M 16		106
22	M 20		108



Set contents:	Nominal groove size	Thread, metric	Art. no. 27015 T-groove screws DIN 787 Pieces/length mm	Art. no. 27003 Each 4 x studs DIN 6379 Length mm	Art. no. 27004 Sliding blocks DIN 508 Pieces	Art. no. 27008 Hexagon nuts DIN 6330 B Pieces	Art. no. 27013 Extension nuts Pieces	Art. no. 27014 Washers DIN 6340 Pieces	Art. no. 27016 + 018 Spherical washers, conical washers DIN 6319 C + G Set
	10	M 10	2/40, 4/63, 4/100	50, 80, 200	-	4	4	4	4
	12	M 12	2/50, 4/80, 4/125	63, 100, 200	-	4	4	4	4
	14	M 12	2/50, 4/80	63, 100, 125, 200	4	4	4	4	4
	16	M 14	2/63, 4/100	63, 100, 160, 250	4	4	4	4	4
	18	M 16	2/63, 4/100	80, 125, 160	4	4	4	4	4
	22	M 20	2/80, 4/125	80, 125, 200, 315	4	4	4	4	4



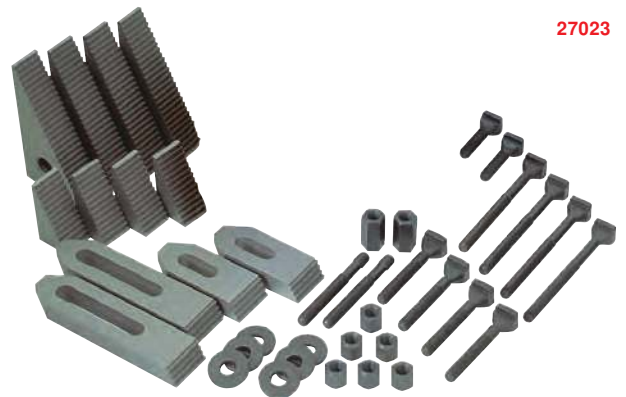
Design

All parts made of heat-treated steel, T-groove screws tempered, thread rolled.

Applications

Ideal for toolmaking, manufacturing and training facilities.

Nominal groove size	Thread	27023	...
14	M 12		101
16	M 14		102
18	M 16		103



Set contents:	Nominal groove size	Thread, metric	Art. no. 27103 Clamps	Art. no. 27125 Clamping supports	Art. no. 27015 T-groove screws DIN 787 Pieces/length mm	Art. no. 27003 Studs DIN 6379 Pieces/length mm	Art. no. 27008 Hexagon nuts DIN 6330 B Pieces	Art. no. 27013 Extension nuts Pieces	Art. no. 27014 Washers DIN 6340 Pieces
	14	M 12	2/100, 2/160	4/size 2, 4/size 3	2/50, 4/80, 4/125	2/100	6	2	6
	16	M 14	2/100, 2/160	4/size 2, 4/size 3	2/63, 4/100, 4/160	2/100, 2/160	6	2	6
	18	M 16	2/125, 2/200	4/size 2, 4/size 3	2/63, 4/100, 4/160	2/100, 2/160	6	4	6

27024

Screw paste



Design

Mineral fat-based paste with synergic combination of highly effective white solid lubricants. Heat resistant and resistant to washout.

Applications

For the lubrication of frequently operated screws or nuts in clamping devices, especially when aggressive coolants are used.



27024

Contents ml	Temperature operating conditions °C	27024	...
75	-25 to +125	101	

27038

Loose sliding blocks, DIN 6323



Design

Case-hardened and ground.

Applications

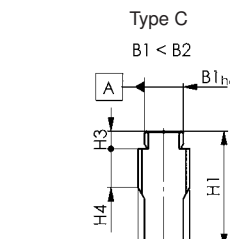
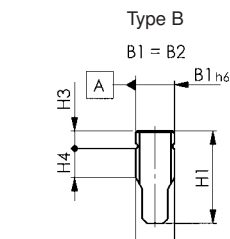
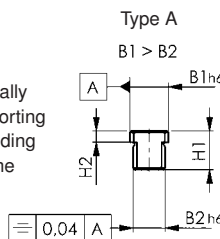
The sliding blocks are inserted laterally after rough alignment. When transporting jigs, there is no interference from sliding blocks protruding underneath and the machine table cannot be damaged.

27038 101-102

For small machines: Jig groove 12.

27038 106-113

For large machines: Jig groove 20.



Type A



Type B



Type C



27038

Nominal size of grooves for

Machine B2 mm	Jig B1 mm	Shape	H1 mm	H2 mm	H3 mm	H4 mm	L mm	27038	...
10	12	A	12.0	3.6	-	-	20	101	
12	12	B	28.6	-	5.5	9	20	102	
12	20	A	14.0	5.5	-	-	32	106	
14	20	A	14.0	5.5	-	-	32	107	
16	20	A	14.0	5.5	-	-	32	108	

Nominal size of grooves for

Machine B2 mm	Jig B1 mm	Shape	H1 mm	H2 mm	H3 mm	H4 mm	L mm	27038	...
18	20	A	14.0	5.5	-	-	32	109	
20	20	B	45.5	-	7.0	16	32	110	
22	20	C	50.5	-	7.0	18	40	111	
24	20	C	55.5	-	7.0	20	40	112	
28	20	C	61.5	-	7.0	24	40	113	

27040

Fixed sliding blocks, DIN 6322 A

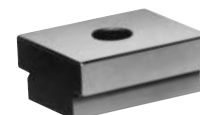
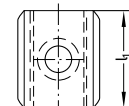
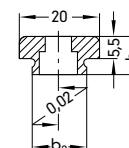


Design

Case-hardened and ground.

Applications

Fixed sliding blocks are installed in pairs in the standard 20 mm-wide aligning grooves of vices or jigs. Changing the sliding blocks makes it possible to work on machines with different groove widths. For particularly heavy jigs we recommend loose sliding blocks to DIN 6323 (art. no. 27038).



27040

Nominal size of grooves for

Machine b ₂ mm	Jig mm	h ₁ mm	l ₁ mm	Cyl. screws	27040	...
10	20	10	22	M 6 x 10	301	
12	20	10	22	M 6 x 10	302	
14	20	10	25	M 6 x 16	303	
16	20	10	25	M 6 x 16	304	
18	20	10	25	M 6 x 16	305	

Nominal size of grooves for

Machine b ₂ mm	Jig mm	h ₁ mm	l ₁ mm	Cyl. screws	27040	...
22	20	12	32	M 6 x 16	306	
24	20	12	32	M 6 x 16	307	
28	20	12	32	M 6 x 16	308	
36	20	12	32	M 6 x 16	309	

27041

Flat sliding blocks, DIN 6322 B



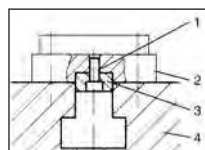
Design

Case-hardened and ground.

Applications

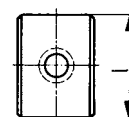
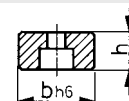
Flat sliding blocks are particularly useful and cost-effective if a jig is always used on the same machine.

For particularly heavy jigs we recommend loose sliding blocks to DIN 6323 (art. no. 27038).



Note:

- 1 = Screw
- 2 = Jig
- 3 = Sliding block
- 4 = Machine table



27041

w mm	h mm	l mm	Cyl. screws	27041	...
10	8	20	M 4 x 10	301	
12	8	20	M 5 x 12	302	
14	10	22	M 6 x 16	303	
16	10	22	M 6 x 16	304	

w mm	h mm	l mm	Cyl. screws	27041	...
18	10	22	M 6 x 16	305	
20	10	22	M 6 x 16	306	
22	12	32	M 6 x 16	307	
24	12	32	M 6 x 16	308	

27062

T-groove covers

Design

Made of aluminium profile. Can be cut to the desired length with a fine saw blade.

Applications

No more time-consuming cleaning of the machine groove after machining. Always cover the free grooves before machining. The cover strips can be easily removed after machining.

27062



For T-grooves mm	Length mm	27062	...
12	1000		101
14	1000		102
16	1000		103
18	1000		104
20	1000		105
22	1000		106
28	1000		107
36	1000		108



27063

Groove scrapers



Suitable for T-grooves mm	27063	...
14 - 20		101
22-32		102



27063 101



27063 102

27101

Clamps, single, DIN 6314



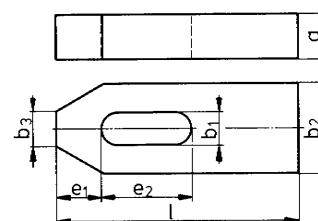
Design

Heat-treated steel, painted.

b ₁ mm	l mm	For screws	a mm	b ₂ mm	b ₃ mm	e ₁ mm	e ₂ mm	27101	...
9	60	M 8	12	25	10	13	22		102
11	80	M 10	15	30	12	15	30		103
14	100	M 12/M 14	20	40	14	21	40		104
14	125	M 12/M 14	20	40	14	21	50		105
18	125	M 16/M 18	25	50	18	26	45		106
18	160	M 16/M 18	25	50	18	26	65		107
22	160	M 20/M 22	30	60	22	30	60		108
22	200	M 20/M 22	30	60	22	30	80		109



27101



27103

Clamps with stepped teeth



Design

With stepped teeth, heat-treated steel, painted.

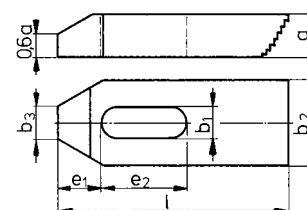
Note:

Can only be used in conjunction with toothed clamping supports, art. no. 27124–27125.

27103



b ₁ mm	l mm	For screws	a mm	b ₂ mm	b ₃ mm	e ₁ mm	e ₂ mm	27103	...
9	60	M 8	12	25	10	13	22		102
11	80	M 10	15	30	12	15	30		103
14	100	M 12/M 14	20	40	14	21	40		104
18	125	M 16/M 18	25	50	18	26	45		105
22	160	M 20/M 22	30	60	22	30	60		106



27105

Fork clamps, bevelled, DIN 6315 B

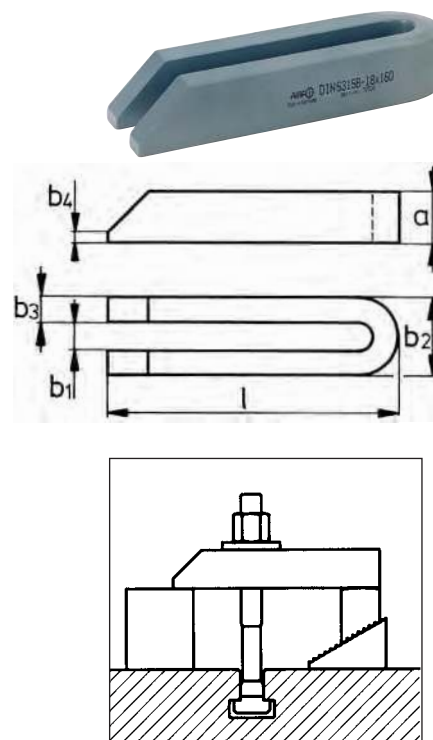


Design

Bevelled, heat-treated steel, painted.

27105

b ₁ mm	l mm	For screws	a mm	b ₂ mm	b ₃ mm	b ₄ mm	27105	...
6.6	60	M 6	12	19	6	3		201
9	80	M 8	15	25	8	4		202
11	100	M 10	20	31	10	5		203
14	125	M 12/M 14	25	38	12	6		204
14	160	M 12/M 14	25	38	12	6		205
14	200	M 12/M 14	25	38	12	6		206
18	160	M 16/M 18	30	48	15	8		207
18	200	M 16/M 18	30	48	15	8		208
18	250	M 16/M 18	40	48	15	10		209
22	200	M 20/M 22	40	52	15	10		210
22	250	M 20/M 22	40	62	20	10		211
22	315	M 20/M 22	40	62	20	10		212
22	500	M 20/M 22	50	62	20	10		213
26	200	M 24	40	66	20	10		214
26	250	M 24	40	66	20	10		215
26	315	M 24	40	66	20	10		216
26	500	M 24	50	66	20	10		217
33	250	M 30	50	74	20	12		218
33	315	M 30	50	74	20	12		219
33	400	M 30	50	74	20	12		220
33	600	M 30	50	74	20	12		221



27106

Fork clamps with lug

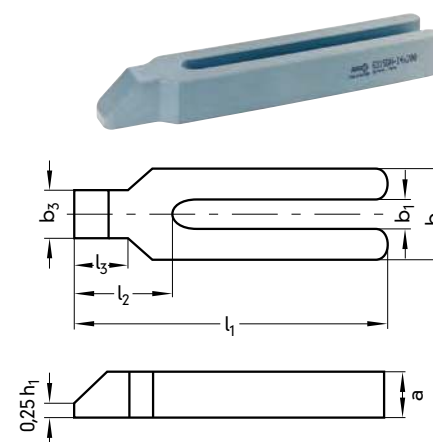


Design

With lug, heat-treated steel, painted.

27106

b ₁ mm	l ₁ mm	For screws	a mm	b ₂ mm	b ₃ mm	l ₂ mm	l ₃ mm	27106	...
9	100	M 8	15	30	16	32	18		101
11	125	M 10	20	30	20	38	24		102
14	160	M 12/M 14	25	40	24	47	30		103
14	200	M 12/M 14	25	40	24	47	30		104
18	200	M 16/M 18	30	50	28	57	36		105
18	250	M 16/M 18	30	50	28	57	36		106
22	250	M 20/M 22	40	60	35	68	45		107
22	315	M 20/M 22	40	60	35	68	45		108
26	250	M 24	40	70	43	83	56		109
26	315	M 24	40	70	43	83	56		110
33	315	M 30	50	80	50	88	56		111
33	400	M 30	50	80	50	88	56		112



27108

Fork clamps with round clamping attachment, DIN 6315 C



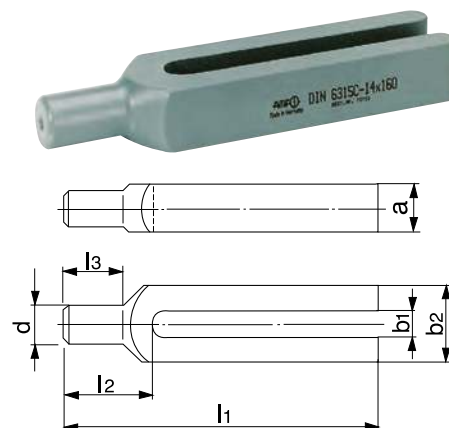
Design

With round clamping attachment.

Heat-treated steel, painted.

27108

b ₁ mm	l ₁ mm	For screws	a mm	b ₂ mm	d mm	l ₂ mm	l ₃ mm	27108	...
9	100	M 8	15	30	12	30	18		101
11	125	M 10	20	30	16	36	24		102
14	160	M 12/M 14	25	40	20	45	30		103
14	200	M 12/M 14	25	40	20	45	30		104
18	200	M 16/M 18	30	50	24	55	36		105
18	250	M 16/M 18	30	50	24	55	36		106
22	250	M 20/M 22	40	60	30	65	45		107
22	315	M 20/M 22	40	60	30	65	45		108
26	250	M 24	40	70	38	80	56		109





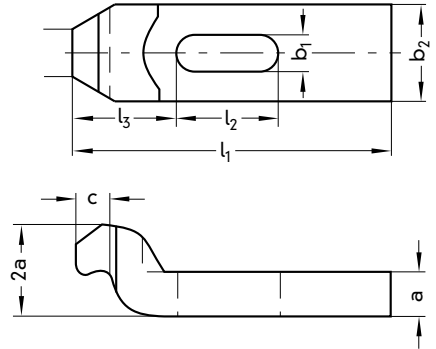
Design

Single depressed centre, heat-treated steel, painted.

() not to DIN.

27110

b ₁ mm	l ₁ mm	For screws	a mm	b ₂ mm	c mm	l ₃ mm	l ₂ mm	27110	...
6.6	60	M 6	10	20	8	22.0	20		101
9	80	M 8	12	25	9	27.5	25		102
11	100	M 10	15	30	12	36.0	32		103
14	125	M 12/M 14	20	40	16	44.0	40		104
18	125	M 16/M 18	25	50	20	51.5	40		105
18	160	M 16/M 18	25	50	20	51.5	50		106
22	160	M 20/M 22	30	60	24	59.0	55		107
22	200	M 20/M 22	30	60	24	59.0	70		108
26	200	M 24	(35)	70	25	76.5	60		109
26	250	M 24	(35)	70	25	76.5	80		110
33	250	M 30	40	80	40	96.0	80		111
33	315	M 30	50	80	40	96.0	100		112



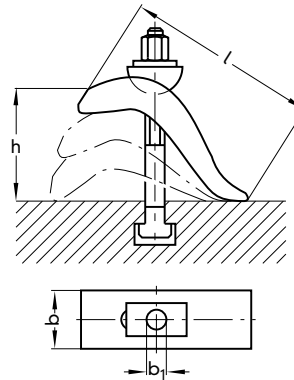
Design

Infinitely adjustable, steel, forged, tempered and zinc-plated. Strength class 8. With screws for T-groove to DIN 787 (8.8), nut and washer.

Applications

The infinitely variable adjustable clamps quickly span various clamping heights without additional support and require little space on the machine table.

27111



Nominal groove size	b ₁ mm	Screw Ø x length mm	Clamping height h mm	b x l mm	27111	...
12	17	M 12 x 125	0-50	50 x 140		101
14	17	M 12 x 125	0-50	50 x 140		102
16	17	M 16 x 160	0-75	50 x 140		103
18	17	M 16 x 160	0-75	50 x 140		104
22	21	M 20 x 200	0-85	60 x 175		107



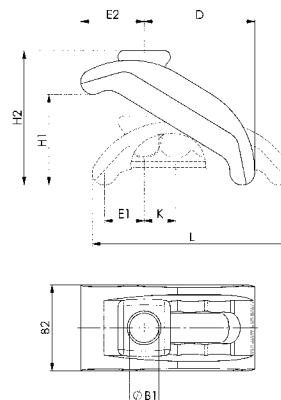
Design

With U-piece, infinitely adjustable, tempered, zinc-plated and blue passivated. **Without clamping screw.**

Note:

For detent clamp levers for clamps, see art. no. 27117.

27112



B1 mm	H1 mm	B2 x L mm	D mm	E1 mm	E2 mm	H2 mm	K mm	Suitable screws DIN 787 no. 27015	Suitable flanged nuts no. 27008	27112	...
13	0-35	38 x 88	48	23	28	30-55	14	12 M 12 x 100/14 M 12 x 100	M 12		101
18	0-55	56 x 130	74	29	38	42-84	18	16 M 16 x 160/18 M 16 x 160	M 16		102
22	0-65	66 x 140	80	32	46	50-100	20	20 M 20 x 200/22 M 20 x 200	M 20		103
26	0-75	76 x 174	100	39	52	54-111	24	24 M 24 x 200/28 M 24 x 200	M 24		104

27115

Adjustable clamps



Design

Straight, with adjustable support screw, screw for T-grooves to DIN 787 (8.8), nut and washer. Heat-treated steel, painted.

Applications

For low workpieces.

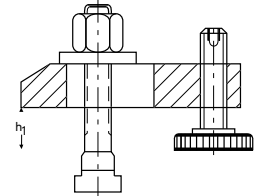
Note:

For detent clamp levers for clamps, see art. no. 27117.

Nominal groove size	Clamping range h, mm	Clamp dimensions see also no. 27101	T-groove screw DIN 787 no. 27015	Support screw	27115	...
10	8-32	11 x 80	10 M 10 x 80	M 10 x 39		101
12	10-40	14 x 100	12 M 12 x 100	M 12 x 49		102
14	10-38	14 x 100	14 M 12 x 100	M 12 x 49		103
16	13-48	18 x 125	16 M 16 x 125	M 16 x 55		104
18	13-46	18 x 125	18 M 16 x 125	M 16 x 55		105
20	16-65	22 x 160	20 M 20 x 160	M 20 x 69		106
22	16-65	22 x 160	22 M 20 x 160	M 20 x 69		107



27115



27116

Adjustable clamps, depressed centre



Design

Depressed centre, with adjustable support screw, screw for T-grooves to DIN 787 (8.8), nut and washer. Heat-treated steel, painted.

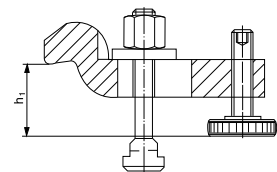
Note:

For detent clamp levers for clamps, see art. no. 27117.

Nominal groove size	Clamping range h, mm	Clamp dimensions see also no. 27101	T-groove screw DIN 787 no. 27015	Support screw	27116	...
10	22-46	11 x 100	10 M 10 x 80	M 10 x 39		101
12	28-58	14 x 125	12 M 12 x 100	M 12 x 49		102
14	28-56	14 x 125	14 M 12 x 100	M 12 x 49		103
16	36-71	18 x 160	16 M 16 x 125	M 16 x 55		104
18	36-69	18 x 160	18 M 16 x 125	M 16 x 55		105
20	43-92	22 x 200	20 M 20 x 160	M 20 x 69		106
22	43-92	22 x 200	22 M 20 x 160	M 20 x 69		107



27116



27118

Adjustable clamps, recessed

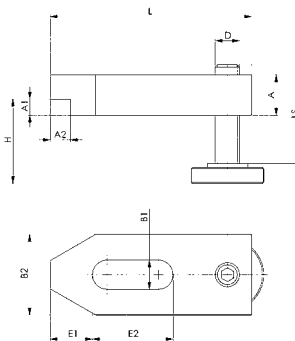


Design

Recessed, with adjustable support screw. Clamps without support screws are of one size for sizes 12 and 14, sizes 16 and 18, and sizes 20 and 22. Heat-treated steel, painted.

Note:

Supplied without clamping screw.
For detent clamp levers for clamps, see art. no. 27117.



27118

Nominal groove size	Clamping range H mm	Clamp B1 x L mm see also no. 27101	Support screw D x LS mm	A mm	A1 x A2 mm	B2 mm	E1 mm	E2 mm	27118	...
12 + 14	10-55	14 x 100	M 12 x 49	20	8 x 10.0	40	40	40		101
16 + 18	13-62	18 x 125	M 16 x 55	25	10 x 12.5	50	45	45		102
20 + 22	16-77	22 x 160	M 20 x 69	30	12 x 15.0	60	60	60		103

27117

Detent clamp levers



Design

Steel, bronzed. Thread on the clamp lever
M 12 suitable for nominal groove size 12 and 14,
M 16 suitable for nominal groove size 16 and 18.

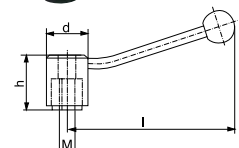
Applications

For clamps and adjustable clamps art. no. 27112-27116 + 27118.

Size	l mm	d mm	h mm	27117	...
M 12	135	33	48		101
M 16	158	40	64		102



27117



27123

Clamping tool assortment box sets



Design

With deep clamping jaws and screw paste. The clamping tool assortment boxes are designed for machine tools with T-groove tables and contain all necessary elements for fast clamping of tools, jigs or workpieces. All parts are made from heat-treated steel to DIN or factory standards. Strength class for screw parts: 8 or 10. The wooden box has a removable hinged lid.

Note:

The deep clamping jaws are supplied with nuts for T-grooves to DIN 508, screws to DIN 912 and 2 hexagonal screwdrivers to DIN 911. All parts are also deliverable individually.

27123



Nominal groove size x thread	T 10 x M 10	T 12 x M 12	T 14 x M 12	T 18 x M 16
Clamping height, 2 times	2 – 230	2 – 270	2 – 270	2 – 270
or 4 times	2 – 140	2 – 160	2 – 160	2 – 160
Set contents:	Art. no. 27123 101	Art. no. 27123 102	Art. no. 27123 103	Art. no. 27123 105
Each of the 4 clamping supports	Sizes 1 + 2	Sizes 2 + 3	Sizes 2 + 3	Sizes 2 + 3
Each of the 2 clamping supports	Size 3	-	-	-
4 clamps	M 11 x 80	M 14 x 100	M 14 x 100	M 18 x 125
Each of the 4 T-groove screws	M 10 x 63/M 10 x 100	M 12 x 80/M 12 x 125	M 12 x 80/M 12 x 125	M 16 x 100/M 16 x 160
Each of the 2 T-groove screws	M 10 x 40	M 12 x 50	M 12 x 50	M 16 x 63
4 studs	M 10 x 80	M 12 x 100	M 12 x 100	M 16 x 125
6 high nuts	M 10	M 12	M 12	M 16
4 extension nuts	M 10	M 12	M 12	M 16
6 conical washers	M 10	M 12	M 12	M 16
4 deep clamping jaws	Groove 12	Groove 12	Groove 14	Groove 18
1 groove scraper	-	-	14–20	14–20
1 open-ended wrench	16 x 16	18 x 18	18 x 18	24 x 24
1 screw paste	1	1	1	1

Nominal groove size x thread	27123	...	27123	...	27123	...	27123	...
T 10 x M 10		101						
T 12 x M 12			102					
T 14 x M 12					103			
T 18 x M 16							105	

27124

Universal clamping support set



Design

Heat-treated steel, painted.

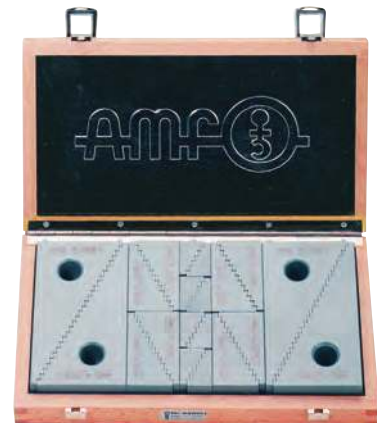
Contents:

4 pairs each of sizes 1 and 2,
2 pairs of size 3,
in the wooden box.

Applications

Can be used horizontally and vertically, step height:
4.65 mm vertically, 2.3 mm horizontally.

27124



	27124	...
		101

27125

Universal clamping supports



Design

Heat-treated steel, painted. Individual.

Applications

Can be used horizontally and vertically. Step height:
4.65 mm vertically, 2.3 mm horizontally.

Note:

The universal clamping supports can be combined
in pairs with all clamps art. no. 27101, 27105–27110
and individually with the toothed clamps art. no.
27103.

27125

Size	Height x width x thickness mm	Support height min. mm	Support height max. mm	27125	...
1	33 x 19.0 x 30	23	51		101
2	66 x 35.5 x 30	39	107		102
3	131 x 68.0 x 30	71	208		103



27135

Screw jacks



Design

With flat support, centring hole Ø 12 mm, self-locking trapezoidal thread, with end protection. Lower part and spindle in heat-treated steel, painted.

Note:

Aluminium and magnetic screw jacks deliverable on request. For aligning attachments see art. no. 27145.

27135 201

Lightweight screw jack without centring hole.

27135 202-204

Medium-weight screw jacks.

27135 205-207

Heavy screw jacks.

Applications

For alignment and support.

27135 208

Extra-heavy screw jack.

Applications

To support large workpieces.

Size	Adjustment height mm	Head Ø mm	Lower part Ø mm	Load capacity kN	For clamp slot width mm	27135	...
50	38-50	31	31	25	Up to 14		201
52	42-52	50	50	100	14-22		202
70	50-70	50	50	100	14-22		203
100	70-100	50	50	100	14-22		204
140	100-140	68	68	120	20-40		205
210	140-210	70	80	170	20-40		206
300	190-300	80	100	350	20-40		207
200	140-200	80	100	350	20-40		208



27135

27138

Atlas screw jacks

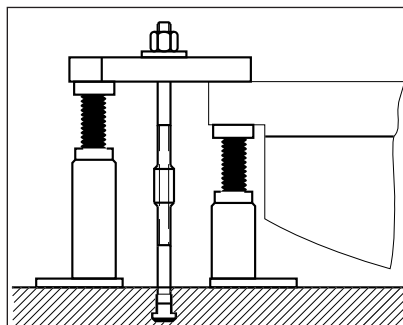


Design

- With lock nut
- Centring hole Ø 12 mm
- Spindle complete: Heat-treated steel, with trapezoidal thread
- Spindle head painted
- Basic body: Grey cast iron, painted

Note:

Heavy screw jacks with locking screw, aligning and support jacks deliverable on request. For aligning attachments see art. no. 27145. When using clamps art. no. 27105, 27108 and 27106 109-112, for safety reasons we recommend the fixing attachment (art. no. 27145 103-104).



Size	Adjustment height mm	Base plate mm	Load capacity kN	27138	...
140	100-140	75 x 110	60		101
200	140-200	75 x 110	60		102
320	200-320	90 x 160	40		103
550	320-550	90 x 160	25		104



27138

27140

Alignment wedges, HERKULES (height wedge)



Design

Centring hole Ø 12 mm. A ball attachment (art. no. 27145 101) is included with each alignment wedge.

Applications

The alignment wedge can be easily adjusted with normal manual force even at a load of 1/3 F max. The finely machined wedge surfaces allow smooth, sensitive adjustment with a precision of more than 1/10 mm, using either a knurled thumb screw or a hexagon screwdriver. The double wedge effect results in a large stroke and precise vertical movement without lateral displacement.

Quality

Spheroidal graphite iron and tempered steel annealed with a burnished finish. Wedge surface finely machined.

Note:

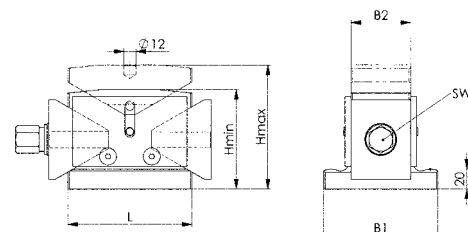
*H/R mm = height adjustment per revolution.
For aligning attachments see art. no. 27145 101, 102 + 106.

Size	H min. mm	H max. mm	B1 mm	B2 mm	L mm	AF mm	H/R* mm	F max. kN	27140	...
63	50	63	40	40	63	13	0.86	40		101
125	100	125	115	60	125	24	1.16	100		102



27140 101

27140 102



27145

Aligning attachments for screw jacks



Design

Tempered steel, annealed with a burnished finish.

Applications

For screw jacks art. no. 27135–27140.

27145 101

Ball attachment.

27145 102

Prism attachment.

27145 103-104

Fixing attachments for fork clamps.

27145 105

With rotating ball, hardened.

27145 106

Centring plate

For mounting multiple screw jacks.

27145 107

Aligning screw jack

Design

With rotating ball, hardened.

Applications

Particularly suitable for supporting and aligning free-form surfaces. The calibration accuracy is approx. 0.1 mm.

27145 101



27145 102



27145 103-104



27145 105



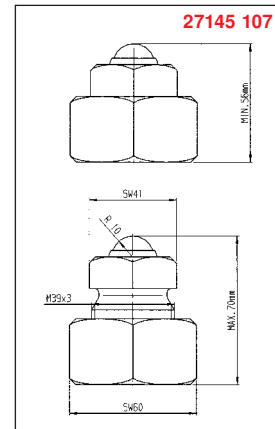
27145 106



27145 107



	Outer Ø mm	Pin Ø mm	Load capacity kN	27145	...
Ball attachment	37	-	-		101
Prism attachment	45	-	-		102
Fixing attachment	-	14	-		103
Fixing attachment	-	25	-		104
Attachment with ball	-	-	30		105
Centring plate	50	-	-		106
Aligning screw jack	-	-	30		107



27210

Deep clamping jaws, Bulle



Design

- Paired

- Heat-treated steel, hardened and annealed with a burnished finish
- Includes fastening screws to ISO 4762, 10.9. Sliding blocks to DIN 508 and hexagon screwdriver to ISO 2936

Applications

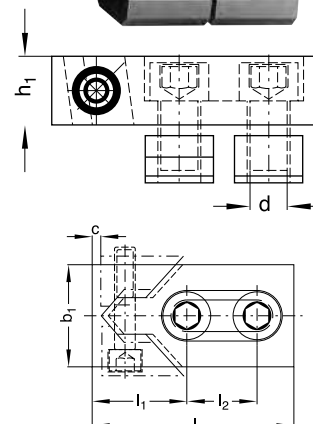
For clamping low plates.

Note:

Tightening the lateral screw on the loose jaws securely clamps the workpiece forwards and downwards simultaneously via the wedge effect. No protruding clamping screws!



27210



Nominal groove size	c mm	h1 mm	b1 mm	l mm	l1 mm	l2 mm	d mm	F1 kN	F2 kN	27210	...
12	3	20	40	80	39	26	M 10	16	0.6		101
14	3	20	40	80	39	26	M 12	22	0.9		102
16	3	20	40	80	39	26	M 12	22	0.9		103
16	4	25	50	100	46	34	M 14	32	1.2		104
18	4	25	50	100	46	34	M 16	36	1.4		105
20	4	25	50	100	46	34	M 16	36	1.4		106
22	5	30	78	140	65	50	M 20	36	1.4		107
24	5	30	78	140	65	50	M 20	36	1.4		108
28	5	30	78	140	65	50	M 24	40	1.6		109

27212

Flat clamps, Mini-Bulle



Design

- Paired

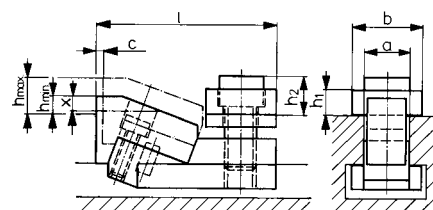
- Heat-treated steel, hardened and annealed with a burnished finish
- Includes fastening screws to ISO 4762, 8.8 and hexagon screwdriver to ISO 2936

Applications

Inserted directly into the T-groove of the machine table, for clamping particularly low workpieces. The wedge effect clamps the workpiece firmly and securely onto the machine table. The clamping piece can be ground down by x mm to create low clamping heights with minimum groove depth.



27212



Nominal groove size	c mm	h min.	h max.	x mm	l max.	b mm	h1 mm	h2 mm	F1 kN	F2 kN	27212	...
12	1.8	2.5	13.5	5	52	18	7	11	5.0	0.6		101
14	1.8	1.5	13.5	5	55	22	8	11	5.5	0.7		102
16	2.5	2.5	17.0	6	68	25	9	15	8.0	0.9		103
18	2.5	1.5	16.0	6	71	28	10	15	9.0	1.0		104
22	3.0	4.5	21.5	9	89	35	14	20	16.0	1.9		105

**Design****Reversible clamping jaws,**

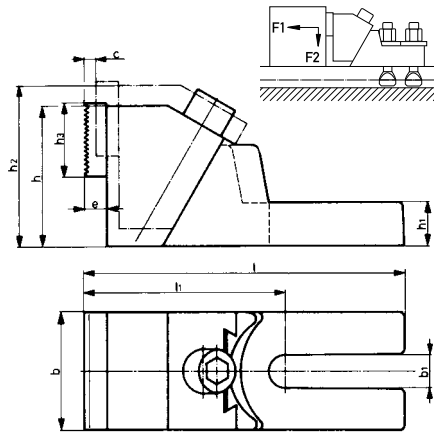
tall design with precise V-guide.

Basic body: Malleable iron.

Clamping jaw: Case-hardening steel, case-hardened. Reversible clamping jaws, with smooth side for machined workpieces and serrated side for unfinished clamping surfaces.

Applications

The large clamping surface makes these sturdy clamping jaws suitable for lateral clamping of tall workpieces. We recommend the use of 2 clamping screws to fix the clamping jaw on the machine table. Depending on the groove width, 2 pieces per clamping jaw (art. no. 27015) are required as fastening screws for T-grooves to DIN 787.



27213



For nominal groove size	b ₁ mm	c mm	h mm	h ₁ mm	h ₂ mm	h ₃ mm	b mm	l mm	l ₁ mm	e mm	F1 kN	F2 kN	27213	...
12-18	19	8	85	38	85-99	40	65	179	112.5	12	8-28	1.2-4.2	101	
20-30	26	11	100	45	100-118	40	75	230	138.5	12	25-36	4.5-5.4	102	
32-42	38	15	120	56	120-145	40	90	265	158.0	12	50	7.5	103	

Design

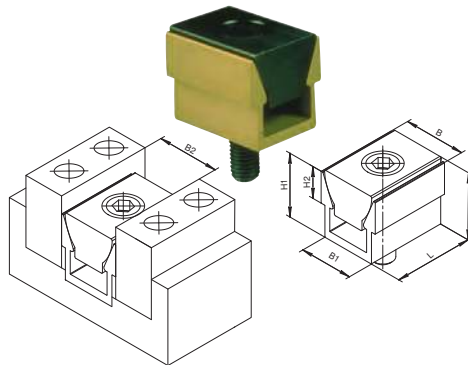
A simple idea for an ingenious solution.

Two workpieces are clamped simultaneously with one clamping element.

- Space-saving multiple clamping reduces non-productive time and thus unit costs
- Cost-effective clamping device
- For circular and rectangular parts
- Clamping force up to 27 kN

Comprising:

Aluminium profile and double wedge made from hardened case-hardening steel.



27217

Clamping force kN	Tightening torque Nm	Screw mm	Allen key mm	B mm	H mm	H ₁ mm	L mm	B ₁ mm	H ₂ mm	B ₂ mm	Pack = Pieces	27217	...
2.2	3.4	M 4	3	12.3	14.5	12.70	15.9	10.4	5.6	12.7	8	101	
6.7	14.3	M 6	5	18.6	19.0	19.05	23.8	16.1	9.5	19.0	6	102	
8.9	14.5	M 8	6	24.8	25.9	25.40	31.7	20.8	12.7	25.4	4	103	
15.6	38.4	M 12	10	37.3	38.6	38.10	47.6	30.8	19.0	38.1	2	104	
26.7	74.6	M 16	14	49.7	51.5	50.80	63.5	41.2	25.4	50.8	2	105	

Design

Double wedge clamping device with extra-wide jaws. Appropriate milled recesses enable workpieces to be clamped via a form fit, and thus absolutely safely and free from distortion. Space-saving design and simultaneous clamping of 2 workpieces, meaning that more parts can be clamped on the machine. Low non-productive times and low clamping device costs increase the profitability of production.

Comprising:

Double wedge made of hardened case-hardening steel, extruded aluminium profile, clamping screw, locking plate for locking the clamping element during form milling.

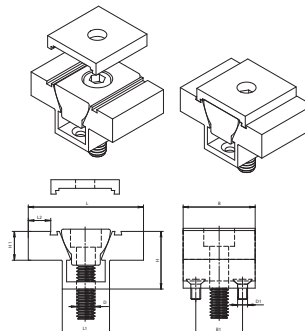
Applications

Workpiece clamping on milling machines, drills and machining centres.

Note:

A is the distance between the workpieces.

The tapped hole for l should be exactly in the centre of A. F is the dimension available for milling.



27219



Clamping force kN	Tightening torque Nm	L mm	H mm	B mm	B ₁ mm	L ₁ mm	H ₁ mm	D ₁ mm	D mm	Pack = pieces	27219	...
2.2	3.4	28.6	12.7	15.7	4.6	10.67	6.3	M 2	M 4	1	101	
6.7	14.3	38.1	19.1	23.9	6.6	16.05	9.4	M 4	M 6	1	102	
8.9	14.5	50.8	25.4	31.8	9.9	20.83	12.7	M 4	M 8	1	103	
15.6	38.4	76.2	38.1	47.5	15.7	30.86	19.1	M 5	M 12	1	104	
26.7	74.6	101.6	50.8	63.5	20.3	41.28	25.4	M 6	M 16	1	105	

27222

Eccentric tensioning clamps for jigs

Design

The patent for the clamping device relates to the screw with the eccentric head. The eccentric fitting causes the clamping movement and the clamping force (up to 27 kN). The hexagonal brass washer serves as the clamping piece. A workpiece of any shape can be clamped with stop pins and one or two clamping screws.

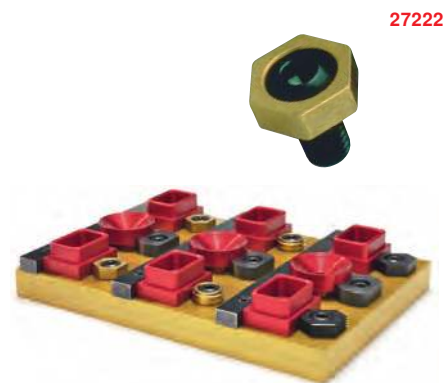
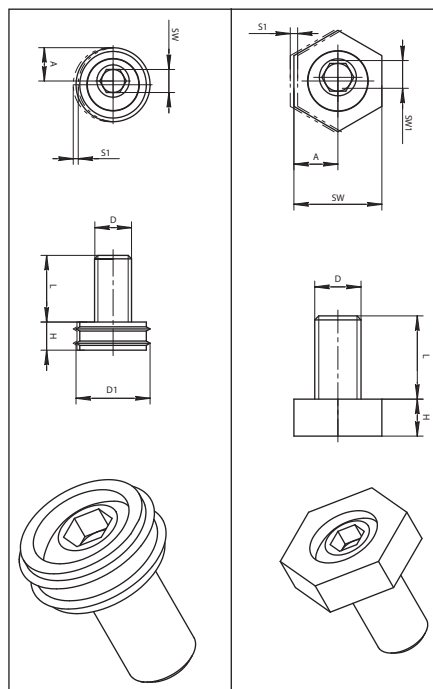
- The low overall height enables easy machining of the workpiece surface
- When programming the CNC, it is not necessary to consider the position of the adjustable clamps
- Space-saving multiple clamping due to the small dimensions

Applications

For jig plates.

Note:

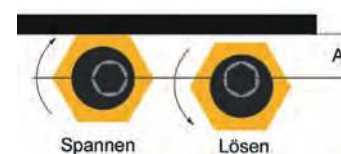
For spare screws and hexagonal washers, see art. no. 27225–27226.



27222

Dimension A = distance between the workpiece and the centre of the hole

M 4 = 3.8 mm	M 10 = 10.2 mm
M 6 = 7.8 mm	M 12 = 12.7 mm
M 8 = 10.2 mm	M 16 = 15.0 mm



Clamping force kN	Hexagon socket AF1 (mm)	Thread D	Thread length L (mm)	Hex washer AF (mm)	Washer height H (mm)	Eccentric travel S1 (mm)	Pack = pieces	27222	...
3.4	4	M 6	12	16	4.8	1.3	10	102	
3.6	5	M 8	12	20	4.8	1.0	12	103	
9.0	7	M 10	16	20	6.4	1.6	10	104	
18.0	8	M 12	20	25	9.5	2.0	8	105	
27.0	12	M 16	30	30	12.7	2.5	4	106	

27225 - 27226

Spare screws/hexagonal washers

27225

Spare screws

Applications

For art. no. 27222.

27226

Spare hexagonal washers

Applications

For art. no. 27222.

27225

27226



Thread	Pack = Unit	27225	...	27226	...
M 6	1	202		202	
M 8	1	204		204	
M 10	1	205		205	
M 12	1	206		206	
M 16	1	207		207	

27230

Eccentric clamping screws for T-grooves

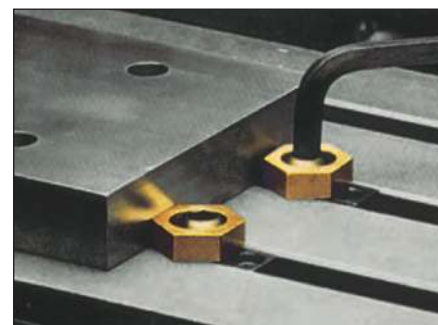
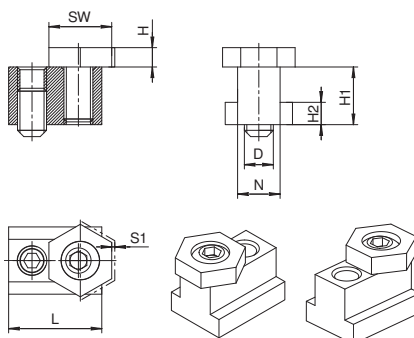
Design

Connecting the standard clamping elements with eccentric screws (with brass hexagon) and a sliding block enables cost-effective clamping of workpieces on machine tables or clamping plates with T-grooves. The T-sliding block is locked in the T-groove with a screw.

- Low overall height; even flat parts can be machined on the surface
- Fast adaptation to different workpiece sizes and parts of any shape. No right-angled side surface necessary
- Clamping force up to 18 kN

Scope of delivery:

With brass washer and sliding block.



27230

For T-groove N (mm)	Clamping force kN	Hexagon socket AF1 (mm)	Thread D (mm)	Washer AF (mm)	Washer height H (mm)	Eccentric travel S1 (mm)	Pack = pieces	27230	...
10	3.4	4	M 6	16	4.8	1.0	2	102	
10	3.6	5	M 8	21	4.8	1.0	2	103	
14	9.0	7	M 10	21	6.4	1.6	2	104	
16	18.0	8	M 12	25	9.5	2.0	2	105	
18	18.0	8	M 12	25	9.5	2.0	2	106	

27233

Mechanical clamping mandrels

Design

- For through-bores
- Mechanical clamping device

Advantage:

- Easy to mill and turn to the required clamping diameter
- High clamping forces
- 5-sided machining even of thin-walled parts
- Warp-free clamping
- For clamping complex workpiece contours
- Easy to operate
- No annoying adjustable clamps

Applications

Clamping elements for multiple or series machining.

Scope of delivery:

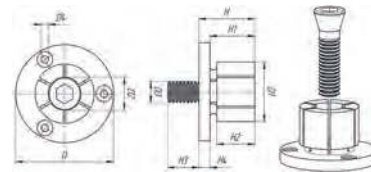
- Clamping mandrel with hardened and coated clamping screw
- 3 fastening screws

Note:

Other sizes deliverable on request.

F = nominal diameter

G = smallest machining diameter



27233



Clamping Ø F max. mm	Clamping Ø G min. mm	Total height A mm	Clamping height B mm	Clamping height C mm	Clamping step D mm	Outer Ø E mm	Mounting screw H	Reference circle	Clamping screw I	Gripping force kN	27233	...
12.4	7.2	21.8	16.0	15.0	5.9	29.7	M 3	21.0	M 4	4.2		101
14.2	12.2	24.9	19.0	15.0	5.9	31.5	M 3	23.1	M 6	8.5		102
20.0	13.5	24.9	19.0	15.0	5.9	37.5	M 3	29.0	M 8	11.1		103
27.0	18.0	28.6	22.2	17.5	6.4	50.0	M 4	39.4	M 10	20.0		104
35.3	25.4	31.8	25.4	20.6	6.4	56.0	M 4	45.5	M 12	26.3		105
42.0	30.0	39.6	31.8	27.0	7.9	69.5	M 5	55.9	M 16	44.5		106
51.0	30.0	39.6	31.8	27.0	7.9	75.5	M 5	63.9	M 16	44.5		107
77.0	30.0	45.5	37.6	32.3	7.9	107.5	M 5	92.5	M 16	44.5		108

27234

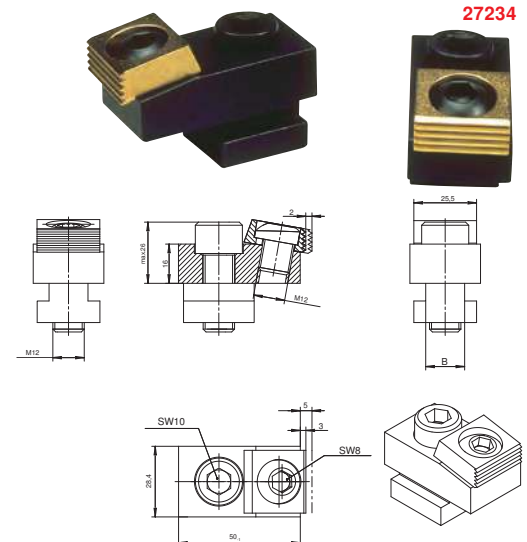
Mini pull-down adjustable clamps

Design

Body and clamping discs case-hardened. Clamping disc with smooth edge for machined parts; opposite edge serrated for blanks. Eccentric clamping screws M 12 for clamping force 18 kN.

Applications

The pull-down effect presses the workpiece onto the support. The clamping disc adapts to the angular position of the workpiece, i.e. the workpiece does not have to be rectangular. For T-grooves measuring 14, 16 and 18 mm and for direct mounting on the jig plate.



27234

T-groove mm	27234	...
14		102
16		103
18		104
Without T-sliding block		105

27242

Clamping film, Power-Grip

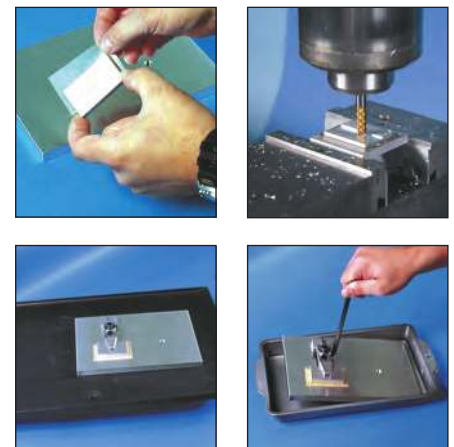
Design

POWER-GRIP is a special composite embedded in a 0.0125 mm-thick retaining medium. This exact retaining medium is a precise workpiece support and guarantees the parallelism of your workpieces. The retention force (30–100 N/cm², depending on the type of support surface) allows the machining of parts that are thin or difficult to clamp, and enables 5-sided machining without the use of a tensioning clamp. POWER-GRIP is also often used to reinforce thin workpiece walls during machining. POWER-GRIP can then be easily removed from the workpiece by heating. POWER-GRIP can be used with steel, non-ferrous metals, glass, wood, most plastics and many other materials. It contains no harmful chemicals. Supplied with operating instructions.

Applications

For clamping unstable parts that otherwise cannot be clamped due to their shape or lack of magnetic properties. POWER-GRIP reduces your equipment costs, solves your problems with difficult parts and is ideal for small series.

27242



Roll mm	27242	...
300 x 1500		101

27313

Vertical clamp

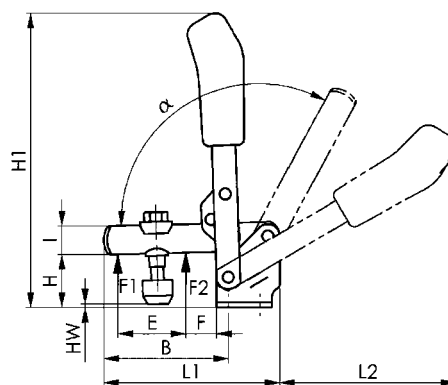
Design

- With open retaining arm and horizontal base
- Zinc-plated and passivated
- Stainless steel rivets; sizes 2 to 5 in case-hardened bearing bushes
- Bearing positions greased
- Ergonomic, oil-resistant handle with large hand rest and soft component
- Safety clamping piece with finger protection
- Protection against loss of the pressure screw at the end of the clamping arm
- Includes tempered, zinc-plated pressure screw

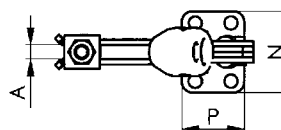
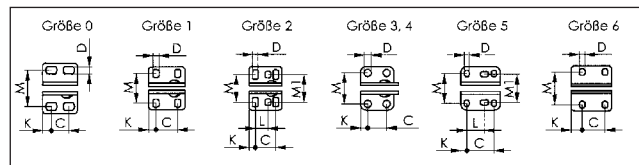
Note:

For cross arms see art. no. 27345.

Sizes 0-4 also deliverable in stainless steel.



27313



Size	A	B	C	D	E	F	H	H1	HW	HW	I	L	L1	L2	M	M1	N	P
	mm	mm	mm	mm	mm	mm	mm	mm	min. mm	max. mm	mm	mm	mm	mm	mm	mm	mm	mm
0	4	31.0	8.5-13.5	4.5	14	5.5	18.0	81.0	-1.5	3.5	8	-	49	50	23.0	-	32	22
1	5	39.0	16.0	4.5	18	6.0	19.0	98.5	-4.0	2.0	10	-	61	59	22.5-26.0	-	34	27
2	6	52.0	20.0	5.5	25	11.0	23.0	139.5	-3.0	4.5	12	12.5	78	89	23.0-31.0	27	43	32
3	8	79.0	20.0	7.5	37	19.0	33.0	186.0	2.0	11.0	18	-	112	112	32.5	-	46	35
4	10	101.0	32.0	8.6	54	16.0	42.5	221.0	-6.0	22.5	20	-	141	130	43.5-46.5	-	64	53
5	14	140.0	45.0	8.5	73	34.0	55.8	281.0	-3.0	27.5	25	26.5-31.5	195	185	45.0-50.0	45	70	65

Size	Compressive force F1	Compressive force F2	Alpha	Pressure screw	Weight	27313	...
	kN	kN	angle		g		
0	0.5	0.7	95	M4 x 25	60		101
1	0.6	1.1	95	M5 x 30	105		102
2	0.8	1.2	105	M6 x 35	175		103
3	1.2	2.5	105	M8 x 45	410		104
4	1.7	3.0	105	M8 x 65	630		105
5	3.0	5.0	115	M12 x 80	1480		106

27315

Vertical clamp

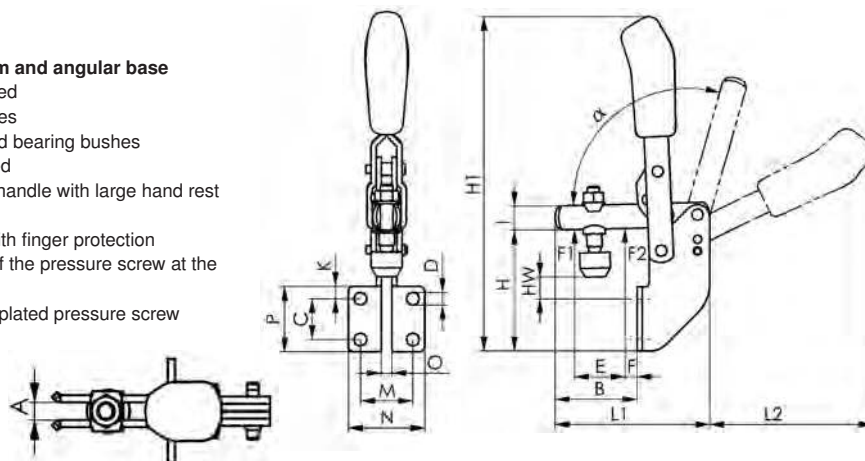


Design

- With open retaining arm and angular base
- Zinc-plated and passivated
- Stainless steel rivets; sizes 2 and 3 in case-hardened bearing bushes
- Bearing positions greased
- Ergonomic, oil-resistant handle with large hand rest and soft component
- Safety clamping piece with finger protection
- Protection against loss of the pressure screw at the end of the clamping arm
- Includes tempered, zinc-plated pressure screw

Note:

All sizes also deliverable in stainless steel.



27315



Size	A	B	C	D	E	F	H	H1	HW	HW	K	I	L1	L2	M	N	O	P	Alpha
	mm	mm	mm	mm	mm	mm	mm	mm	min. mm	max. mm	mm	mm	mm	mm	mm	mm	mm	mm	angle
1	5	34.5	14	4.5	18	7	45	125	2.5	9.0	10	10	61	58	20.0	30.0	5	30	98
2	6	41.0	20	6.1	25	6	60	167	7.5	15.5	6	12	77	81	25.5	37.0	5	32	105
3	8	63.0	24	6.5	37	11	71	223	9.0	17.5	7	18	111	112	28.5	42.5	6	38	105

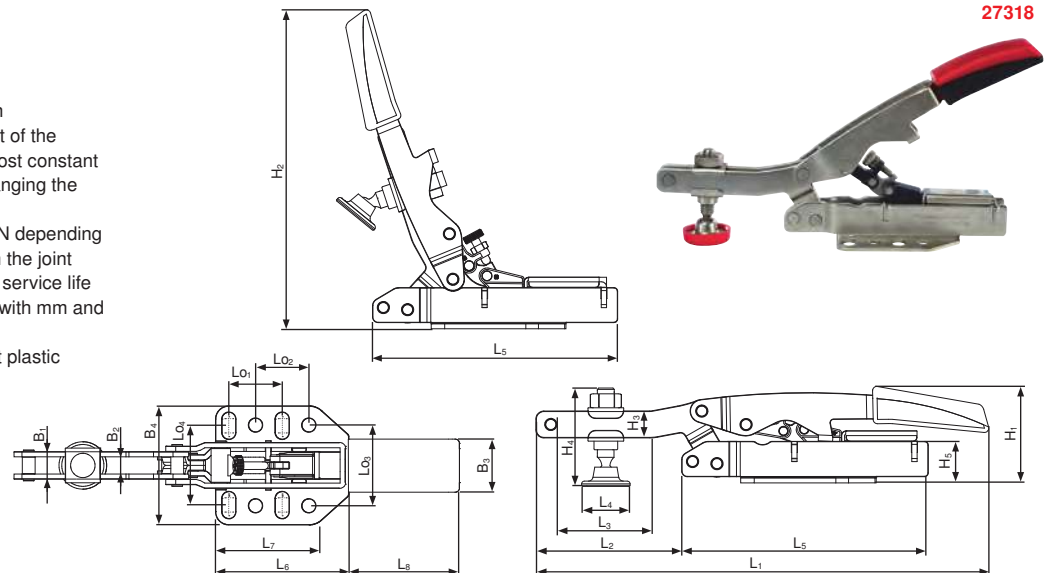
Size	Compressive force F1	Compressive force F2	Pressure screw	Weight	27315	...
	kN	kN		g		
1	0.8	1.1	M5 x 30	125		101
2	1.0	1.2	M6 x 35	220		102
3	1.4	2.5	M8 x 45	400		103



Einfach besser.

Design

- Lever is horizontal in clamping position
- Infinitely variable automatic adjustment of the clamping height up to 35 mm with almost constant clamping force – without manually changing the position of the pressure screw
- Adjustable clamping force up to 2500 N depending on the setting of the adjusting screw in the joint
- Sturdy, tempered steel sheets for long service life
- Hole pattern of base plate compatible with mm and inch
- High-quality, oil-resistant 2-component plastic handle



27318

Type	B1 mm	B2 mm	B3 mm	B4 mm	H1 mm	H2 mm	H3 mm	H4 mm	H5 mm	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	L6 mm	L7 mm	L8 mm	Lo1 mm	Lo2 mm	Lo3 mm	Lo4 mm
STC-HH50	13	8	32	60	47	158	14	50	27	217	77	40	23	113	53	38	72	25.4	25.4	38	33–48
STC-HH70	13	8	32	60	64	175	14	68	44	217	77	40	23	113	53	38	72	25.4	25.4	38	33–48

Type	Clamping width mm	Hole Ø mm	Weight g	27318	...
STC-HH50	0–40	6.5	380		301
STC-HH70	0–65	6.5	420		302



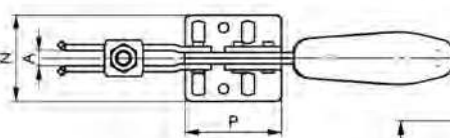
Design

- With open retaining arm and horizontal base
- Zinc-plated and passivated
- Stainless steel rivets; sizes 2 to 5 in case-hardened bearing bushes
- Bearing positions greased
- Ergonomic, oil-resistant handle with large hand rest and soft component
- Protection against loss of the pressure screw at the end of the clamping arm
- Includes tempered, zinc-plated pressure screw

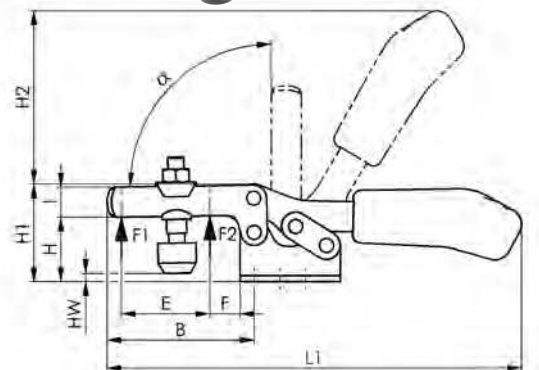
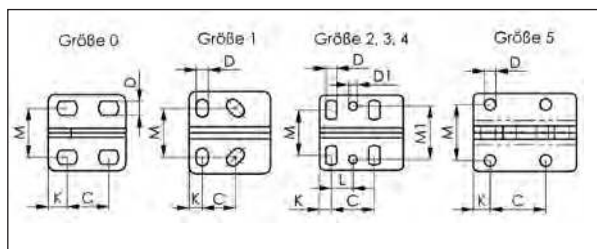
Note:

For cross arms see art. no. 27345.

All sizes also deliverable in stainless steel.



27317



Size	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	H mm	H1 mm	H2 mm	HW min. mm	HW max. mm	K mm	L mm	I mm	L1 mm	M mm	M1 mm	N mm	P mm
0	4	28.0	11.5–15.5	4.6	-	9.0	5.5	14.5	23.0	34	-5.5	0.0	6.3	-	7.5	79	16.0	-	25.0	25.5
1	5	42.0	13.0–14.5	5.2	-	18.7	8.0	19.0	30.0	49	-3.0	2.5	5.5	-	10.0	120	18.0–21.5	-	34.0	34.0
2	6	64.0	26.0	5.6	5.6	32.0	16.0	24.0	45.0	68	-1.5	5.0	6.0	12.7	13.2	162	19.5–29.5	28.5	42.0	38.0
3	8	73.0	25.7	6.5	5.1	38.0	14.0	32.0	48.5	86	-2.0	9.0	7.0	13.0	15.0	206	22.0–31.8	31.6	45.5	50.0
4	10	113.0	41.0	8.5	8.5	63.0	27.0	45.0	75.0	126	-4.0	24.0	8.0	20.5	20.0	287	29.0–43.0	43.0	58.0	57.0
5	10	123.0	41.5	8.5	-	78.0	16.0	46.0	73.0	128	+1.7	25.0	12.5	-	25.0	321	41.5	-	58.0	77.0

Size	Compressive force F1 kN	Compressive force F2 kN	Alpha angle	Pressure screw	Weight g	27317	...
0	0.25	0.4	90	M4 x 25	35		101
1	0.8	1.1	90	M5 x 30	105		102
2	1.0	1.2	90	M6 x 35	185		103
3	1.8	2.5	90	M8 x 45	320		104
4	2.0	3.0	90	M8 x 65	700		105
5	3.0	5.0	90	M8 x 65	1080		106

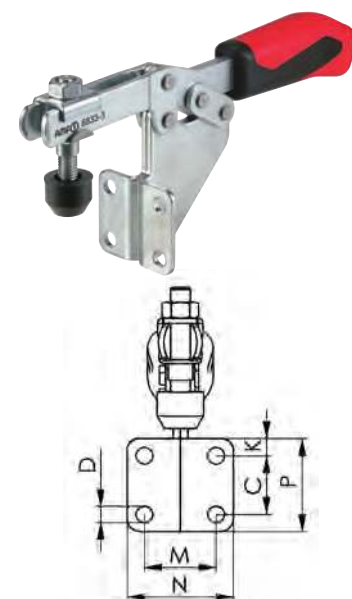
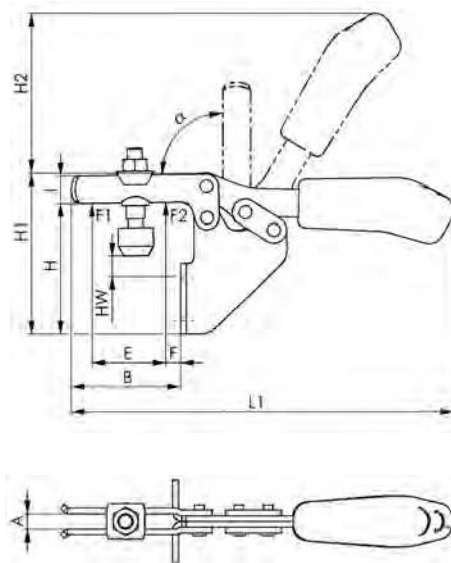
27319

Horizontal clamp



Design

- With open retaining arm and angular base
- Zinc-plated and passivated
- Stainless steel rivets in case-hardened bearing bushes
- Bearing positions greased
- Ergonomic, oil-resistant handle with large hand rest and soft component
- Protection against loss of the pressure screw at the end of the clamping arm
- Includes tempered, zinc-plated pressure screw



27319

Size	A mm	B mm	C mm	D mm	E mm	F mm	H mm	H1 mm	H2 mm	HW min. mm	HW max. mm	K mm	I mm	L1 mm	M mm	N mm	P mm	Alpha angle
2	6.2	52	20	5.6	32	10.5	73	94.0	68	22	29.5	6	13.2	162	25.5	37.0	32	90
3	8.0	59	24	6.8	37	6.5	70	86.5	86	5	16.0	7	15.0	206	28.5	42.5	38	90

Size	Compressive force F1 kN	Compressive force F2 kN	Pressure screw	Weight g	27319	...
2	1.0	1.2	M6 x 35	245		101
3	1.8	2.5	M8 x 45	390		102

27345

Cross arms for quick-action clamps



Design

- Zinc-plated and passivated
- Includes two tempered pressure screws and fastening screw

Applications

For item no. 27313, 27315, 27317 and 27319.



27345

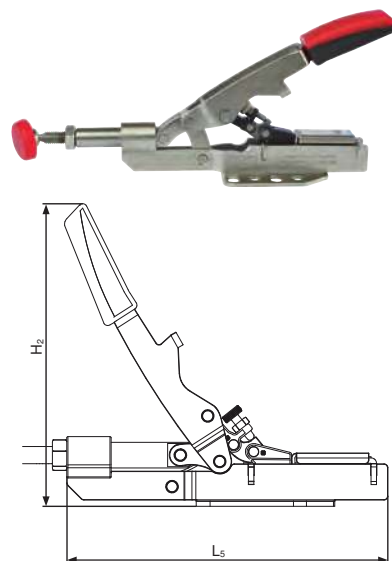
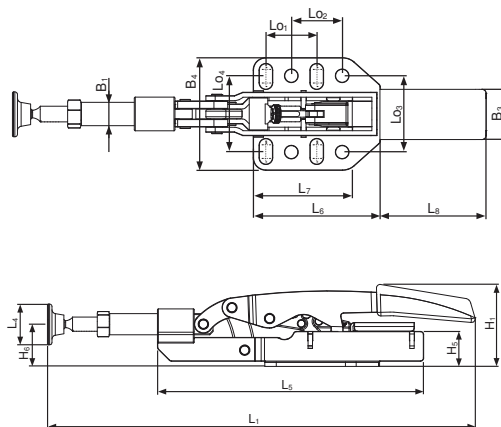
Size	Screw DIN 933	Clamping width mm	Length mm	Weight g	27345	...
0	M4 x 25	18-60	70	40		101
1	M5 x 30	22-72	85	65		102
2	M6 x 35	28-85	100	90		103
3	M8 x 45	34-100	120	200		104

Size	Screw DIN 933	Clamping width mm	Length mm	Weight g	27345	...
4	M8 x 65	40-125	150	370		105
5	M8 x 65	40-125	150	370		106
6	M12 x 80	54-200	240	985		107



Design

- Movement of the lever is converted into an axial movement of the push rod
- Infinitely variable automatic adjustment of the clamping width up to 13 mm with almost constant clamping force, without manually changing the position of the pressure screw
- Adjustable clamping force up to 2500 N depending on the setting of the adjusting screw in the joint
- Sturdy, tempered metal sheets for long service life
- Hole pattern of base plate compatible with mm and inch
- High-quality, oil-resistant 2-component plastic handle



27329

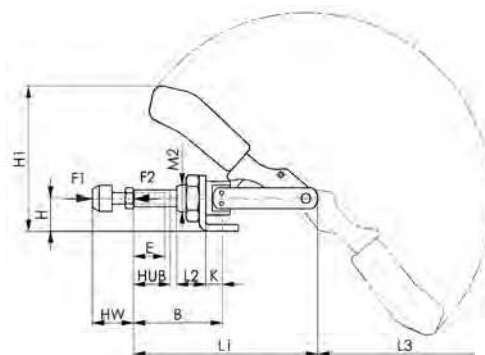
Type	B1 mm	B3 mm	B4 mm	H1 mm	H2 mm	H5 mm	H6 mm	L1 mm	L4 mm	L5 mm	L6 mm	L7 mm	L8 mm	Lo1 mm	Lo2 mm	Lo3 mm	Lo4 mm
STC-IHH25	12	32	60	46	155	25	27	233	23	154	53	38	73	25.4	25.4	38	33-48

Type	Clamping width mm	Hole Ø mm	Weight g	27329	...
STC-IHH25	35	6.5	200		101



Design

- With small angular base
- Compression and tension clamps
- Push rod and hand lever synchronised
- Long push rod guide with mounting thread and nut
- Zinc-plated and passivated
- Stainless steel rivets; sizes 2 and 3 in case-hardened bearing bushes
- Lifting part and push rod made from heat-treated steel
- Bearing positions greased
- Hand lever can be rotated at any angle to the base surface
- Ergonomic, oil-resistant handle with large hand rest and soft component



27330

Size	A mm	B min. mm	B max. mm	E mm	H mm	H1 mm	Lift mm	HW min. mm	HW max. mm	K mm	L1 mm	L2 mm	L3 mm	M min. mm	M max. mm	M2	N mm	P mm
0	6.5	17.0	33.0	13	12	49.3	16	12	20	6.5	66.5	10	54.0	-	16.0	M10 x 1.0	25	16
1	8.0	24.5	44.5	20	15	60.5	20	12	20	7.0	91.0	16	74.0	16.0	19.5	M12 x 1.5	30	20
2	10.0	32.5	58.5	20	20	85.5	26	17	25	12.5	114.0	19	105.0	31.8	36.0	M16 x 1.5	50	34
3	12.0	37.0	69.0	30	25	108.0	32	22	35	13.0	140.0	22	127.5	29.5	42.5	M20 x 1.5	60	30
5	16.0	41.5	81.5	50	30	129.5	40	30	50	15.5	171.5	25	158.0	29.0	46.0	M24 x 1.5	65	35

Size	Compressive force F1 kN	Compressive force F2 kN	Pressure screw	Weight g	27330	...
0	0.8	0.8	M4 x 20	65		101
1	1.0	1.0	M4 x 20	125		102
2	2.0	2.0	M6 x 25	245		103
3	2.5	2.5	M8 x 35	445		104
5	4.5	4.5	M12 x 50	880		105

27340

Push rod clamp

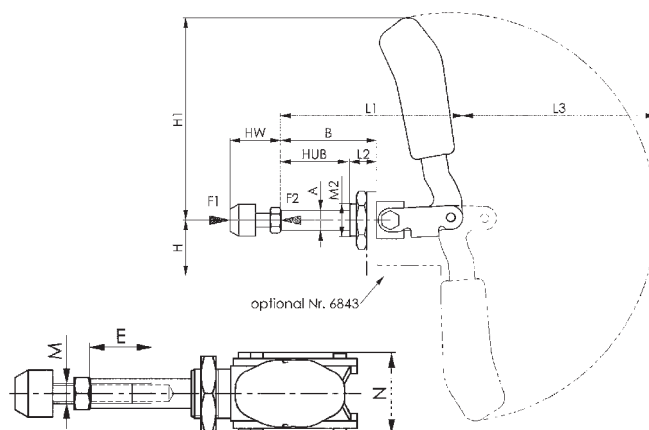


Design

- Short design
- Compression and tension clamps
- Long push rod guide with mounting thread and nut
- Zinc-plated and passivated
- Stainless steel rivets
- Fitting screws tempered
- Bearing positions greased
- Ergonomic, oil-resistant handle with large hand rest and soft component

Note:

Drawing shows push rod clamp with angular base, AMF no. 6843.



27340



Size	A	B	E	H	H1	Lift	HW	HW	L1	L2	L3	M	M2	N
	mm	mm	mm	mm	mm	mm	min. mm	max. mm	mm	mm	mm			mm
2	10	36	15	24	73	21.5	17	25	68.5	13	68	M6	M16 x 1.5	30.5
3	12	57	25	33	123	40.0	22	35	108.0	16	115	M8	M20 x 1.5	33.0
5	16	92	45	37	149	67.0	30	50	175.0	24	139	M12	M24 x 1.5	49.0

Size	Compressive force F1	Compressive force F2	Pressure screw	Weight	27340	...
	kN	kN		g		
2	1.0	1.0	M6 x 25	130		101
3	2.5	2.5	M8 x 35	320		102
5	4.0	4.0	M12 x 50	1200		103

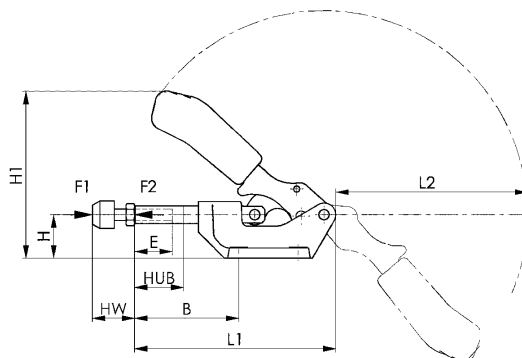
27355

Heavy-duty push rod clamp

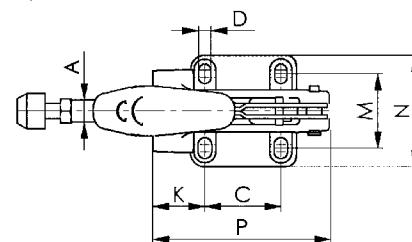


Design

- Compression and tension clamps
- Heavy-duty design with long push rod guide
- Push rod and hand lever synchronised
- Basic body made of malleable iron, painted
- Lever parts and push rod made from heat-treated steel, tempered and passivated
- Rivets made from stainless steel; size 3 in case-hardened bearing bushes
- Bearing positions greased
- Handle made from red, oil-resistant plastic
- For sizes 3 and 5: Ergonomic, oil-resistant handle with large hand rest and soft component



27355



Size	A	B	B	C	D	E	H	H1	Lift	HW	HW	K	L1	L2	M	N	P
	mm	min. mm	max. mm	mm	mm	mm	mm	mm	mm	min. mm	max. mm	mm	mm	mm	mm	mm	mm
3	12	40	72	41	6.5	30	30	116.0	32	22	35	28	139	135	36-44	60	95
5	16	58	98	41	8.5	50	38	137.5	40	30	50	45	174	156	41-50	71	121
7	22	59	105	70	11.0	50	55	179.0	50	30	50	45	218	192	57-65	93	158

Size	Compressive force F1	Compressive force F2	Pressure screw	Weight	27355	...
	kN	kN		g		
3	4	4	M8 x 35	540		101
5	10	10	M12 x 50	1115		102
7	25	25	M12 x 50	2840		103

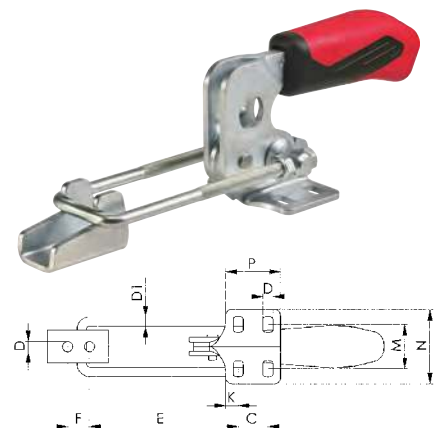
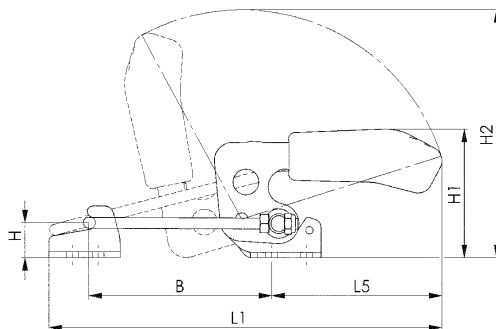
27375

Pull clamp



Design

- Horizontal
- Zinc-plated and passivated
- Stainless steel rivets in case-hardened bearing bushes
- Hook tempered
- Bearing positions greased
- Ergonomic, oil-resistant handle with large hand rest and soft component
- Includes retainer



27375

Size	B	B	C	D	D1	E	E	F	H	H1	H2	K	L1	L1	L5	M	N	P
	min. mm	max. mm	mm	mm	mm	min. mm	max. mm	mm	mm	mm	mm	mm	min. mm	max. mm	mm	mm	mm	mm
2	42.0	76	13	5.2	4	38.0	72	11	12	47.0	99.0	6.4	125	159	69	19.5–23.5	38.0	26.0
3	53.5	101	19	6.5	6	48.6	96	14	19	70.0	135.5	8.0	169	216	93	24.5–32.0	48.0	35.0
4	66.0	130	32	8.5	8	59.0	123	19	26	94.5	171.5	9.5	209	273	111	35.0–46.0	64.3	53.5

Size	Tensile force kN	Weight g	27375	...
2	1.6	120		101
3	3.2	330		102
4	7.0	810		103

27360

Quick-action clamp (machine table clamp)



Einfach besser.

Design

- With quick lever clamping
- Clamping released by pressing the clamping lever
- The lock can then be easily released
- Insert into T-groove with corresponding sliding block to DIN 508
- Pivoting and infinitely height-adjustable

Applications

For drilling and light milling work.

Overhang x clamping height mm	Achievable clamping force at 50 mm clamping height, approx. N	Rail mm	Weight approx. kg	27360	...
100 x 200	3500	19.5 x 9.5	1.35		122
120 x 200	5500	22.0 x 10.5	1.55		123
120 x 200	7500	28.0 x 11.0	2.65		124
140 x 240	10000	30.0 x 15.0	3.30		125



27360

27365

Pull clamps



Einfach besser.

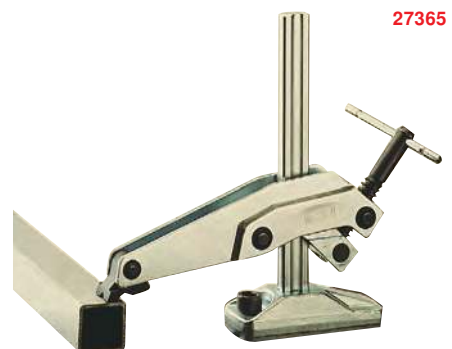
Design

- Sturdy all-steel construction
- With wear-resistant spindle and toggle handle for powerful, fast and safe clamping
- Pivoting and infinitely height-adjustable
- Fastened to machine table with T-sliding block and hexagon socket screw

Applications

For drilling and light milling work.

Overhang x clamping height mm	Achievable clamping force at 50 mm clamping height, approx. N	Rail mm	Weight approx. kg	27365	...
123–140 x 200	6500	28 x 11	3.0		101



27365

Workpiece stops

27407 - 27408

Workpiece stop, 3-dimensional

27407

Design

5 axes continuously rotatable by 360°.
Material: Anodised aluminium.

Applications

For use on milling machines and drills.

27408

Matching sliding blocks

T-groove size	Workpiece stop		Sliding block	
	27407	...	27408	...
-		101		
10				101
12				102
14				103
16				104
18				105



27407

27409

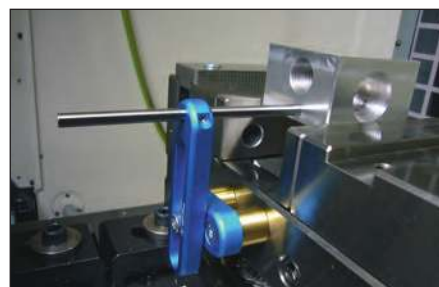
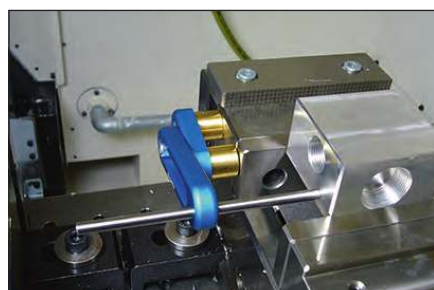
Magnetic workpiece stop

Design

- Removable, anodised aluminium stop with large adjustment range
- Retention forces up to 5 times higher due to permanent magnets with SmCo core
- Large adjustment range

Applications

On all magnetic surfaces, such as vices, measuring equipment, drills, milling machines etc.
Removable for trimming work.



Adjustment range Height (Z) mm	Adjustment range Stop bar (X) mm	27409	...
55	120		101



27409

27410

Workpiece stop

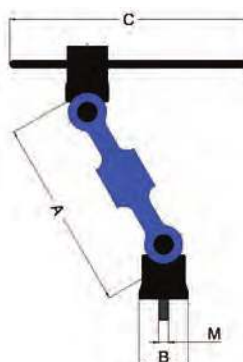
ATORN®

Design

Adjustable in five axes, fast, flexible, stable, with T-sliding blocks 12 and 14 mm, for sizes T16 and T18 see art. no. 27408 104 + 105.

Applications

For use on drills and milling machines.



A mm	B mm	C mm	M	27410	...
150	39	190	8		101



27410