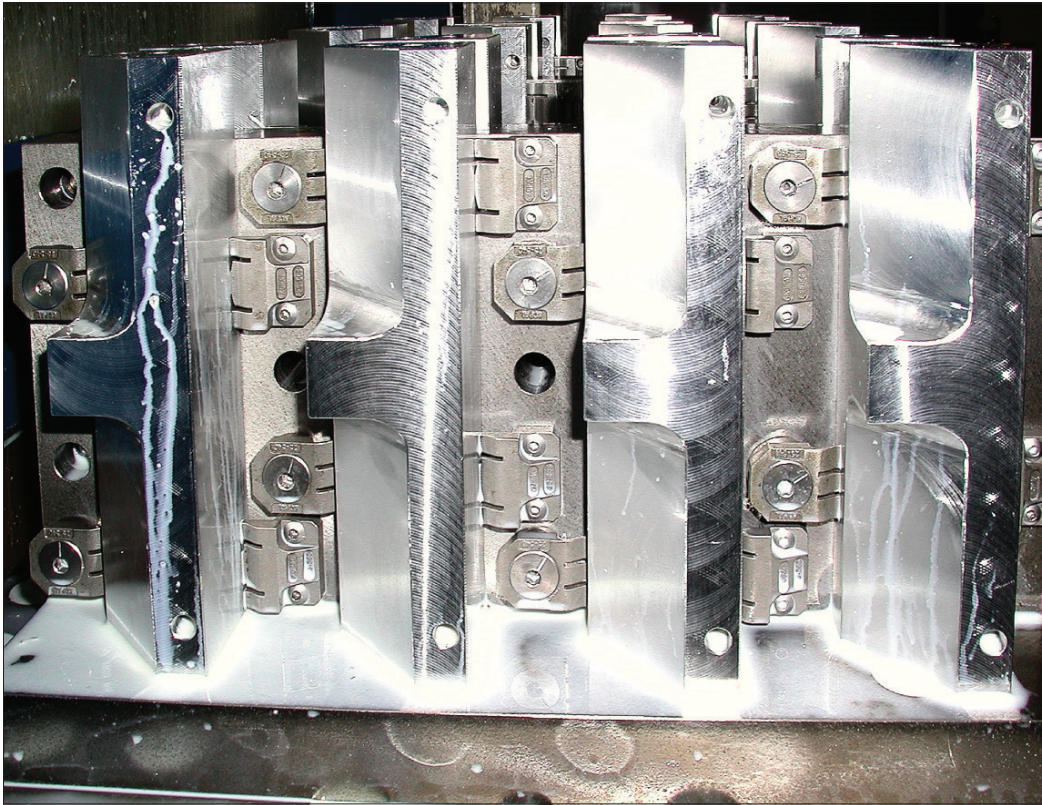




Application



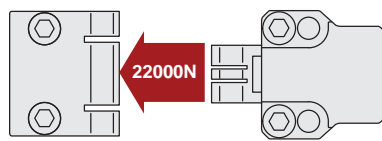
HEAVY-DUTY SIDE CLAMPING

Unique Horizontal Clamping Set-Ups

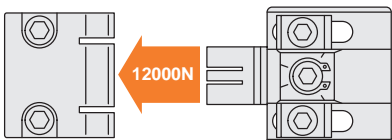
Part No. 10900, 10920, 10940
T-slot table and special machining set-ups



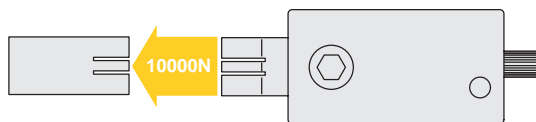
Part No. 11040, 11041, 11042, 11043
Supports and special machining set-ups



Part No. 11070, 11071
Supports and special machining set-ups



Part No. 11080, 11081, 11083
T-slot table, supports and special machining set-ups



ov-W10920-A-T-W10940-b-rmh - Updated - 20-10-2022



Unique Action - "three finger" Clamping

Pull down AND clamp with the highest of clamping forces – from 0,4 tons to 2,2 tons!

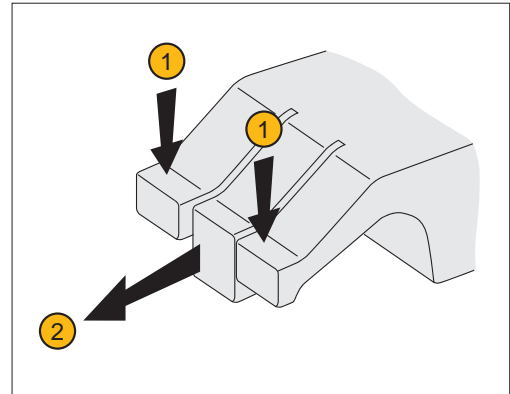
Used in our clamping series:

- 10900, 10940, 10880,
- 10920, 11040, 11041,
- 11042, 11043, 11070,
- 11071, 11080, 11081,
- 11082, 11083

Our horizontal clamps have a unique "three finger" arrangement ensuring components are both pulled down and clamped in the same motion. The face of the clamp is made of three parts or "fingers":

- Two outer flexible fingers (1); for pulling down the component to the work table.
- One solid central finger (2), to provide direct clamping action.

Available in two styles – smooth and serrated face. They can also cater for workpieces with an adverse angle on the clamping face – for example flame cut steel blanks.

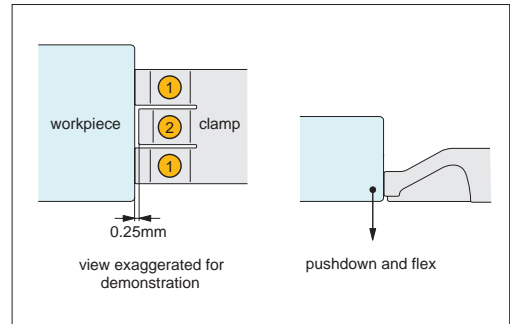


Clamping Action

Contact

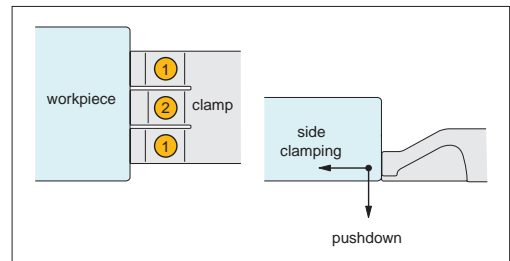
The clamps outer flexible fingers (1) are approx. 0,25mm longer than the solid central finger/clamping stop (2), this slight difference in length means it is the flexible fingers which first come into contact with the workpiece.

As initial contact is made with the work-piece the flexible fingers (1) apply downward pressure forcing the workpiece down against the work table, the flexible fingers are compressed until they are the same length as the solid central finger/clamping stop (2).



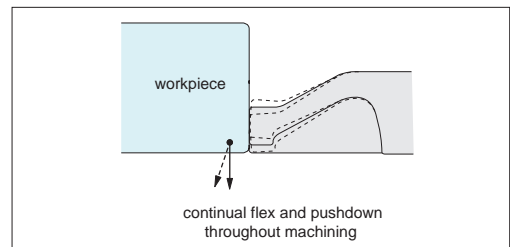
Clamping

As the solid central finger/clamping stop (2) comes into contact with the work-piece it applies high side clamping pressure to achieve clamping forces up to 2,2 tons (dependent upon clamping model selected).



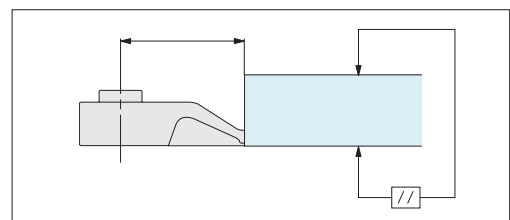
Machining

During machining the uniquely designed flexible fingers (1) continue to flex and twist applying downward pressure to keep the workpiece flat to the work table throughout.



Precision Positioning

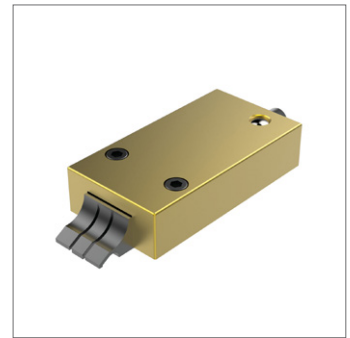
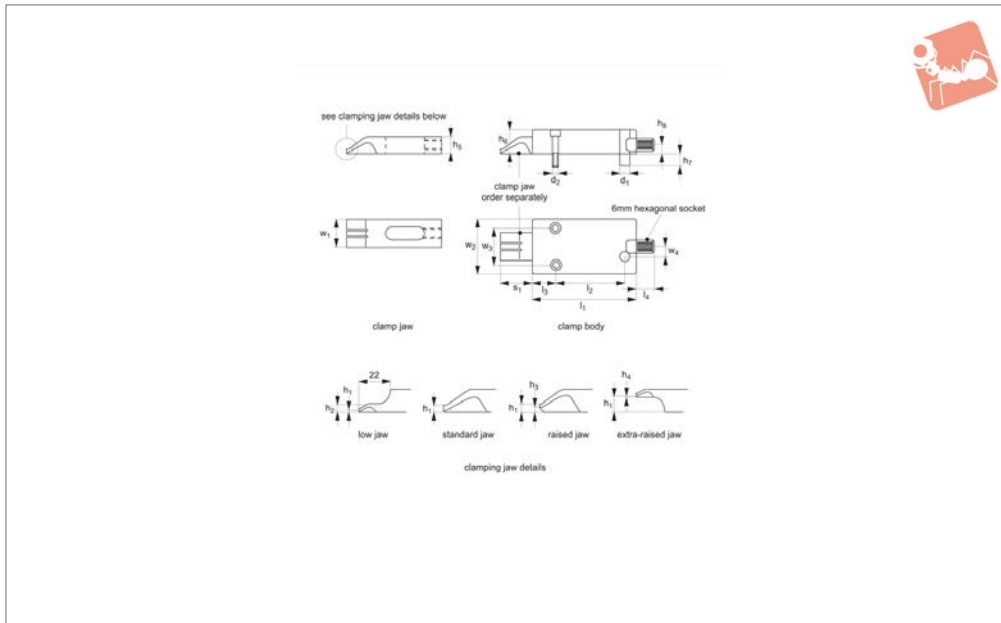
The unique clamping action achieves precision positioning of workpieces – ensuring the workpiece remains parallel to the reference surface.





1.0 Ton Finger Clamps for fixtures

Heavy-Duty Side Clamping



11080

HEAVY-DUTY SIDE CLAMPING

Material

Aluminium body, with spring steel clamping element.

Technical Notes

A low height, very powerful compact

clamp.

These clamps have a unique sideways and downwards clamping action.

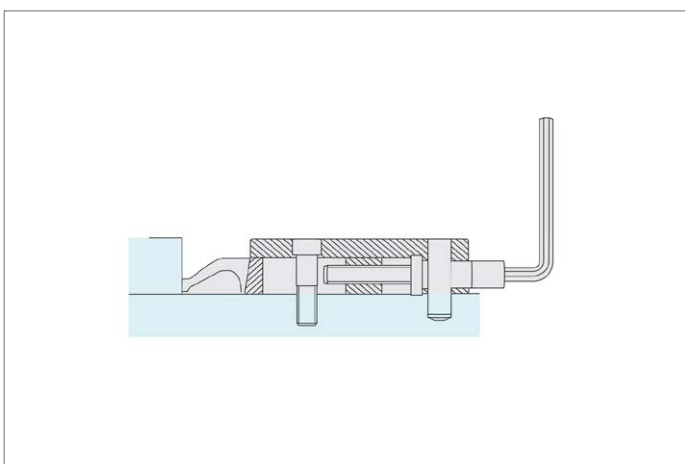
Tips

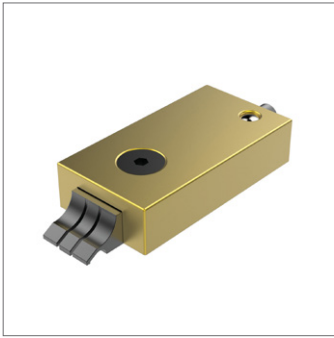
Clamp jaws and clamp body sold separa-

tely. To order please select clamp body 11080.W0090 then most suitable clamp jaw for your application - (part nos. 11080.W0610 to 11080.W0625).

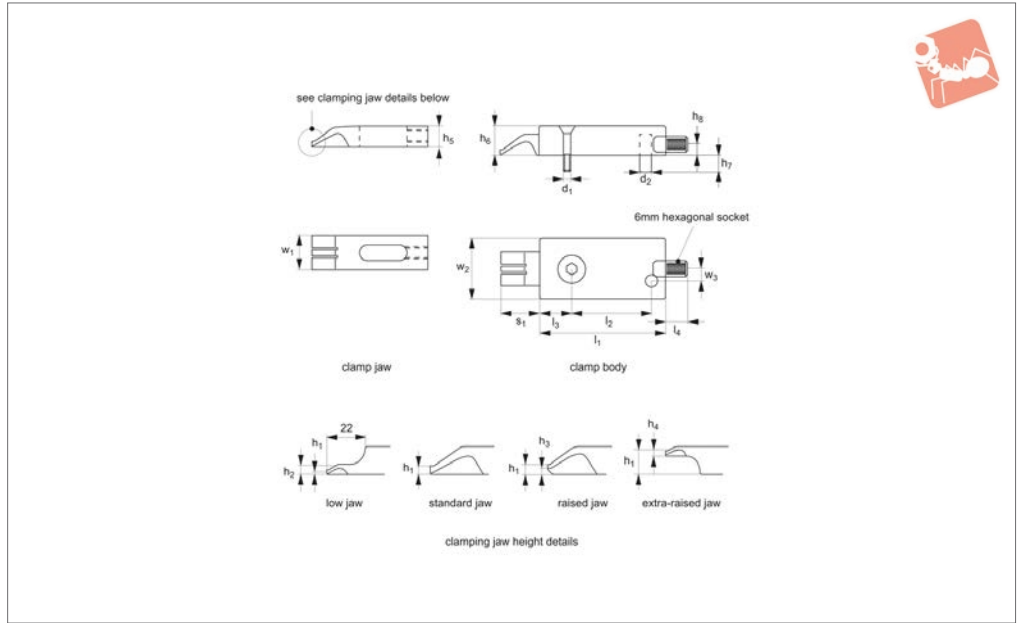
Order No.	Type	Jaw height h_1	Clamp stroke	s_1	w_1	d_1	d_2
11080.W0090	Clamp Body	-	20	18 to 38	-	M 6	10
11080.W0610	Standard Jaw	4.7	-	-	28	-	-
11080.W0615	Low Jaw	2.5	-	-	28	-	-
11080.W0620	Raised Jaw	8.0	-	-	28	-	-
11080.W0625	Extra-raised Jaw	13.5	-	-	28	-	-

Order No.	h_2	h_3	l_1	l_2	h_4	l_3	h_5	l_4	h_6	h_7	h_8	w_2	w_3	w_4
11080.W0090	-	-	104	69.5	-	23	-	18	24	9	12	55	37	10
11080.W0610	-	-	-	-	-	-	17	-	-	-	-	-	-	-
11080.W0615	6.0	-	-	-	-	-	17	-	-	-	-	-	-	-
11080.W0620	-	4.0	-	-	-	-	17	-	-	-	-	-	-	-
11080.W0625	-	-	-	-	2.5	-	17	-	-	-	-	-	-	-





11081



Material

Jaw: spring steel.
Body: aluminium.

Technical Notes

These clamps have a unique sideways and

downwards action.

Please see part no. 11082 for fixed stops.

Tips

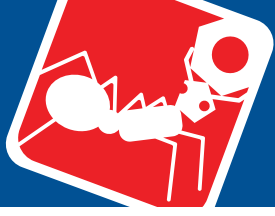
Provided location bolts - M10, M12.

Clamp and body supplied separately. To

order please select clamp body (part nos. 11081.W0065 or .W0068) then the clamping jaw most suitable for your application (11081.W0610 to .W0625).

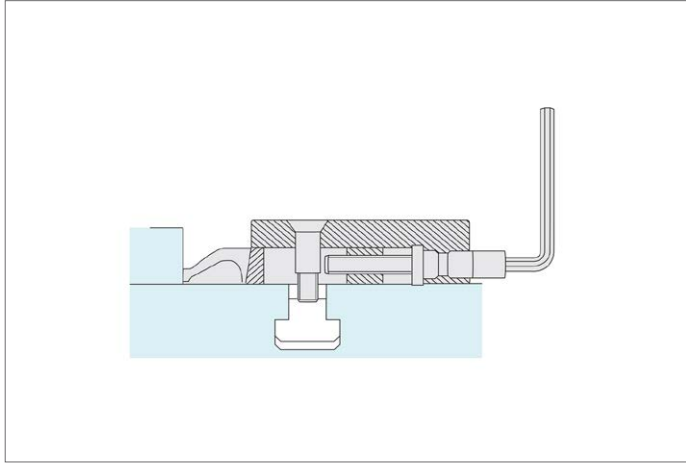
Order No.	Type	Clamp stroke	s ₁	w ₁	d ₁	d ₂	h ₁	h ₂	h ₃	l ₁	l ₂
11081.W0065	Clamp Body M10	20	18 to 38	-	M10	10	-	-	-	104	69.5
11081.W0068	Clamp Body M12	20	18 to 38	-	M12	10	-	-	-	104	69.5
11081.W0610	Standard Jaw	-	-	28	-	-	2.5	-	-	-	-
11081.W0615	Low Jaw	-	-	28	-	-	4.7	6.0	-	-	-
11081.W0620	Raised Jaw	-	-	28	-	-	8.0	-	4.0	-	-
11081.W0625	Extra-raised Jaw	-	-	28	-	-	13.5	-	-	-	-

Order No.	h ₄	l ₃	h ₅	l ₄	h ₆	h ₇	h ₈	w ₂	w ₃	Clamping torque Nm	Clamping force kN
11081.W0065	-	23	-	1.8	24	9	12	55	10	12	10
11081.W0068	-	23	-	1.8	24	9	12	55	10	12	10
11081.W0610	-	-	17	-	-	-	-	-	-	-	-
11081.W0615	-	-	17	-	-	-	-	-	-	-	-
11081.W0620	-	-	17	-	-	-	-	-	-	-	-
11081.W0625	2.5	-	17	-	-	-	-	-	-	-	-



1.0 Ton Finger Clamps for T-slots

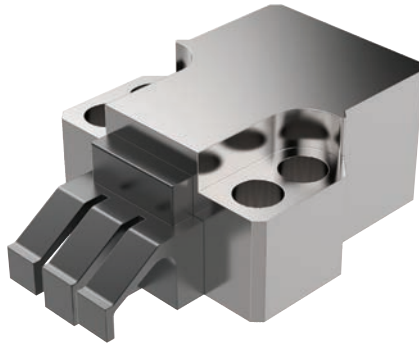
Heavy-Duty Side Clamping



HEAVY-DUTY SIDE CLAMPING

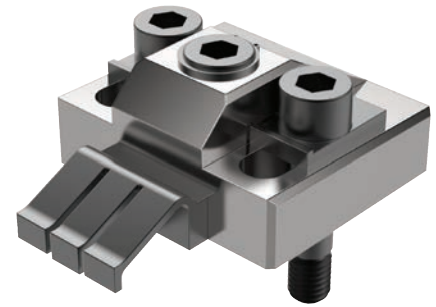


Clamping Torque



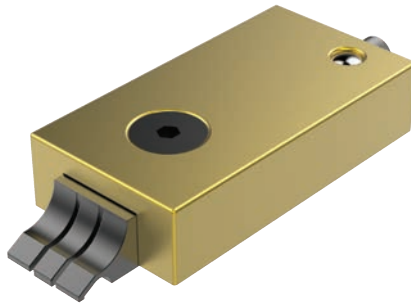
11040/CL2040

Clamping Torque N/m	Clamping Force N
50	23000
40	18000
30	12500
25	11500
20	9500



11070/CL2070

Clamping Torque N/m	Clamping Force N
60	16500
50	15000
40	12000
30	10000
25	8000
20	7000



11081/CL2081

Clamping Torque N/m	Clamping Force N
5	6600
4.5	5500
4	4900



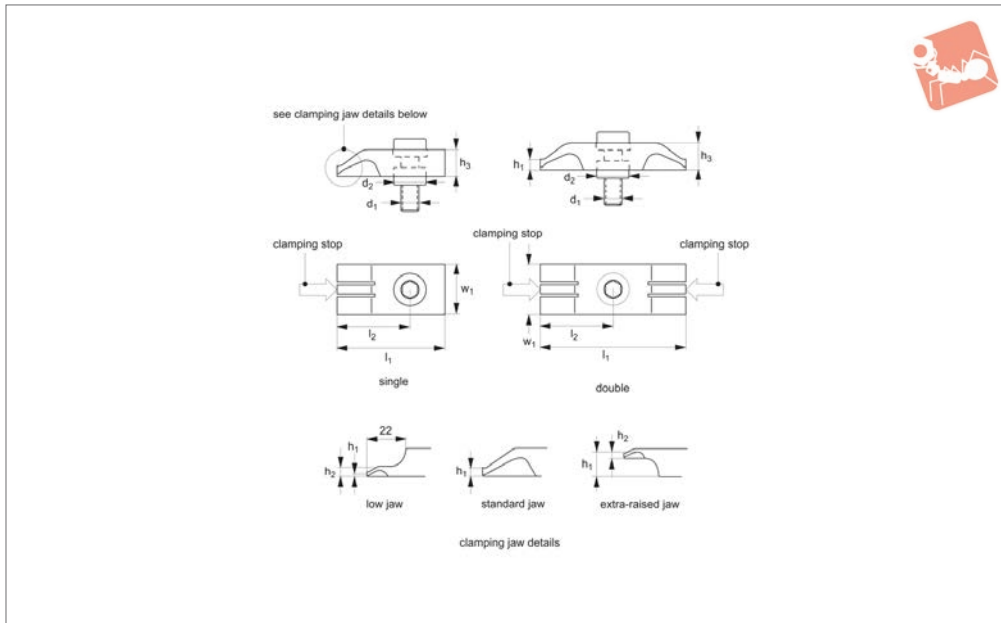
10940/CL0030

Clamping Torque N/m	Clamping Force N
8.5	4000
8	3800
7	3400
6	3000
5	2500
4	2000



1.0 Ton Fixed Stops for 1 ton finger clamps

Heavy-Duty Side Clamping



11082

HEAVY-DUTY SIDE CLAMPING

Material

Hardened steel, with spring steel clamping element.

Technical Notes

A low height, very powerful compact clamp stop.

Tips

Supplied with clamping screw and Ø18 centering bush. When used longitudinally along a T-slot it is advisable to use anti-slip T-nuts or additional stops to resist the force exerted by the clamping element.

For use with part nos. 11080 and 11081.

Fitting instruction:

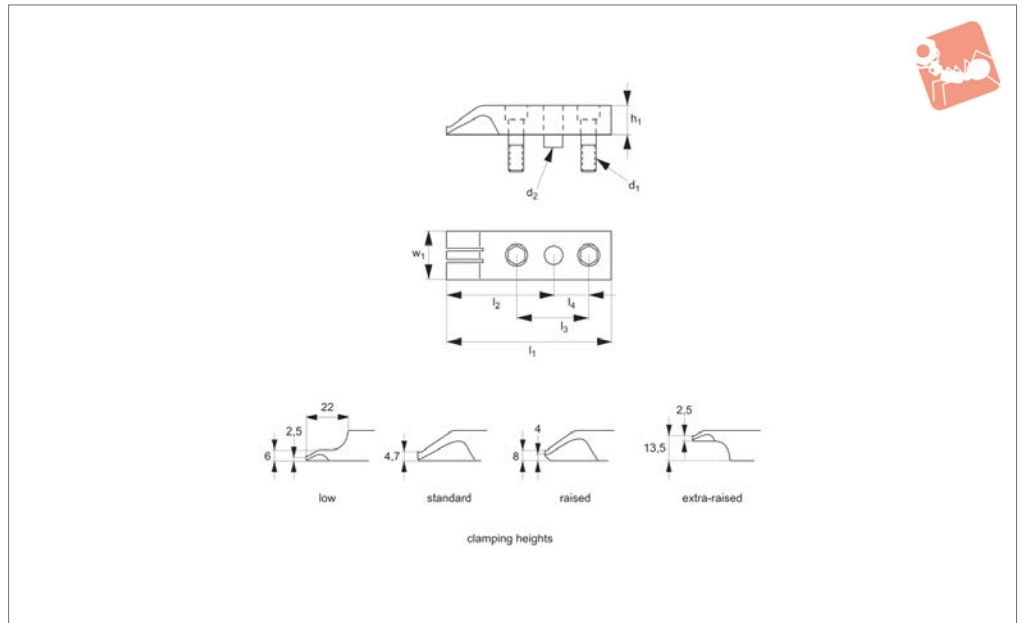
Tap M10/M12 counterbore 18,00 (H7) with depth 5mm.

Order No.	Type	Jaw height h_1	Jaw type	w_1	d_1	d_2	h_2	h_3	l_1	l_2
11082.W0140	Single	4.7	Standard	28	M10	18	-	15	60	40
11082.W0141	Single	4.7	Standard	28	M12	18	-	15	60	40
11082.W0142	Single	13.5	Extra-raised	28	M10	18	2.5	15	60	40
11082.W0143	Single	2.5	Low	28	M10	18	6	15	60	40
11082.W0144	Single	2.5	Low	28	M12	18	6	15	60	40
11082.W0145	Double	6.0	Standard	28	M10	18	-	15	80	40
11082.W0147	Double	6.0	Standard	28	M12	18	-	15	80	40





11083



Material

Spring steel.

Technical Notes

These stops have a unique sideways and

downward action.

For use on support bars, part no. 11086.

Supplied with M6 screws and dowel pin.

Order No.	Type	w_1	d_1	d_2	h_1	l_1	l_2	l_3	l_4
11083.W0120	Low Jaw	28	M 6	8	17	95	57.7	40	20
11083.W0125	Standard Jaw	28	M 6	8	17	95	57.7	40	20
11083.W0130	Raised Jaw	28	M 6	8	17	95	57.7	40	20
11083.W0135	Extra-raised Jaw	28	M 6	8	17	95	57.7	40	20



1.0 Ton Finger Clamp Sets

Heavy-Duty Side Clamping



11085

HEAVY-DUTY SIDE CLAMPING

Material

Support bar: steel, hardened, with ground faces.

Clamping jaws: spring steel.

Body: aluminium.

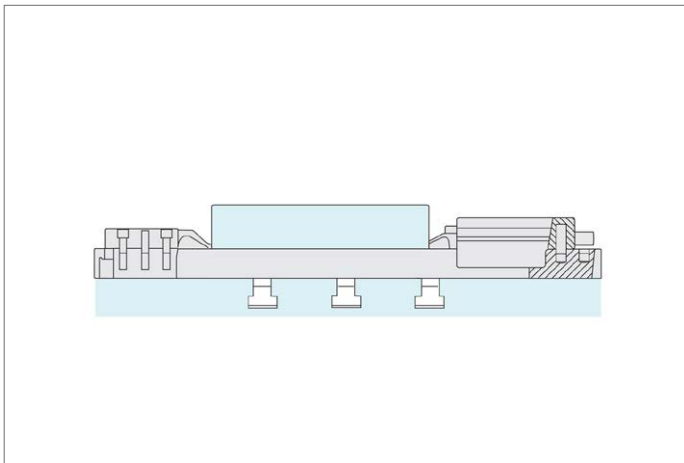
Tips

Maximum workpiece capacity 232mm when

used as a single vice.

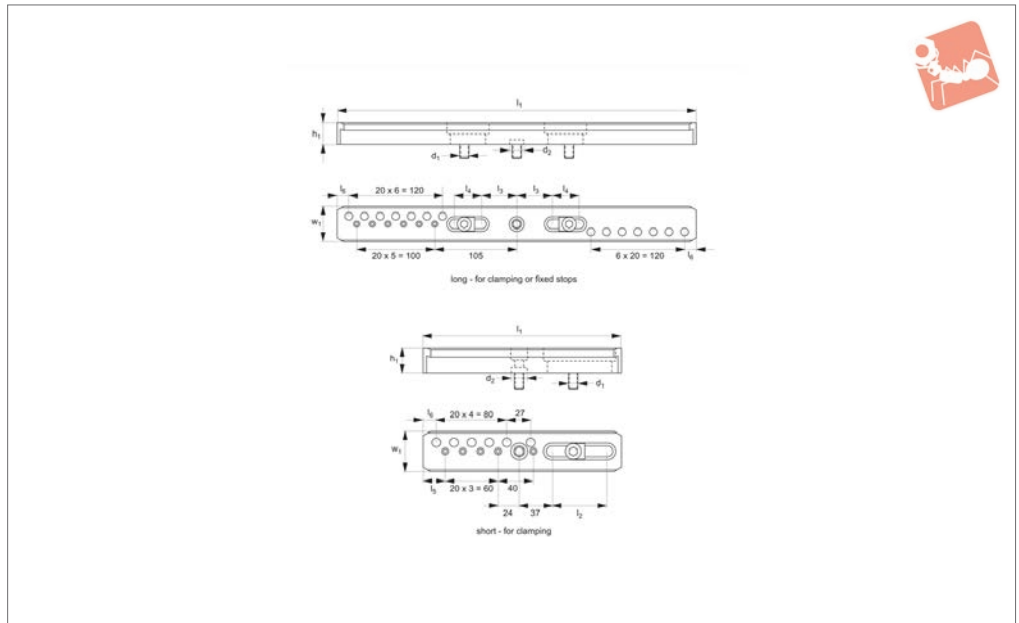
Supplied with M12 mounting screws.

Order No.	Type	Rail	Clamp body	Clamp jaw	Fixed clamp
11085.W0455	Set	1 pc 11086.W0040	1 pc 11080.W0090	1 pc 11080.W0610	1 pc 11083.W0125





11086



Material

Steel, hardened, with ground faces.

for locator d_2 tap M12 counterbore 18,00
H7 + 5mm deep.

Technical Notes

Fitting instructions:

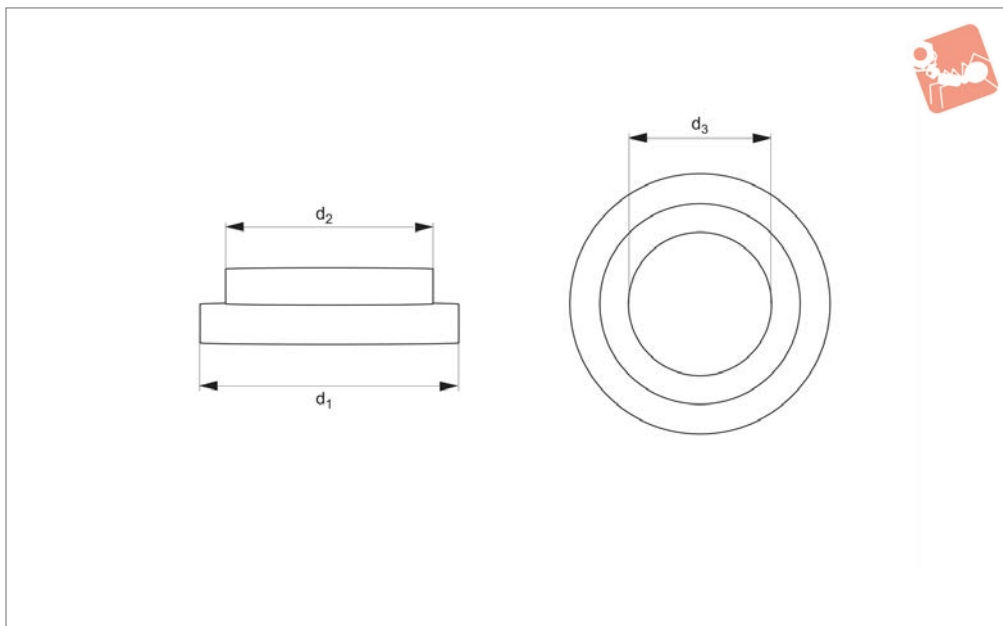
For use with finger clamps 11080-11083.

Order No.	Type	w_1	d_1	d_2	h_1	l_1	l_2	l_3	l_4	l_5	l_6
11086.W0040	Long	45.5	M12	18	28	460	-	45	35	-	15
11086.W0045	Short	45.5	M12	18	28	225	63	-	-	25	15



Centering Bushes for clamp 11086

Heavy-Duty Side Clamping



11095

HEAVY-DUTY SIDE CLAMPING

Tips

Centering bushes for use with finger clamps mounting bars 11086. Their use

enables immediate alignment of the clamp to the T-slot and hence prevents any movement of components.

Order No.	Slot size	d ₁	d ₂	d ₃
11095.W0220	12	18	12	10.2
11095.W0225	14	18	14	10.2
11095.W0230	16	18	16	12.2
11095.W0215	18	18	18	12.2
11095.W0235	20	18	20	12.2
11095.W0240	22	18	22	12.2

