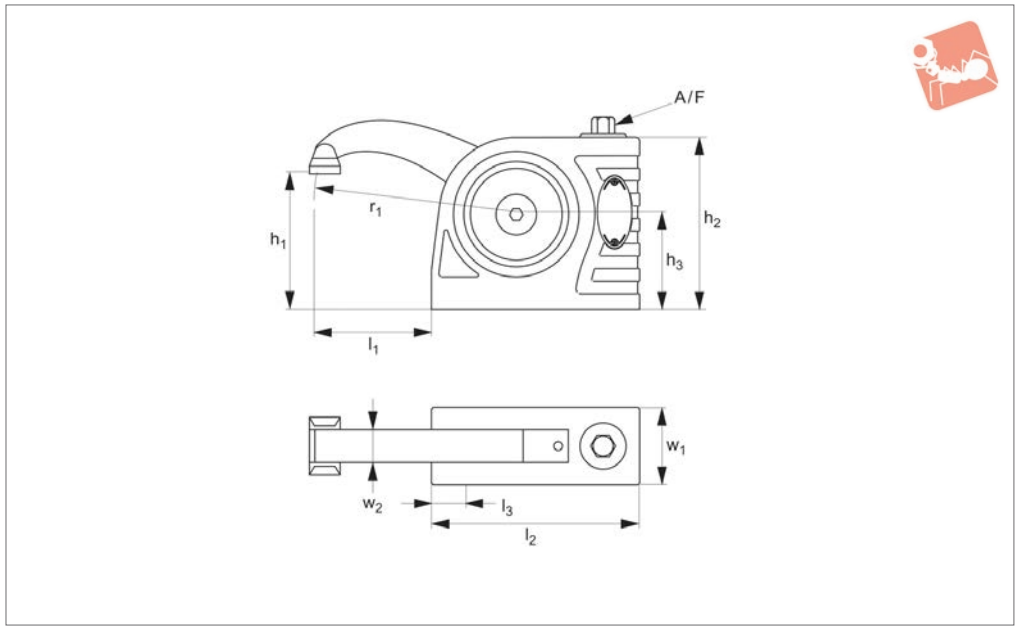


10650

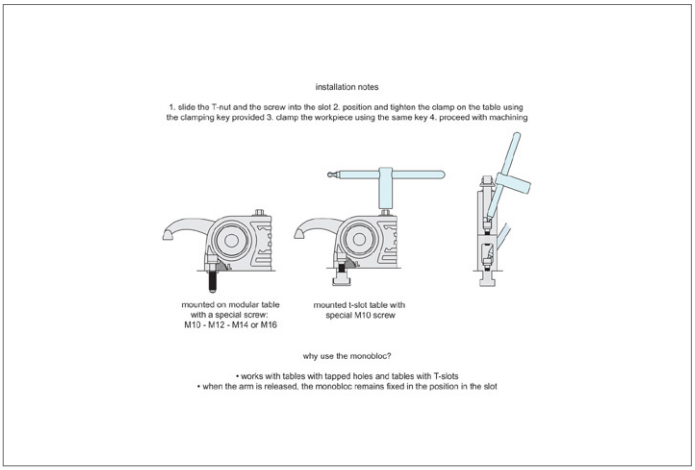
Material
Aluminium body, steel arm and screw. Aluminium clamping pad.

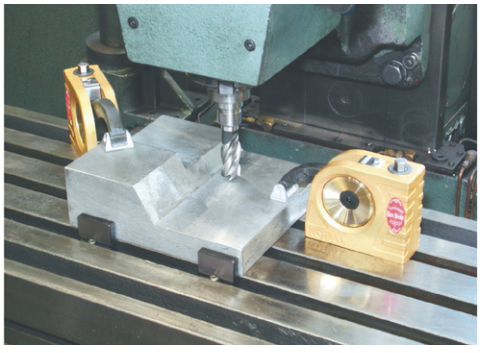
Technical Notes
Can be used with our stackable riser elements to increase the clamping height if required (see part 10651). Supplied with clamping key (10651. W1140). Clamping screws for mounting to machine bed etc. supplied separately, see part no. 10654.

Tips
Can be used on T-slot tables or tapped holes.

Important Notes
Available as a box set, see part 10653.

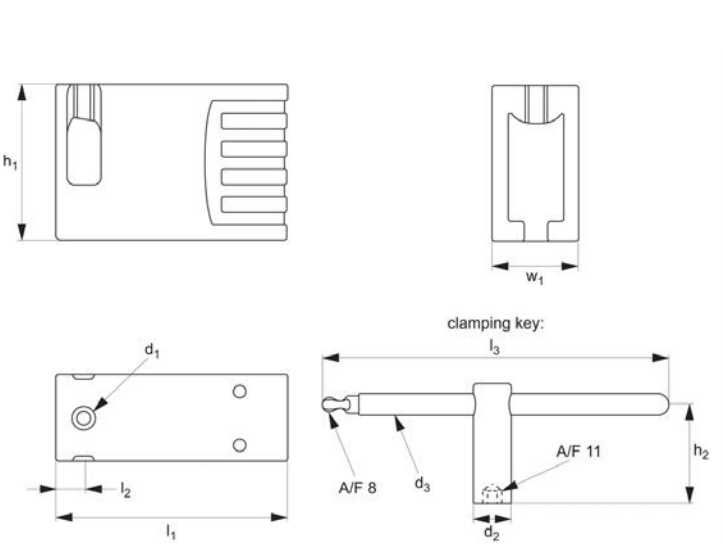
Order No.	Arm type	Clamp reach l_1	Clamping force kN max.	Clamping height h_1	h_2	h_3	l_2	l_3	r_1	w_1	w_2	A/F	Torque to Nm max.
10650.W0020	Short	33	16	0 to 80	89	49	108	12.5	r 77	40	16	11	80
10650.W0030	Long	61	12	-8 to 102	89	49	108	12.5	r105	40	16	11	80
10650.W0035	Extra Long	132	8	-43 to 155	89	49	108	12.5	r176	40	16	11	80





Monobloc Spacer Elements
for clamps 10650

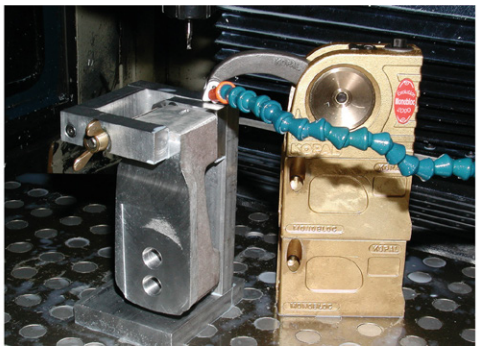
10651

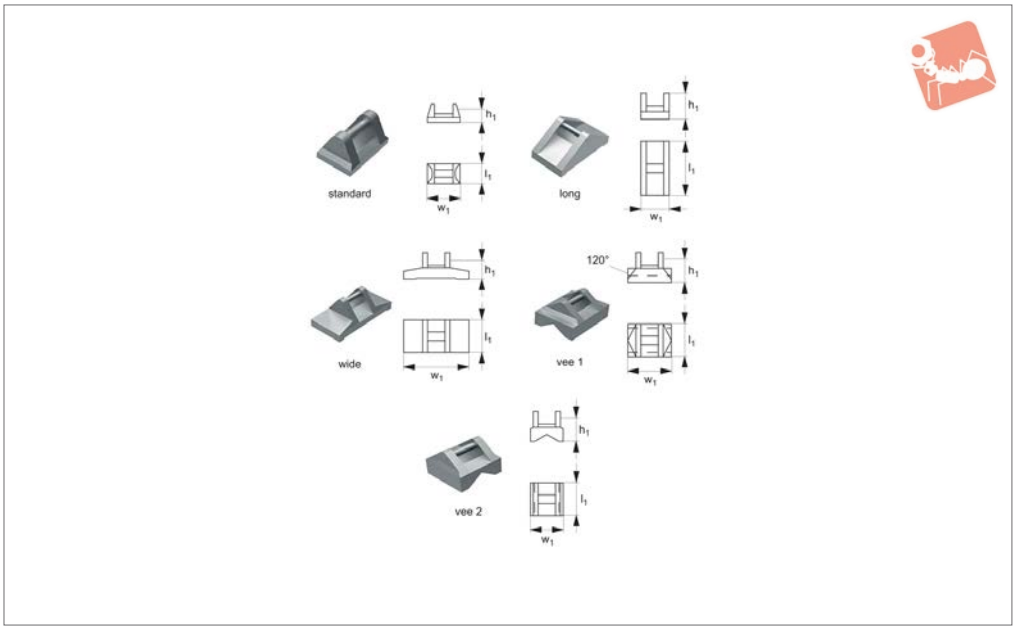


Material
Spacer elements: aluminium. Supplied with clamping screw.
Clamping key: red plastic coated or nickel plated.

Technical Notes
Can be used to increase the clamping height of most of our vertical clamping systems (10650, 10660).

Order No.	Type	h_1	h_2	d_1	d_2	d_3	l_1	l_2	l_3	w_1
10651.W0050	Spacer element	74	-	M10	-	-	108	12.5	-	40
10651.W0160	Key - coated	-	58	-	24	14	-	-	200	-
10651.W0325	Key - plated	-	88	-	20	10	-	-	200	-





10652

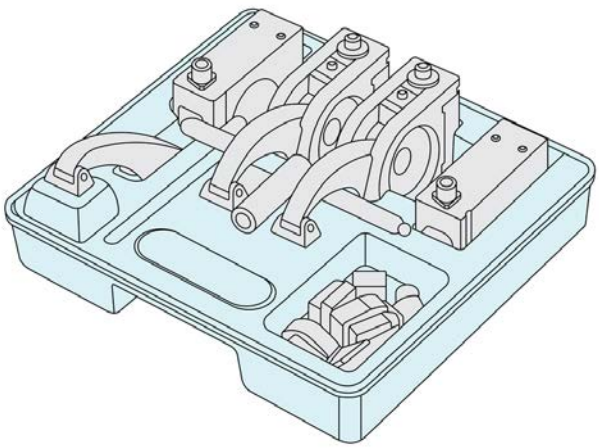
Material
Aluminium.

Technical Notes
Clamping pads to suit differing workpiece shapes. For use with clamps 10650, 10655, 10660.

Order No.	Pad type	h_1	l_1	w_1
10652.W0565	Standard	11	18	30
10652.W0802	Long	17	50	26
10652.W0803	Wide	18	30	60
10652.W0804	Vee 1	14	30	40
10652.W0805	Vee 2	14	30	30
10652.W1150	Set of 4 (Long, Wide, Vee 1, Vee 2)	-	-	-

Monobloc Clamp Sets

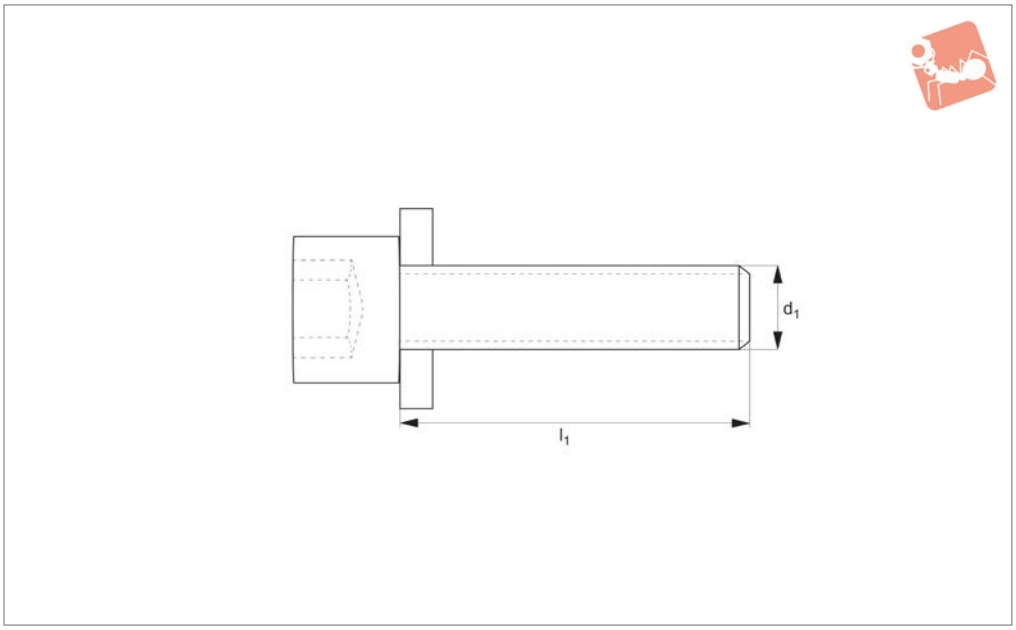
10653



Technical Notes
Comprises of two monobloc clamps (short 10650.W0020 and long 10650.W0030), two spacer elements (2 x 10651.W0050), one clamping key (10651.W0160 or 10651. W0325), one extra long arm (available with clamp in 10650.W0035), 4xM10 screws (10654.W0080 and 10654.W0085) and 6xM10 T-nuts (with spring) for 14, 16 and 18mm slots.

Tips
Clamp heights shown with the use of the riser blocks.

Order No.	Description	Clamp reach	Clamping force kN max.	Clamping height min.|max.
10653.W0100	Long Arm Set	61	12	-8 to 176
10653.W0110	Short Arm Set	33	16	0 to 154



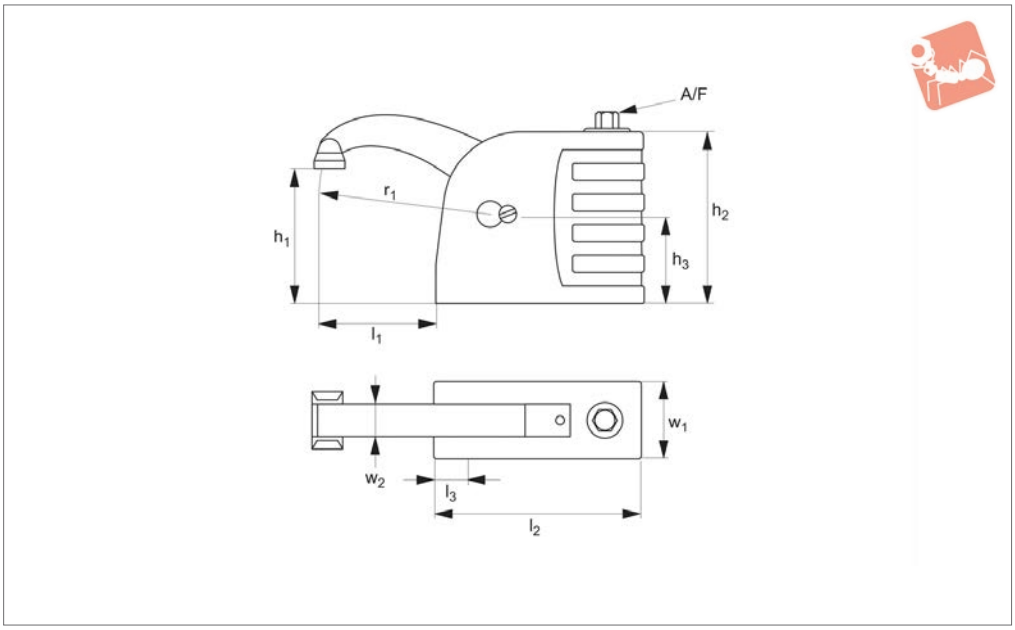
10654

Material
Steel.

Technical Notes
Please order T-nuts separately, see part no. 24000.

Order No.	Type	For thread	For T-slot	d_1 x l_1
10654.W0080	For T-slots	-	12 & 14	M10x35
10654.W0085	For T-slots	-	16 & 18	M10x40
10654.W0090	For T-slots	-	20 & 22	M10x45
10654.W0065	For threads	M12	-	M12x40
10654.W0070	For threads	M14	-	M14x45
10654.W0075	For threads	M16	-	M16x45

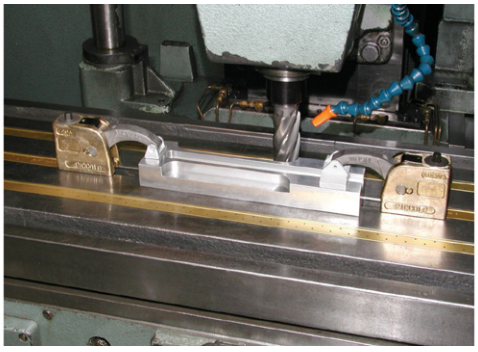
10655

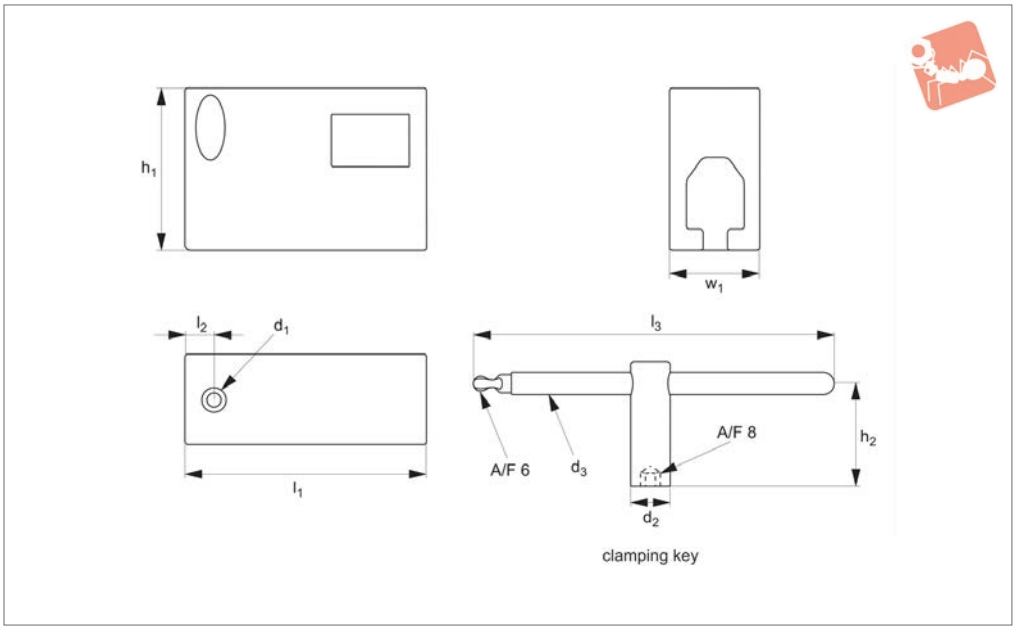


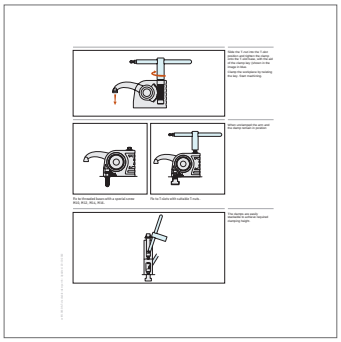
Material
Aluminium body, steel arm and screw. Aluminium thrust product.

Technical Notes
Small clamping footprint with high clamping force. Supplied with key and clamping screw (M8 x 30mm) for mounting to machine bed.
For spacer elements see part no. 10656.

Order No.	Arm type	Clamp reach l_1	Clamping force kN max.	Clamping height h_1 min.|max.	h_2	h_3	l_2	l_3	r_1	w_1	w_2	A/F	Torque to Nm max.
10655.W0020	Short	54	6.5	-15 to 58	62.5	31	73	11	r 76	32	16	8	30
10655.W0025	Long	100	4.2	-40 to 90	62.5	31	73	11	r122	32	16	8	30







10656

Material
Aluminium body, supplied with clamping screw.

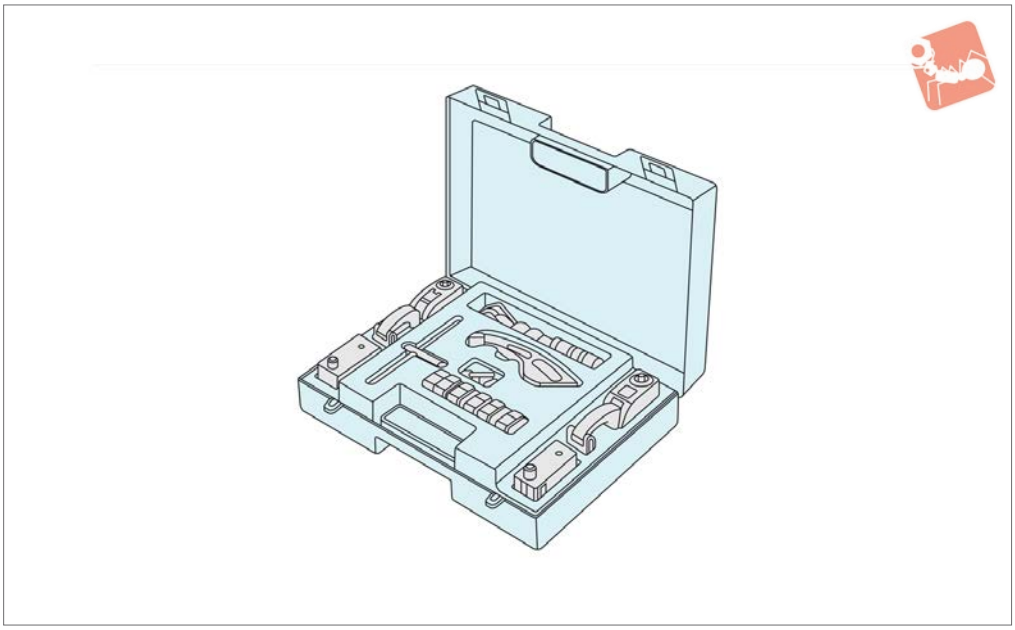
Clamping body key: nickel plated steel.

Technical Notes
Can be used to increase the clamping height of our vertical clamping systems 10655.

Order No.	Type	h_1	h_2	d_1	d_2	d_3	l_1	l_2	l_3	w_1
10656.W0030	Spacer	60	-	M8	-	-	73	11	-	32
10656.W0180	Key	-	38	-	16	7	-	-	140	-

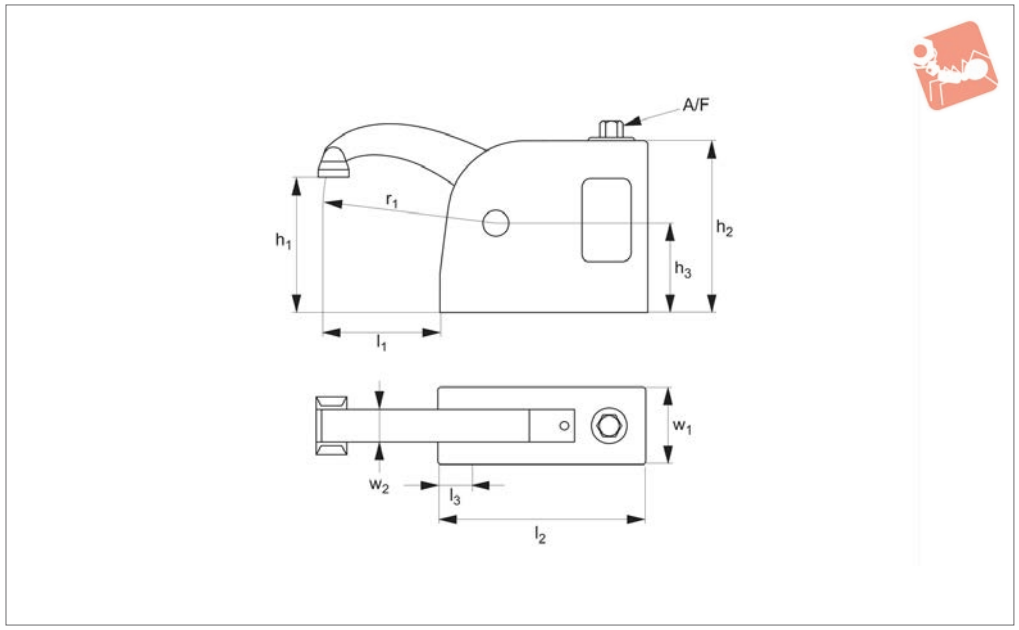
Piccolo Clamp Sets

10657



Technical Notes
Comprises of two piccolo clamping elements (short 10655.W0020 and long 10655.W0025), two spacer elements (2 x 10656.W0030), one clamping key (10656.W0180), one extra long arm, four M10 screws and six M10 T-nuts (with spring) for 14, 16 and 18mm slots.

Order No.	Description	Clamp reach	Clamping force kN max.	Clamping height min.|max.
10657.W0100	Piccolo Clamp Set	54	6.5	0 to 118



10658

Material
Aluminium body, steel arm and screw. Aluminium clamp thrust product.

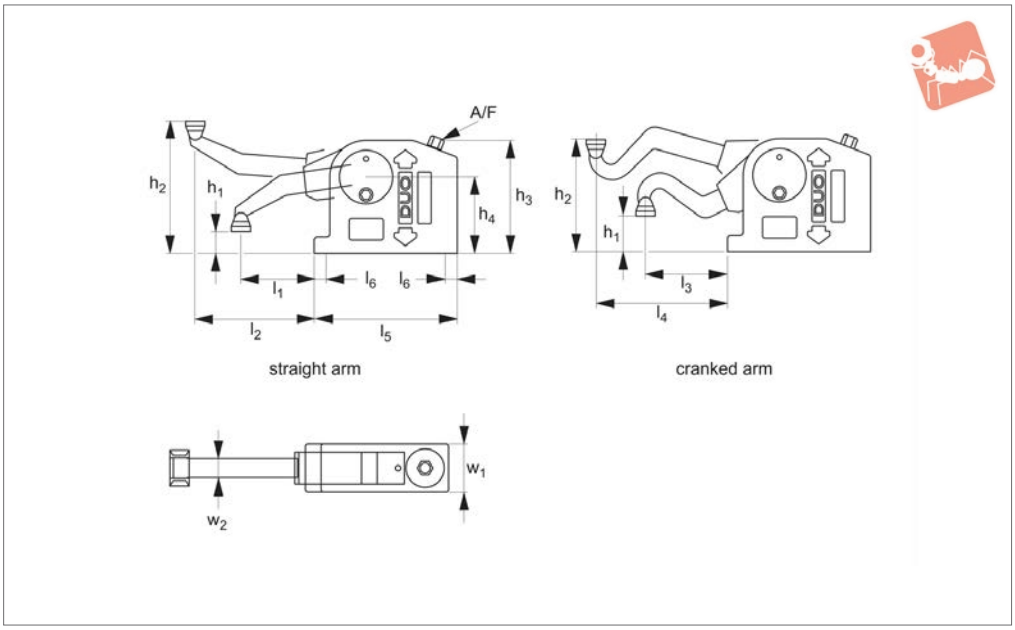
Technical Notes
The only clamp specially designed for electro-discharge (EDM) machines. The body has a large opening to ensure free flow of fluid.
These clamps are easily disassembled without tools, cleaned, greased and re-assembled.

Important Notes
Supplied with clamping key and clamping screw (M8 x 30mm) for mounting to machine bed.

Order No.	Arm type	Clamp reach l_1	Clamping force kN max.	Clamping height h_1 min.|max.	h_2	h_3	l_2	l_3	r_1	w_1	w_2	A/F	Torque to Nm max.
10658.W0022	Short	54	6	-15 to 58	62.5	31	73	11	r 76	32	16	8	80
10658.W0023	Long	100	4	-40 to 90	62.5	31	73	11	r122	32	16	8	30

Duo Retractable Arm Clamps

10660

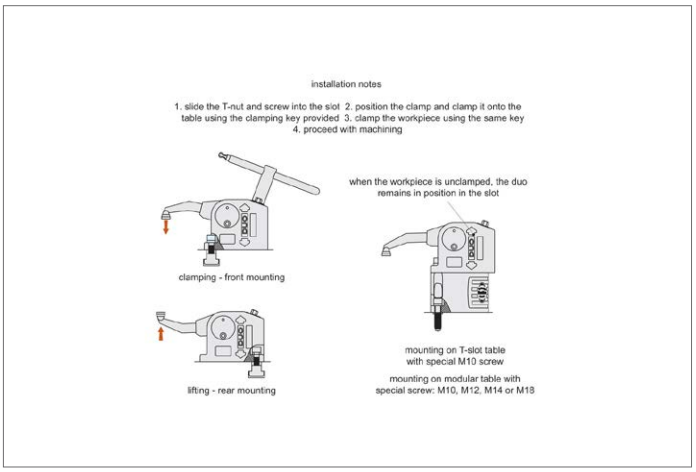


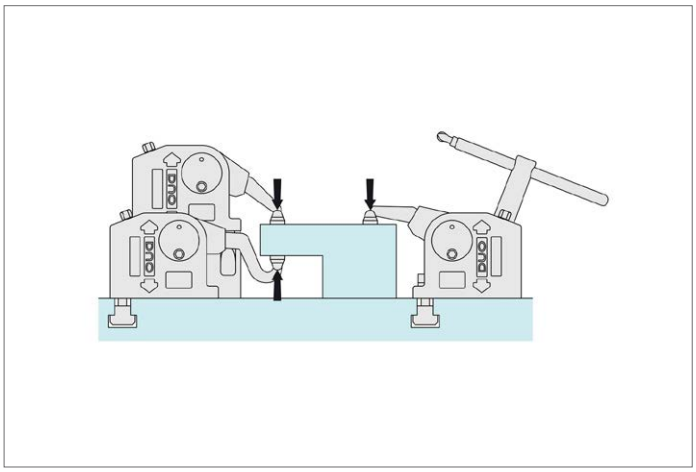
Material
Aluminium body, steel arm and screw.
Aluminium clamp thrust product.

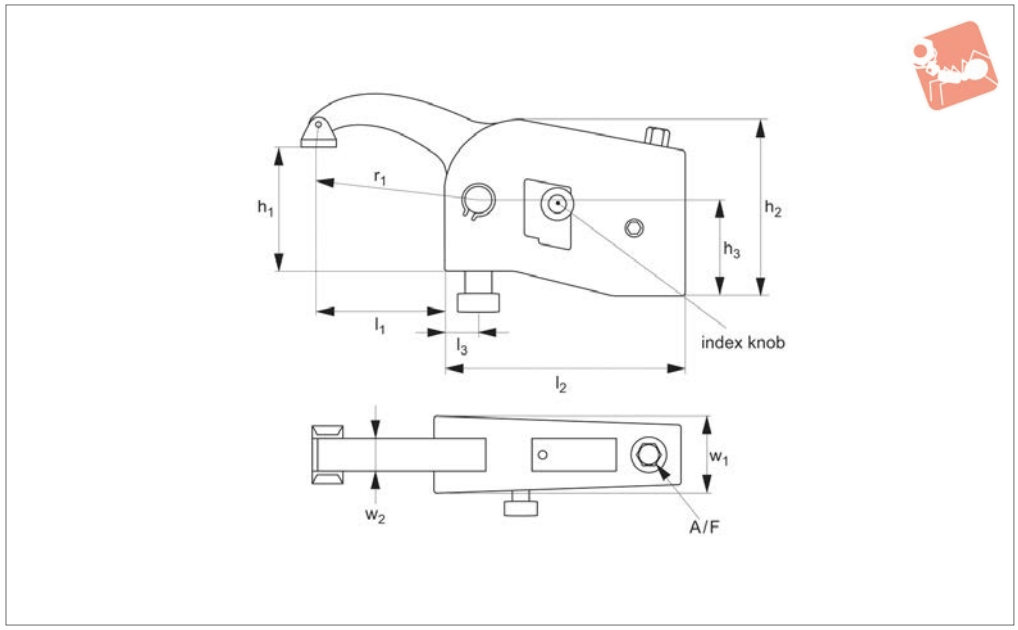
Technical Notes
Fully adjustable clamping range that can be used with our standard stackable riser elements (see part no. 10651).
Has both clamping and lifting capability, aided by two different interchangeable arms.
Supplied with operating key.

Tips
Two different clamping arm shapes provided: straight and cranked. See table below for clamping and lifting heights of each arm.

Order No.	Clamp reach l_1-l_2	Clamp reach l_3-l_4	Clamping force kN max.	Clamping height h_1 min. | max.	Lifting height h_2 min. | max.	h_1 min. | max.	h_2 min. | max.	h_3	h_3 min. | max.	h_4	h_4 min. | max.	l_5	l_6	w_1	w_2	Clamping arm
10660.W0020	46-88	48-91	11	0-129	4-142	0-80	52-142	95	38-125	65	4-94	120	10	40	14	Straight







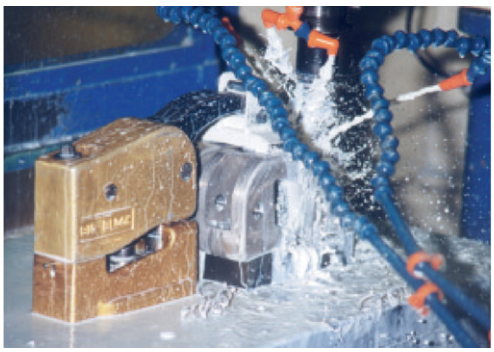
10661

Material
Aluminium body, steel arm and screw. Aluminium thrust product.

Technical Notes
Quick and easy clamping of different clamping heights. The index pin knob allows rapid adjustment to five set positions. Can be used with stackable riser elements to achieve required clamping heights. See part 10662.

Supplied with clamping key.

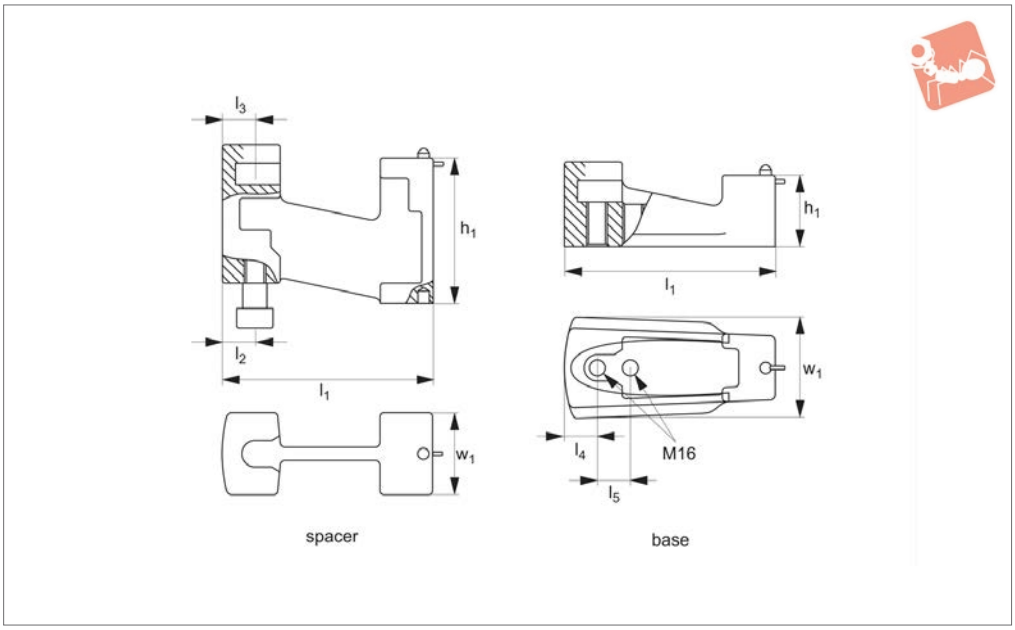
Order No.	Description	Clamp reach l_1	Clamping force kN max.	Clamping height h_1 min.|max.	h_2	h_3	l_2	l_3	r_1	w_1	w_2	A/F	Torque to Nm max.
10661.W0020	Short	50	40	12 to 80	105	60	162	25	r 75	60	30	11	70
10661.W0030	Standard	95	28	-12 to 100	105	60	162	25	r120	60	30	11	70
10661.W0035	Long	145	20	-18 to 135	105	60	162	25	r170	60	30	11	70
10661.W0038	Extra Long	245	14	-50 to 155	105	60	162	25	r270	60	30	11	70



Big Block Spacer Elements

for big block clamps no. 10661

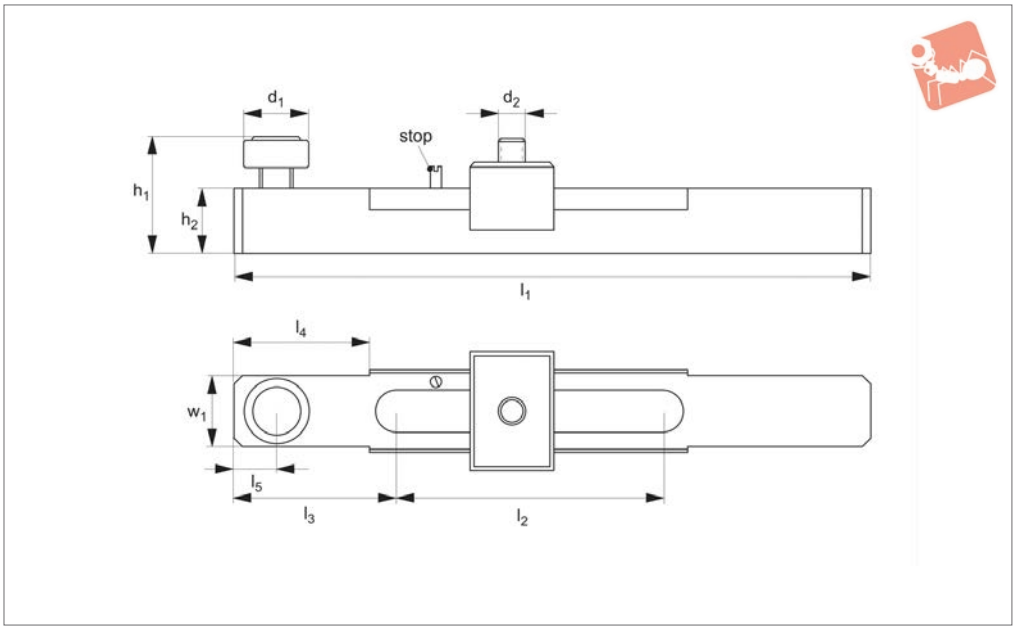
10662



Material
Aluminium.

Technical Notes
Base and spacer elements. For use with big block clamping system (part no. 10661).

Order No.	Type	h_1	l_1	l_2	l_3	l_4	l_5	w_1
10662.W0040	Base	55	162	-	-	25	25	75
10662.W0045	Spacer	55	162	25	25	-	-	75
10662.W0050	Spacer	110	162	25	25	-	-	75
10662.W0055	Spacer	330	162	25	25	-	-	75

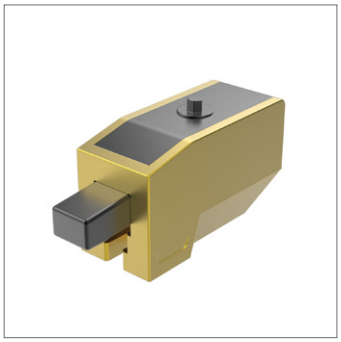


10663

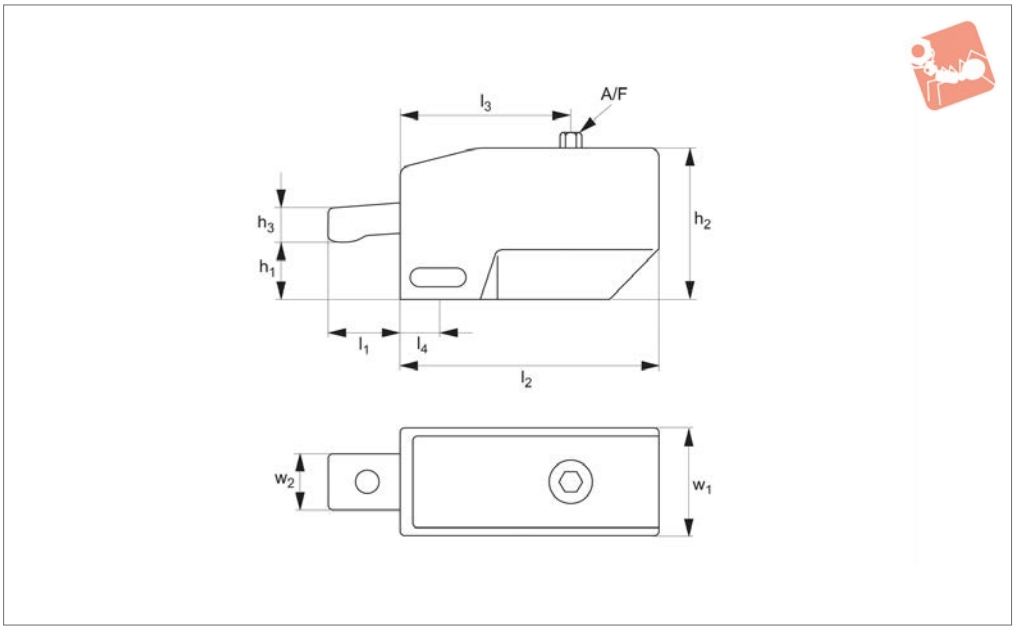
Material
Steel.

Technical Notes
Easy 152mm retraction of clamps. For use with big block clamping system (part no. 10661).

Order No.	Type	h_1	h_2	d_1	d_2	l_1	l_2	l_3	l_4	l_5	Travel max.	w_1
10663.W0180	Base	61 - 85	28	28	M16	382	160	95	80	25	152	48



10670

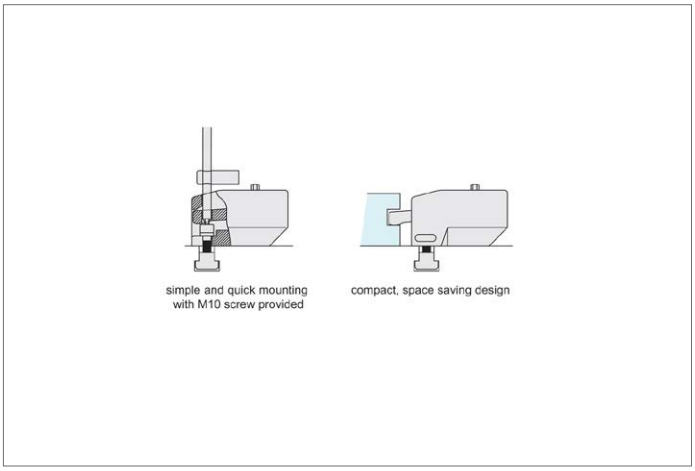


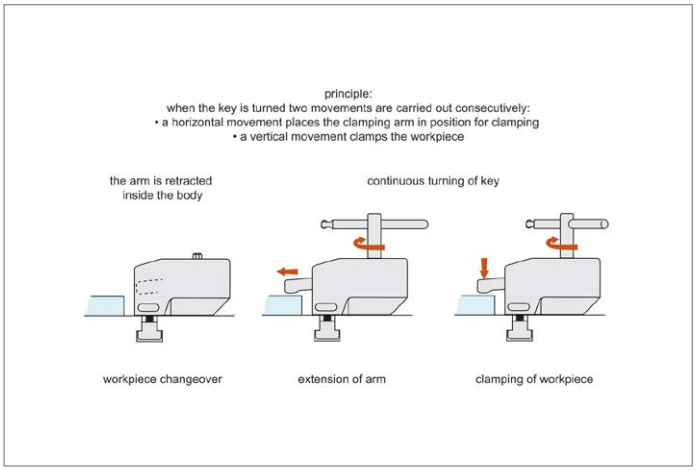
Material
Body: aluminium.
Clamping piece: steel.

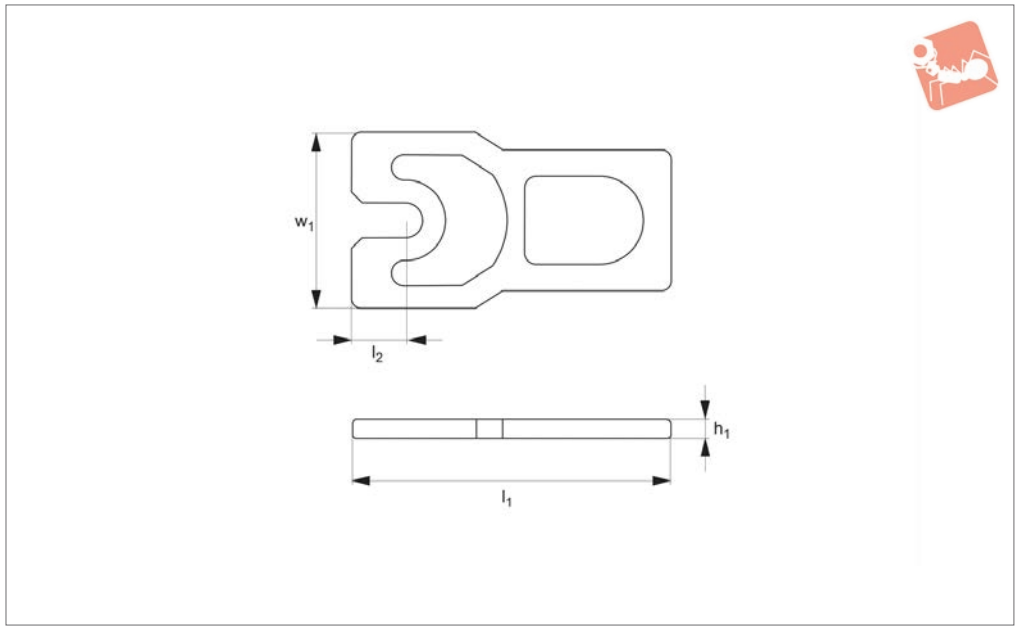
Technical Notes
Unique double action, moves forward and downward simply with a turn of the hex key.
Very compact, powerful and quick acting.

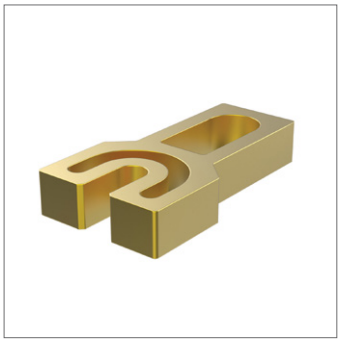
Tips
Clamping height can be easily adjusted by using on a spacer element or using our standard spacers (see part no. 10671).
Supplied with clamping key and clamping screw (M10 x 35mm).

Order No.	Clamping force kN max.	Clamping height h_1 min. | max.	Clamping reach l_1	h_2	h_3	l_2	l_3	l_4	w_1	w_2	A/F	Torque to Nm max.
10670.W0020	11	22 to 26	30	67	16.5	115	65	18	50	25	8	20







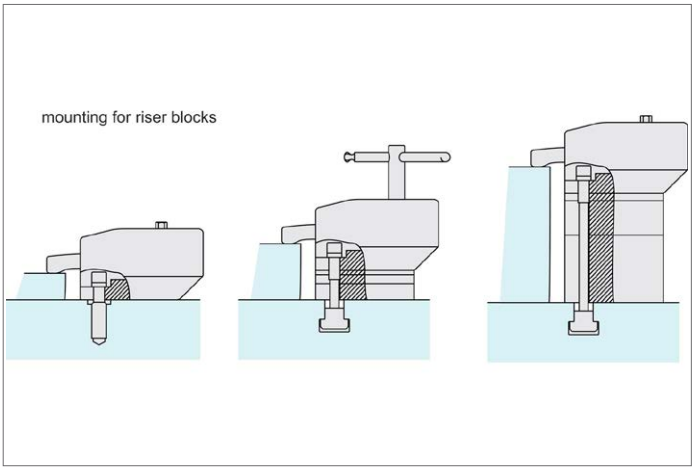


10671

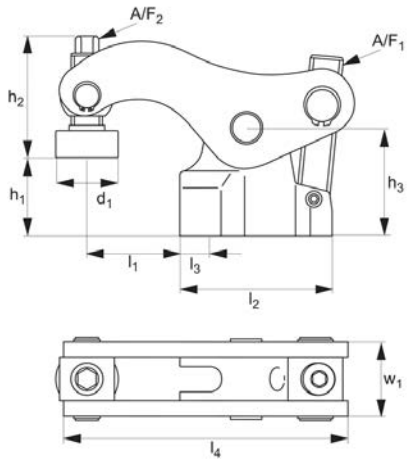
Material
Aluminium.

Technical Notes
Supplied as set of six different spacer thicknesses. Suitable mounting screws also supplied. For use with clamp 10670.
Can reach a maximum clamping height of 126mm.

Order No.	Type	h_1	l_1	l_2	w_1
10671.W0080	Set of 6	2, 4, 8, 16, 32 and 64	92	18	50



10675



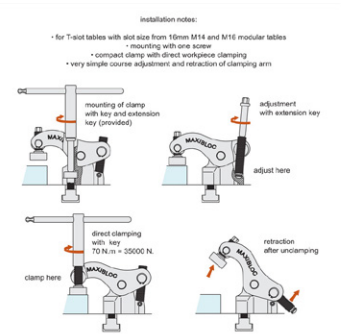
Material
Steel body and clamping arm, with special clamping screw.

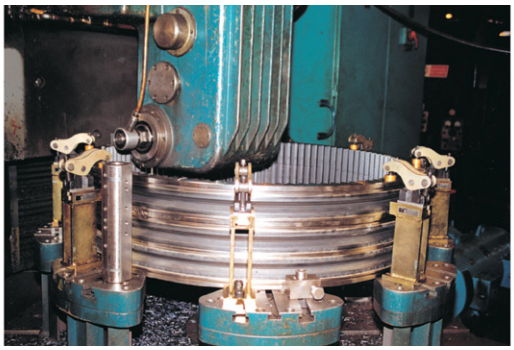
Technical Notes
For very heavy machining. Arm retracts.

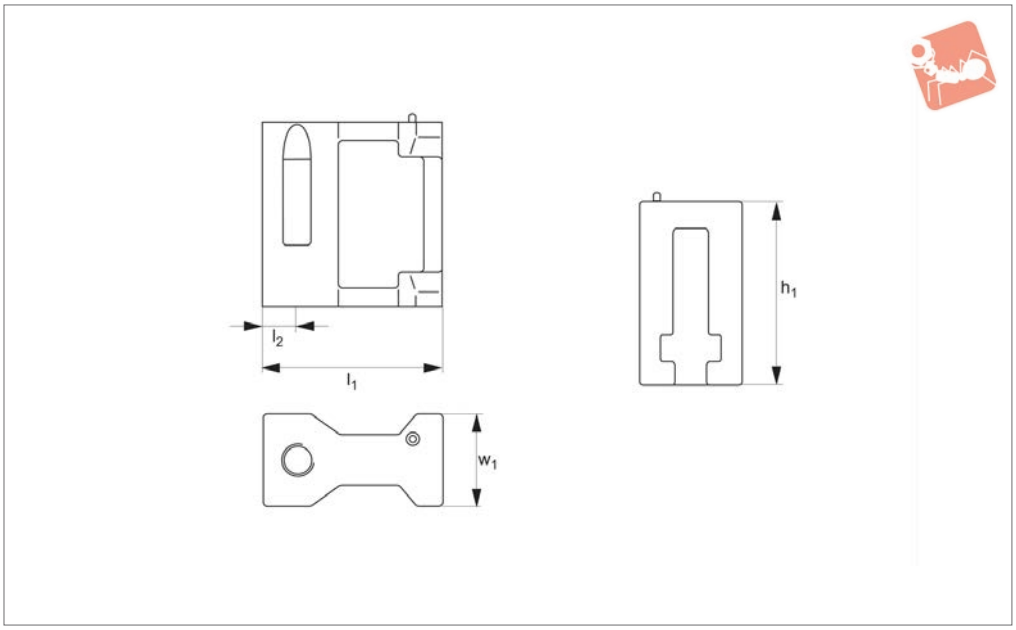
Supplied with clamping key, extension key and clamping screw (M14 x 40mm). Please order suitable T-nuts separately, see part no. 24000.

Tips
Clamping height can be raised using our stackable elements (part no. 10676).

Order No.	Clamping force kN max.	Clamping height h_1 min.|max.	Clamping reach l_1	h_2	h_3	d_1	l_2	l_3	l_4	w_1	A/F_1	A/F_2	Torque to Nm max.
10675.W0310	35	0 to 86	49	62.5	55	32	78	15	152	40	8	11	70





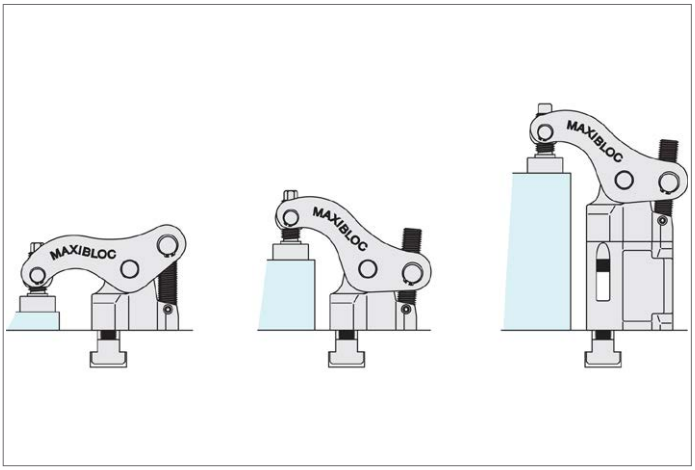


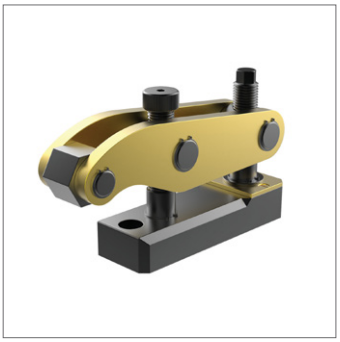
10676

Material
Steel.

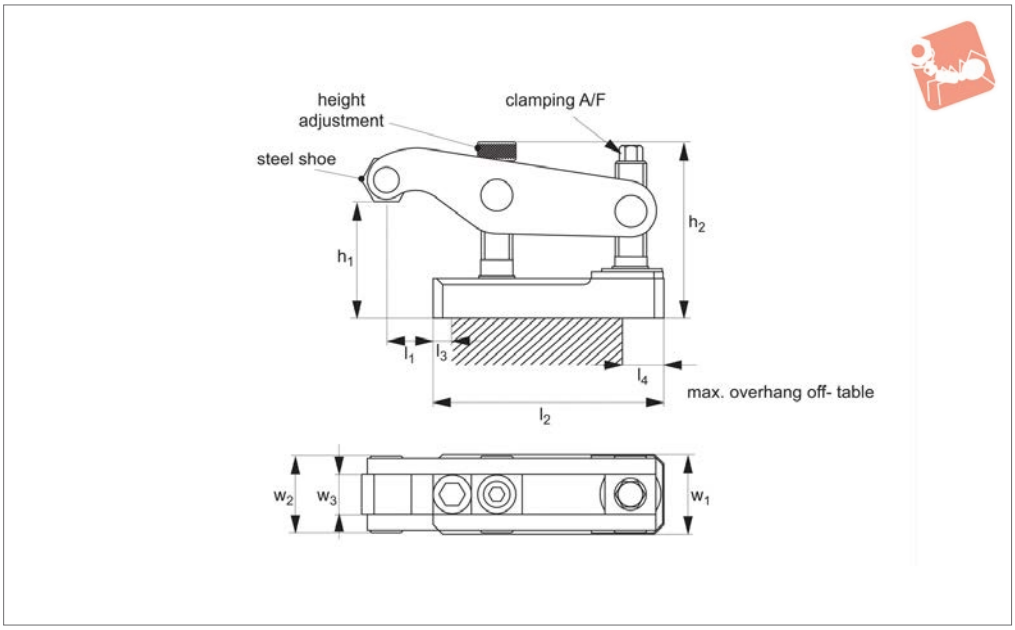
Technical Notes
Quick and easy clamping of different clamping heights. For use with Maxi Bloc clamping system part no. 10675. Supplied with M14 mounting screw.

Order No.	Type	h_1	l_1	l_2	w_1
10676.W0320	Spacer	80	78	15	40





10678

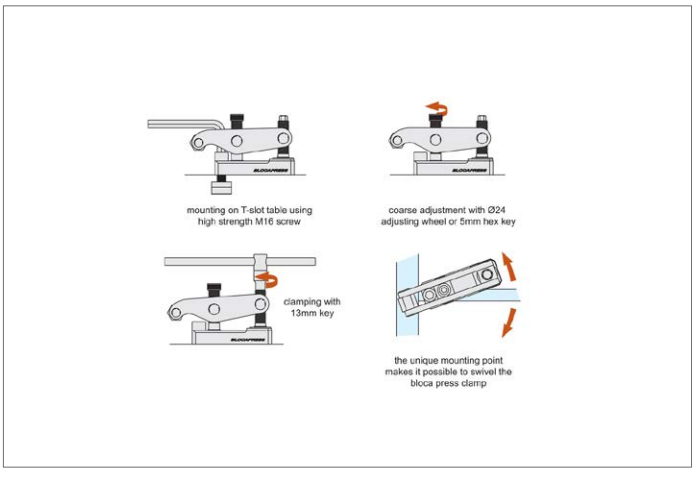


Material
Steel, hardened, supplied with clamping key and high tensile strength (12.9) clamping screw.

Technical Notes
Suitable for heavy duty presses.

Five ton clamping force.

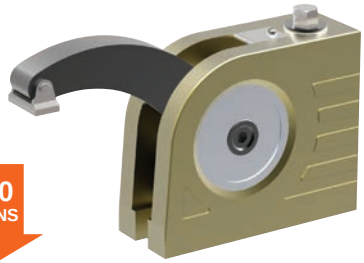
Order No.	Clamping force kN max.	Clamping height h_1 min. | max.	Clamping reach l_1	h_2	l_2	l_3	l_4 max.	w_1	w_2	w_3	A/F	Torque to Nm max.
10678.W0340	50	14 to 92	30	111	145	12	25	50	45	25	13	90



A Wide Range of Clamps to Match any Requirement

CLAMPING FORCE UP TO 50000 NEWTONS

10650 All machining operations



16000 NEWTONS

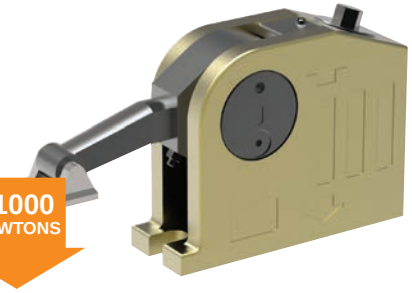
10655 Light machining

6500 NEWTONS

10658 Electrical discharge machining

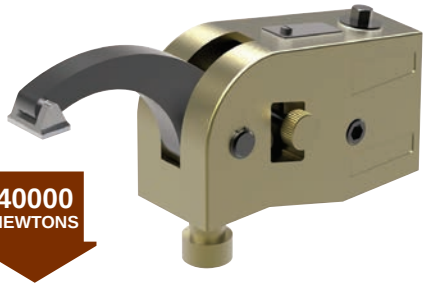
6500 NEWTONS

10660 Clamping and lifting



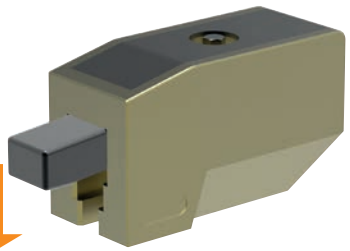
11000 NEWTONS

10661 Heavy machining



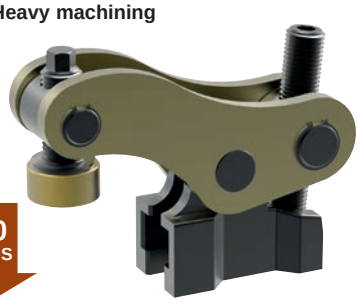
40000 NEWTONS

10670 Repetitive machining



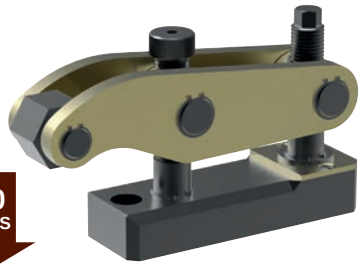
11000 NEWTONS

10675 Heavy machining



35000 NEWTONS

10678 Press Tool Clamping



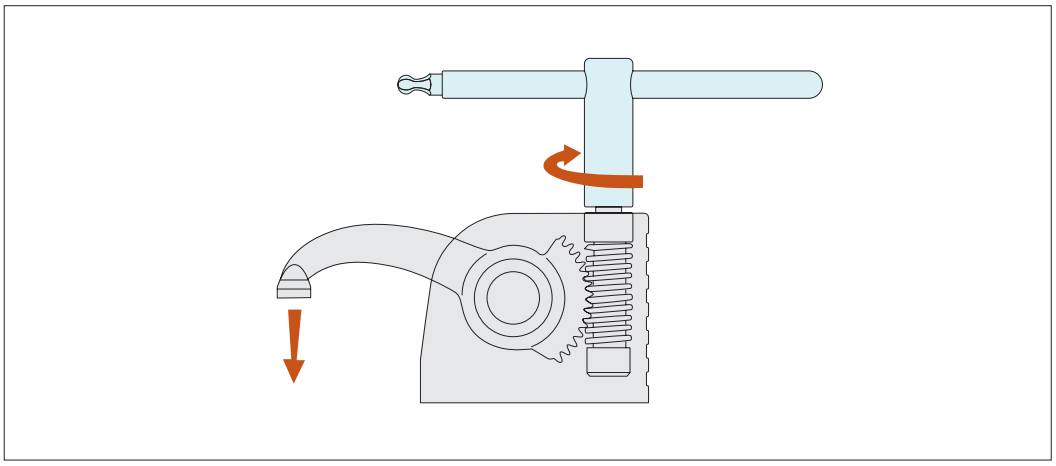
50000 NEWTONS

Monobloc Clamps

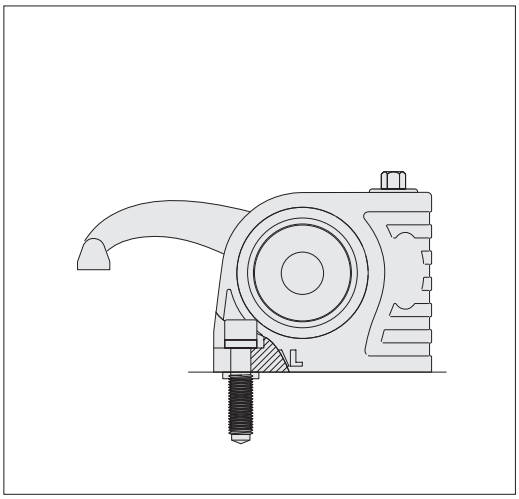
stackable vertical clamping

Slide the T-nut into the T-slot position and tighten the clamp onto the T-slot base, with the aid of the clamp key (shown in the image in blue.

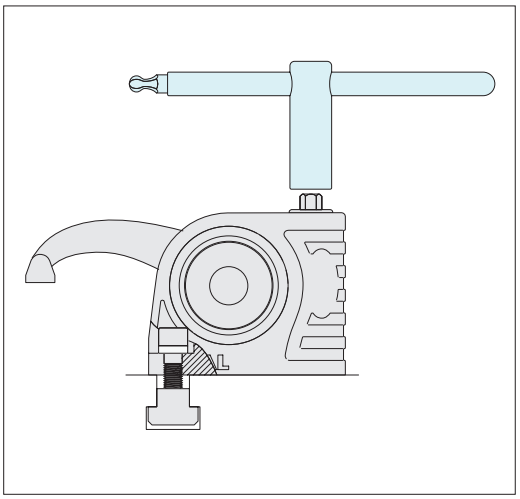
Clamp the workpiece by twisting the key. Start machining.



When unclamped the arm and the clamp remain in position

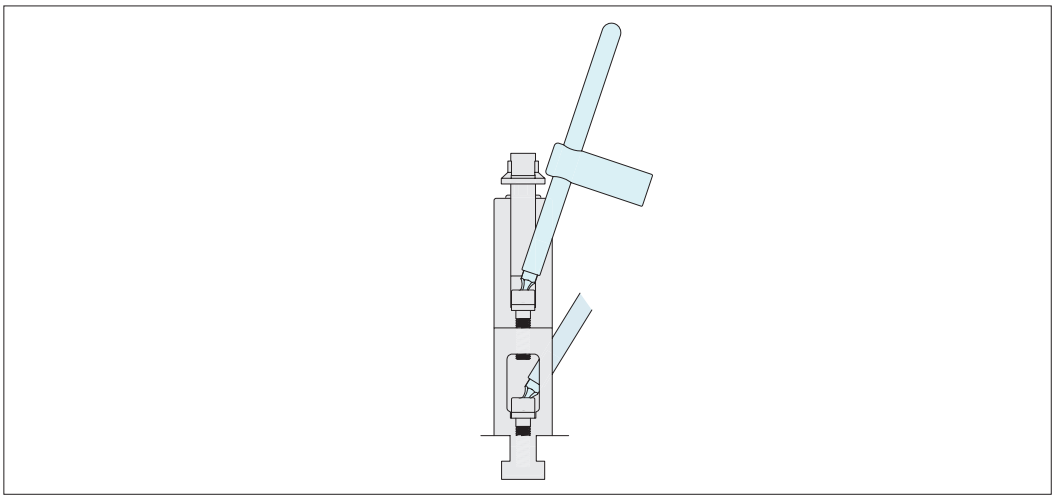


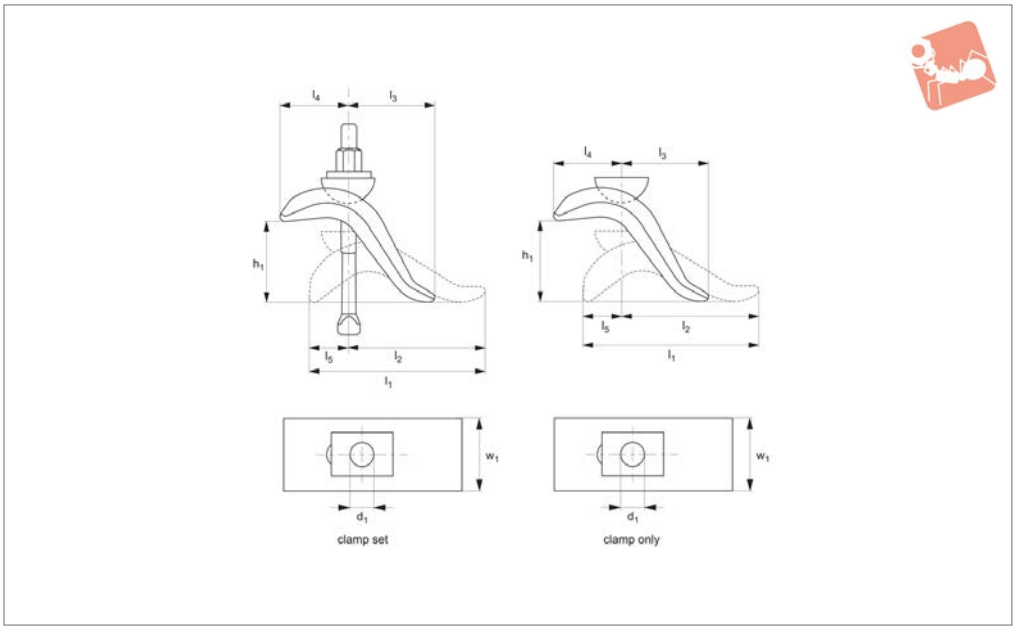
Fix to threaded bases with a special screw M10, M12, M14, M16.



Fix to T-slots with suitable T-nuts.

The clamps are easily stackable to achieve required clamping height.





10600

Material
Steel, forged, tempered and burnished.

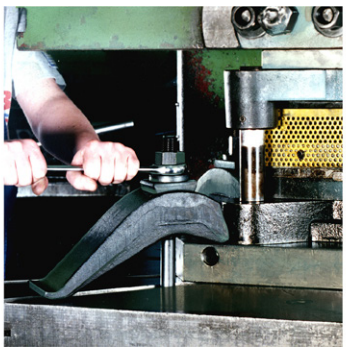
Technical Notes
Type one: clamp and T-bolt set.
Type two: clamp only.

h_1 - depends on the depth of the slot position and the position of the fixture nut.

Tips
Often used for clamping press tools.
Easy height adjustable clamp. No fitting support required.

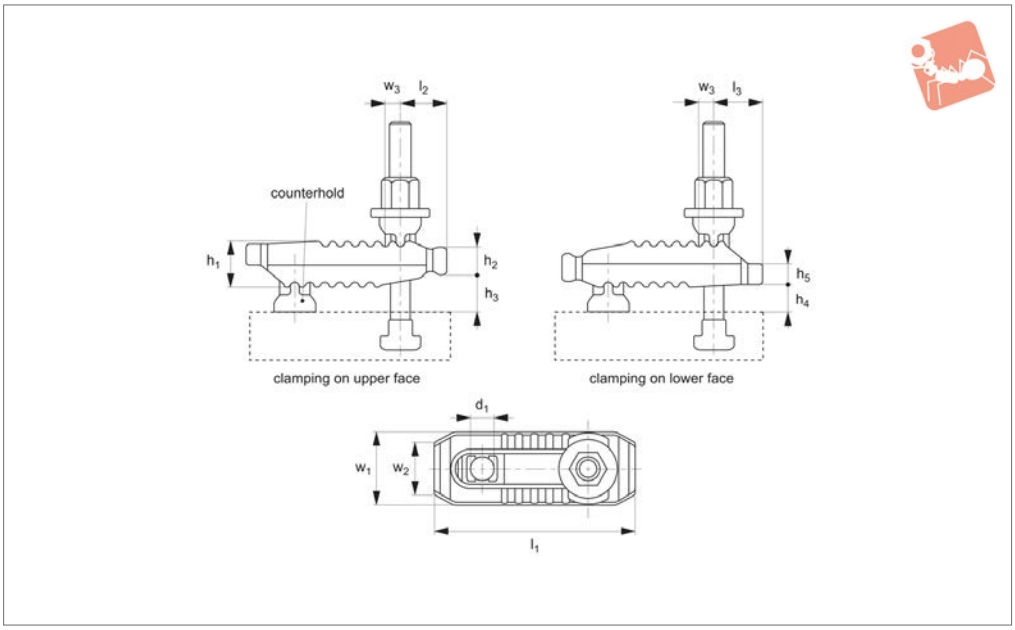
Used with:
21000 T-slot bolts, 24400 collar nuts, 25000 plain washer.

Order No.	Type	T-bolt	For T-bolt	For T-slot	d_1 x l_1	h_1	l_2	l_3	l_4	l_5	w_1	Weight g
10600.W0012	Clamp set	M12x12x125	M12 - M16	12	17x140	0-50	110	60	55	30	50	1070
10600.W0014	Clamp set	M12x14x125	M12 - M16	14	17x140	0-50	110	60	55	30	50	1080
10600.W0016	Clamp set	M16x16x160	M12 - M16	16	17x140	0-75	110	60	55	30	50	1270
10600.W0018	Clamp set	M16x18x160	M12 - M16	18	17x140	0-75	110	60	55	30	50	1280
10600.W0020	Clamp set	M20x20x200	M18 - M20	20	21x175	0-85	135	80	70	40	60	2300
10600.W0022	Clamp set	M20x22x200	M18 - M20	22	21x175	0-85	135	80	70	40	60	2370
10600.W0117	Clamp only	-	M12 - M16	-	17x140	0-75	110	60	55	30	50	900
10600.W0121	Clamp only	-	M18 - M20	-	21x175	0-85	135	80	70	40	60	1600



Crocodile Adjustable Clamp
with support heel

10603



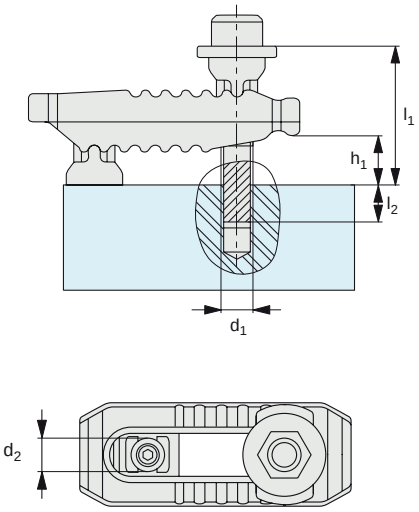
Material
Clamp: steel, tempered and galvanised.
T-bolt: steel, forged (strength class 8.8). See part 21000 for details.
Washer: steel, hardened. See part 25000 for details.
Nut: steel, heat-treated to strength class 10. See part 24300 for details.

Technical Notes
Ideal for clamping components of varying heights - requires no additional support or packing pieces.
Continuously adjustable clamp over range of heights (see dimension h_1 in table), with high clamping force.
Support heel and stud counterhold are non-detachable, making for a single piece clamp which is quick and easy to use.
Supplied complete with T-bolt, washer and T-nut (see data table).
Ideal for use on press tools and injection mould tools. Height can be increased by using Support Extensions 10604.

Tips
*Clamping forces based on using stud and nut of strength class 8.8 or better, optimal positioning of the clamp and good condition of the thread.

Order No.	T-bolt	For T-slot	h_1	h_2	h_3 min. | max.	h_4	h_5	l_2	l_3	w_1 x l_1	w_2	w_3	d_1	Clamping force kN max.	Weight g
10603.W0011	M10x10x100	10	27	17	0-40	18	12	25	30	44x115	30	11	13	25	613
10603.W0012	M12x12x125	12	27	17	0-55	18	12	25	30	44x115	30	11	13	30	686
10603.W0013	M12x12x160	12	36	21	0-70	20	17	35	36	55x150	41	12	17	35	1591
10603.W0014	M12x14x125	14	27	17	0-55	18	12	25	30	44x115	30	11	13	30	705
10603.W0015	M12x14x160	14	36	21	0-70	20	17	35	36	55x150	41	12	17	35	1610
10603.W0016	M16x16x160	16	36	21	0-70	20	17	35	36	55x150	41	12	17	40	1798
10603.W0017	M16x16x200	16	42	27	0-80	30	20	44	44	62x187	30	14	21	55	2715
10603.W0018	M16x18x160	18	36	21	0-70	20	17	35	36	55x150	41	12	17	40	1818
10603.W0020	M16x18x200	18	42	27	0-80	30	20	44	44	62x187	30	14	21	55	3018
10603.W0021	M20x20x200	20	42	27	0-80	30	20	44	44	62x187	30	14	21	60	3018
10603.W0022	M20x22x200	22	42	27	0-80	30	20	44	44	62x187	30	14	21	60	3060
10603.W0023	M20x20x250	20	51	34	0-100	31	24	60	47	70x235	30	17	25	70	4368
10603.W0024	M24x24x250	24	51	34	0-100	31	24	60	47	70x235	30	17	25	75	4895
10603.W0025	M20x22x250	22	51	34	0-100	31	24	60	47	70x235	30	17	25	70	4410
10603.W0028	M24x28x250	28	51	34	0-100	31	24	60	47	70x235	30	17	25	75	4966

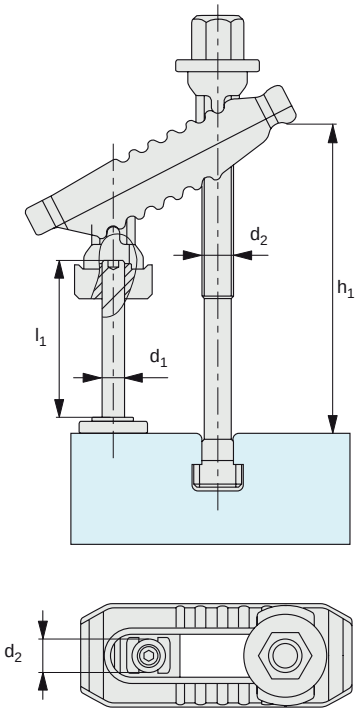
d_2	Stud 21100 size d_1 x l_1	Thread depth l_2	Achievable clamping range height h_1
13	M10x80	15-31	4-25
	M10x90	15-31	17-40
	M10x100	15-31	4-25
	M12x80	18-33	0-20
	M12x90	18-33	10-34
	M12x100	18-33	22-50
17	M12x90	18-33	0-22
	M12x110	18-33	24-50
	M12x120	18-33	38-66
	M16x100	24-43	0-26
	M16x110	24-44	12-40
	M16x120	24-44	26-55
21	M16x120	24-44	2-29
	M16x130	24-44	15-43
	M16x150	24-44	43-72
	M20x140	30-52	18-48
	M20x150	30-52	31-63
	M20x160	30-52	45-78
25	M20x160	30-52	23-54
	M20x180	30-52	51-83
	M20x195	34-52	72-100
	M24x160	36-48	0-15
	M24x180	36-60	10-42
	M24x195	36-60	37-71



Installation Recommendations

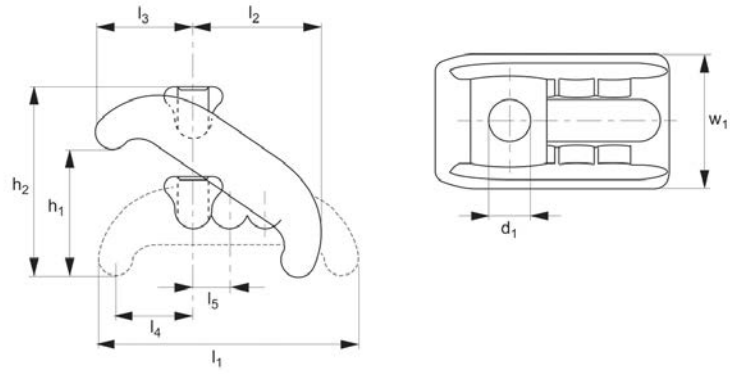
Installation dimensions for clamp 10603 (without support extension 10604) when using clamping stud 21100.

d_2	10604 support extension d_1 x l_1	T-Slot 21000 d_2 x T-slot x l_1	Achievable clamping range height h_1
13	M10x39	M10x10x100	18-31
	M10x39	M12x12x160	18-95
	M10x39	M12x14x160	18-95
17	M12x49	M12x12x200	26-123
	M12x49	M12x14x200	26-123
	M12x49	M16x16x200	26-123
	M12x49	M16x18x200	26-123
	M12x94	M12x12x200	26-120
	M12x94	M12x14x200	26-120
	M12x94	M16x16x250	26-166
	M12x94	M16x18x250	26-166
21	M16x55	M16x16x250	33-141
	M16x55	M16x18x250	33-141
	M16x55	M20x20x250	33-141
	M16x55	M20x22x250	33-141
	M16x90	M16x16x250	33-150
	M16x90	M16x18x250	33-150
	M16x90	M20x20x315	33-173
	M16x90	M20x22x315	33-173
25	M20x69	M20x20x315	41-177
	M20x69	M20x22x315	41-177
	M20x69	M24x24x315	41-177
	M20x69	M24x28x315	41-177
	M20x109	M20x20x315	41-197
	M20x109	M20x22x315	41-193
	M20x109	M24x24x315	41-180
	M20x109	M24x28x315	41-180



Installation dimensions for clamp 10603 (with support extension 10604) when using T-slot bolt 21000.

10620

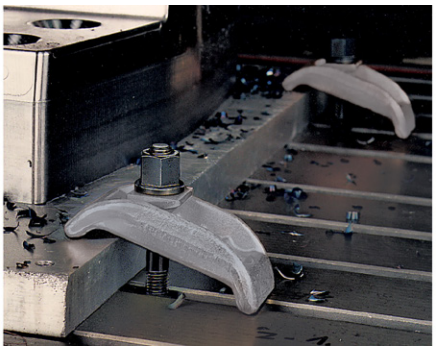


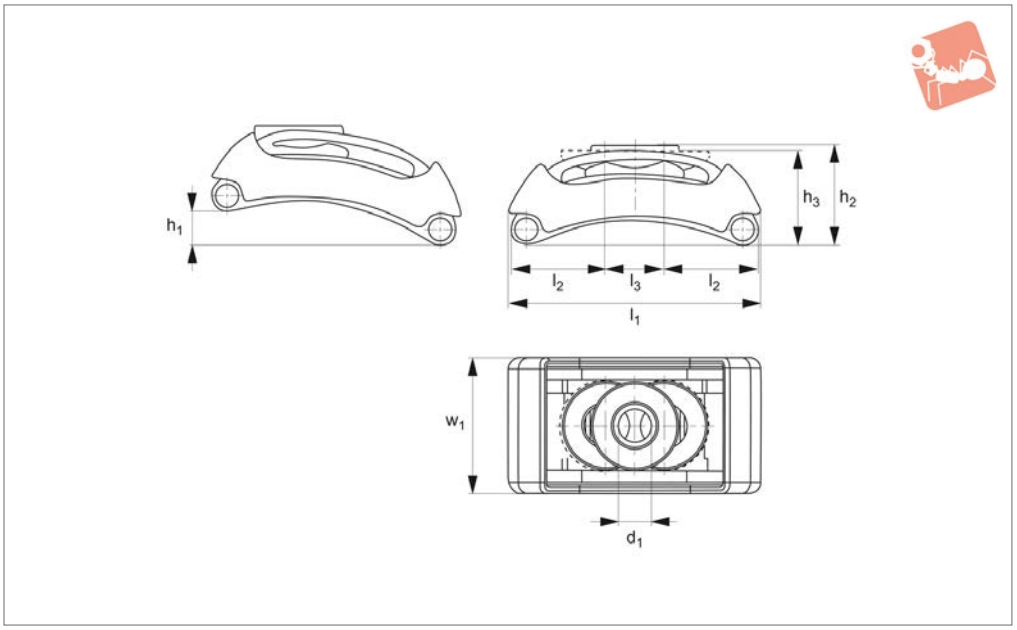
Material
Steel, tempered and galvanised.

Technical Notes
Ideal for press tool clamping. The clamp body has a long slot for easy positioning.

Tips
Supplied without T-bolt or nut - for these parts see nos. 21000 and 24400.

Order No.	Clamping height h_1 min.|max.	For T-slot	For bolt	h_2 min.|max.	l_2	l_3	l_4	l_5	w_1 x l_1	d_1	Weight g
10620.W0012	0-35	12 & 14	M12	30-55	48	28	23	14	38x88	13	260
10620.W0016	0-55	16 & 18	M16	42-84	74	38	29	18	56x130	18	809
10620.W0020	0-65	20 & 22	M20	50-100	80	46	32	20	66x140	22	1253
10620.W0026	0-75	24 & 28	M24	54-111	100	52	39	24	76x174	26	1718
10620.W0032	0-80	36	M30	62-125	110	61	44	28	90x200	32	2785





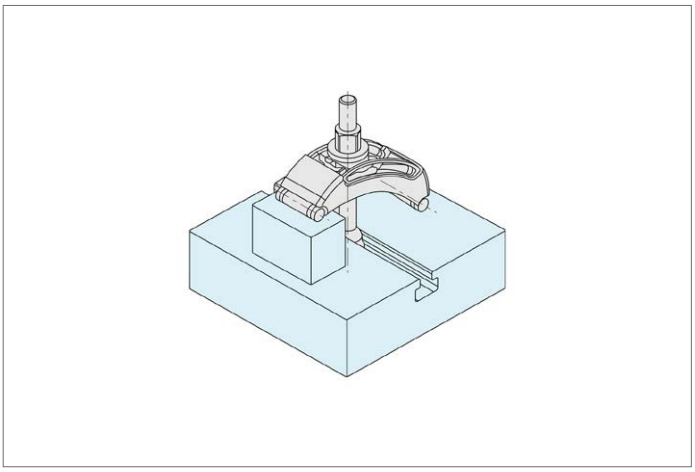
10630.1

Material
Steel, tempered and burnished.

Technical Notes
Weight-saving thanks to its lightweight design. Variable and fast adjustment at a distance from the workpiece. No additional clamping supports are needed to reach the required clamping height. The U-piece is undetachable from the clamp.

Tips
For clamping, clamping bolts no. 21000 and studs no. 21100 and cheese head screws (ISO 4762) can be used.
A washer no. 25000 must always be used between the hexagonal nut and U-piece.
h_1 is dependent on depth of slot to DIN 650 and position of fixture nut.

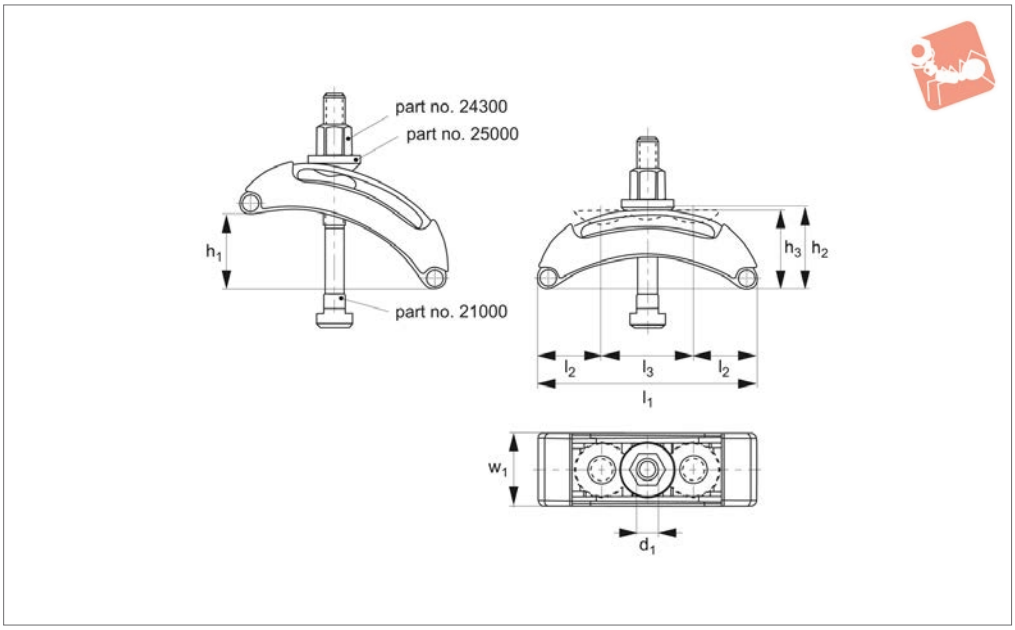
Order No.	Size	For clamping screw	h_1 min.|max.	h_2	h_3	l_1	l_2	l_3	w_1	d_1	Weight g
10630.W0010	10	M10	0-15	32.0	30.5	80	30	19	44	11	257
10630.W0014	14	M12-M14	0-33	49.5	47.0	125	37	51	57	14	708
10630.W0018	18	M16-M18	0-45	62.0	58.5	160	49	63	67	18	1235
10630.W0022	22	M20-M22	0-65	75.0	71.5	200	58	63	72	22	1880
10630.W0026	26	M22-M24	0-85	94.0	89.5	250	74	0	82	16	2799



Clamp - Plastic Cover

complete with T-bolt set

10630.2



Material

Steel, tempered and burnished.

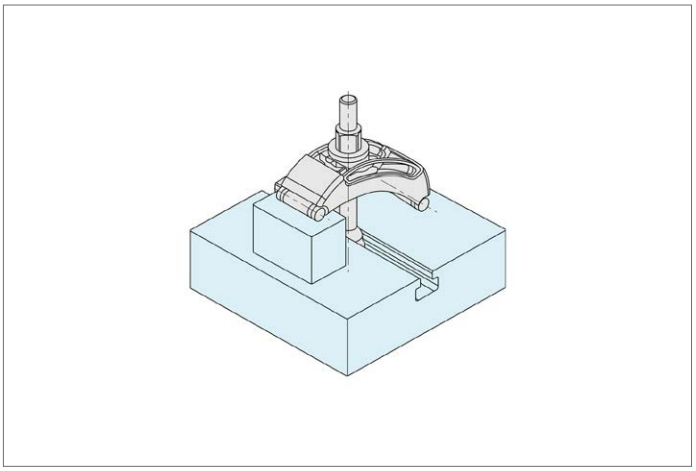
Technical Notes

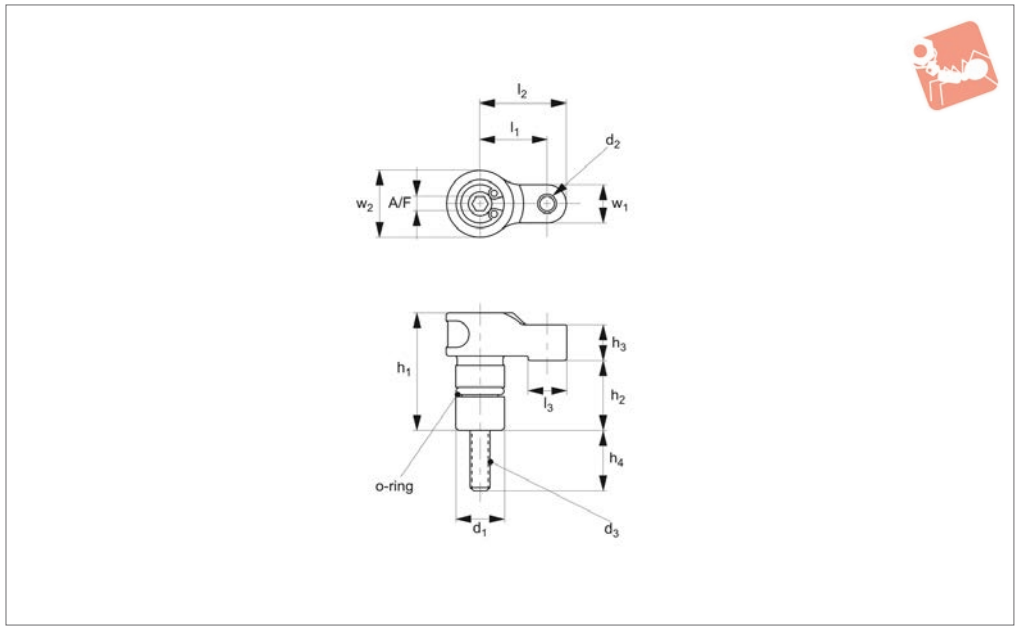
Complete with T-bolt set. Weight-saving thanks to its lightweight design. Variable and fast adjustment at a distance from the workpiece. No additional clamping supports are needed to reach the required clamping height. The U-piece is undetachable from the clamp.

Tips

A washer (DIN 6340) must always be used between the hexagonal nut and U-piece. h_1 is dependent on depth of slot to DIN 650 and position of fixture nut.

Order No.	Size	With clamping bolt	h_1 min. | max.	h_2	h_3	l_1	l_2	l_3	w_1	d_1	Weight g
10630.W0110	10	M10x10x80	0-15	32.0	30.5	80	30	19	44	11	349
10630.W0112	12	M12x12x100	0-33	49.5	47.0	125	37	51	57	14	886
10630.W0114	14	M12x14x125	0-33	49.5	47.0	125	37	51	57	14	905
10630.W0116	16	M16x16x160	0-45	62.0	58.5	160	49	63	67	18	1648
10630.W0118	18	M16x18x160	0-45	62.0	58.5	160	49	63	67	18	1668



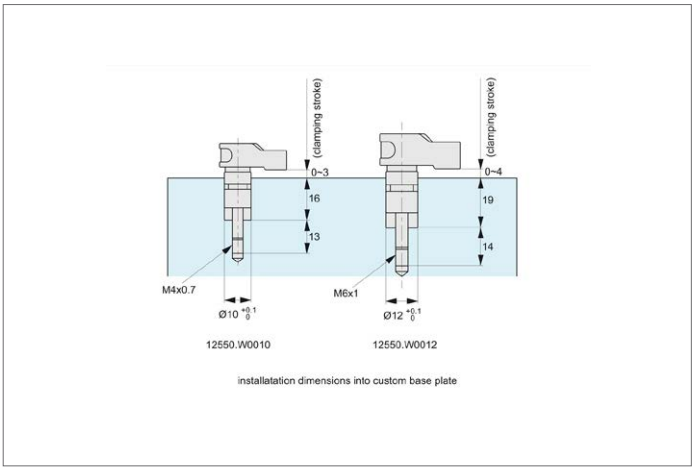


12550.1

Material
Steel (42CrMo), tempered, black oxide finish.

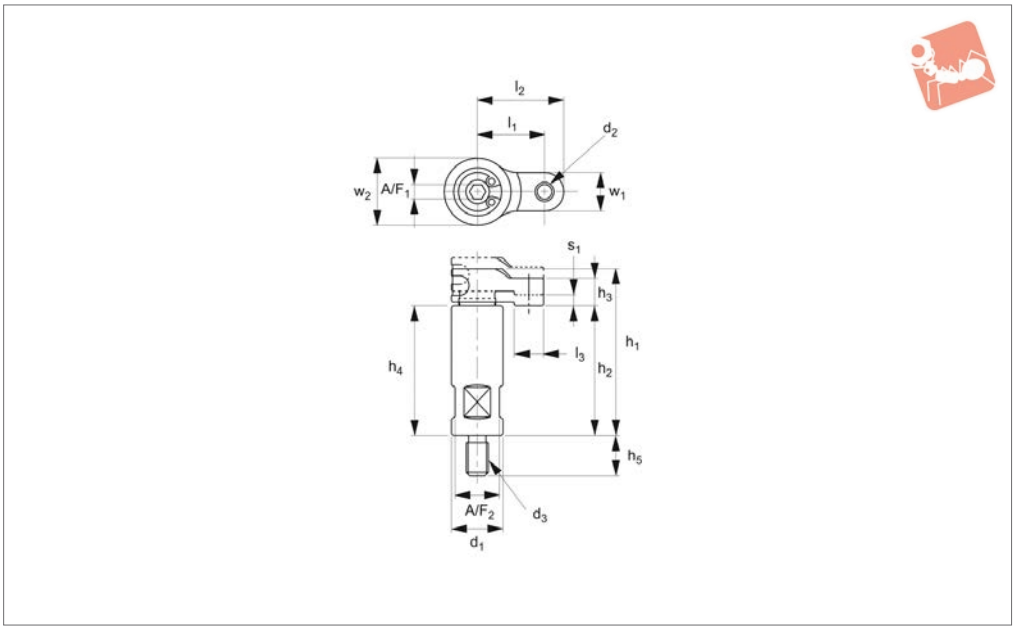
Technical Notes
Very useful for limited space vertical clamping, can be recessed into bores to minimise height. Clamping stroke (see diagram below) for M 4= 0-3mm, for M 6= 0-4mm.

Order No.	h_1	l_1	d_1 -0.02|-0.10	d_2	h_2	h_3	h_4	d_3	l_2	l_3	w_1	w_2	Torque to Nm max.	A/F	Clamping force kN max.	Weight g
12550.W0010	24,5	14	10	M 4x0,7	14,5	7,5	12,5	M 4x30	18	8	8	14	2,7	3	2,0	25
12550.W0012	30,5	17	12	M 5x0,8	17,5	9,5	13,5	M 6x35	22	10	10	16	7,0	5	3,5	45



Hook Clamp
with holder

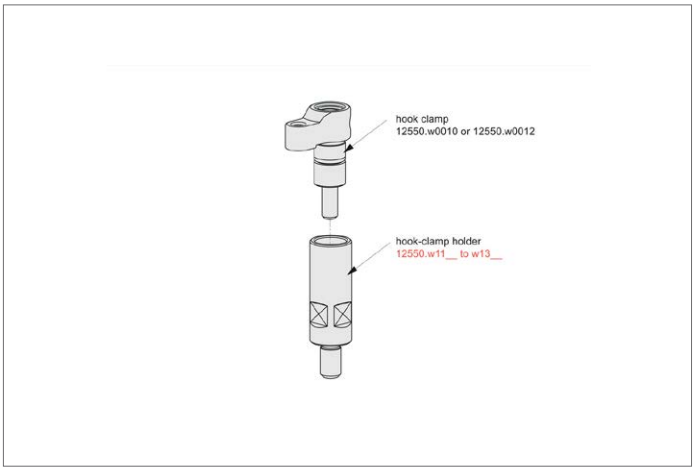
12550.2

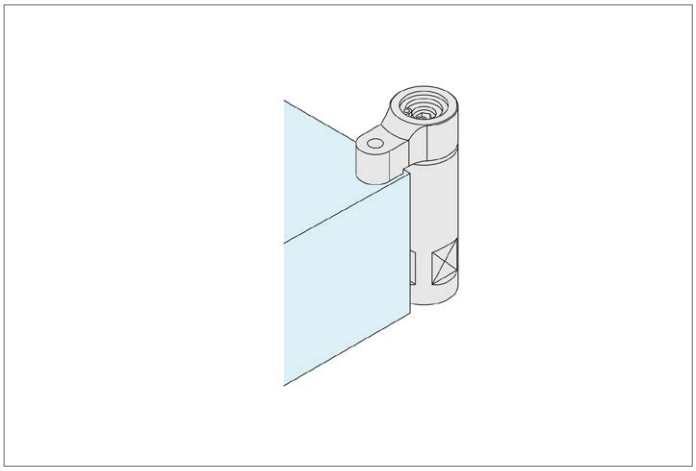


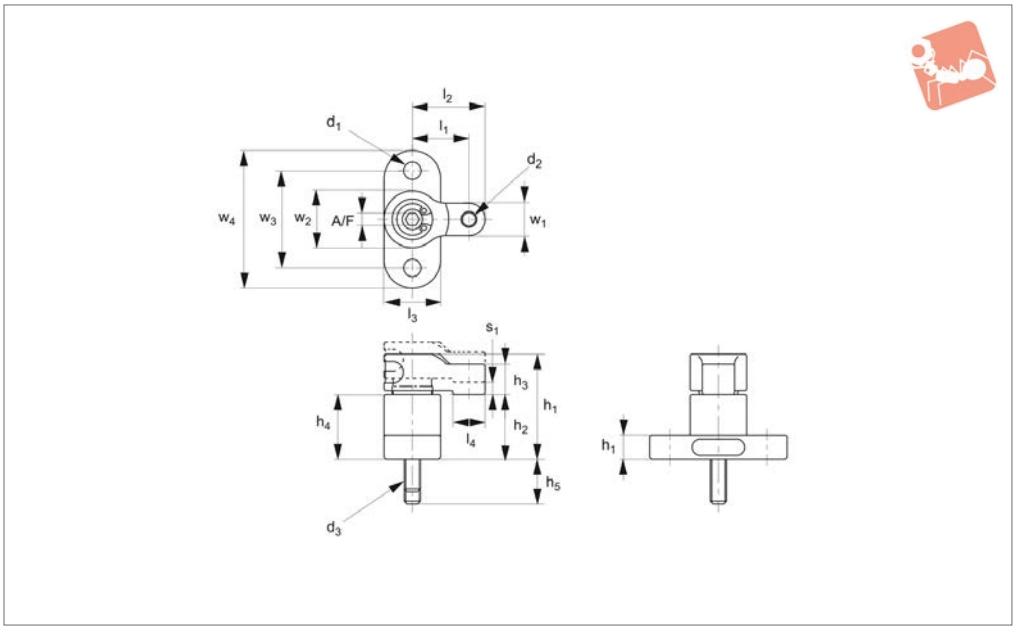
Material
Clamp body: steel (42CrMo), tempered, black oxide finish.
Holder: steel (C45), tempered, black oxide finish.

Technical Notes
The hook clamp is designed to move up and down in conjunction with the tightening screw.

Order No.	h_1	Stroke s_1	l_1	d_1	d_2	h_2	h_3	h_4	h_5	d_3	w_1	w_2	A/F_1	A/F_2	Clamping force kN	Torque Nm max.	Weight g
12550.W0110	45	3	14	14	M 4x0,7	35	7,5	35	11	M 6x1	8	14	3	12	2,0	2,7	55
12550.W0112	53	4	17	16	M 5x0,8	40	9,5	40	14	M 8x1,25	10	16	5	13	3,5	7,0	90







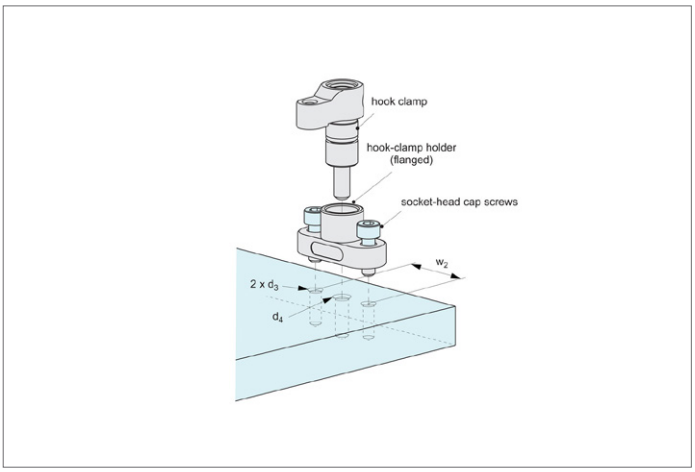
12550.3

Material
Steel (42CrMo), quenched and tempered, black oxide finish.
Holder: steel (C45), quenched and tempered, black oxide finish.

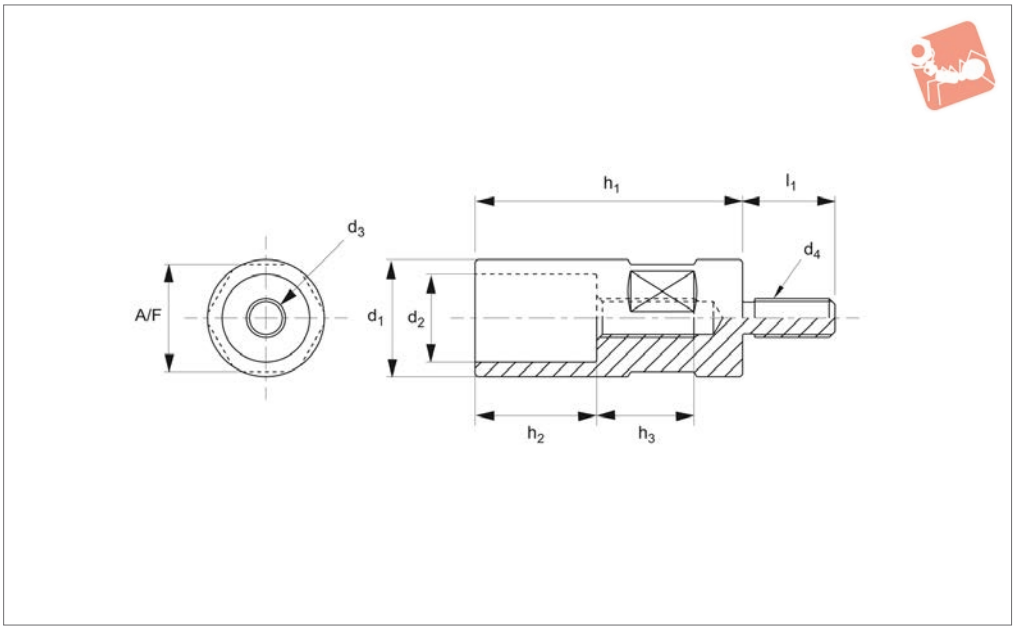
Technical Notes
Ideal for low height clamping.

The hook clamp is designed to move up and down in conjunction with the tightening screw.

Order No.	h_1	Stroke s_1	l_1	d_1	d_2	h_2	h_3	h_4	h_5	d_3	l_2	l_3	w_1	w_2	w_3	w_4	Torque to Nm max.	A/F	Clamping force kN	Weight g
12550.W0210	6	3	14	4,3	M 4x0,7	16	7,5	16	11	M 4x30	18	14	8	14	24	34	2,7	3	2,0	45
12550.W0212	8	4	17	5,3	M 5x0,8	19	9,5	19	12	M 5x35	22	16	10	16	28	40	7,0	5	3,5	75



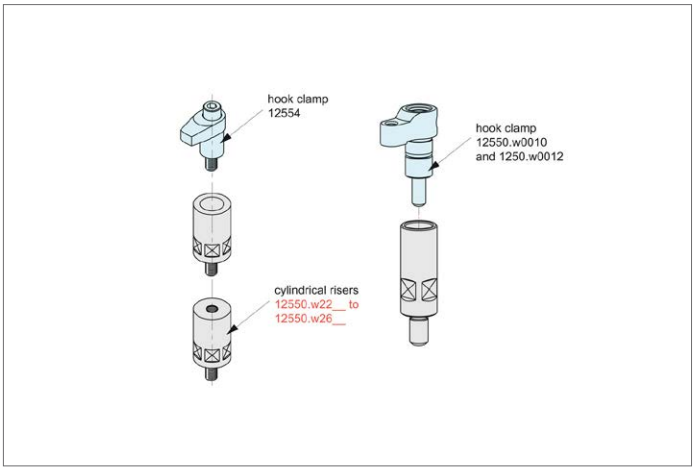
12550.4

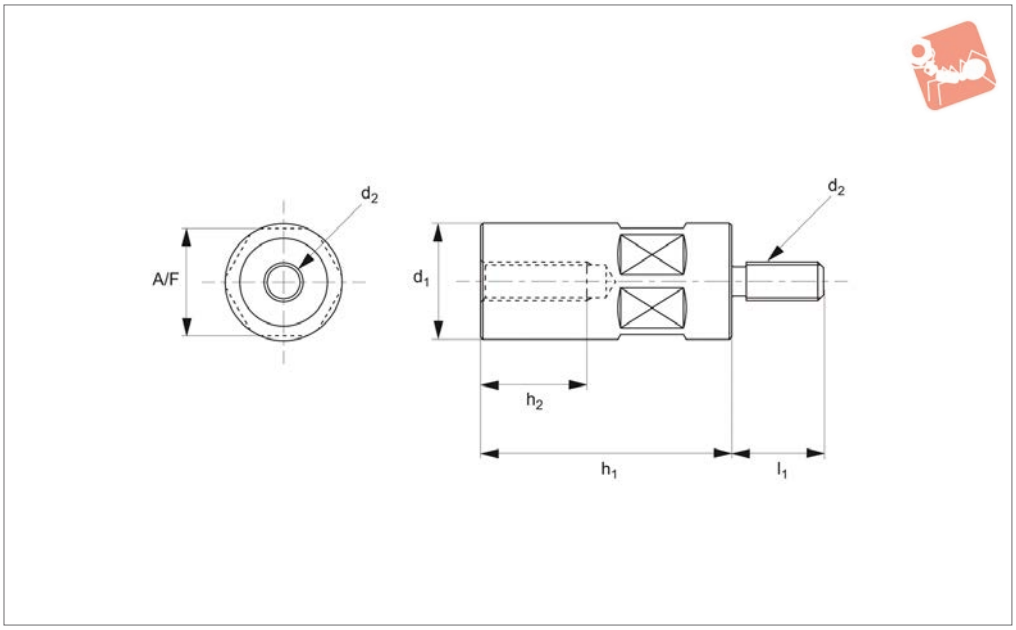


Material
Steel (C45), black oxide finish.

Tips
For use with hook clamps part no's 12550. W0010- .W0012 and 12554.

Order No.	Hook clamp size dia.	h_1	l_1	d_1	d_2 tol. f7	h_2	h_3	d_3	d_4	Torque to Nm max.	A/F	Weight g
12550.W1101	10	35	11	14	10 $^{+0,1,0}$	16	13	M 4x0,7	M 6x1	2.7	12	30
12550.W1121	12	40	14	16	12 $^{+0,1,0}$	19	14	M 6x1	M 8x1,25	7.0	13	45
12550.W1181	18	55	19	24	18	25	20	M 8x1,25	M 8x1,25	30	22	140
12550.W1201	20	63	30	32	20	30	21	M10x1,5	M12x1,75	38	30	400
12550.W1202	20	80	30	32	20	30	23	M10x1,5	M12x1,75	38	30	500
12550.W1251	25	80	30	40	25	40	25	M12x1,75	M12x1,75	50	36	600
12550.W1252	25	100	30	40	25	40	25	M12x1,75	M12x1,75	50	36	800
12550.W1321	32	80	30	50	32	40	25	M16x2	M16x2	80	46	930
12550.W1322	32	100	30	50	32	40	25	M16x2	M16x2	80	46	1230





12550.5

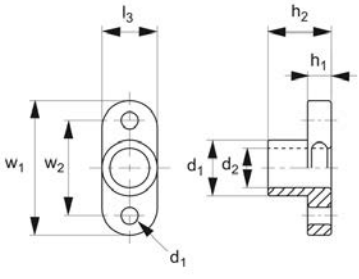
Material
Steel, heat treated and black oxide finish.

Technical Notes
For use with hook clamps 12550.

Order No.	h_1	l_1	d_1	d_2	h_2	A/F	Weight g
12550.W2241	32	19	24	M 8x1,25	20	22	105
12550.W2242	40	19	24	M 8x1,25	20	22	135
12550.W2243	50	19	24	M 8x1,25	20	22	170
12550.W2244	65	19	24	M 8x1,25	20	22	220
12550.W2401	50	30	40	M12x1,75	35	36	480
12550.W2402	65	30	40	M12x1,75	35	36	640
12550.W2403	80	30	40	M12x1,75	35	36	740
12550.W2404	100	30	40	M12x1,75	35	36	940
12550.W2405	125	30	40	M12x1,75	35	36	1230
12550.W2406	160	30	40	M12x1,75	35	36	1570
12550.W2407	200	30	40	M12x1,75	35	36	1970
12550.W2501	50	30	50	M16x2	35	46	770
12550.W2502	65	30	50	M16x2	35	46	1000
12550.W2503	80	30	50	M16x2	35	46	1160
12550.W2504	100	30	50	M16x2	35	46	1470
12550.W2505	125	30	50	M16x2	35	46	1920
12550.W2601	160	30	60	M16x2	35	55	3490
12550.W2602	200	30	60	M16x2	35	55	4370

Flanged Hook Clamp Holders

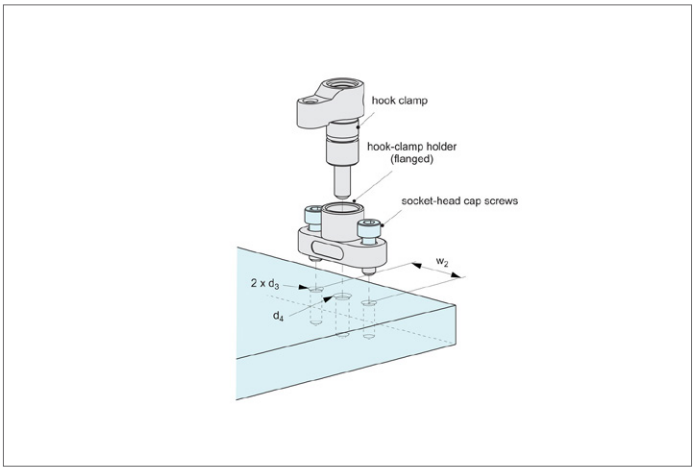
12550.6

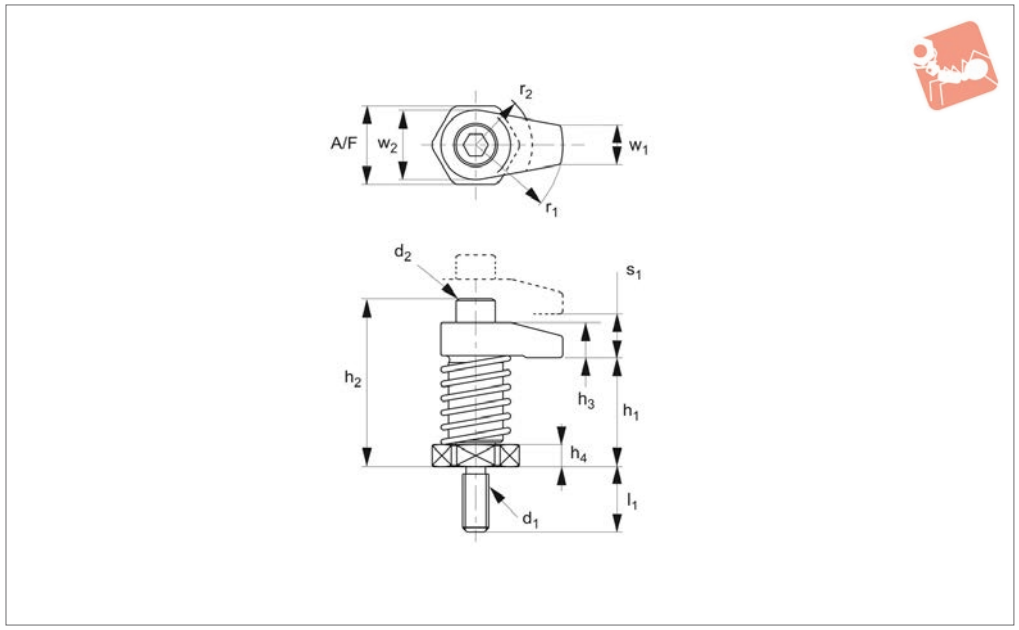


Material
Steel (C45), black oxide finish, tempered - 12550.W3100 and 12550.W3120).

Technical Notes
For use with hook clamps part no's 12550. W0010- .W0012 and 12554.

Order No.	Hook clamp size dia.	h_1	l_1	d_1	d_2 tol. f7	h_2	d_3	l_2	w_1	w_2	w_3	Weight g
12550.W3100	10	6	-	14	$10^{+0,1}$	16	4,3 (M 4)	14	34	24	-	20
12550.W3120	12	8	-	16	$12^{+0,1}$	19	5,3 (M 5)	16	40	28	-	30
12550.W3180	18	10	11.3	24	18	25	6,6 (M 6)	24	50	38	15	85
12550.W3200	20	12	13.4	28	20	30	9,0 (M 8)	28	60	45	20	150
12550.W3250	25	14	15.0	35	25	40	11,0 (M10)	35	75	55	20	290
12550.W3320	32	16	20.2	42	32	40	13,0 (M12)	41	85	65	25	400





12552

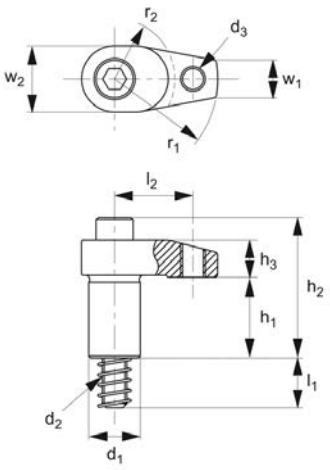
Material
Steel (35CrMo), heat treated, black oxide finish, precision ground.

Technical Notes
Cylindrical risers can be used to raise clamping height.

Tips
Please apply grease to sliding surface.

Order No.	h_1	Stroke s_1	l_1	d_1	d_2	h_2	h_3	h_4	w_1	w_2	r_1	r_2	Torque to Nm max.	A/F	Clamping force kN	Weight g
12552.W0221	35	10	19	M 8x1,25	M 8x30	49	12	6	10	22	20	15	20	22	7.9	125
12552.W0222	35	10	19	M 8x1,25	M 8x30	49	12	6	10	22	25	15	20	22	7.3	130
12552.W0223	35	10	19	M 8x1,25	M 8x30	49	12	6	10	22	30	15	20	22	6.7	135
12552.W0224	45	10	19	M 8x1,25	M 8x30	59	12	16	10	22	20	15	20	22	7.9	160
12552.W0225	45	10	19	M 8x1,25	M 8x30	59	12	16	10	22	25	15	20	22	7.3	165
12552.W0226	45	10	19	M 8x1,25	M 8x30	59	12	16	10	22	30	15	20	22	6.7	170
12552.W0321	50	15	30	M12x1,75	M12x45	77	16	10	18	32	40	26	45	36	13.5	450
12552.W0322	50	15	30	M12x1,75	M12x45	79	16	10	18	32	50	26	45	36	12.6	480
12552.W0323	50	15	30	M12x1,75	M12x45	79	16	10	18	32	60	26	45	36	11.7	520
12552.W0324	65	15	30	M12x1,75	M12x45	92	16	25	18	32	40	26	45	36	13.5	600
12552.W0325	65	15	30	M12x1,75	M12x45	94	18	25	18	32	50	26	45	36	12.6	630
12552.W0326	65	15	30	M12x1,75	M12x45	94	18	25	18	32	60	26	45	36	11.7	670
12552.W0361	50	15	30	M16x2	M16x55	86	21	10	22	36	40	26	60	36	13.4	630
12552.W0362	50	15	30	M16x2	M16x55	86	21	10	22	36	50	26	60	36	12.4	680
12552.W0363	50	15	30	M16x2	M16x55	86	21	10	22	36	60	26	60	36	12.0	740
12552.W0364	65	15	30	M16x2	M16x55	101	21	25	22	36	40	26	60	36	13.4	780
12552.W0365	65	15	30	M16x2	M16x55	101	21	25	22	36	50	26	60	36	12.4	830
12552.W0366	65	15	30	M16x2	M16x55	101	21	25	22	36	60	26	60	36	12.0	890

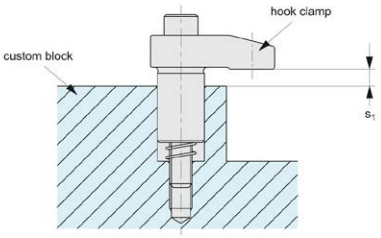
12554

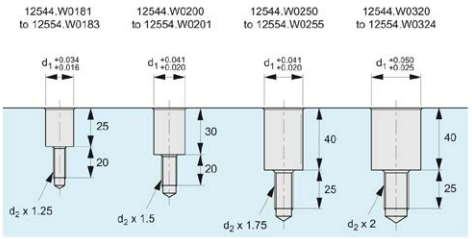


Material
Steel (C45), tempered and black oxide finish, precision ground.

Tips
Please apply grease on sliding surface to prevent galling when using in dry condition.
Can be used with clamping holders 12550.4. and cylindrical risers 12550.5.

Order No.	h_1	Stroke s_1	l_1	d_1 tol. h7	d_2	h_2	h_3	d_3	l_2	w_1	w_2	r_1	r_2	Torque to Nm max.	Clamping force kN	Weight g
12554.W0181	23	10	21	18	M 8x50	37	12			10	22	20	15	38	15	90
12554.W0182	23	10	21	18	M 8x50	37	12			10	22	25	15	33	12	100
12554.W0183	23	10	21	18	M 8x50	37	12			10	22	30	20	30	10	105
12554.W0200	30	12	21	20	M10x65	54	15			12	25	30	20	38	13	165
12554.W0201	30	12	21	20	M10x65	54	15			12	25	40	25	32	10	180
12554.W0250	39	15	26	25	M12x80	66	16			18	32	40	25	60	18	305
12554.W0251	39	15	24	25	M12x80	68	18			18	32	50	25	50	14	360
12554.W0252	39	15	24	25	M12x80	68	18			18	32	60	25	46	12	380
12554.W0253	39	15	26	25	M12x80	66	16	M12x1,75	31	18	32	40	25	60	18	295
12554.W0254	39	15	24	25	M12x80	68	18	M12x1,75	38	18	32	50	25	50	14	350
12554.W0255	39	15	24	25	M12x80	68	18	M12x1,75	46	18	32	60	25	46	12	370
12554.W0320	39	15	26	32	M16x85	75	21			22	36	40	25	170	38	530
12554.W0321	39	15	26	32	M16x85	75	21			22	36	50	25	150	31	580
12554.W0322	39	15	26	32	M16x85	75	21			22	36	60	25	130	26	625
12554.W0323	39	15	26	32	M16x85	75	21	M12x1,75	38	22	36	50	25	150	31	565
12554.W0324	39	15	26	32	M16x85	75	21	M12x1,75	46	22	36	60	25	130	26	610

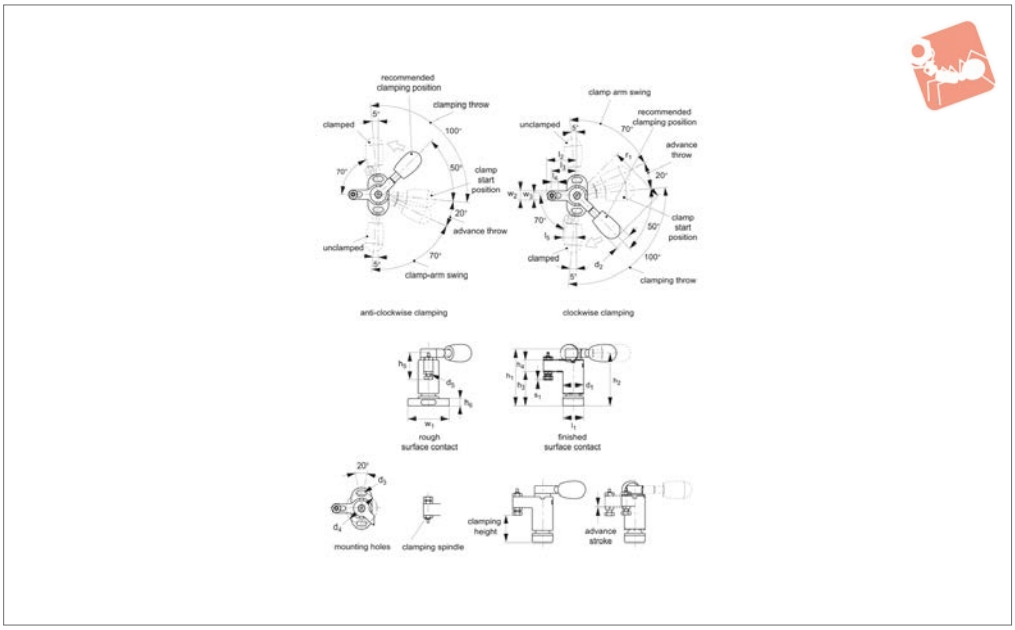




Hook clamps can be mounted directly into custom blocks with receiving holes as specified above.

machining instruction for custom blocks

12562.1

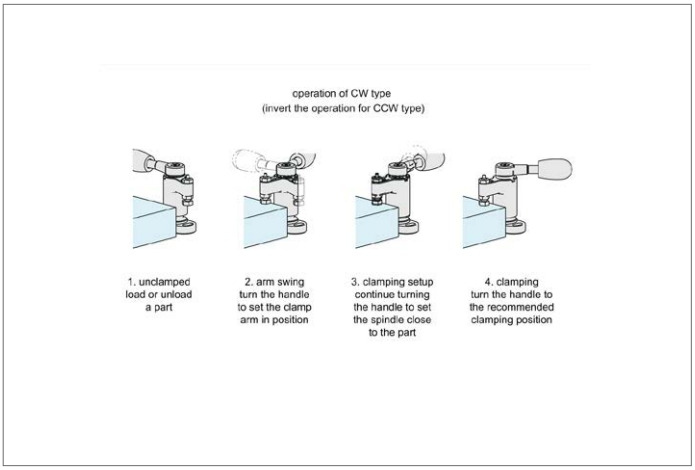


Material
Body, handle, clamping spindle: steel (C45), tempered and black oxide finish.
Arm, cam shaft: steel (42CrMo4), tempered and black oxide finish.
Knob: phenolic plastic, black.

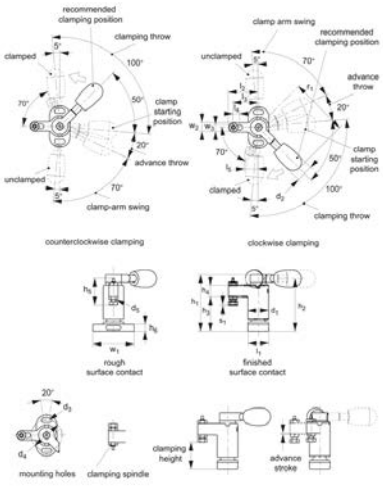
Tips
Rough surface contact. Can be supplied with nickel-plated finish on request. Clamping height can be adjusted. Values in

Order No.	Clamping direction	Clamping height finished surface min.	Clamping height finished surface max.	Clamping height rough surface min.	Clamping height rough surface max.	h_1	h_2	h_3	h_4	h_5	h_6	l_1	l_2	Weight g
12562.W0030	Clockwise	22,8 (22,3~23)	24,8 (24,3~25)	22,4 (21,9~22)	24,4 (23,9~24)	49	45.8	30	10	22.8	6	18	26	112
12562.W0040	Clockwise	31,3 (30,6~32,0)	31,3 (30,6~32,0)	32,2 (31,5~32,9)	34,2 (33,5~34,9)	66	61.3	40	14	28.5	8	23	35	250
12562.W0050	Clockwise	32,5 (31,7~33,2)	39,0 (38,2~39,7)	33,5 (32,7~34,2)	40,0 (39,2~40,7)	82	76.5	50	18	45.5	12	30	45	570
12562.W0060	Clockwise	36,5 (35,5~37,4)	46,0 (45,0~46,9)	39,0 (38,0~39,9)	48,5 (47,5~49,4)	100	93.0	60	22	57.0	15	40	55	1200
12562.W0031	Anti Clockwise	22,8 (22,3~23,3)	24,8 (24,3~25,3)	22,4 (21,9~22,9)	24,4 (23,9~24,9)	49	45.8	30	10	22.8	6	18	26	112
12562.W0041	Anti Clockwise	31,3 (30,6~32,0)	33,3 (32,6~34,0)	32,2 (31,5~32,9)	34,2 (33,5~34,9)	66	61.3	40	14	28.5	8	23	35	250
12562.W0051	Anti Clockwise	32,5 (31,7~33,2)	39,0 (38,2~39,7)	33,5 (32,7~34,2)	40,0 (39,2~40,7)	82	76.5	50	18	45.5	12	30	45	570
12562.W0061	Anti Clockwise	36,5 (35,5~37,4)	46,0 (45,0~46,9)	39,0 (38,0~39,9)	48,5 (47,5~49,4)	100	93.0	60	22	57.0	15	40	55	1200

Order No.	l_3	l_4	l_5	d_1	d_2	d_3	d_4	d_5	r_1	w_1	w_2	w_3	Clamping force kN	Clamping mechanism	Clamping stroke s_1	Advance stroke s_2	Operating load N max.
12562.W0030	22	6	11.5	18	15	4.3	27	M 4x0, 70	50	36	8	4.3	1.1	Spiral Cam, 5°	1.0	0.8	100
12562.W0040	30	8	15.3	23	20	5.3	34	M 5x0, 80	63	45	10	5.3	1.8	Spiral Cam, 5°	1.4	1.1	150
12562.W0050	37	8	20.7	30	26	8.4	48	M 8x1, 25	80	65	16	8.4	2.2	Spiral Cam, 4°	1.5	1.4	200
12562.W0060	45	8	25.4	40	33	10.5	64	M10x1, 50	100	85	20	10.4	3.5	Spiral Cam, 4°	1.9	1.7	300
12562.W0031	22	6	11.5	18	15	4.3	27	M 4x0, 70	50	36	8	4.3	1.1	Spiral Cam, 5°	1.0	0.8	100
12562.W0041	30	8	15.3	23	20	5.3	34	M 5x0, 80	63	45	10	5.3	1.8	Spiral Cam, 5°	1.4	1.1	150
12562.W0051	37	8	20.7	30	26	8.4	48	M 8x1, 25	80	65	16	8.4	2.2	Spiral Cam, 4°	1.5	1.4	200
12562.W0061	45	8	25.4	40	33	10.5	64	M10x1, 50	100	85	20	10.4	3.5	Spiral Cam, 4°	1.9	1.7	300



12562.2



Material
Body, handle, clamping spindle: steel (C45), quenched and tempered, electroless nickel plated.
Arm, cam shaft: steel (42CrMo4), quenched and tempered, electroless nickel plated.
Knob: phenolic plastic, black.

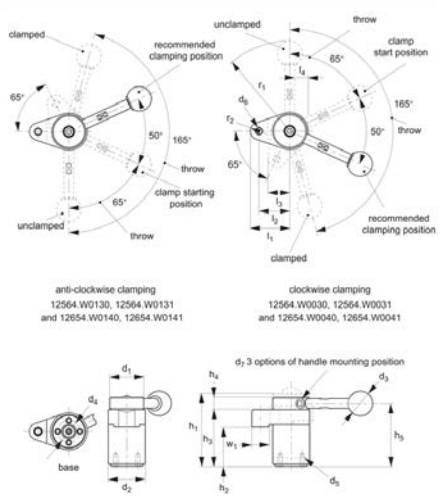
Tips
Clamping height can be adjusted. The parenthesised values denote clamping height range.

Order No.	Clamping direction	Clamping height finished surface min.	Clamping height finished surface max.	Clamping height rough surface min.	Clamping height rough surface max.	h_1	h_2	h_3	h_4	h_5	h_6	l_1	l_2	Weight g
12562.W0330	Clockwise	22,8 (22,3~23,3)	24,8 (24,3~25,3)	22,4 (21,9~22,9)	24,4 (23,9~24,9)	49	45.8	30	10	22.8	6	18	26	112
12562.W0340	Clockwise	31,3 (30,6~32,0)	33,3 (32,6~34,0)	32,2 (31,5~32,9)	34,2 (33,5~34,9)	66	61.3	40	14	28.5	8	23	35	250
12562.W0350	Clockwise	32,5 (31,7~33,2)	39,0 (38,2~39,7)	33,5 (32,7~34,2)	40,0 (39,2~40,7)	82	76.5	50	18	45.5	12	30	45	570
12562.W0360	Clockwise	36,5 (35,5~37,4)	46,0 (45,0~46,9)	39,0 (38,0~39,9)	48,5 (47,5~49,4)	100	93.0	60	22	57.0	15	40	55	1200
12562.W0331	Counter Clockwise	22,8 (22,3~23,3)	24,8 (24,3~25,3)	22,4 (21,9~22,9)	24,4 (23,9~24,9)	49	45.8	30	10	22.8	6	18	26	112
12562.W0341	Counter Clockwise	31,3 (30,6~32,0)	33,3 (32,6~34,0)	32,2 (31,5~32,9)	34,2 (33,5~34,9)	66	61.3	40	14	28.5	8	23	35	250
12562.W0351	Counter Clockwise	32,5 (31,7~33,2)	39,0 (38,2~39,7)	33,5 (32,7~34,2)	40,0 (39,2~40,7)	82	76.5	50	18	45.5	12	30	45	570

Order No.	Clamping direction	Clamping height finished surface min.	Clamping height finished surface max.	Clamping height rough surface min.	Clamping height rough surface max.	h_1	h_2	h_3	h_4	h_5	h_6	l_1	l_2	Weight g
12562.W0361	Counter Clockwise	36,5 (35,5~37,4)	46,0 (45,0~46,9)	39,0 (38,0~39,9)	48,5 (47,5~49,4)	100	93.0	60	22	57.0	15	40	55	1200

Order No.	l_3	l_4	l_5	d_1	d_2	d_3	d_4	d_5	r_1	w_1	w_2	w_3	Clamping force kN max.	Clamping mechanism	Clamping stroke s_1	Advance stroke s_2	Operating load N max.
12562.W0330	22	6	11.5	18	15	4.3	27	M 4x0,70	50	36	8	4.3	1.1	Spiral Cam, Cam Angle 5°	1.0	0.8	100
12562.W0340	30	8	15.3	23	20	5.3	34	M 5x0,80	63	45	10	5.3	1.8	Spiral Cam, Cam Angle 5°	1.4	1.1	150
12562.W0350	37	8	20.7	30	26	8.4	48	M 8x1,25	80	65	16	8.4	2.2	Spiral Cam, Cam Angle 5°	1.5	1.4	200
12562.W0360	45	8	25.4	40	33	10.5	64	M10x1,50	100	85	20	10.4	3.5	Spiral Cam, Cam Angle 4°	1.9	1.7	300
12562.W0331	22	6	11.5	18	15	4.3	27	M 4x0,70	50	36	8	4.3	1.1	Spiral Cam, Cam Angle 5°	1.0	0.8	100
12562.W0341	30	8	15.3	23	20	5.3	34	M 5x0,80	63	45	10	5.3	1.8	Spiral Cam, Cam Angle 5°	1.4	1.1	150
12562.W0351	37	8	20.7	30	26	8.4	48	M 8x1,25	80	65	16	8.4	2.2	Spiral Cam, Cam Angle 4°	1.5	1.4	200
12562.W0361	45	8	25.4	40	33	10.5	64	M10x1,50	100	85	20	10.4	3.5	Spiral Cam, Cam Angle 4°	1.9	1.7	300

12564.1



Material

Body, shaft: steel (42CrMo), tempered and black oxide finish.
Clamp arm, adaptor head: steel (C45), tempered and black oxide finish.
Handle: steel (C45), black oxide finish.
Ball knob: ABS resin, black.

Technical Notes

When installing a pad on the clamp arm, lock the clamp arm using a wrench to prevent the clamp from receiving any torque.
Clamping height can be adjusted. The values in brackets shows clamping height range.

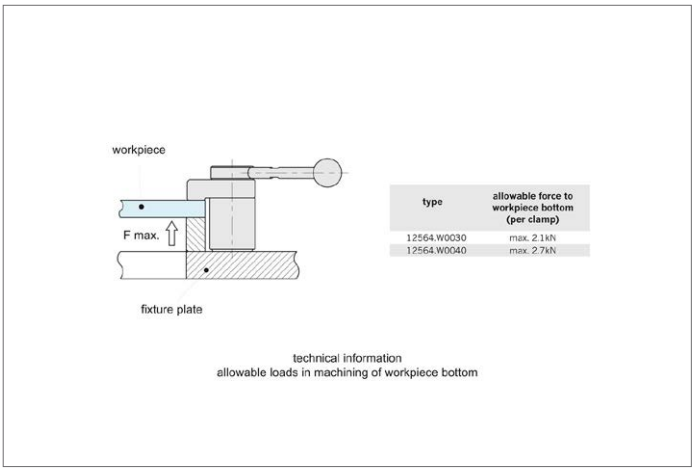
Tips

For parts 12564.W0031, 12564.W0131, 12564.W0041 and 12564.W0141 the handle must be ordered separately.

Order No.	Clamping direction	Type	h_1	h_2	h_3	h_4	h_5	l_1	l_2	l_3	Weight g
12564.W0030	Clockwise	With handle	57.5	32 (31,4~32,6)	46	10	51.0	32	25	17.5	320
12564.W0040	Clockwise	With handle	78.1	45 (44,1~45,9)	63	13	69.5	40	32	21.5	710
12564.W0031	Clockwise	Without handle	57.5	32 (31,4~32,6)	46	10	51.0	32	25	17.5	295
12564.W0041	Clockwise	Without handle	78.1	45 (44,1~45,9)	63	13	69.5	40	32	21.5	660
12564.W0130	Anti Clockwise	With handle	57.5	32 (31,4~32,6)	46	10	51.0	32	25	17.5	320
12564.W0140	Anti Clockwise	With handle	78.1	45 (44,1~45,9)	63	13	69.5	40	32	21.5	710
12564.W0131	Anti Clockwise	Without handle	57.5	32 (31,4~32,6)	46	10	51.0	32	25	17.5	295
12564.W0141	Anti Clockwise	Without handle	78.1	45 (44,1~45,9)	63	13	69.5	40	32	21.5	660

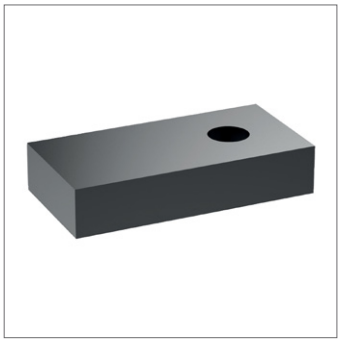
Order No.	l_4	d_1	d_2	d_3	d_4	d_5	d_6	d_7	r_1	r_2	w_1	Clamping force kN max.	Clamping mechanism	Handle load N max.
12564.W0030	15	30	30	20	18	M 4x0,7 Depth 8	M 6x1,0	5x0,8	73	7	14	0.8	Spiral Cam, 4°	150
12564.W0040	20	40	38	25	25	M 6x1,0 Depth 12	M 8x1,25	6x1,0	107	8	16	1.2	Spiral Cam, 4°	200
12564.W0031	15	30	30	20	18	M 4x0,7 Depth 8	M 6x1,0	5x0,8	73	7	14	0.8	Spiral Cam, 4°	150
12564.W0041	20	40	38	25	25	M 6x1,0 Depth 12	M 8x1,25	6x1,0	107	8	16	1.2	Spiral Cam, 4°	200
12564.W0130	15	30	30	20	18	M 4x0,7 Depth 8	M 6x1,0	5x0,8	73	7	14	0.8	Spiral Cam, 4°	150
12564.W0140	20	40	38	25	25	M 6x1,0 Depth 12	M 8x1,25	6x1,0	107	8	16	1.2	Spiral Cam, 4°	200

Order No.	l_4	d_1	d_2	d_3	d_4	d_5	d_6	d_7	r_1	r_2	w_1	Clamping force kN max.	Clamping mechanism	Handle load N max.
12564.W0131	15	30	30	20	18	M 4x0,7 Depth 8	M 6x1,0	5x0,8	73	7	14	0.8	Spiral Cam, 4°	150
12564.W0141	20	40	38	25	25	M 4x1,0 Depth 8	M 8x1,25	6x1,0	107	8	16	1.2	Spiral Cam, 4°	200

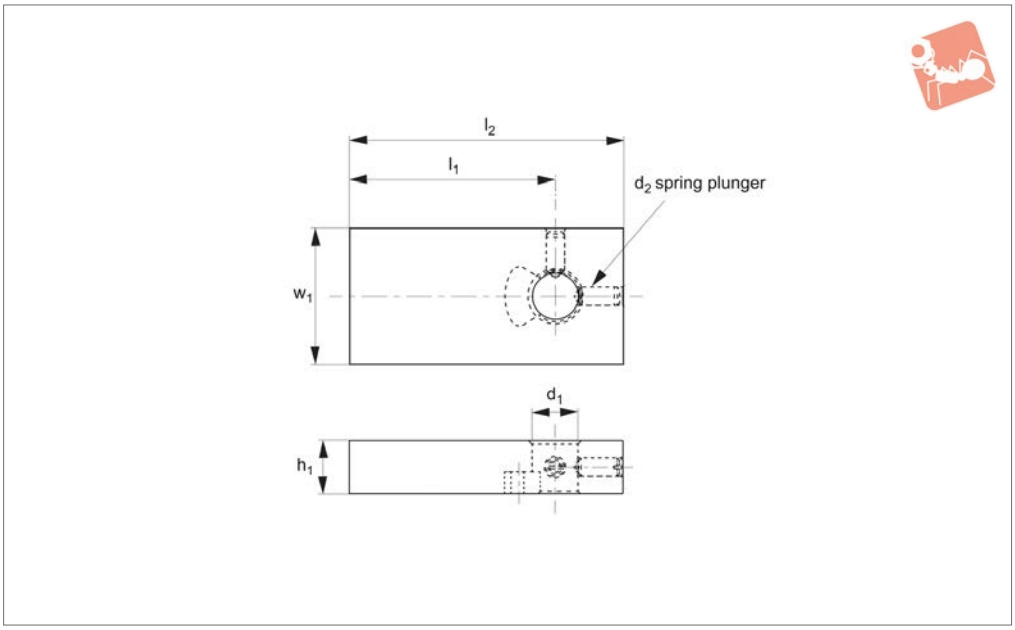


Machineable Clamp Arms

for use with 12564.W0030 - .W0141



12564.2

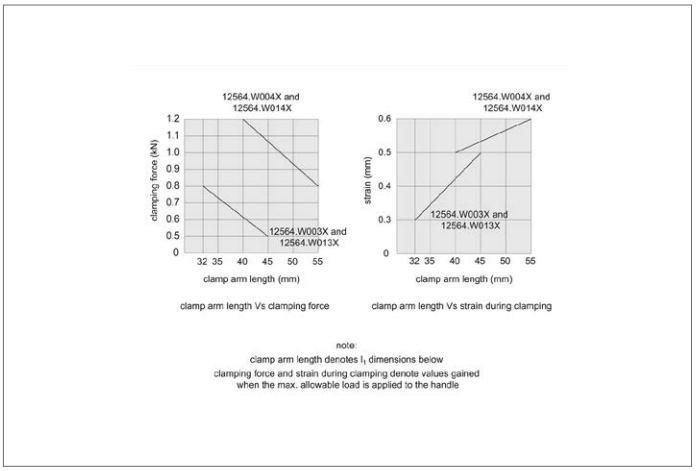


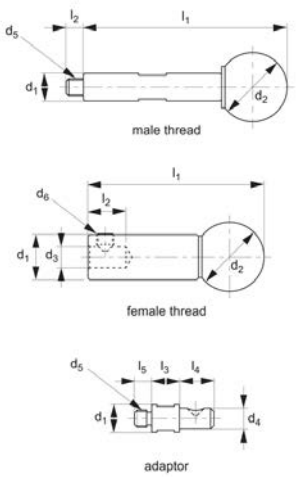
Material
Steel (C45), black oxide finish.

Technical Notes
Clamp arm length denotes l_1 dimensions.

Clamping force and strain during clamping denote values gained when the maximum allowable load is applied to the handle.

Order No.	h_1	l_1	l_2	d_1	d_2	w_1	To suit clamp 12564	Weight of clamping prd. g max.	Weight g
12564.W0430	12	45	60	10	M 4	30	.W003x and .W013x	100	150
12564.W0440	16	55	75	16	M 5	40	.W004x and .W014x	100	330





12564.3

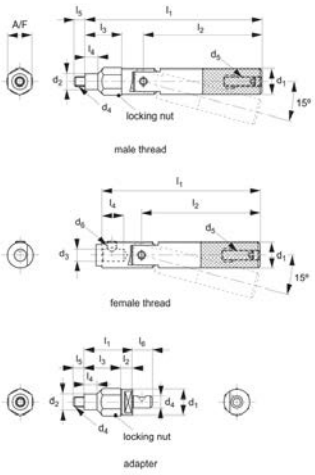
Material
Handle: steel (C45), black oxide finish.
Ball knob: ABS resin, black.

Shaft: steel (C45), tempered and black oxide finish.

Order No.	Type	l_1	l_2	l_3	l_4	l_5	d_1	d_2	d_3	d_4	d_5	d_6	Weight g
12564.W0630	Male Thread	59	5	-	-	-	8	20	-	-	M 5x0,8	-	25
12564.W0640	Male Thread	89	6	-	-	-	10	25	-	-	M 6x1	-	50
12564.W0631	Female Thread	51	11	-	-	-	13	20	6	-	-	M 5x5	45
12564.W0641	Female Thread	79	13	-	-	-	15	25	8	-	-	M 6x6	90
12564.W0632	Adaptor	-	-	8	10	5	8	-	-	6	M 5x0,8	-	7
12564.W0642	Adaptor	-	-	10	12	6	10	-	-	8	M 6x1	-	14

Adjustable Torque Handles
for use with swing and pull clamps

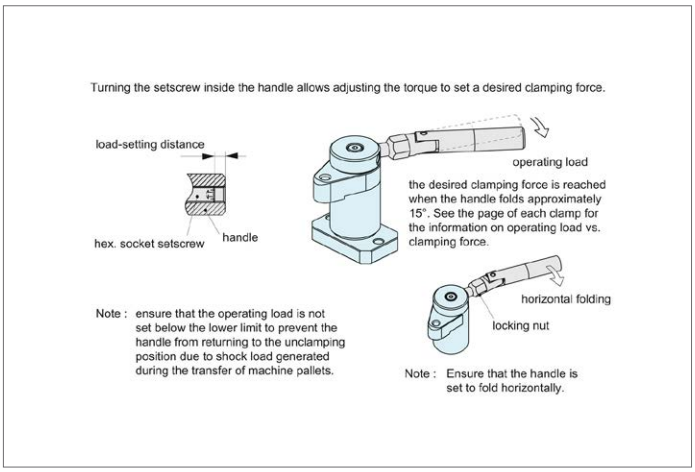
12564.4

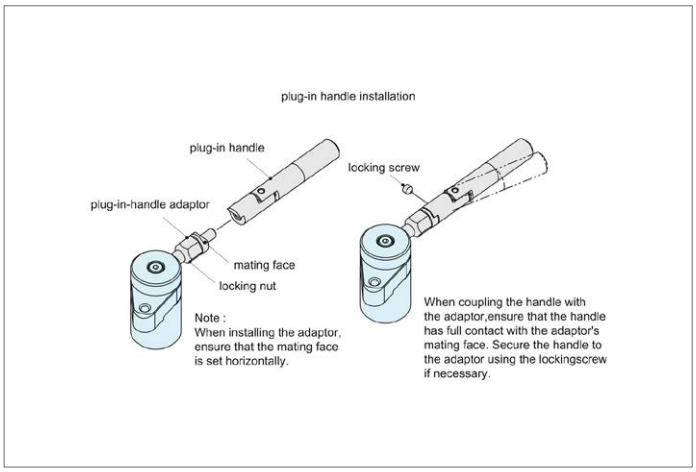


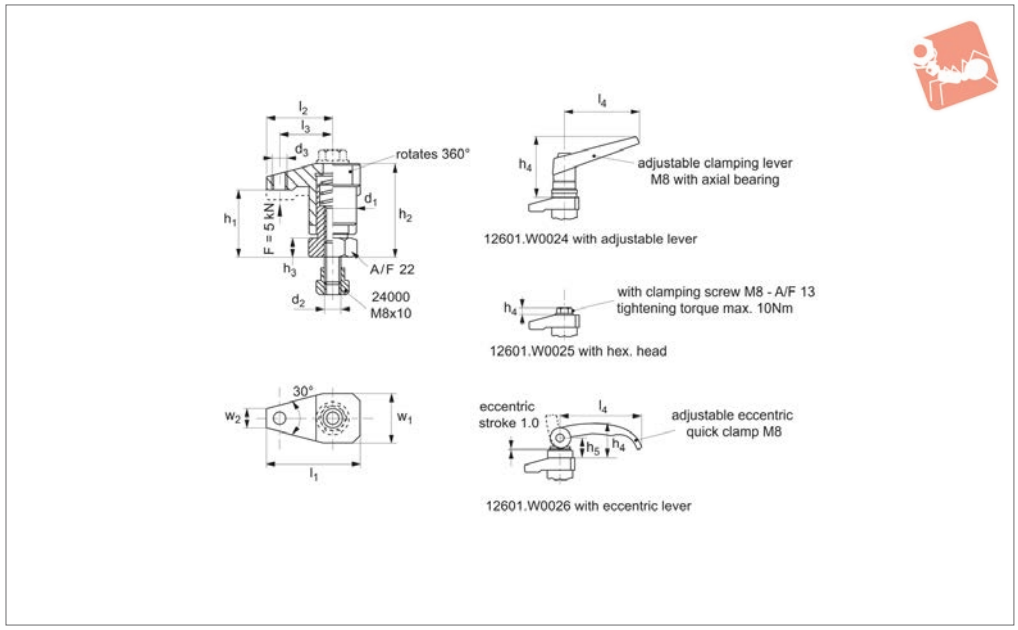
Material
Stem, handle: steel (C45), tempered and black oxide finish.
Locking nut: steel (C45), black oxide finish.

Technical Notes
Turning the set screw inside the handle allows the torque to be set to a desired clamping force.

Order No.	Type	l_1	l_2	l_3	l_4	l_5	l_6	d_1	d_2	d_3	d_4	d_5	d_6	A/F	Load setting range N	Weight g
12564.W0730	Male Thread	89,5	60	18,5	6,5	5,5		13	8		M 5x0,8	M 5x16		12	30 - 120	90
12564.W0740	Male Thread	119,0	84	23,0	8,0	6,5		15	10		M 6x1	M 6x20		14	30 - 160	140
12564.W0731	Female Thread	80,0	60		11,0			13		6		M 5x6	M 5x5		30 - 120	70
12564.W0741	Female Thread	107,0	84		13,0			15		8		M 6x20	M 6x6		30 - 160	130
12564.W0732	Adaptors	24,5	6	18,5	6,5	5,5	10	13	8		M 5x0,8				30 - 120	20
12564.W0742	Adaptors	30,0	7	23,0	8,0	6,5	12	15	10		M 6x1				30 - 160	40







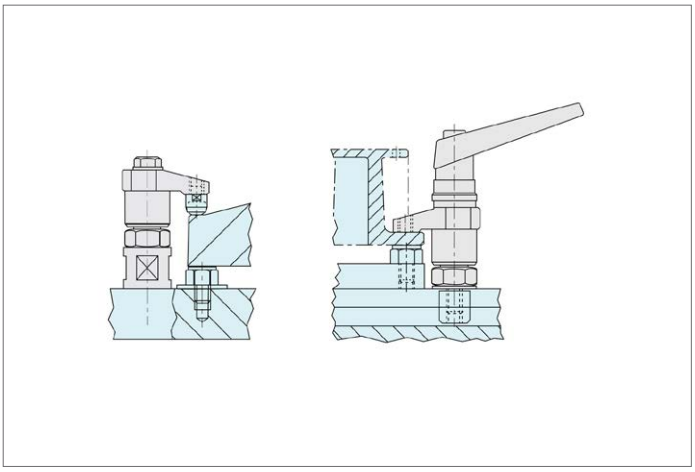
12601

Material
Steel case-hardened, blackened and ground.

Technical Notes
Ideally suited for clamping small components. The 10mm wide nose allows a very small clamping footprint. For suitable self-aligning pads (if required) see no. 34100.

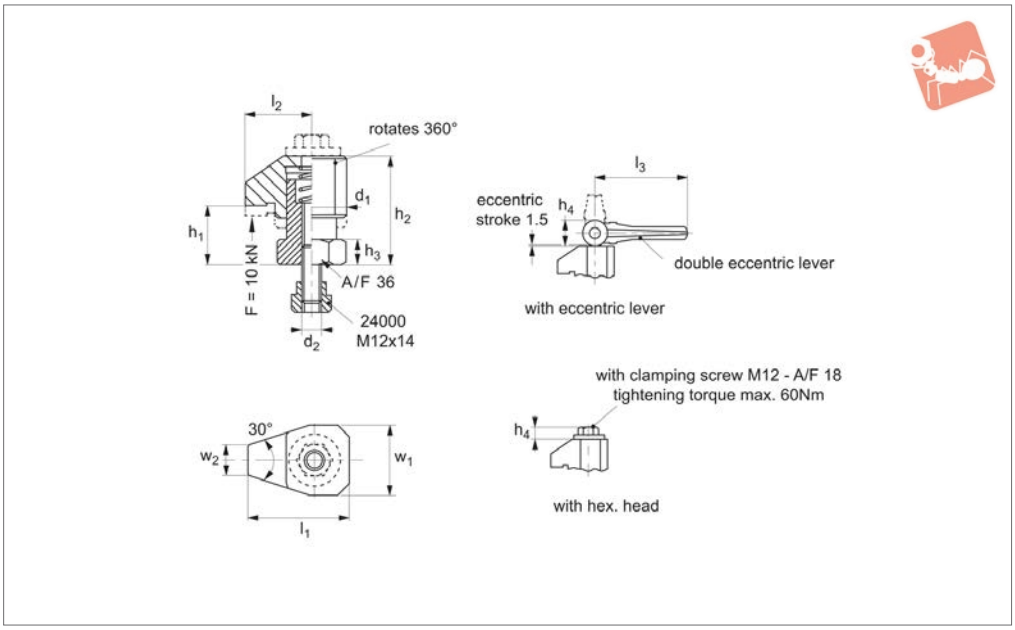
Tips
T-nuts can be supplied in any M8 sizes, see no. 24000.

Order No.	Type	Clamping height h_1 min.	Clamping height h_1 max.	Stroke	d_1	d_2	w_1	w_2	h_2 min.	h_2 max.	h_3	h_4	h_5	l_1	l_2	l_3	l_4	Weight g
12601.W0024	with adj. clamping lever	30	35	5	25	M8	26	10	44	49	10	60,0		49,5	35	28	74	363
12601.W0025	with hex. head	30	35	5	25	M8	26	10	44	49	10	6,9		49,5	35	28		215
12601.W0026	with ecc. clamping lever	30	35	5	25	M8	26	10	44	49	10	35,0	20,5	49,5	35	28	82	340



Compact Down Thrust Clamps
swivelling

12602



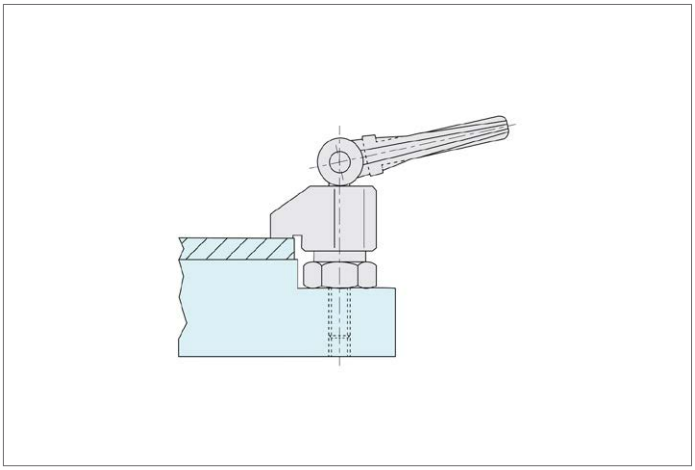
Material
Steel case-hardened, blackened and ground.

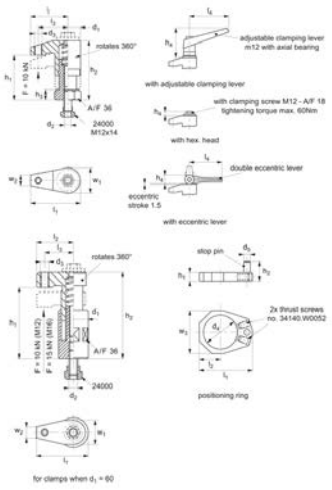
Technical Notes
For heavy-duty clamping applications where space and height are limiting factors.

Tips
Often used for clamping of injection mould tools and the like.

T-nuts removable. For other T-nut sizes please refer to no. 24000.

Order No.	Type	Clamping height h_1 min.	Clamping height h_1 max.	Stroke	d_1	d_2	w_1	w_2	h_2 min.	h_2 max.	h_3	h_4	l_1	l_2	l_3	Weight g
12602.W0034	With Eccentric Clamp Lever	25	30	5	44	M12	42	18	54	59	15	28	61	40	100	1022
12602.W0035	With Hex. Head Bolt	25	30	5	44	M12	42	18	54	59	15	13	61	40		708





12603

Material
Steel case-hardened, blackened and ground.

Technical Notes
Clamping height increased with the addition of height adjusting cylinders no. 12605.W0125-.W0167 and reduced with self-aligning pads nos.34100 or 34120.
Maximum clamping height (h_1 max.) must not be exceeded.
Use of positioning ring 12603.W0350 increases height h_2 by 7mm and reduces stroke by 7mm.
* Part no. 12603.W0063 has a M16 threaded stud.

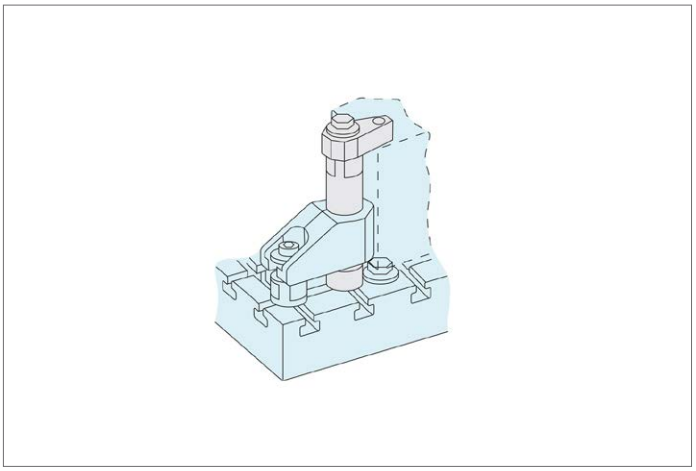
Tips
Offers rapid manual clamping with easy removal of workpieces through rotation of clamp arm away from component.
Positioning ring no. 12603.W0063, and its integral stop, provides repeated accuracy of the clamping position.
SAFETY: base of the clamping cylinder must make full surface contact.
T-nuts removable. For other T-nut sizes please refer to no.24000.

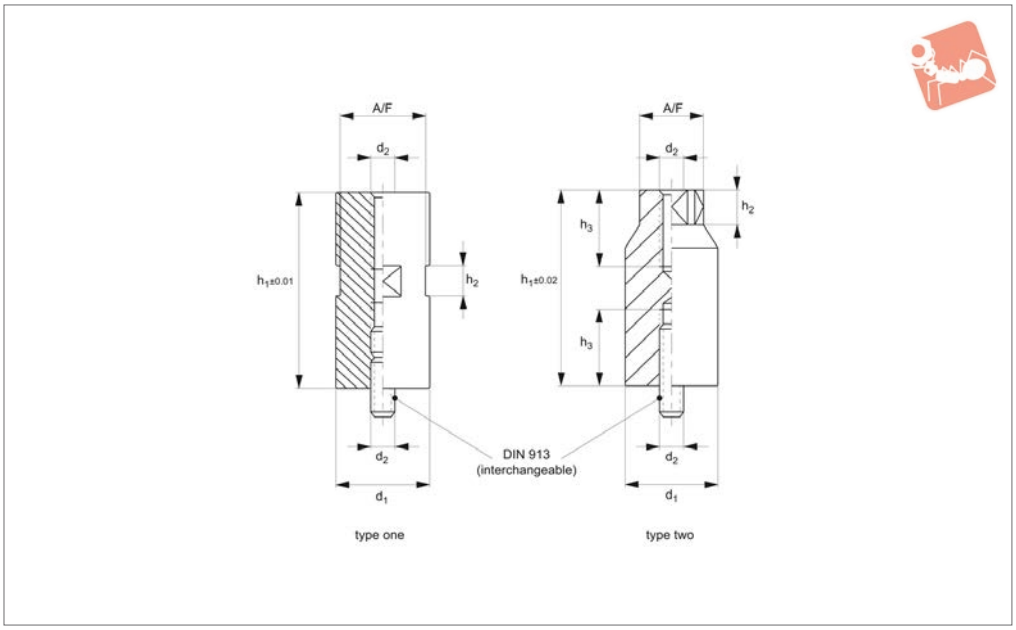
Order No.	Type	Stroke	d_1	d_2	d_3	d_4	d_5	w_1	w_2	w_3	h_1 min.	h_1 max.	Weight g
12603.W0050	With Adj. Clamping Lever	20	40	M12	M12	-	-	40	17	-	50	70	1194
12603.W0053	With Adj. Clamping Lever	30	40	M12	M12	-	-	40	17	-	68	98	1359
12603.W0056	With Adj. Clamping Lever	40	40	M12	M12	-	-	40	17	-	95	135	1639
12603.W0051	With Hex. Head	20	40	M12	M12	-	-	40	17	-	50	70	876
12603.W0054	With Hex. Head	30	40	M12	M12	-	-	40	17	-	68	98	964
12603.W0057	With Hex. Head	40	40	M12	M12	-	-	40	17	-	95	135	1300
12603.W0061	With Hex. Head	35	60	M12	M12	-	-	44	17	-	100	135	2695
12603.W0063	With Hex. Head *	35	60	M16	M16	-	-	53	24	-	100	135	2939
12603.W0052	With Ecc. Clamping Lever	20	40	M12	M12	-	-	40	17	-	50	50	1213
12603.W0055	With Ecc. Clamping Lever	30	40	M12	M12	-	-	40	17	-	68	70	1370
12603.W0058	With Ecc. Clamping Lever	40	40	M12	M12	-	-	40	17	-	95	98	1585
12603.W0060	With Ecc. Clamping Lever	35	60	M12	M12	-	-	40	17	-	100	135	3015
12603.W0350	Positioning Ring	-	-	-	-	28	5	-	-	35	7	-	32

Order No.	h_2 min.	h_2 max.	h_3	h_4	l_1	l_2	l_3	l_4	A/F
12603.W0050	73	93	15	82	75	55	43	108	36
12603.W0053	91	121	15	82	75	55	43	108	36
12603.W0056	118	158	22	82	75	55	43	108	36
12603.W0051	73	93	15	13	75	55	43	108	36
12603.W0054	91	121	15	13	75	55	43	108	36
12603.W0057	118	158	22	13	75	55	43	108	36
12603.W0061	123	158	98	13	95	65	53	-	36
12603.W0063	123	158	98	16	99	69	53	-	36
12603.W0052	50	50	15	73-93	75	55	43	108	36
12603.W0055	73	93	15	28	75	55	43	108	36
12603.W0058	91	121	22	28	75	55	43	108	36

Down Thrust Clamps
swivelling

Order No.	h_2 min.	h_2 max.	h_3	h_4	l_1	l_2	l_3	l_4	A/F
12603.W0060	123	158	98	28	95	65	53	100	36
12603.W0350	16	-	-	-	43.5	17.5	-	-	-





12605

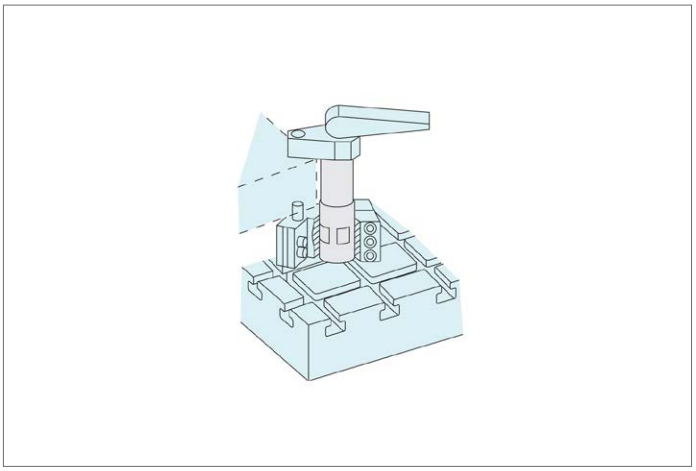
Material
Steel case-hardened, blackened and ground.

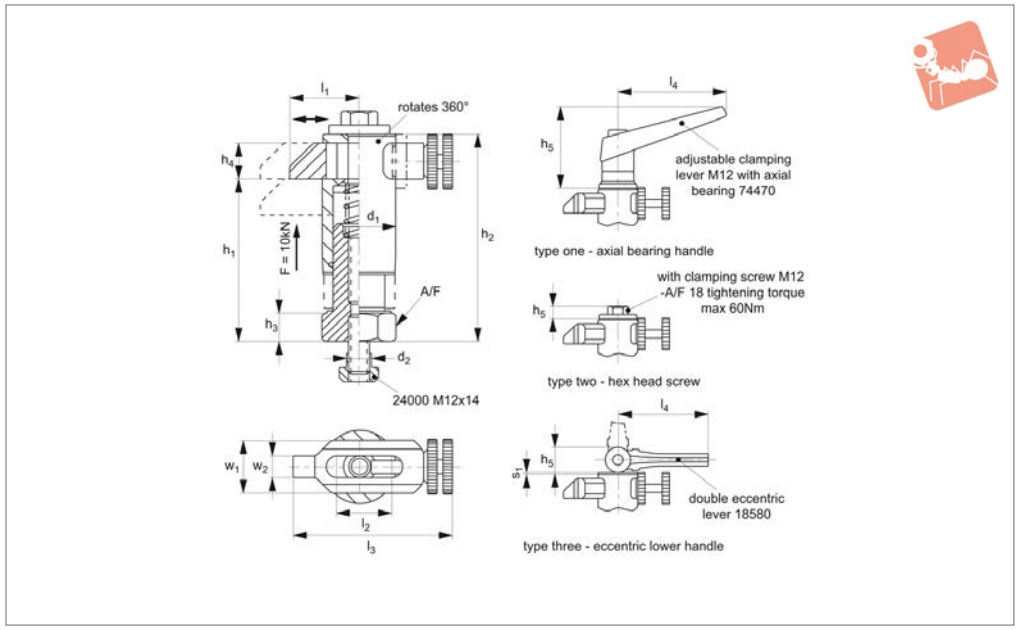
Technical Notes
Increase clamping height for down-thrust clamps, alternatively can be used as general height setting and supporting elements.

Order No.	Type	d_1 tol. h9	d_2	h_1 ±0.01	h_2	h_3	A/F	Weight g
12605.W0125	One	25	M 8	20	10	-	22	71
12605.W0126	One	25	M 8	40	20	-	22	139
12605.W0127	One	25	M 8	80	20	-	22	292
12605.W0140	One	40	M12	35	20	-	36	319
12605.W0141	One	40	M12	70	20	-	36	644
12605.W0142	One	40	M12	140	20	-	36	1325
12605.W0145	One	40	M16	35	20	-	36	318
12605.W0146	One	40	M16	70	20	-	36	634
12605.W0147	One	40	M16	140	20	-	36	1307
12605.W0160	One	60	M12	35	20	-	55	755
12605.W0161	One	60	M12	70	20	-	55	1460
12605.W0162	One	60	M12	140	20	-	55	3034
12605.W0165	One	60	M16	35	20	-	55	438
12605.W0166	One	60	M16	70	20	-	55	1493
12605.W0167	One	60	M16	140	20	-	55	3016
12605.W0241	One	70	M24	50	25	-	65	1310
12605.W0242	One	70	M24	100	25	-	65	2682
12605.W0243	Two	90	M24	200	35	50	65	8655
12605.W0244	Two	90	M24	300	35	50	65	13617

Height Adjusting Cylinders

for down thrust clamps 12603





12608

Material
Steel case-hardened, blackened and ground

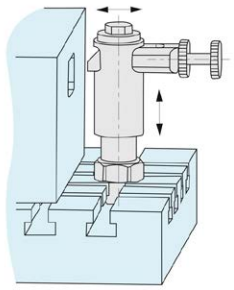
Technical Notes
Use when swivelling of clamp is not possible, horizontal retraction available, see l_1 min - l_1 max.
Use of positioning ring 12603.W0350 increases height h_1 by 7mm and reduces stroke by 7mm.
Operation:
Push clamp jaw back. Insert workpiece to fixture. Push clamp jaw forwards, adjust position with knurled clamp screw, lock off. Apply clamping pressure.

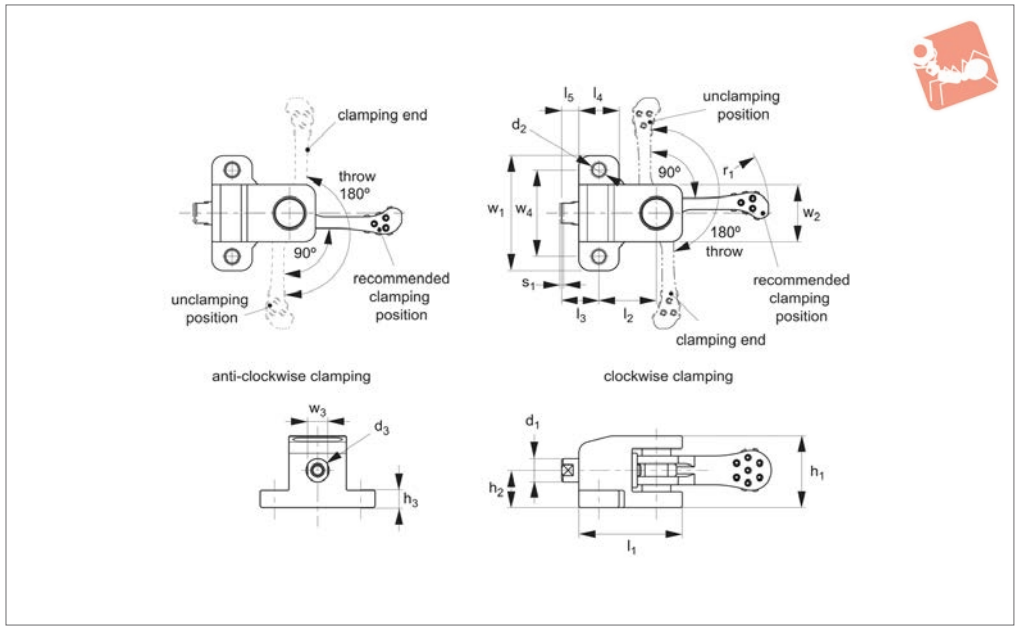
Tips
Offers quick manual clamping by use of clamping screw/lever. Compact design and height adjustable.
Used with:
24000 T-nuts
12603.W0350 positioning ring.

Order No.	Type	Stroke s_1	d_1	d_2	w_1	w_2	h_1 min.	h_1 max.	h_2 min.	h_2 max.	Weight g
12608.W0083	One	20	40	M12	30	13	70	90	95	115	1400
12608.W0086	One	30	40	M12	30	13	88	118	113	143	1560
12608.W0084	Two	20	40	M12	30	13	70	90	95	115	1070
12608.W0087	Two	30	40	M12	30	13	88	118	113	143	1240
12608.W0085	Three	20	40	M12	30	13	70	90	95	115	1400
12608.W0088	Three	30	40	M12	30	13	88	118	113	143	1560

Order No.	h_3	h_4	h_5	l_1 min.	l_1 max.	l_2	l_3 min.	l_3 max.	l_4	A/F
12608.W0083	15	20	82	38	55	30	90	107	108	36
12608.W0086	15	20	82	38	55	30	90	107	108	36
12608.W0084	15	20	13	38	55	30	90	107	-	36
12608.W0087	15	20	13	38	55	30	90	107	-	36
12608.W0085	15	20	28	38	55	30	90	107	100	36
12608.W0088	15	20	28	38	55	30	90	107	100	36

Down Thrust Clamps
retractable





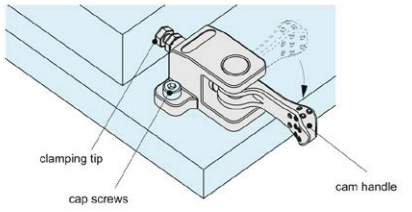
12618

Material
Steel (35CrMo), heat treated, black oxide finish, precision ground.
Body: steel (C45), black oxide finish.
Piston/pin: steel (C45), tempered and black oxide finish.
Cam handle: steel (42CrMo), tempered and black oxide finish.

Technical Notes
The tapped hole in the piston allows a pad to be fitted to the clamp.

Order No.	Clamping direction	Clamping stroke s_1	d_1	d_2	d_3	w_1	w_2	w_3	w_4	h_1	Weight g
12618.W0008	Clockwise	1.2	8	4.5	M 4x0,7 Depth 8	40	20	7	30	25	130
12618.W0012	Clockwise	1.6	12	6.6	M 6x1 Depth 12	55	26	10	40	33	350
12618.W0108	Anti Clockwise	1.2	8	4.5	M 4x0,7 Depth 8	40	20	7	30	25	130
12618.W0112	Anti Clockwise	1.6	12	6.6	M 6x1 Depth 12	55	26	10	40	33	350

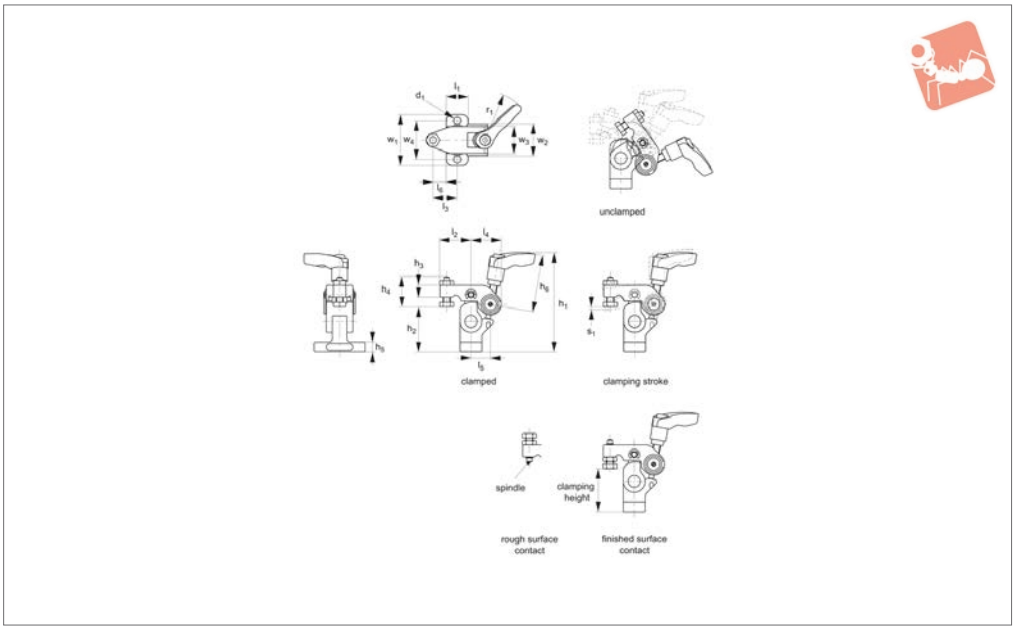
Order No.	h_2	h_3	l_1	l_2	l_3	l_4	l_5	r_1	Handle load N max.	Clamping force kN max.	Clamping mechanism
12618.W0008	13	6	36	20	13	14	6	40	80	0.9	Spiral Cam, 4°
12618.W0012	18	10	50	28	19	20	9	63	150	2.4	Spiral Cam, 4°
12618.W0108	13	6	36	20	13	14	6	40	80	0.9	Spiral Cam, 4°
12618.W0112	18	10	50	28	19	20	9	63	150	2.4	Spiral Cam, 4°



turning the handle in the clamping direction lets the cam work to project the piston for clamping
turning the handle back lets the spring work to retract the piston for unclamping

Retractable Clamps
with adjustable handle

12610.1

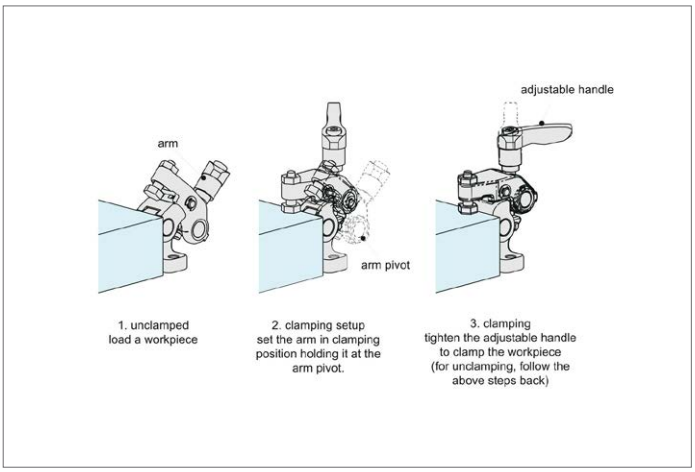


Material
Body/spindle: steel (C45), tempered and black oxide finish.
Arm/joint: steel (35CrMo), tempered and black oxide finish.

Tips
Clamping height can be adjusted. The values in brackets shows clamping height range. Screw clamping mechanism allows for longer clamping stroke and greater clamping force.

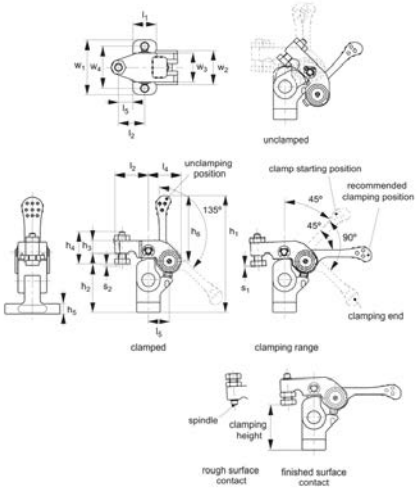
Order No.	h_1	h_2	h_3	h_4	h_5	h_6	l_1	l_2	l_3	l_4	Weight g
12610.W0006	81	45	10	24.0	8	47	18	25.5	20	25	242
12610.W0008	100	55	12	30.5	10	63	22	32.0	25	31	490

Order No.	l_5	l_6	r_1	w_1	w_2	w_3	w_4	w_5	d_1	Handle load N max.	Clamping height finished surface min.	Clamping height finished surface max.	Clamping height rough surface min.	Clamping height rough surface max.	Clamping stroke s_1	Clamping force kN max.	Clamping mechanism
12610.W0006	16	11	40	42	26	22	32	M 6x1	5.5	170	32 (32,0~29,5)	40 (40,0~37,5)	35 (35,0~32,5)	43 (43,0~40,5)	2.5	2.4	Screw
12610.W0008	20	14	65	52	32	28	40	M 8x1,25	6.5	210	37 (37,0~33,5)	48 (48,0~44,5)	42 (42~38,5)	53 (53,0~49,5)	3.5	4.2	Screw


arm
arm pivot
adjustable handle
1. unclamped
load a workpiece
2. clamping setup
set the arm in clamping
position holding it at the
arm pivot.
3. clamping
tighten the adjustable handle
to clamp the workpiece
(for unclamping, follow the
above steps back)

Retractable Clamps
with eccentric handle

12610.2

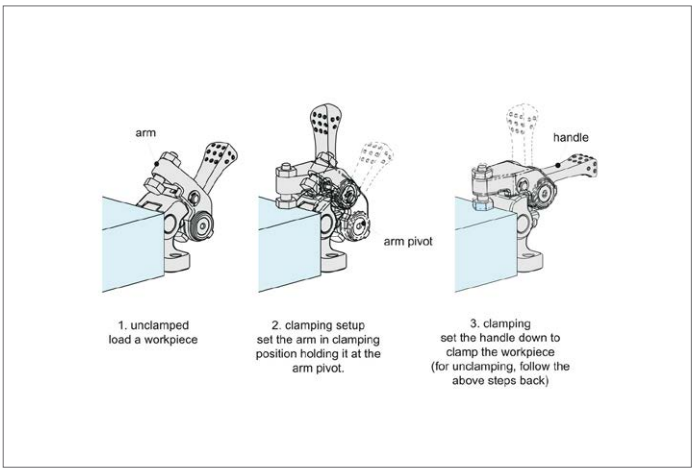


Material
Body/spindle: steel (C45), tempered and black oxide finish.
Arm/joint: steel (35CrMo), tempered and black oxide finish.

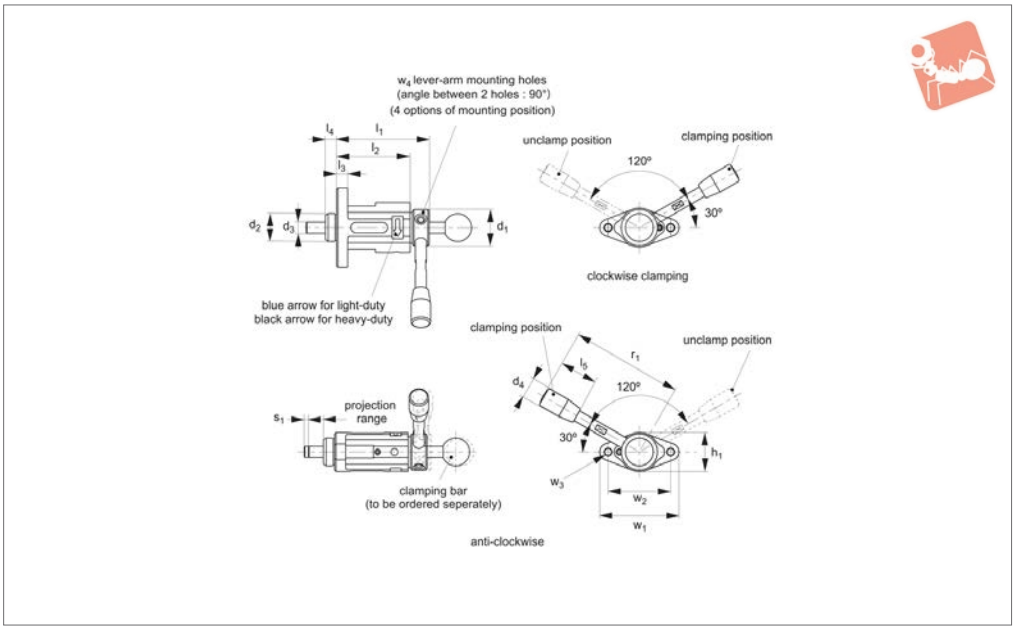
Tips
Clamping height can be adjusted. The values in brackets shows clamping height range.

Order No.	h_1	h_2	h_3	h_4	h_5	h_6	l_1	l_2	l_3	l_4	Weight g
12610.W0106	89	45	10	24.0	8	50	18	25.5	20	25	244
12610.W0108	109	55	12	30.5	10	63	22	32.0	25	31	468

Order No.	l_5	l_6	w_1	w_2	w_3	w_4	w_5	d_1	Handle load N max.	Clamping height finished surface min.	Clamping height finished surface max.	Clamping height rough surface min.	Clamping height rough surface max.	Clamping stroke s_1	Clamping force kN max.	Clamping mechanism	Overall stroke s_2
12610.W0106	16	11	42	26	22	32	M 6x1	5.5	100	32 (31,5~32,5)	40 (39,5~40,5)	35 (34,5~35,5)	43 (42,5~43,5)	1.0	0.7	Spiral Cam, 4°	1.5
12610.W0108	20	14	52	32	28	40	M 8x1,25	6.5	150	37 (36,4~37,6)	48 (47,4~48,6)	42 (41,4~42,6)	53 (52,4~53,6)	1.2	1.1	Spiral Cam, 4°	1.8


arm
handle
arm pivot
1. unclamped
load a workpiece
2. clamping setup
set the arm in clamping
position holding it at the
arm pivot.
3. clamping
set the handle down to
clamp the workpiece
(for unclamping, follow the
above steps back)

12615



Material

Body/lever arm: steel (C45), black oxide finish.
Cam: steel (C45), carburized-hardened, black oxide finish.
Handle: phenolic plastic, black matt. Clamping handle is not included.

Technical Notes

Can be used in both vertical and horizontal clamping applications.
Spring-loaded clamp that provides constant clamping force.
Long clamping-bar projection range allows clamping of a recessed part.
When using your own clamping bar, ensure that the diameter is finished to a H9 or better tolerance.

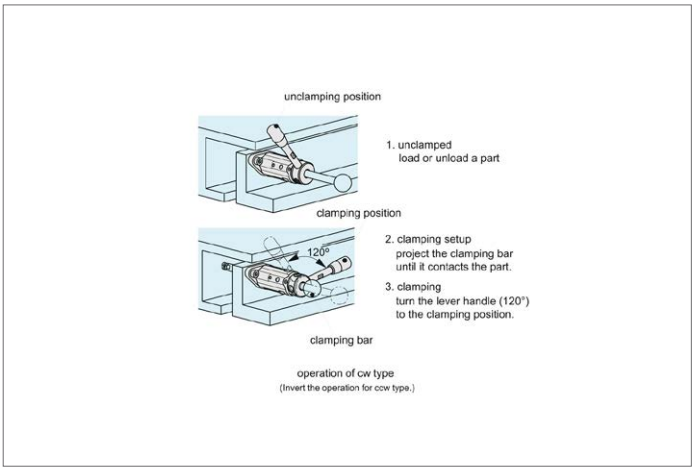
Tips

When a reaction force (F) becomes greater than clamping force, the clamping bar slides back, unclamping the part.

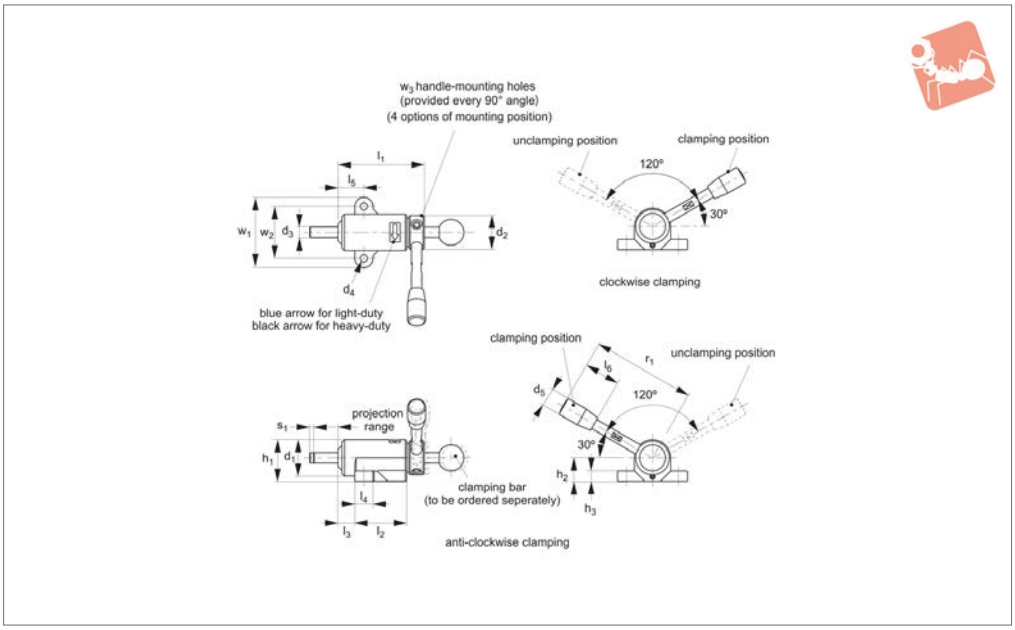
Order No.	Type	Clamping direction	d_1	d_2	d_3	d_4	h_1	l_1	l_2	l_3	Weight g
12615.W0008	Light Duty	Clockwise	26	20	8	14	28	68.5	53	8	330
12615.W0012	Light Duty	Clockwise	36	30	12	21	40	90.7	72	12	930
12615.W0208	Light Duty	Clockwise	26	20	8	14	28	68.5	53	8	330
12615.W0212	Light Duty	Clockwise	36	30	12	21	40	90.7	72	12	950
12615.W0108	Heavy Duty	Anti Clockwise	26	20	8	14	28	68.5	53	8	330
12615.W0112	Heavy Duty	Anti Clockwise	36	30	12	21	40	90.7	72	12	930
12615.W0308	Heavy Duty	Anti Clockwise	26	20	8	14	28	68.5	53	8	330
12615.W0312	Heavy Duty	Anti Clockwise	36	30	12	21	40	90.7	72	12	950

Order No.	l_4	l_5	r_1	w_1	w_2	w_3	w_4	Clamping stroke s_1	Handle load N max.	Clamping force kN max.	Clamping releasing force kN
12615.W0008	8	28	80	57	45	M 6x1 (Pre-drill 5,2)	M 5x0,8	1.5	40	0.2	F>0,2
12615.W0012	12	50	132	85	65	M10x1,5 (Pre-drill 8,5)	M 6x1	2.3	100	0.7	F<0,7
12615.W0208	8	28	80	57	45	M 6x1 (Pre-drill 5,2)	M 5x0,8	1.5	80	0.5	F>0,5
12615.W0212	12	50	132	85	65	M10x1,5 (Pre-drill 8,5)	M 6x1	2.3	150	1.4	F>1,4
12615.W0108	8	28	80	57	45	M 6x1 (Pre-drill 5,2)	M 5x0,8	1.5	40	0.2	F>0,2
12615.W0112	12	50	132	85	65	M10x1,5 (Pre-drill 8,5)	M 6x1	2.3	100	0.5	F<0,7
12615.W0308	8	28	80	57	45	M 6x1 (Pre-drill 5,2)	M 5x0,8	1.5	80	0.5	F>0,5

Order No.	l_4	l_5	r_1	w_1	w_2	w_3	w_4	Clamping stroke s_1	Handle load N max.	Clamping force kN max.	Clamping releasing force kN
12615.W0312	12	50	132	85	65	M10x1,5 (Pre-drill 8,5)	M 6x1	2.3	150	1.4	F>1,4



12616.1



Material

Body/lever arm: steel (C45), black oxide finish.
Cam: steel (C45), carburized-hardened, black oxide finish.
Handle: phenolic plastic, black matt.

Technical Notes

Can be used in both vertical and horizontal clamping applications.
Spring-loaded clamp that provides constant clamping force.
Long clamping-bar projection range allows clamping of a recessed part.
When using your own clamping bar, ensure that the diameter is finished to a H9 or better tolerance.

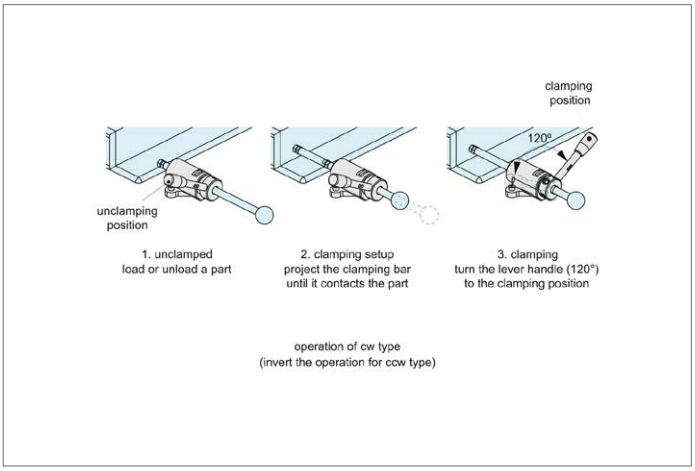
Tips

When the applied u-clamp force (F) becomes greater than clamping force, the clamping bar slides back, unclamping the part.

Order No.	Type	Clamping direction	d_1	d_2	d_3	d_4	d_5	h_1	h_2	h_3	Weight g
12616.W0008	Light Duty	Clockwise	28	26	8	5.5	14	32	18	8	330
12616.W0012	Light Duty	Clockwise	40	36	12	9.0	21	45	25	12	910
12616.W0208	Heavy Duty	Clockwise	28	26	8	5.5	14	32	18	8	330
12616.W0212	Heavy Duty	Clockwise	40	36	12	9.0	21	45	25	12	910
12616.W0108	Light Duty	Anti Clockwise	28	26	8	5.5	14	32	18	8	330
12616.W0112	Light Duty	Anti Clockwise	40	36	12	9.0	21	45	25	12	910
12616.W0308	Heavy Duty	Anti Clockwise	28	26	8	5.5	14	32	18	8	330
12616.W0312	Heavy Duty	Anti Clockwise	40	36	12	9.0	21	45	25	12	910

Order No.	l_1	l_2	l_3	l_4	l_5	l_6	r_1	w_1	w_2	w_3	Clamping stroke s_1	Handle load N max.	Clamping force kN max.	Clamping releasing force kN
12616.W0008	68.5	40	13	14	20	28	80	54	40	M 5x0,8	1.5	40	0.2	F>0,2
12616.W0012	93.7	55	20	20	30	50	132	80	60	M 6x1	2.3	100	0.7	F>0,7
12616.W0208	68.5	40	13	14	20	28	80	54	40	M 5x0,8	1.5	80	0.5	F>0,5
12616.W0212	93.7	55	20	20	30	50	132	80	60	M 6x1	2.3	150	1.4	F>1,4
12616.W0108	68.5	40	13	14	20	28	80	54	40	M 5x0,8	1.5	40	0.2	F>0,2
12616.W0112	93.7	55	20	20	30	50	132	80	60	M 6x1	2.3	100	0.7	F>0,7

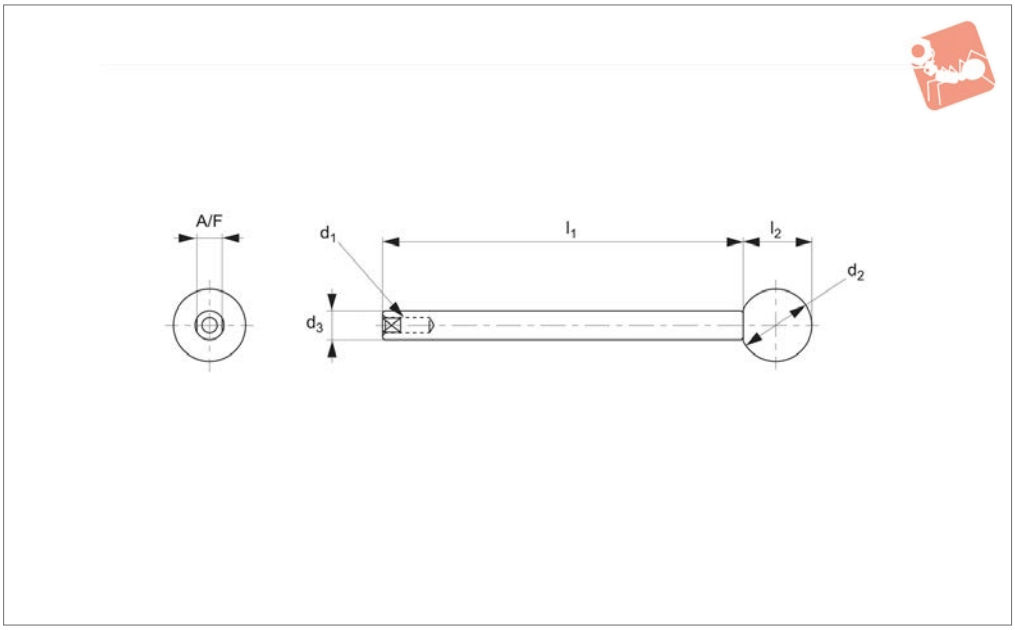
Order No.	l_1	l_2	l_3	l_4	l_5	l_6	r_1	w_1	w_2	w_3	Clamping stroke s_1	Handle load N max.	Clamping force kN max.	Clamping releasing force kN
12616.W0308	68.5	40	13	14	20	28	80	54	40	M 5x0,8	1.5	80	0.5	F>0,5
12616.W0312	93.7	55	20	20	30	50	132	80	60	M 6x1	2.3	150	1.4	F>1,4



Handles For Thrust Clamps

for 12615 & 12616

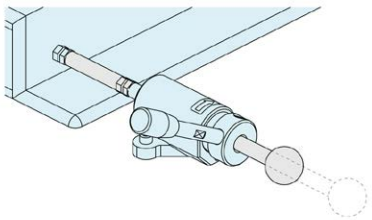
12616.2



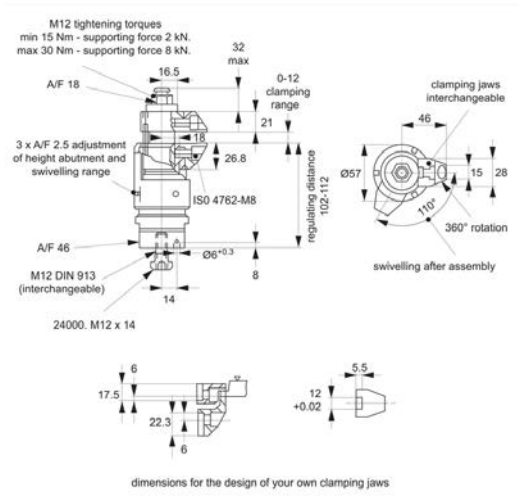
Material
Arm: steel (C45), chrome plated.
Ball knob: ABS resin black.

Tips
Can be used with part no's 12615 and 12616.W0008- .W0312.

Order No.	d_1	d_2	d_3	l_1	l_2	A/F	Weight g
12616.W0810	M 4x8	20	8	100	19	7	50
12616.W0812	M 4x8	20	8	125	19	7	60
12616.W0815	M 4x8	20	8	150	19	7	70
12616.W1212	M 6x12	25	12	125	24	10	130
12616.W1215	M 6x12	25	12	150	24	10	150
12616.W1220	M 6x12	25	12	200	24	10	190



12615 and 12616 thrust clamps
can be cut shorter to a desired length



12660.1

Material
Body: steel case-hardened, nitrided, blackened and ground.
Clamping jaws: steel case-hardened, nitrided, blackened.
Housing: aluminium, red anodised.

Technical Notes
Used to clamp and support additional clamping points on components, whilst minimising distortion in the clamping of components. It also serves to reduce vibration during machining.

Tips
Alternative clamping jaws available, see part 12660.W0050 to W0058 and 12660.W0148 to W0156.
The benefits of the floating clamp are:
- Avoids vibration during the processing
- Clamps ribs and flanges to reinforce clamped components
- Distortion-free clamping of first op. parts.

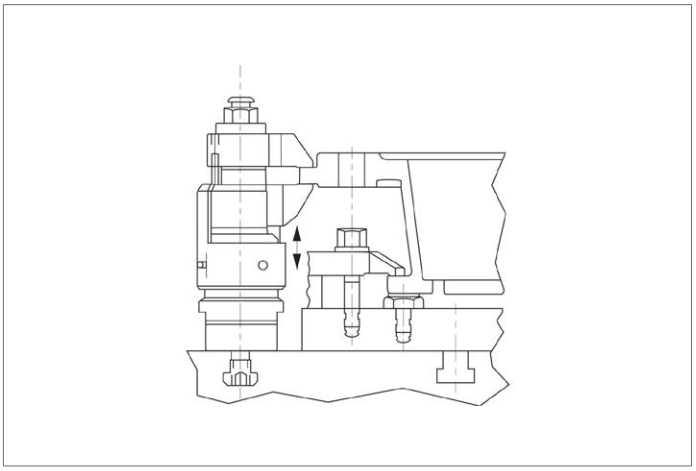
Assembly
1. Mount the floating clamp (M 12 connection thread) onto the device with a wrench (A/F 46).
2. Adjust the height limit stop and the rotating area with the red sleeve and clamp with a set screw (3 x A/F 2,5). When setting the height limit, consider tolerance of workpiece.

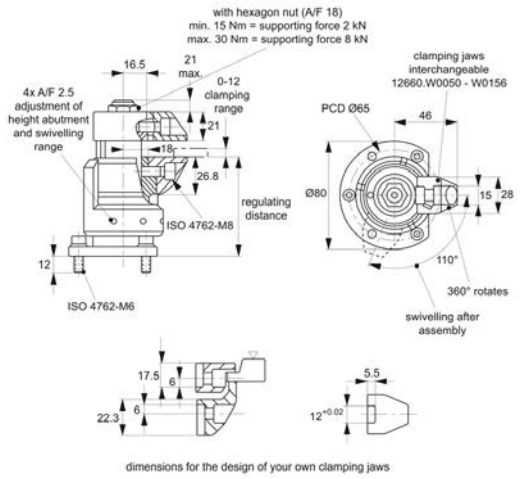
Operation
1. Push the floating clamp downwards.
2. Pivot the clamping jaws in as far as possible. The floating clamp contacts the bottom of the workpiece with a slight spring load.
3. Tighten the floating clamp with a hexagonal nut (A/F 18) having a min. torque of 15 Nm and a maximum torque of 30 Nm. In the clamping process, the workpiece is clamped and simultaneously supported.
4. Releasing is done in reverse order.

Order No.	Description	Clamping & support force kN max.	Clamping stroke	Weight g
12660.W0012	Clamping & Support	8	0-12	2076

Floating Clamps M12

combined clamping and locking





12660.2

Material
Body: steel case-hardened, nitrided, manganese phosphate treated and ground. Clamping jaws: steel case-hardened, nitrided, manganese phosphate treated. Housing: aluminium, red anodised.

Technical Notes
Used to clamp and support additional clamping points on components, whilst minimising distortion in the clamping of components. It also serves to reduce vibration during machining.

Tips
Alternative clamping jaws available, see part 12660.W0050 to W0058 and 12660.W0148 to W0156.

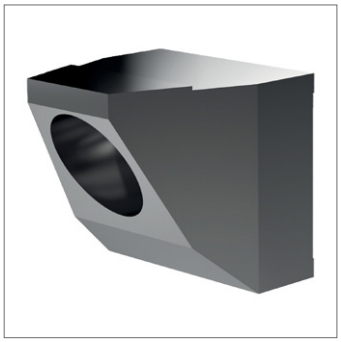
Floating clamp benefits:
Floating Clamp 12660.1 is used to clamp and support over-determined points on a component, offering the following benefits:
1. No deformation in the clamping of unstable components.
2. Eliminates vibration during machining.
3. Clamps on the smallest area to improve clamping stability.

Installation of floating clamp on fixture:
1. Fix clamp on to machine bed with A/F 46 spanner. Clamp has 12mm connection thread, select suitable T-nut for your machine bed.
2. Adjust the clamp's height limit stop and rotating area with the red setting sleeve, set sleeve position through tightening the 3 grub screws (A/F 2,5mm). When setting the height limit, make generous allowance for variation in workpiece tolerance.

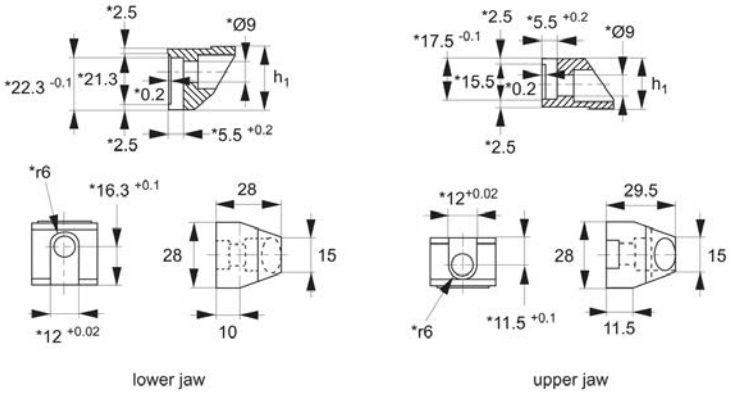
Clamping process:
1. Push floating clamp downwards,
2. Pivot clamping jaws into component as far as possible. Clamp will contact bottom of component with a light spring pressure.
3. Tighten floating clamp with A/F 18mm hex nut – torque to min. 15Nm, 30Nm max. In the clamping process workpiece is clamped and simultaneously supported.
4. To release, reverse steps 3 to 1.

Order No.	Description	Clamping & support force kN max.	Clamping stroke	Weight g
12660.W0008	Clamping & Support	8	0-12	1450

Support Jaws
for floating clamps M12



12660.3



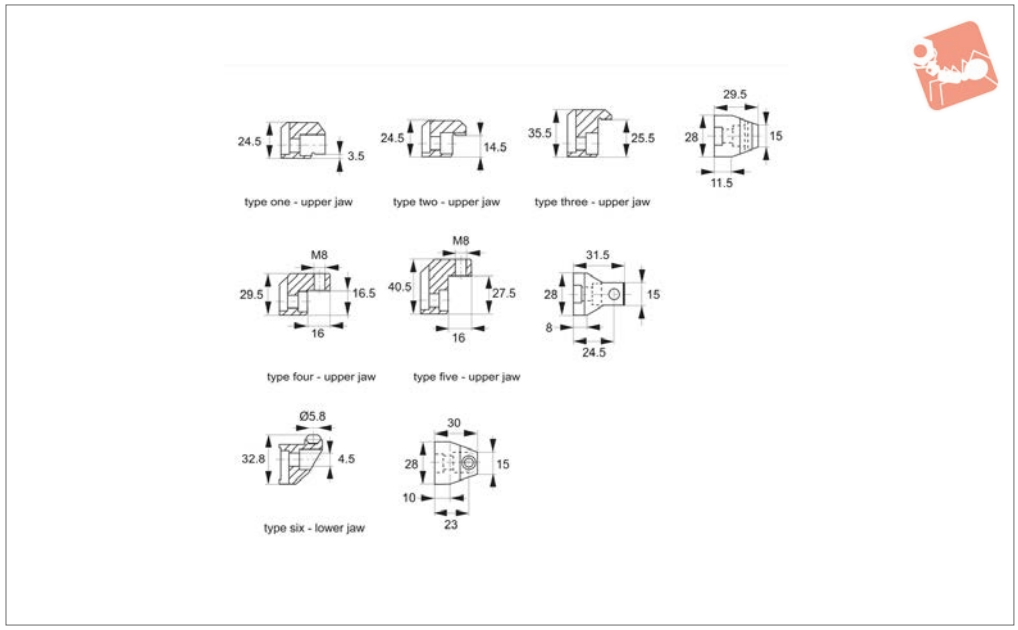
*specifications and material of specially designed jaws has to be considered

Material
Steel, case-hardened, nitrided.

Technical Notes
The clamping jaws can be used for floating clamps 12660.W0008, 12662.W0010, 12660.W0012 and 12662.W0014

Tips
When using custom-made jaws it is important to insert the tightening screw (M 8 grade 12,9, 43Nm) 10mm deep into the clamp housing on the upper clamping jaw and 9mm deep into the clamp housing on the lower clamping jaw.

Order No.	Type	Clamping range	h_1 -0.1	Weight g
12660.W0050	Lower Jaw	-	26.8	83
12660.W0052	Upper Jaw	0 - 12	21	69



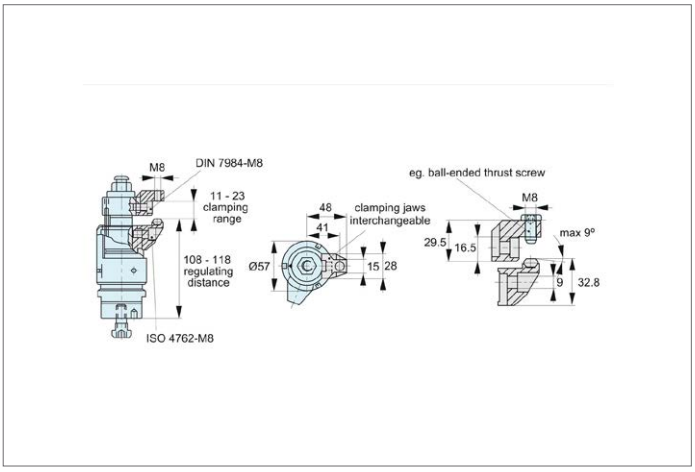
12660.4

Material
Ball: steel ball-bearing
Clamping jaws: steel case-hardened, nitrided.

Technical Notes
A selection of the alternative upper and lower jaws for floating clams. The tightening torque of the floating clamp must be adapteddependet on condition. Note the surface pressure due to the reduced contact surface of the clamping jaws.

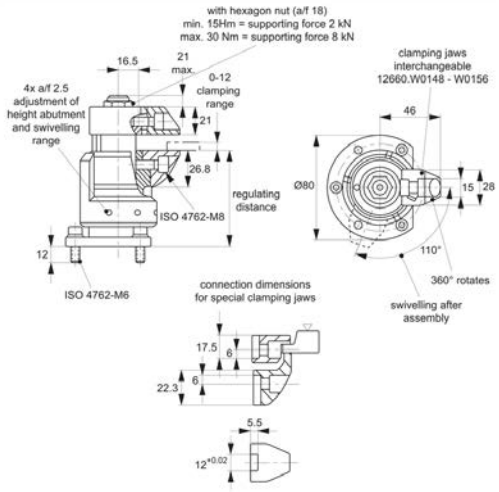
Important Notes
The clamping jaws can be used for floating clamps 12660.W0008, 12662.W0010, 12660.W0012 and 12662.W0014.

Order No.	Type	Clamping range of clamp in combination with standard lower jaw 12260.W0050	Clamping range in combination with lower jaw 12260.W0148 max.	Weight g
12660.W0054	Upper Jaw (Type One)	4-16		91
12660.W0056	Upper Jaw (Type Two)	15-27		88
12660.W0058	Upper Jaw (Type Three)	26-38		130
12660.W0154	Upper Jaw (Type Four)	29	23	83
12660.W0156	Upper Jaw (Type Five)	40	34	112
12660.W0148	Lower Jaw (Type Six)			98



Floating Clamps - Compact
combined clamping and locking

12661

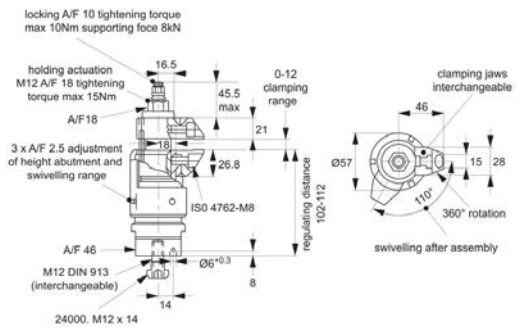


Material
Body: case hardened steel, nitrided, manganese phosphate treated and ground.
Clamping jaws: case hardened steel, nitrided, manganese phosphate treated.
Housing: aluminium, red anodised.

Technical Notes
Used to clamp and support additional clamping points on components, whilst minimising distortion in the clamping of components. It also serves to reduce vibration during machining.

Tips
The benefits of the floating clamp are:
- avoids vibration during the processing
- clamps ribs, beads and shackles to reinforce clamped components
- distortion-free clamping of raw parts.
Compact version with reduced height.
Used with:
24000 T-Nuts
12660 Clamp Jaws - upper & lower

Order No.	Description	Clamping & support force kN max.	Clamping stroke	Weight g
12661.W0008	Clamping & Support	8	0-12	1450



12662.1

Material
Body: case hardened steel, nitrided and ground.
Clamping jaws: case hardened steel, nitrided.
Housing: aluminium, blue anodised.

Technical Notes
Used to clamp and support additional clamping points on extremely pliable work pieces, whilst minimising deformation of component. It also serves to reduce vibration during machining.

Tips
Alternative clamping jaws available, see part 12660.W0050 to W0058 and 12660. W0148 to W0156.

Floating clamp benefits:

Floating clamp 12662.1 is used to clamp and support over determined points on a component, offering the following benefits:
1. No deformation in the clamping of unstable components.
2. Eliminates vibration during machining.
3. Clamps on the smallest area to improve clamping stability.

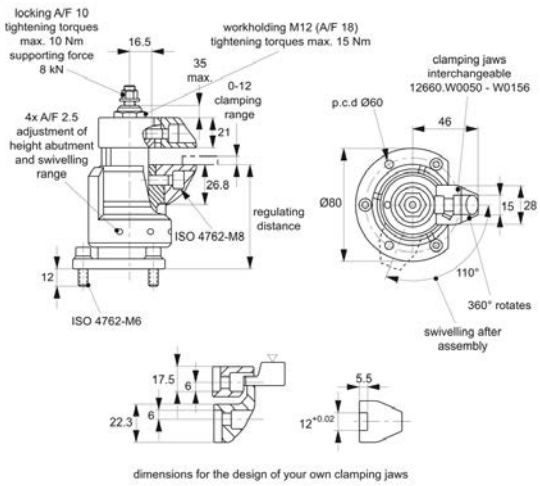
Installation of floating clamp on fixture:
1. Fix clamp on to machine bed with A/F 46 spanner. Clamp has 12mm thread, select suitable T-nut for your machine bed.
2. Adjust the clamp's height limit stop and rotating area with the blue setting sleeve, set sleeve position through tightening the 3 grub screws (A/F 2,5mm). When setting the height limit, make generous allowance for variation in workpiece tolerance.

Clamping process:
1. Push floating clamp downwards.
2. Pivot clamping jaws into component as far as possible. Clamp will contact bottom of component with only light spring pressure.
3. Tighten floating clamp with A/F 18mm hex nut - torque to min. 15Nm, 30Nm max. The jaws are clamping the workpiece, the clamp is still floating.
4. Tighten hexagon collar with A/F 10mm hex to max. 10Nm torque.
5. Clamping process is complete.
6. To release, reverse steps 5 to 1.

Order No.	Type	Weight g
12662.W0014	Steel	1890

Compact Floating Clamps
separate clamping and locking

12662.2

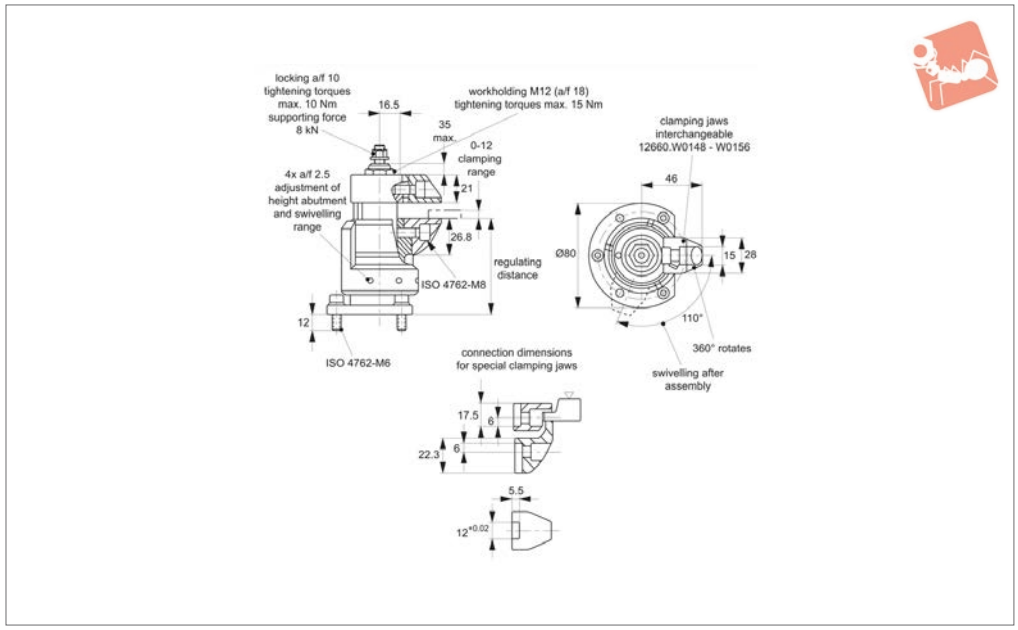


Material
Body: steel case-hardened, nitrided, maganese phosphate treated and ground. Clamping jaws: steel case-hardened, nitrided, maganese phosphate treated. Housing: aluminium, blue anodised.

Technical Notes
Used to clamp and support additional clamping points on extremely pliable work pieces, whilst minimising deformation of component. It also serves to reduce vibration during machining.

Tips
Alternative clamping jaws available, see part 12660.W0050 to W0058 and 12660.W0148 to W0156.

Order No.	Description	Clamping & support force kN max.	Clamping stroke s_1	Weight g
12662.W0010	Clamping & Locking	8	0-12	1650



12663

Material
Body: case hardened steel, nitrided, maganese phosphate treated and ground.
Clamping jaws: case hardened steel, nitrided, maganese phosphate treated.
Housing: aluminium, blue anodised.

Technical Notes
Used to clamp and support additional clamping points on extremely pliable work pieces, whilst minimising deformation of component. It also serves to reduce vibration during machining.

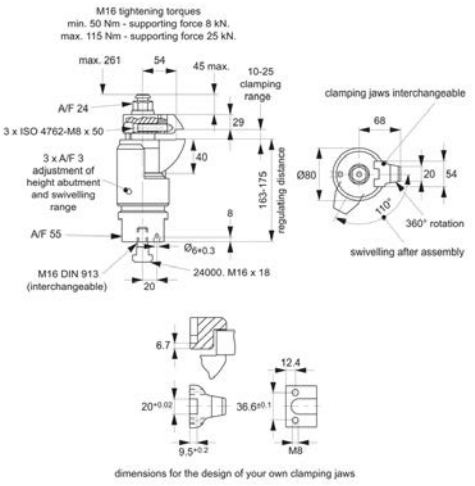
Tips
The benefits of the floating clamp are:
- avoids vibration during the processing
- clamps ribs, beads and shackles to reinforce clamped components
- distortion-free clamping of raw parts.

Used with:
24000 T-Nuts
12660 Clamp Jaws - upper & lower

Order No.	Description	Clamping & support force kN max.	Clamping stroke	Weight g
12663.W0010	Clamping and locking	8	0-12	1650

Floating Clamps M16
combined clamping and locking

12664.1



Material
Body: steel case-hardened, nitrided and ground.
Clamping jaws: steel case-hardened, nitrided, maganese phosphate treated.
Housing: aluminium, red anodised.

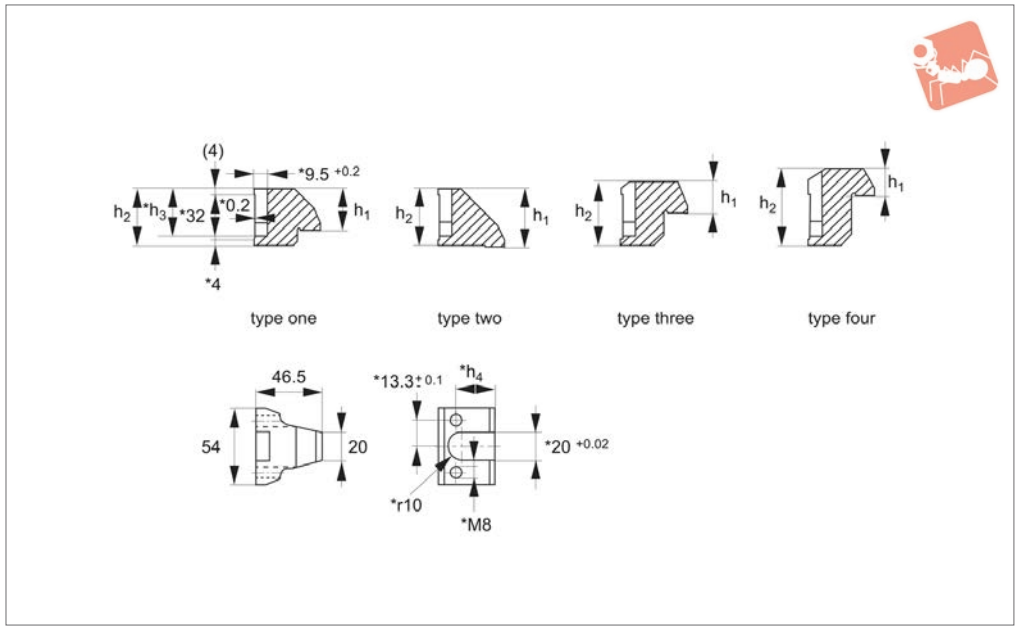
Technical Notes
Used to clamp and support additional clamping points on extremely pliable work pieces, whilst minimising deformation of component. It also serves to reduce vibration during machining.

Tips
Alternative clamping jaws available, see part 12664.W0060 to W0066.
Floating clamp benefits:
Floating clamp 12664.1 is used to clamp and support over-determined points on a component, offering the following benefits:
1. No deformation in the clamping of unstable components.
2. Eliminates vibration during machining.
3. Clamps on the smallest area to improve clamping stability.

Installation of floating clamp on fixture:
1. Fix clamp onto machine bed with A/F 46 spanner. Clamp has 16mm connection thread, select suitable T-nut for your machine bed.
2. Adjust the clamp's height limit stop and rotating area with the red setting sleeve, set sleeve position through tightening the 3 grub screws (A/F 2,5mm). When setting the height limit, make generous allowance for variation in workpiece tolerance.

Clamping process:
1. Push floating clamp downwards.
2. Pivot clamping jaws in to component as far as possible. Clamp will contact bottom of component with only low spring pressure.
3. Tighten floating clamp with A/F 24mm hex nut - torque 50Nm, 115Nm max. **In the clamping process the workpiece is clamped and simultaneously supported.**
4. To release, reverse steps 3 to 1.

Order No.	Type	Weight g
12664.W0016	Steel	6250



12664.2

Material
Steel case-hardened, nitrided, maganese phosphate treated.

Technical Notes
For use with 12664.1 clamps. A selection of alternative clamping jaws.

Order No.	Type	Clamping range	h_1	h_2	h_3	h_4	Weight g
12664.W0060	1	10-25	29.0	40	33.3	27.6	402
12664.W0062	2	0-14	41.0	40	33.3	27.6	380
12664.W0064	3	23-28	21.6	45	38.3	32.6	435
12664.W0066	4	35-50	18.6	54	47.3	41.6	490