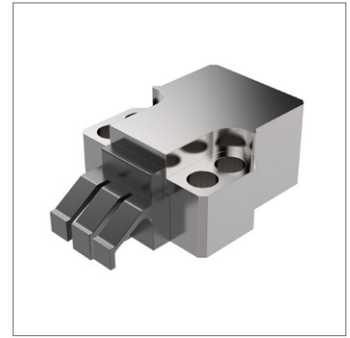
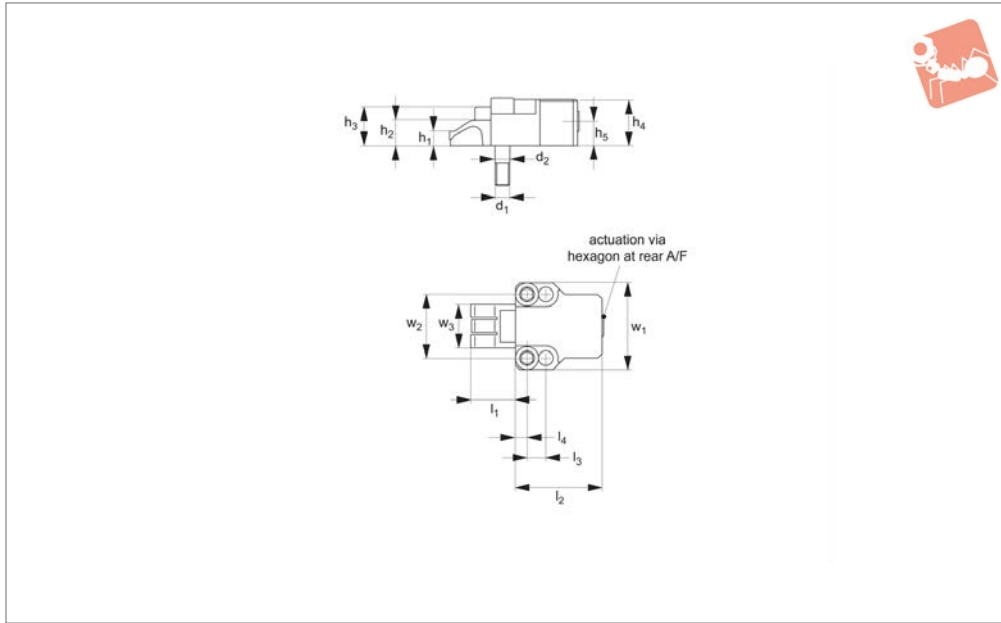




# 2.2 Ton Finger Clamp - Smooth Face movable jaw

## Heavy-Duty Side Clamping



**11040**

HEAVY-DUTY SIDE CLAMPING

**Material**

Hardened steel, 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**

Provided with specially ground location bolts  $\varnothing 10,2 - M10$ , allowing for precise positioning. For mounting there are 2 tapped holes at  $44,00 \pm 0,005\text{mm}$  centres,  $M10$  with depth of 28mm, counterbore

10,2 (H6) with depth of 14mm.

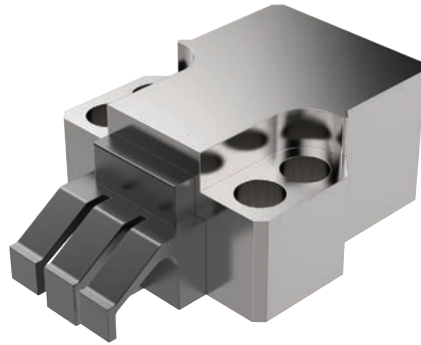
**Important Notes**

When used in conjunction with fixed stop, part nos. 11041 or 11043, these clamps achieve a positive downforce on both faces of the workpiece - a unique feature.

Order No.	Clamping height $h_1$		Clamping stroke $l_1$		$d_1$	$d_2$ tol. h6	$h_2$	$h_3$	$h_4$	$h_5$	$l_2$
11040.W0025	10		18-34		M10	10.2	18	27	33	17	60
Order No.	$l_3$	$l_4$	$l_5$	$w_1$	$w_2$	$w_3$	A/F	Clamping torque Nm		Clamping force kN	
11040.W0025	13	8	18	60	44	30	8	50		22	

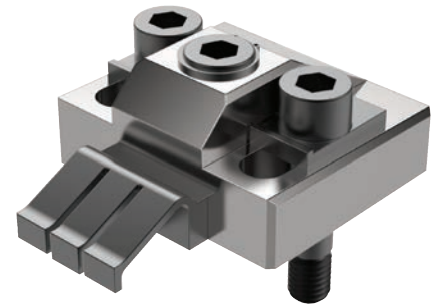


## Clamping Torque



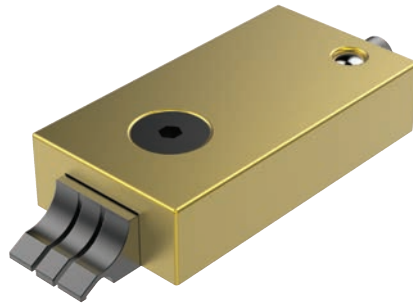
11040/CL2040

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



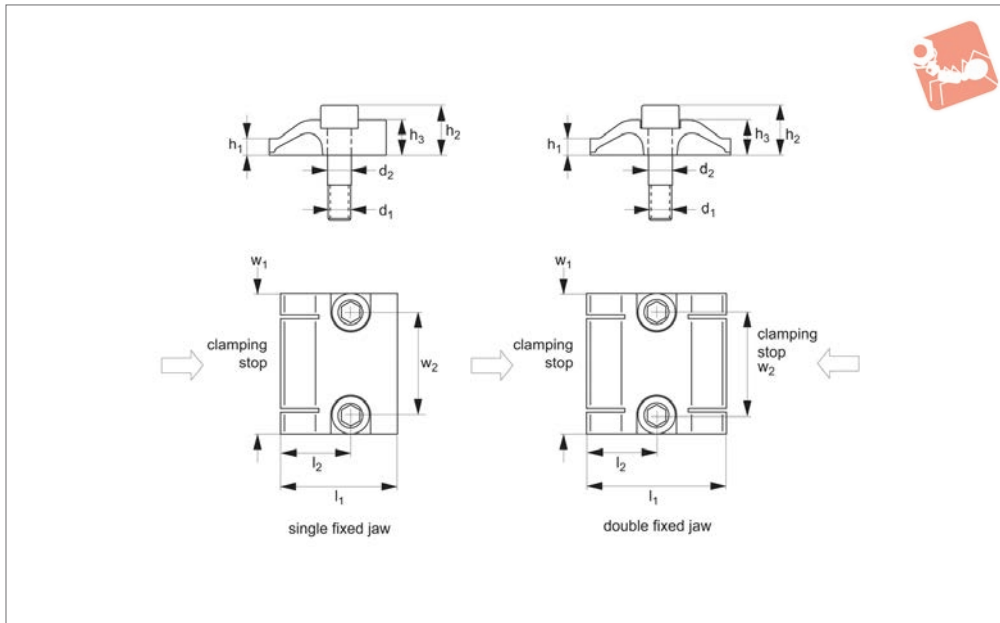
10940/CL0030

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



## 2.2 Ton Finger Clamp - Fixed Stop smooth face

## Heavy-Duty Side Clamping



# 11041

HEAVY-DUTY SIDE CLAMPING

### Material

Spring steel.

### Technical Notes

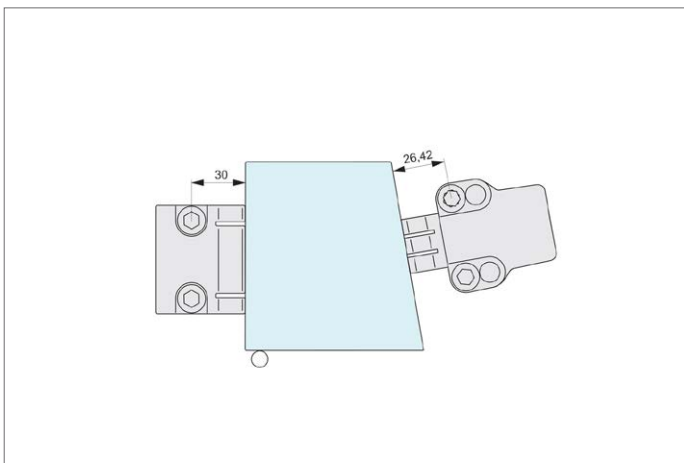
These stops have a unique sideways and downwards action.

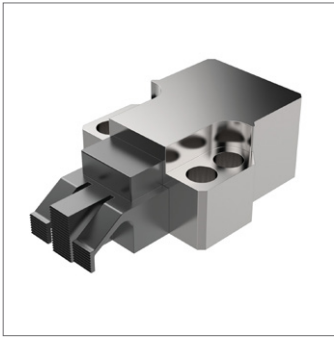
### Tips

Provided with specially ground location bolts  $\varnothing 10,2 - M10$ , allowing for precise positioning. Precision of the screws also allows dimension  $l_2$  to be used as a useful

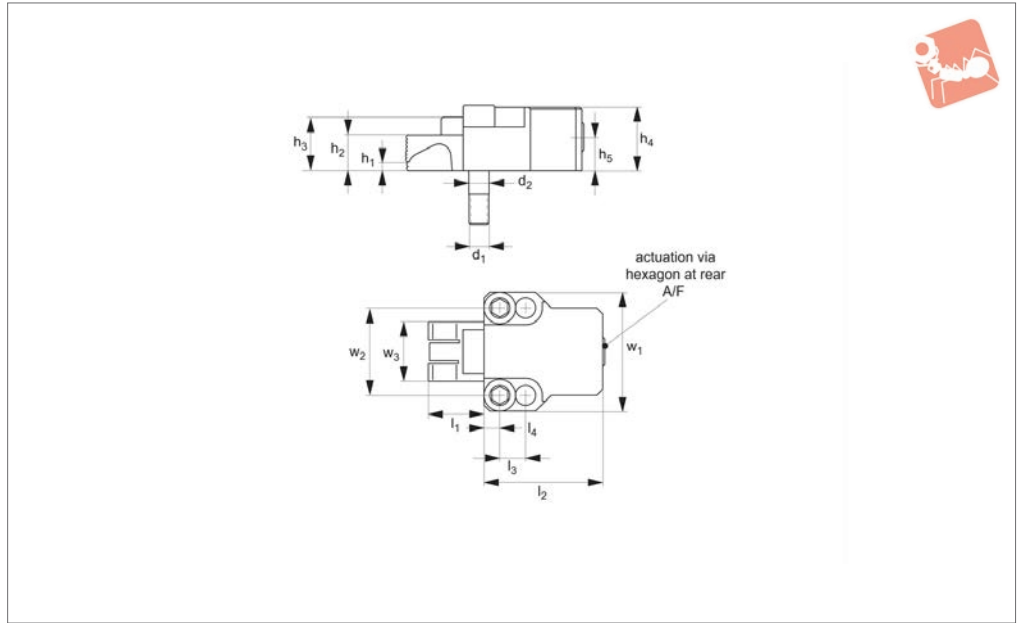
clamping datum. For mounting there are 2 tapped holes at  $44,00 \pm 0,005\text{mm}$  centres, M10, with depth of 28mm, counterbore 10,2 (H6), with depth of 14mm.

Order No.	Type	Clamping height $h_1$	$d_1$	$d_2$ tol. h6	$h_2$	$h_3$	$l_1$	$l_2$	$w_1$	$w_2$
11041.W0080	Single	7	M10	10.2	22	15	50	30	60	44
11041.W0082	Double	7	M10	10.2	22	15	60	30	60	44





### 11042



#### Material

Hardened steel, with spring steel clamping element.

#### Technical Notes

A low height, very powerful compact clamp.

These clamps exert a sideways and down-

wards clamping action.

#### Tips

Provided with specially ground location bolts  $\text{Ø}10,2 - \text{M}10$ , allowing for precise positioning.

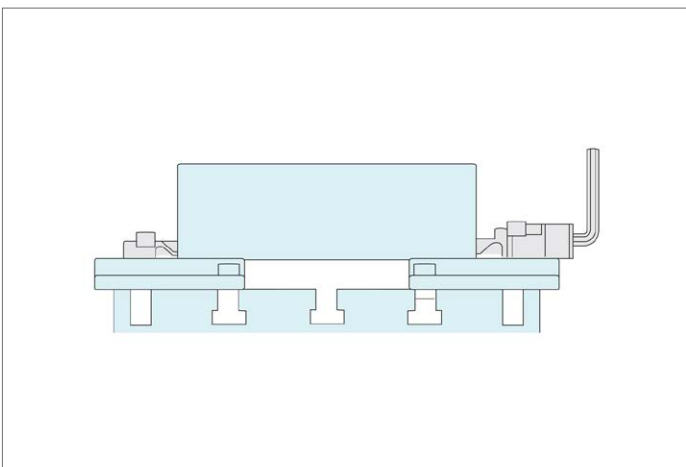
For mounting there are 2 tapped holes at  $44,00 \pm 0,005\text{mm}$  centres, M10 with depth

of 28mm, counterbore 10,2 (H6) with depth of 14mm.

#### Important Notes

When used in conjunction with fixed stop (part nos. 11041 or 11043) these clamps achieve a positive downforce on both faces of the workpiece - a unique feature.

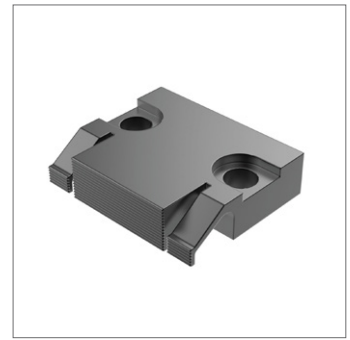
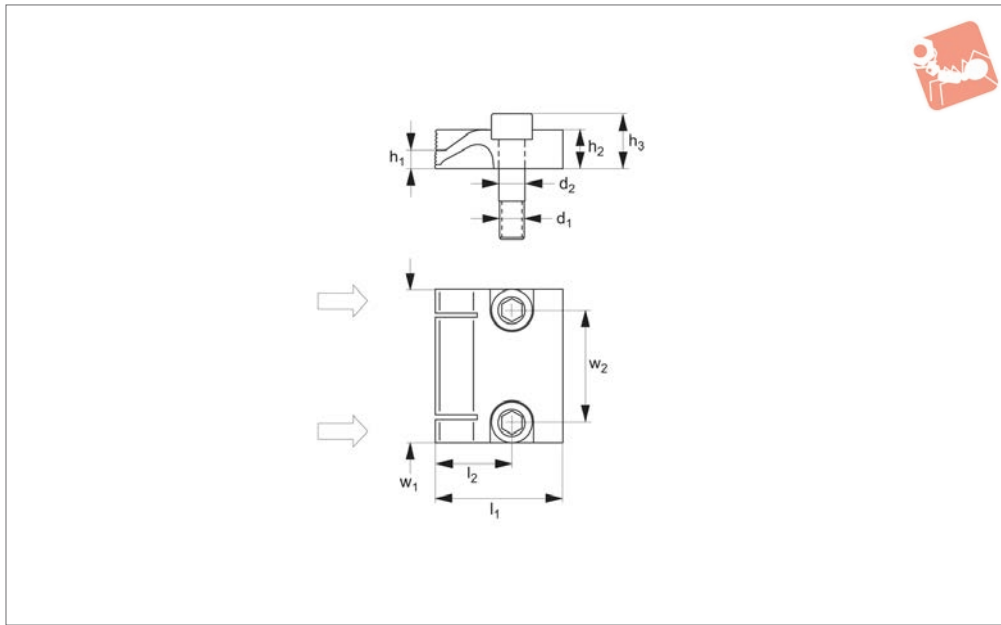
Order No.	Clamp height $h_2$	Clamp stroke $l_1$	$d_1$	$d_2$ tol. h6	$h_1$	$h_3$	$h_4$	$h_5$	$l_2$	$l_3$	$l_4$	$w_1$	$w_2$	$w_3$	A/F	Torque to Nm max.	Clamping force kN max.
11042.W0027	18	18-34	M10	10,2	10	27	33	17	60	13	8	60	44	30	8	50	22





## 2.2 Ton Fixed Stop - Serrated Face

## Heavy-Duty Side Clamping



**11043**

HEAVY-DUTY SIDE CLAMPING

### Material

Spring steel.

### Technical Notes

These stops have a unique sideways and

downwards action.

### Tips

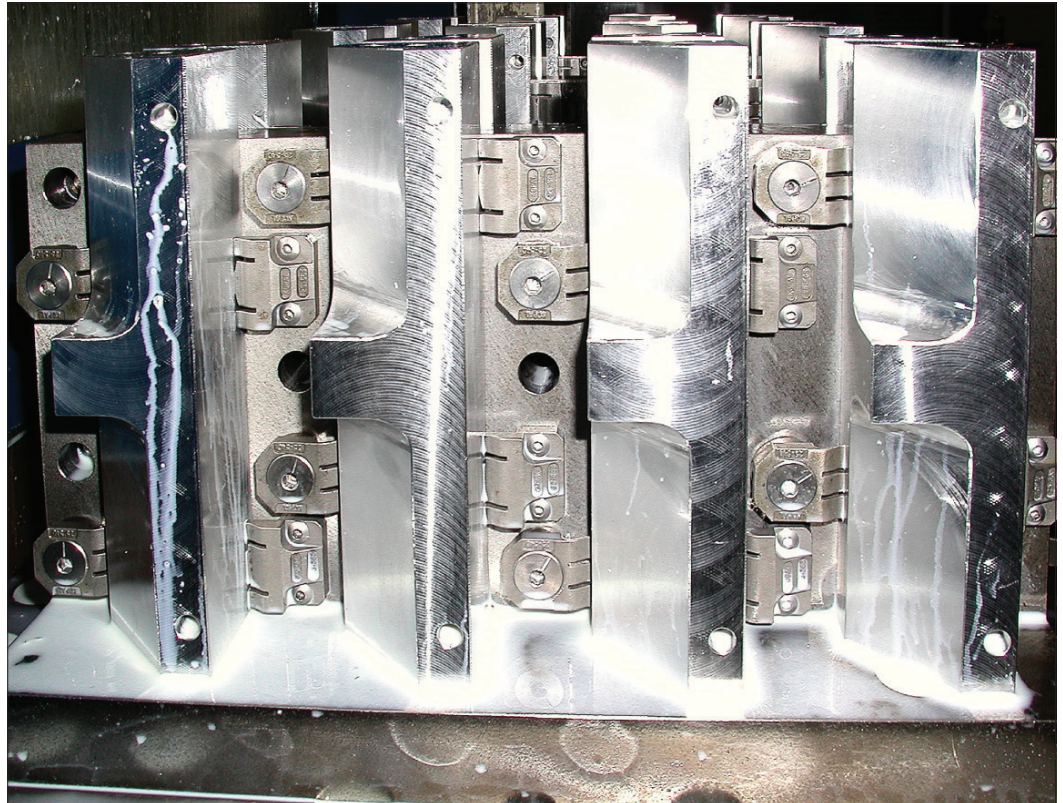
Provided with specially ground location bolts  $\varnothing 10,2 - M10$ , allowing for precise

positioning. For mounting - 2 tapped holes at  $44,00 \pm 0,005$ mm centres, M10 with depth of 28mm, counterbore 10,2 (H6) with depth of 14mm.

Order No.	Type	Clamping height $h_1$	$d_1$	$d_2$ tol. h6	$h_2$	$h_3$	$l_1$	$l_2$	$w_1$	$w_2$
11043.W0081	Serrated Face	7	M10	10.2	15	22	50	30	60	44



## Application



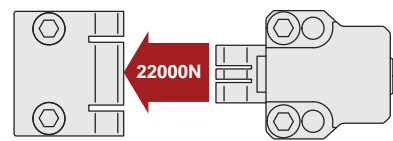
HEAVY-DUTY SIDE CLAMPING

## Unique Horizontal Clamping Set-Ups

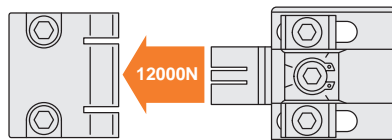
**Part No. 10900, 10920, 10940**  
T-slot table and special machining set-ups



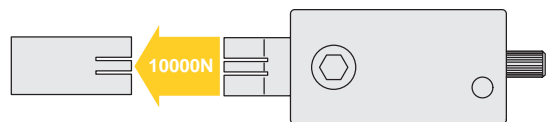
**Part No. 11040, 11041, 11042, 11043**  
Supports and special machining set-ups



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



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



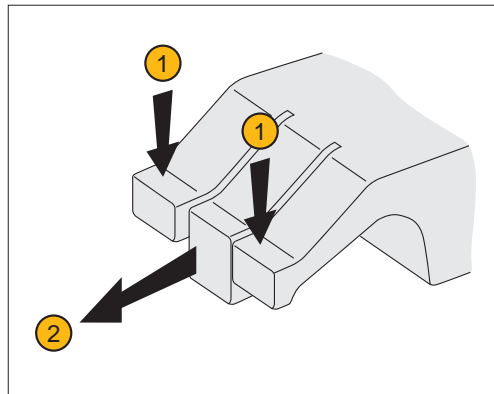


## Unique Action - "three finger" Clamping

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.



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

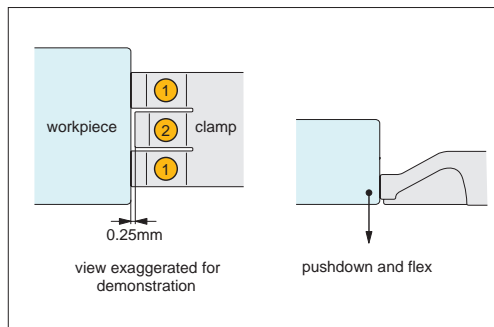
Used in our clamping series:

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

## Clamping Action

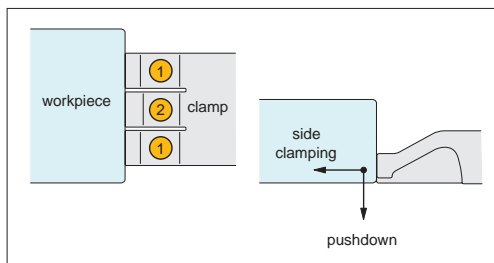
The clamps outer flexible fingers ① are approx. 0,25mm longer than the solid central finger/clamping stop ②, this slight difference in length means it is the flexible fingers which first come into contact with the workpiece.

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.



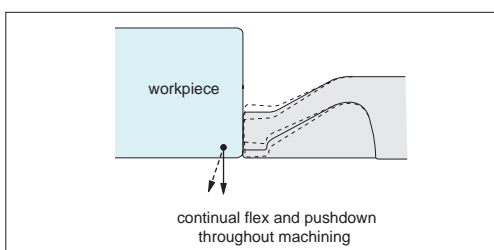
## Contact

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).



## Clamping

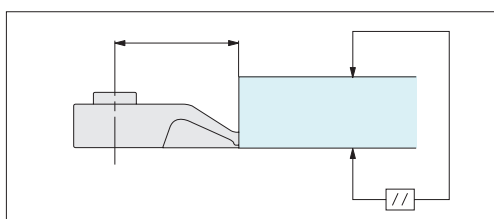
During machining the uniquely designed flexible fingers ① continue to flex and twist applying downward pressure to keep the workpiece flat to the work table throughout.



## Machining

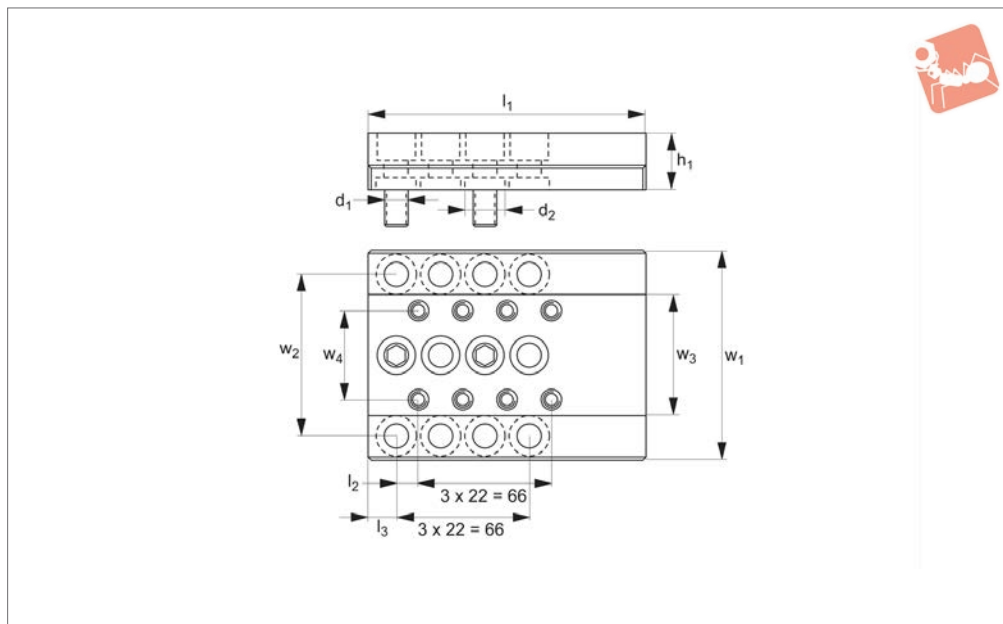
## Precision Positioning

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





## 11045



### Material

Steel, hardened, with ground faces.

### Technical Notes

For T-slot tables and fixture plates.

### Tips

Provided with 3 x M12 fixing screws and centring locator.

For use with parts 11040-11043.

Order No.	$d_1$	$d_2$	$h_1$	$l_1$	$l_2$	$l_3$	$w_1$	$w_2$	$w_3$	$w_4$
11045.W0016	M12	20	28	138	11	14	104	80	60	44

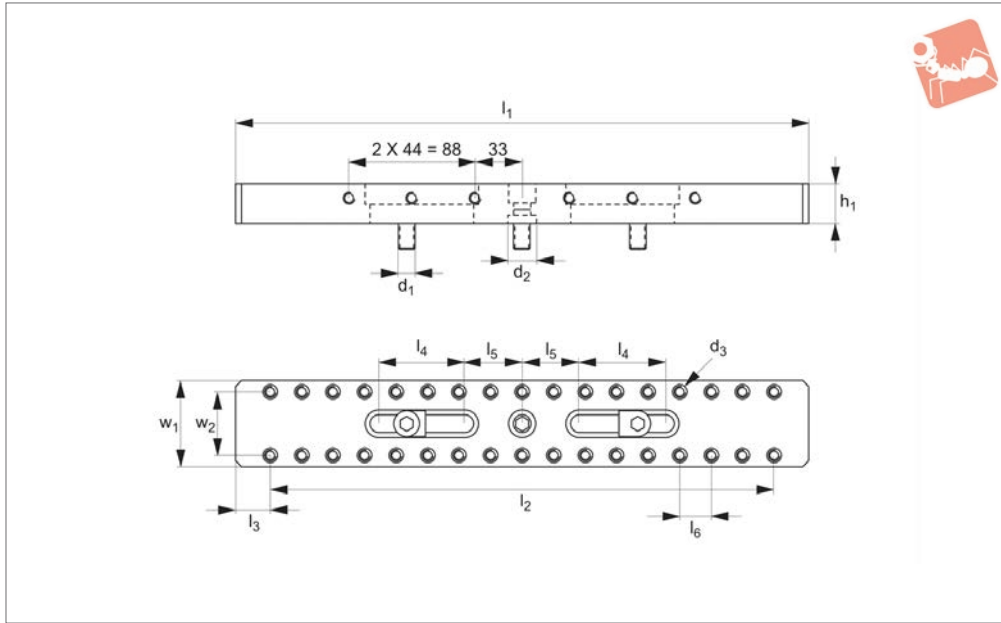




# Base Plates Finger - Long

for 2.2 ton clamps

## Heavy-Duty Side Clamping



**11046**

HEAVY-DUTY SIDE CLAMPING

### Material

Steel, hardened, with ground faces.

### Technical Notes

For T-slot tables and fixture plates.

### Tips

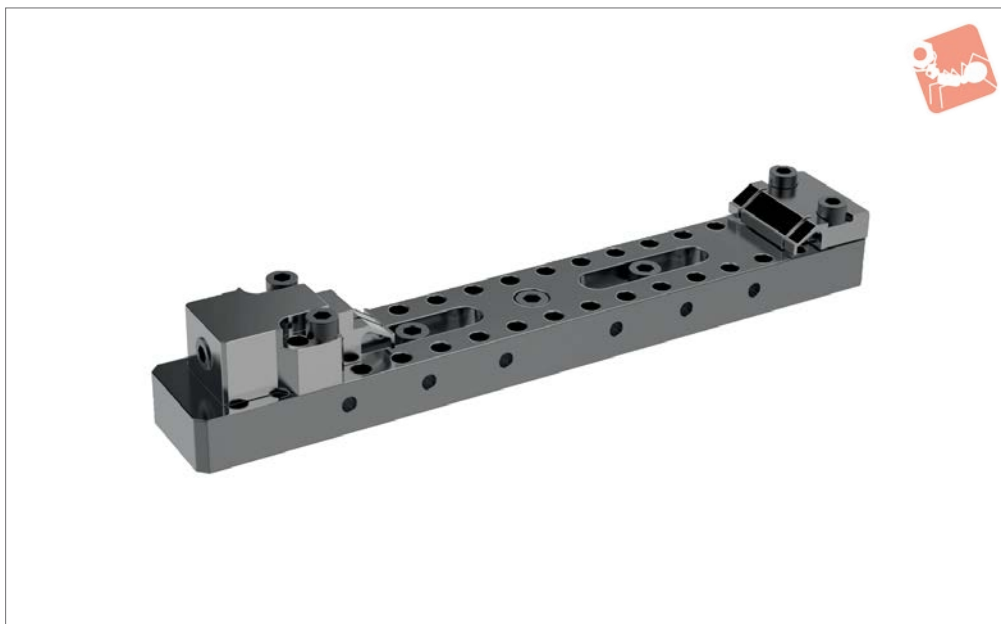
Provided with 3 x M12 fixing screws and centring locator.

For use with parts 11040-11043.

Order No.	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	h <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	w <sub>1</sub>	w <sub>2</sub>
<b>11046.W0015</b>	M12	20	Ø10,2 - M10	28	400	352	60	40	24	22	60	44



**11050**



**Material**

Clamp rail: steel, hardened and ground faces.  
Clamps: hardened steel, with spring steel clamping element.  
Stops: spring steel.

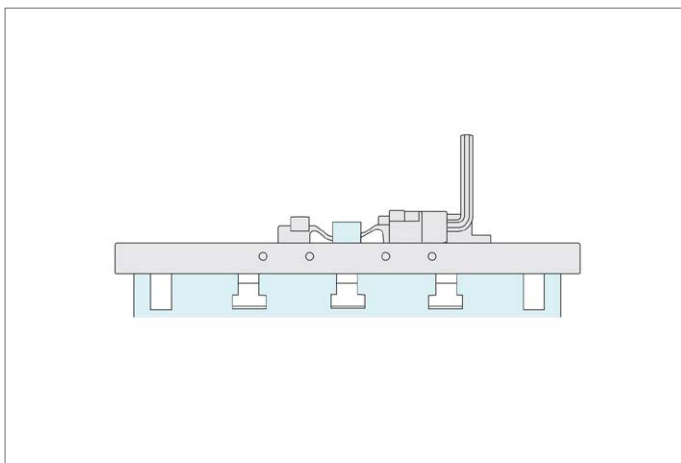
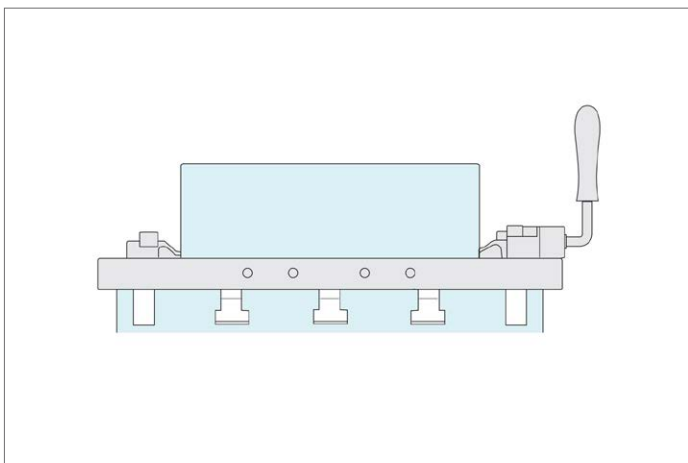
**Technical Notes**

A low height, very powerful compact clamp system.  
These clamps have a unique sideways and downwards clamping action.  
Maximum workpiece capacity 280mm.

**Tips**

Provided with specially ground location bolts Ø10,2 - M10.  
Also available with serrated jaws.

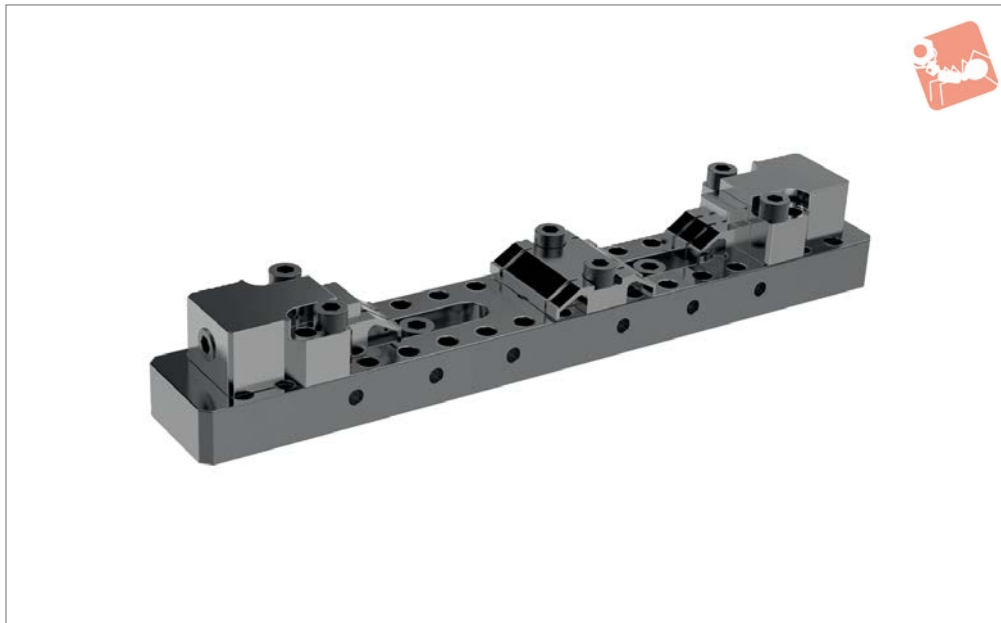
Order No.	Type	Base	Clamp	Stop
11050.W0004	Standard Vice Set	1 pc 11046.W0015	1 pc 11040.W0025	1 pc 11041.W0080





## 2.2 Ton Finger Clamps double vice sets

## Heavy-Duty Side Clamping



# 11051

HEAVY-DUTY SIDE CLAMPING

### Material

Clamp rail: steel, hardened, with ground faces.

Clamps: hardened steel, with spring steel clamping element.

Stops: spring steel.

### Technical Notes

A low height, very powerful compact

clamp.

These clamps have a unique sideways and downwards clamping action.

Maximum workpiece capacity 107mm when used as a double vice, or 280mm when used as a single vice.

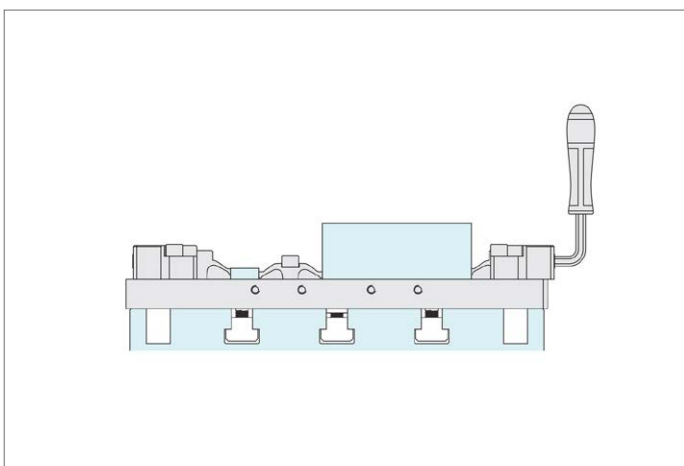
### Tips

Provided with specially ground location

bolts  $\varnothing 10,2$  - M10.

Also available with serrated jaws.

Order No.	Type	Base	Clamp	Stop
11051.W0002	Double Vice Set	1 pc 11046.W0015	2 pcs 11040.W0025	1 pc 11041.W0082





**11052**



**Material**

Clamp rail: steel, hardened, with ground faces.  
 Clamps: hardened steel, with spring steel clamping element.  
 Stops: spring steel.

**Technical Notes**

A low height, very powerful compact clamp.  
 These clamps have a unique sideways and downwards clamping action.

**Tips**

Provided with specially ground location bolts Ø10,2 - M10.  
 Also available with serrated jaws.

Order No.	Type	Base	Clamp	Stop
11052.W0006	Modular Vice Set	2 pcs 11045.W0016	1 pc 11040.W0025	1 pc 11041.W0080



# Horizontal Clamping

up to 2.2 tons



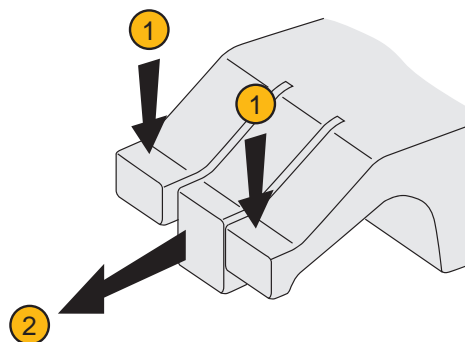
# Clamping & Height Setting

## Unique Action - "three finger" Clamping

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.



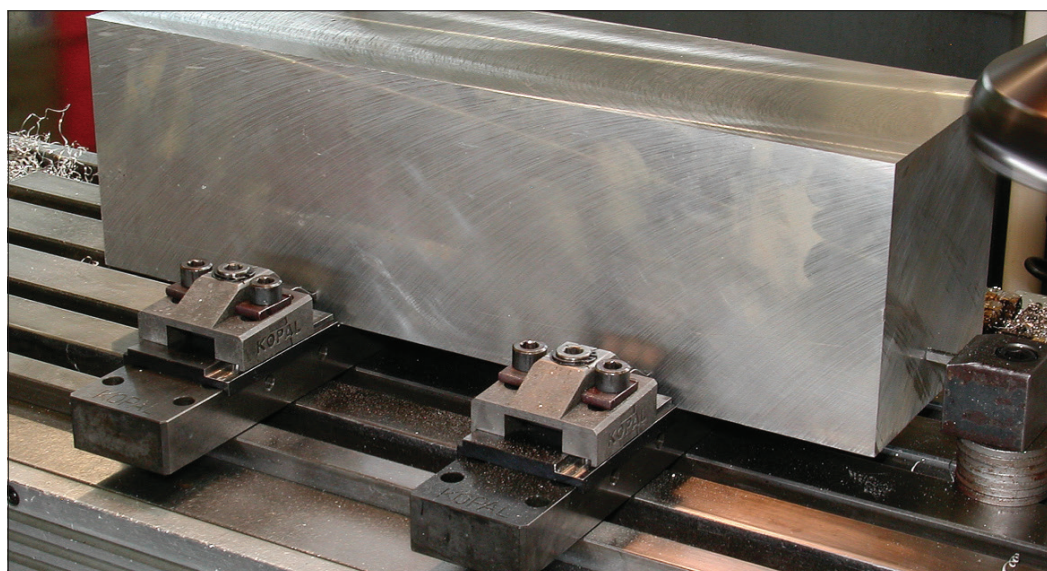
11040/41/42/43

22000N

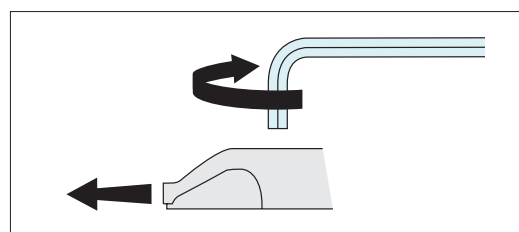
11070/71

12000N

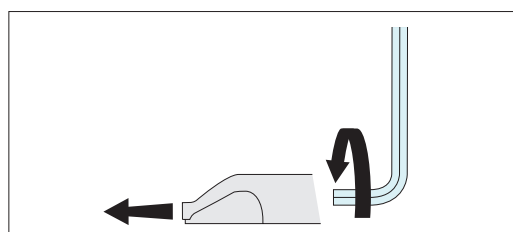
HEAVY-DUTY SIDE CLAMPING



## Options

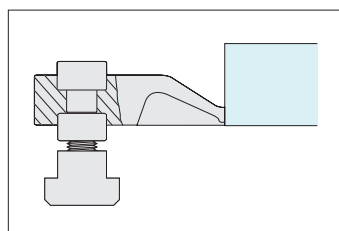


Quick 1/4 turn eccentric clamping – on models offering 4000 and 12000 Newtons clamping force.

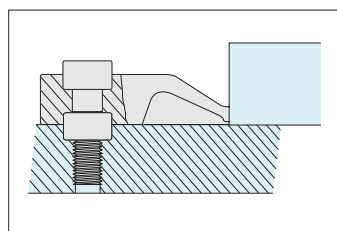


Rear screw clamping – on models offering 6500, 10000 and 22000 Newtons clamping force.

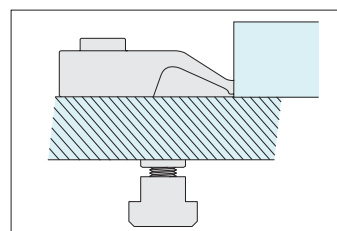
## Actuation



T-Slotted tables



Dedicated fixturing

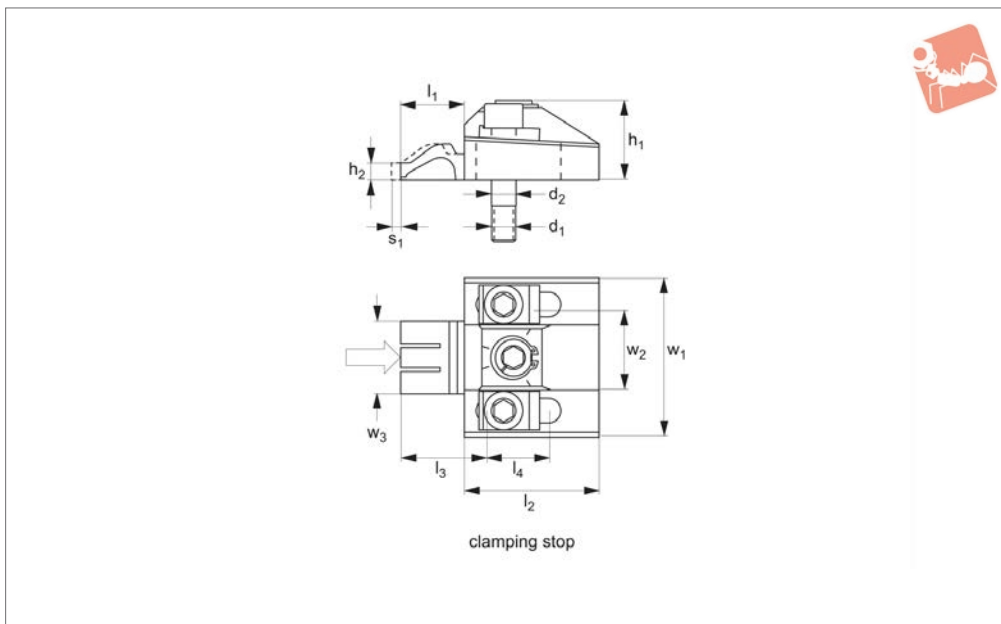


Modular fixturing

## Mounting



**11070**



**Material**

Hardened steel, with spring steel clamping element.

**Technical Notes**

A low height, very powerful compact

**clamp.**

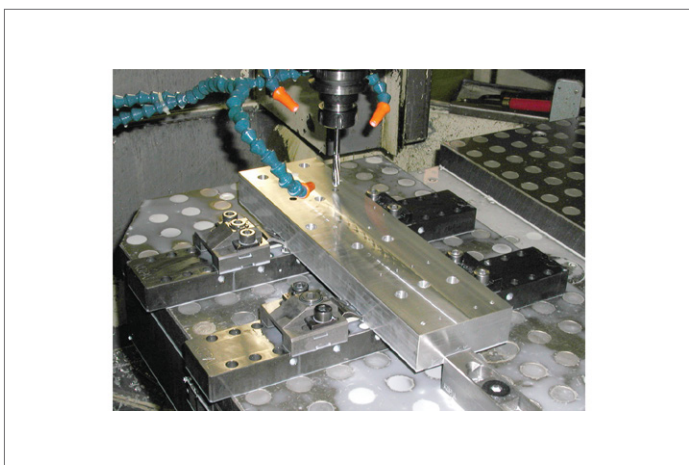
These clamps have a unique sideways and downwards clamping action.

**Tips**

Provided with specially ground location

bolts  $\varnothing 10,2$  - M10, screws, washers and clamping key. For mounting there are 2 tapped holes at  $44,00 \pm 0,005$ mm centres, M10 with depth of 28mm, counterbore 10,2 (H6) with depth of 14mm.

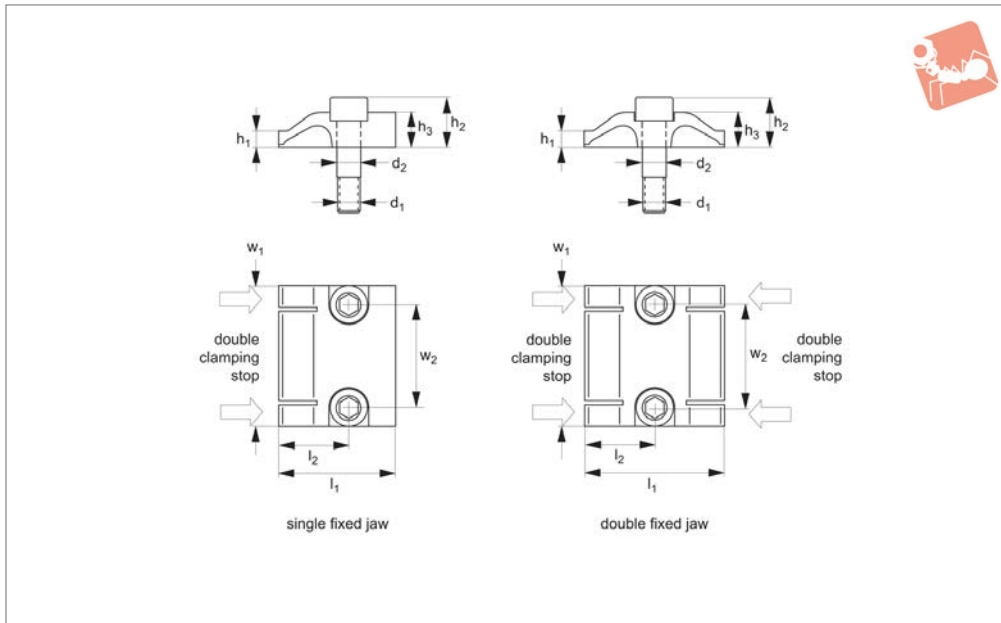
Order No.	Clamping adjustment $l_3$	Clamping height $h_2$	Clamping stroke $s_1$	$d_1$	$d_2$ tol. h6	$h_1$	$l_1$	$l_2$	$l_4$	$w_1$	$w_2$	$w_3$	Torque to Nm max.	Clamping force kN max.
11070.W0020	25	7	1,6	M10	10,2	33	26,5	56	36,5	66	44	30	70	12





# 1.2 Ton Fixed Stops for finger clamps

## Heavy-Duty Side Clamping



**11071**

HEAVY-DUTY SIDE CLAMPING

**Material**

Spring steel.

**Technical Notes**

These stops have a unique sideways and

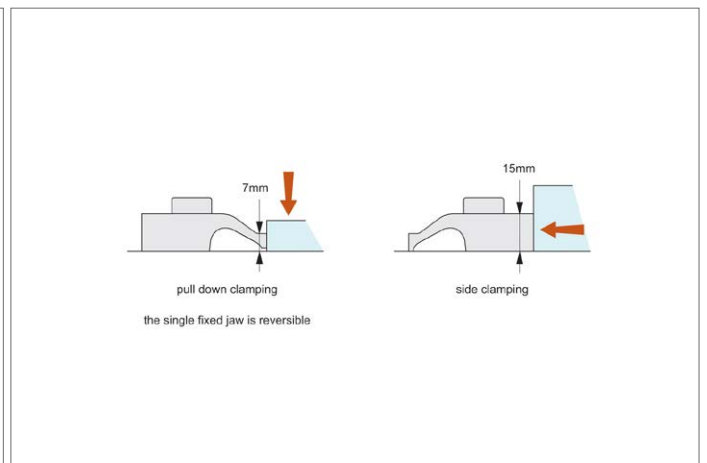
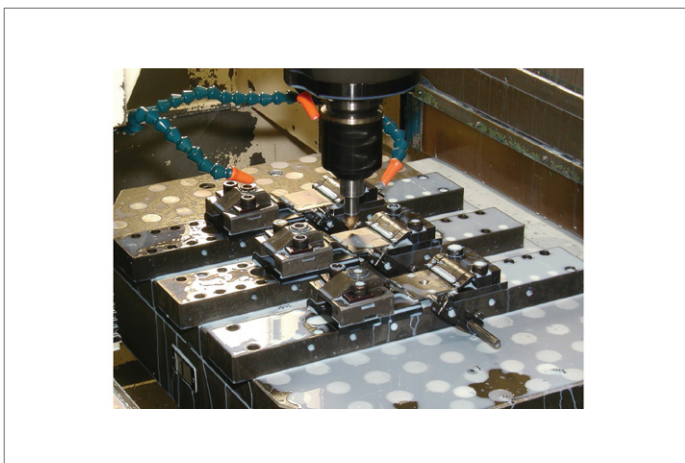
downwards action.

**Tips**

Provided with specially ground location bolts  $\varnothing 10,2 - M10$ . For mounting there are

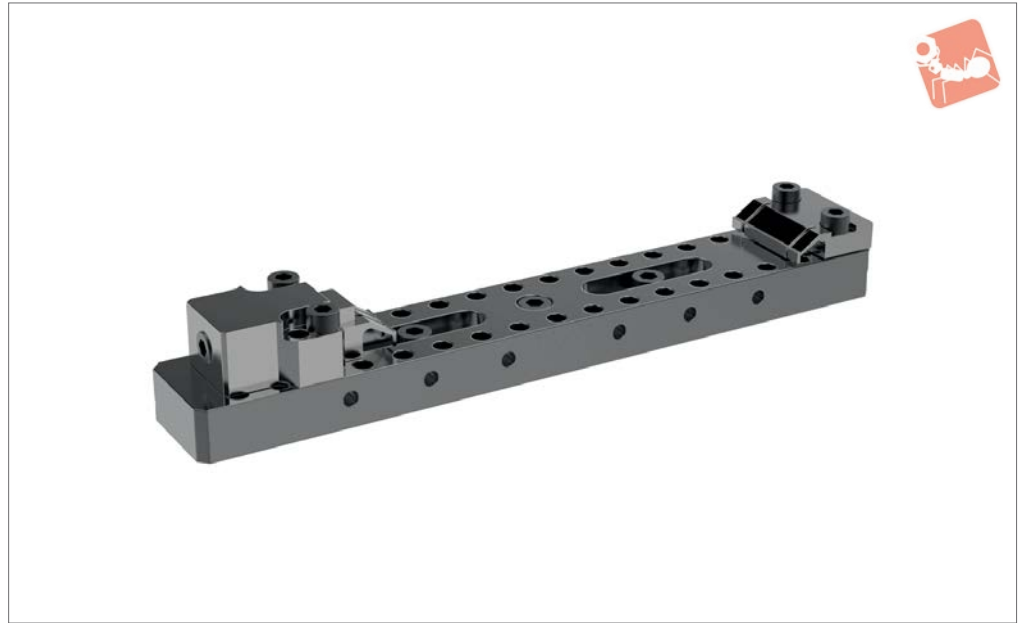
2 tapped holes at  $44,00 \pm 0,005\text{mm}$  centres, M10 with depth of 28mm, counterbore 10,2 (H6) with depth of 14mm.

Order No.	Type	Clamping height $h_1$	$d_1$	$d_2$	$h_2$	$h_3$	$l_1$	$l_2$	$w_1$	$w_2$
11071.W0080	Single	7	M10	10.2	22	15	50	30	60	44
11071.W0082	Double	7	M10	10.2	22	15	60	30	60	44





**11075**



**Material**

Steel, hardened, with ground faces.

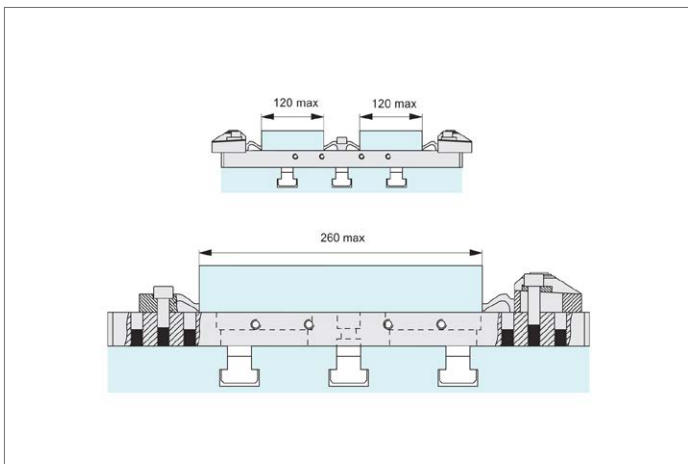
**Technical Notes**

For T-slot tables and fixture plates.

**Tips**

Provided with 2 x M12 fixing screws and centring locator.

Order No.	Rail	Stop	Type	Clamp
11075.W0010	1 pc 11046.W00015	1 pc 11071.W0080	Vice Set	1 pc 11070.W0020







# 1.2 Ton Finger Clamps modular vice set

## Heavy-Duty Side Clamping



**11076**

HEAVY-DUTY SIDE CLAMPING

### Material

Steel, hardened, with ground faces.

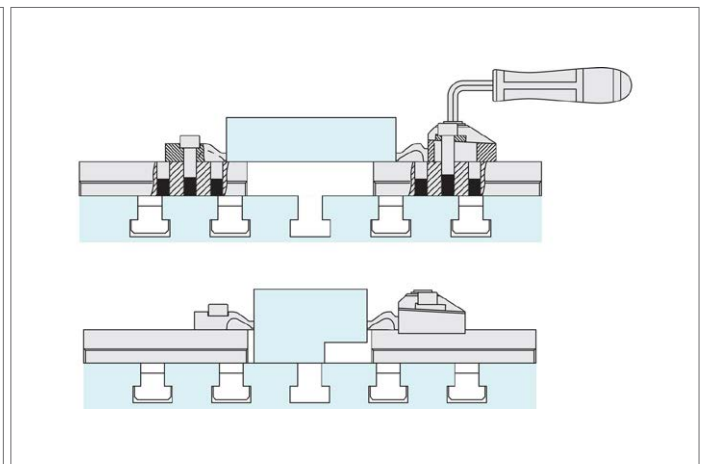
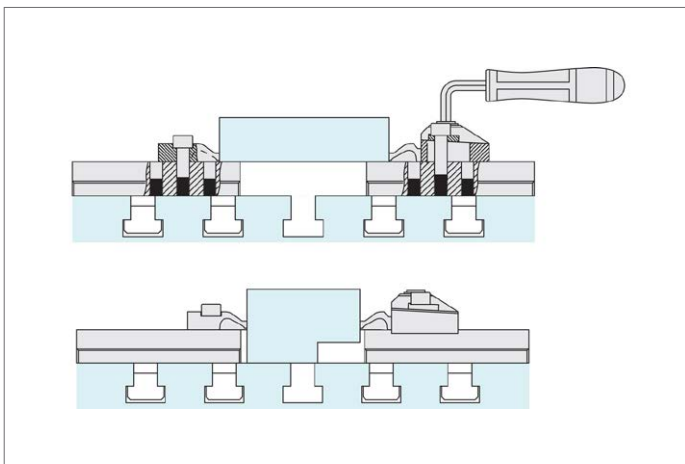
### Technical Notes

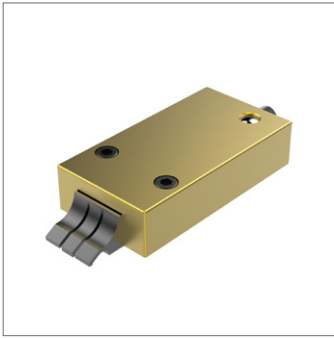
For T-slot tables and fixture plates.

### Tips

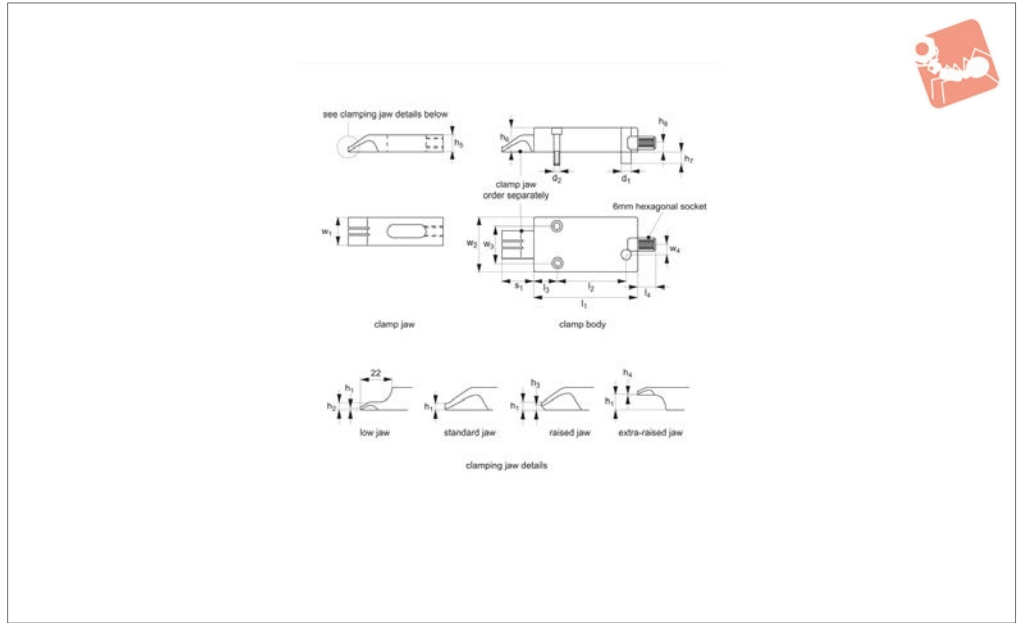
Provided with 3 x M12 fixing screws and centring locator.

Order No.	Rail	Stop	Type	Clamp
11076.W0014	2 pc 11045.W0016	1 pc 11071.W0080	Modular Vice Set	1 pc 11070.W0020





## 11080



### 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.

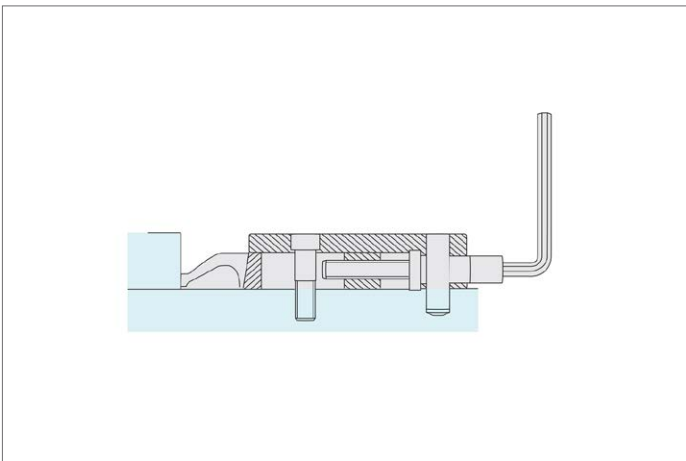
### Tips

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	-	-

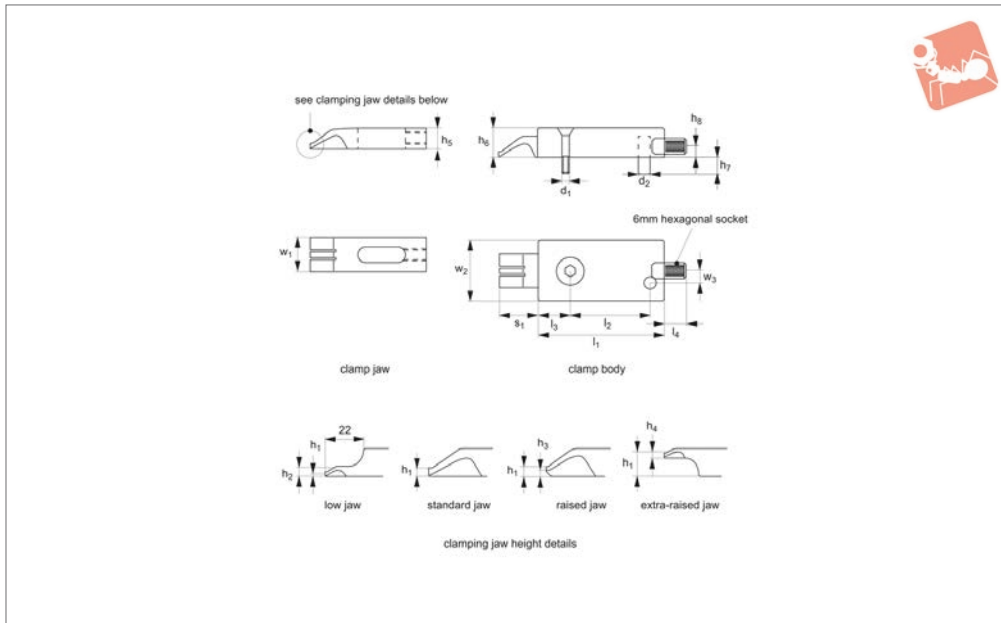
Order No.	$h_2$	$h_3$	$l_1$	$l_2$	$h_4$	$l_3$	$h_5$	$l_4$	$h_6$	$h_7$	$h_8$	$w_2$	$w_3$	$w_4$
11080.W0090	-	-	104	69.5	-	23	-	18	24	9	12	55	37	10
11080.W0610	-	-	-	-	-	-	17	-	-	-	-	-	-	-
11080.W0615	6.0	-	-	-	-	-	17	-	-	-	-	-	-	-
11080.W0620	-	4.0	-	-	-	-	17	-	-	-	-	-	-	-
11080.W0625	-	-	-	-	2.5	-	17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





# 1.0 Ton Finger Clamps for T-slots

## Heavy-Duty Side Clamping



# 11081

HEAVY-DUTY SIDE CLAMPING

### 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).

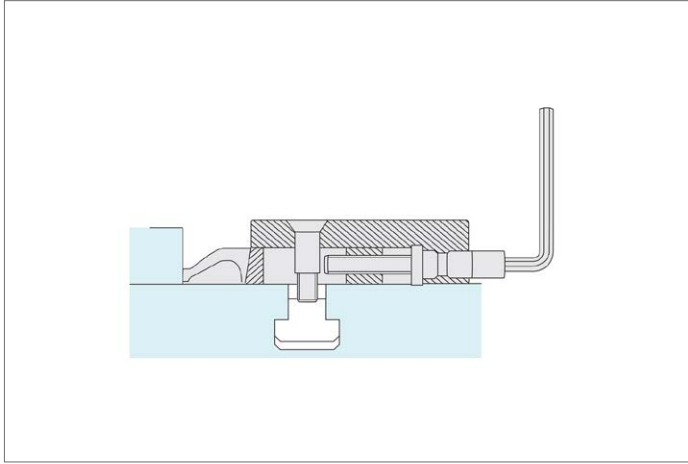
Order No.	Type	Clamp stroke	s <sub>1</sub>	w <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>
11081.W0065	Clamp Body M10	20	18 to 38	-	M10	10	-	-	-	104	69.5
11081.W0068	Clamp Body M12	20	18 to 38	-	M12	10	-	-	-	104	69.5
11081.W0610	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 <sub>4</sub>	l <sub>3</sub>	h <sub>5</sub>	l <sub>4</sub>	h <sub>6</sub>	h <sub>7</sub>	h <sub>8</sub>	w <sub>2</sub>	w <sub>3</sub>	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	-	-	-	-	-	-	-	-



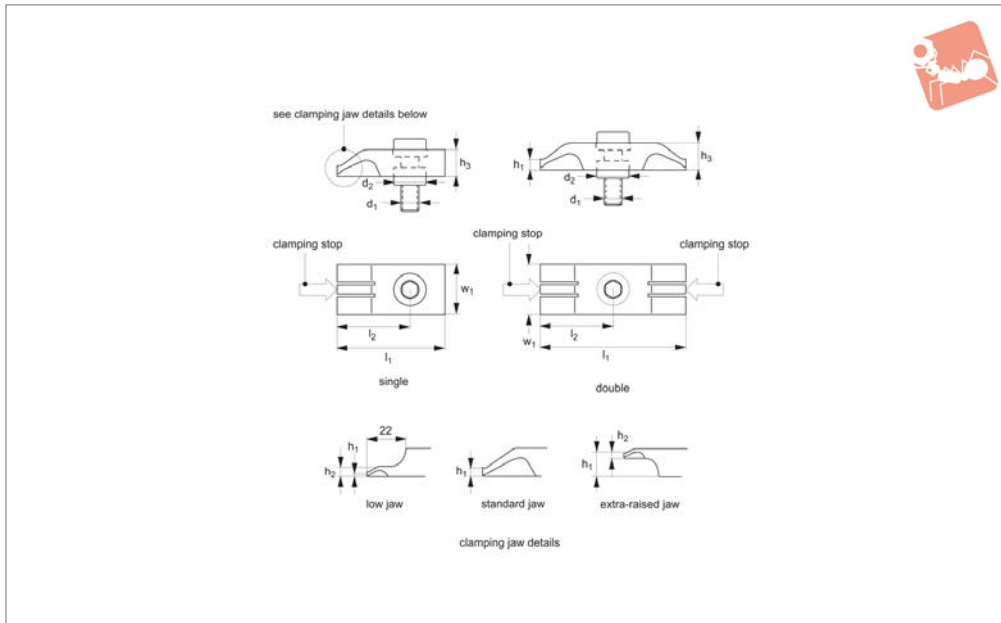
HEAVY-DUTY SIDE CLAMPING





# 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.

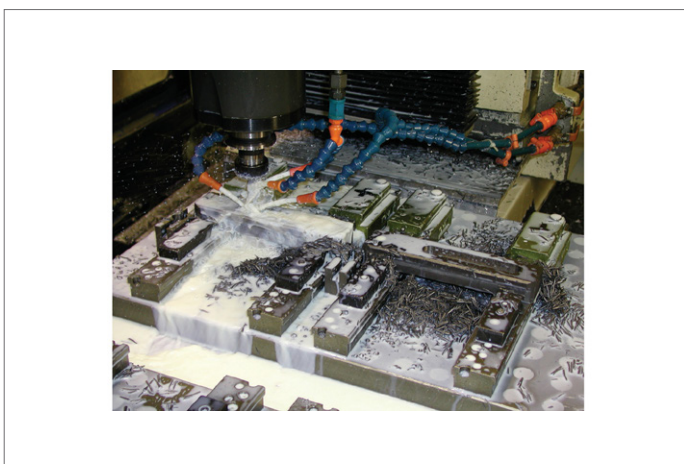
### Tips

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.

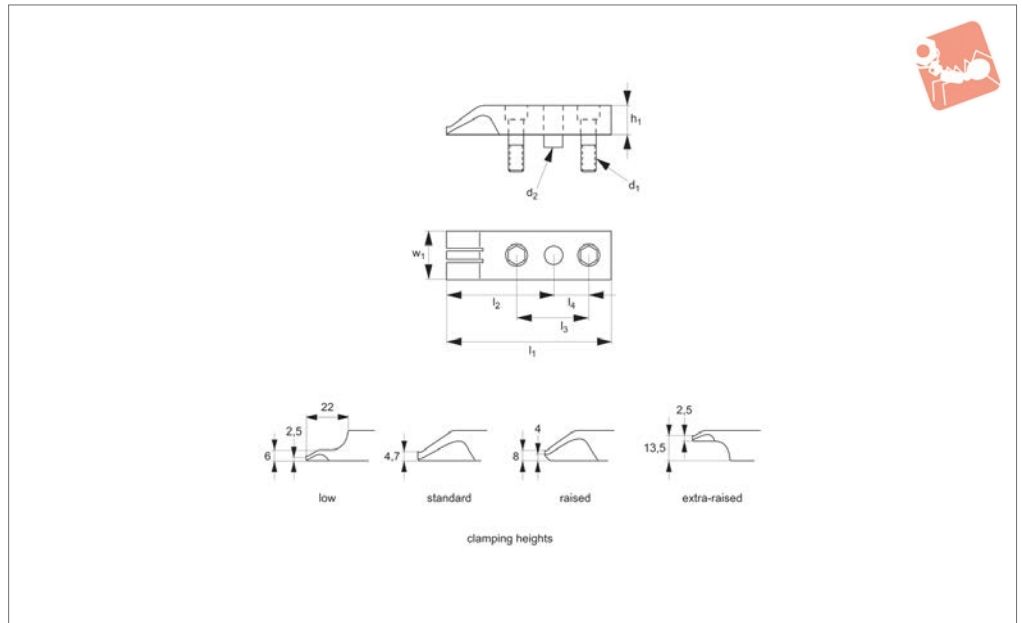
Fitting instruction:  
Tap M10/M12 counterbore 18,00 (H7) with depth 5mm.

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.

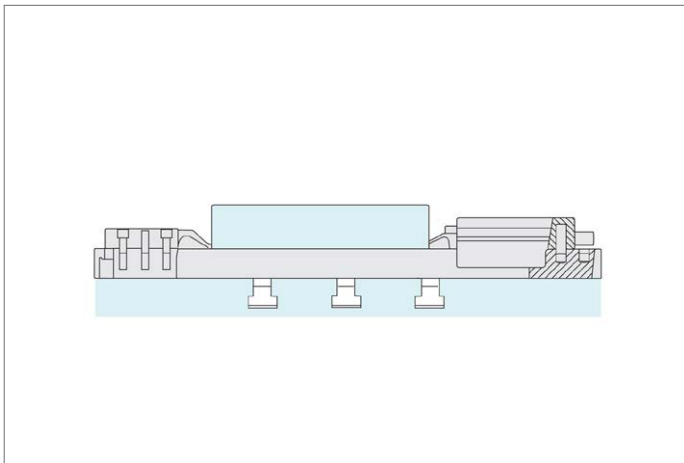
#### Tips

Maximum workpiece capacity 232mm when

used as a single vice.

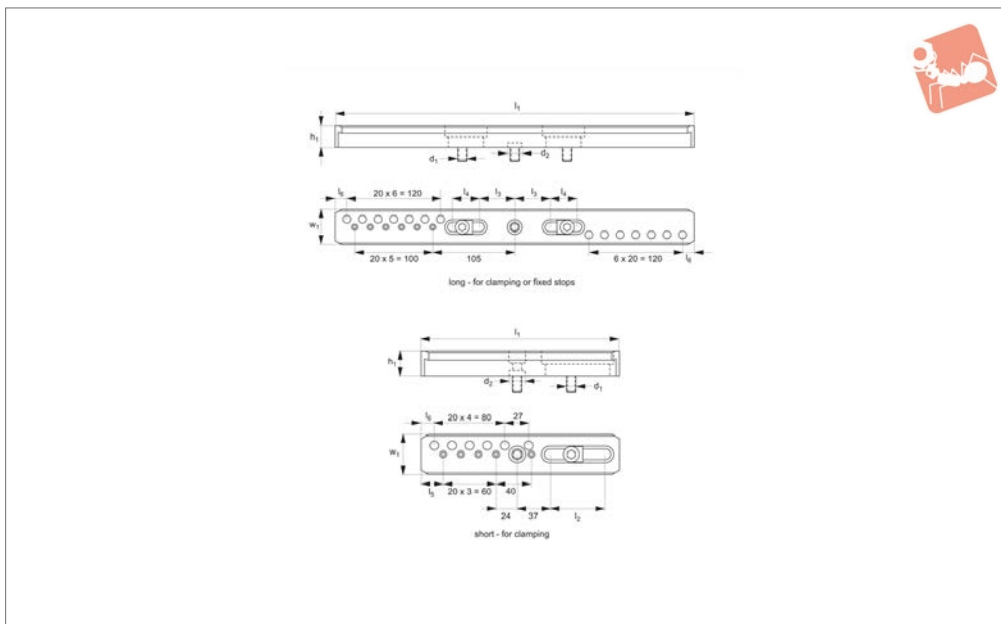
Supplied with M12 mounting screws.

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.

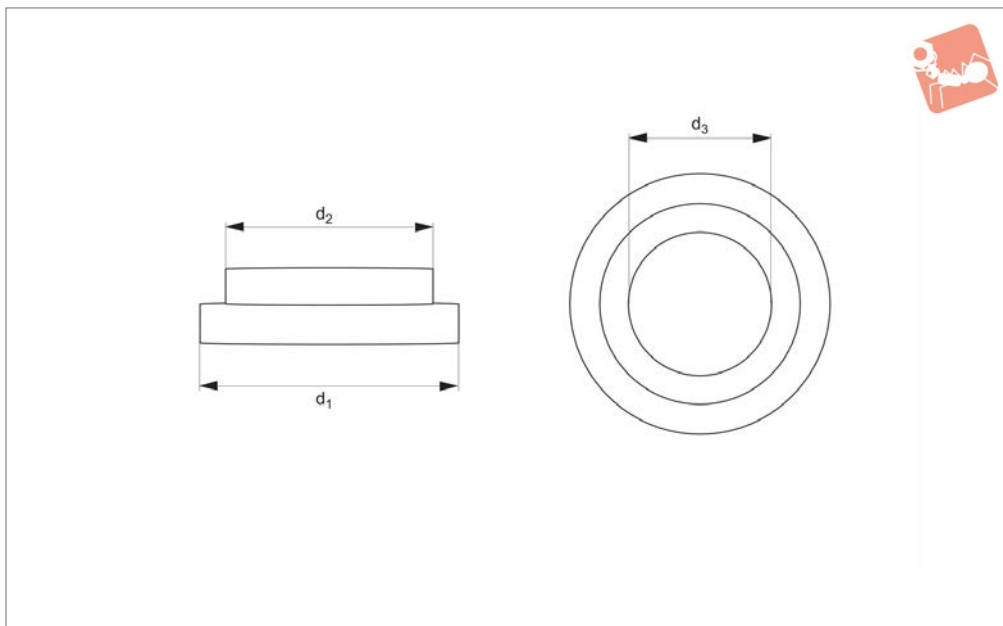
Order No.	Type	$w_1$	$d_1$	$d_2$	$h_1$	$l_1$	$l_2$	$l_3$	$l_4$	$l_5$	$l_6$
<a href="#">11086.W0040</a>	Long	45.5	M12	18	28	460	-	45	35	-	15
<a href="#">11086.W0045</a>	Short	45.5	M12	18	28	225	63	-	-	25	15





# Centering Bushes for clamp 11086

## Heavy-Duty Side Clamping



**11095**

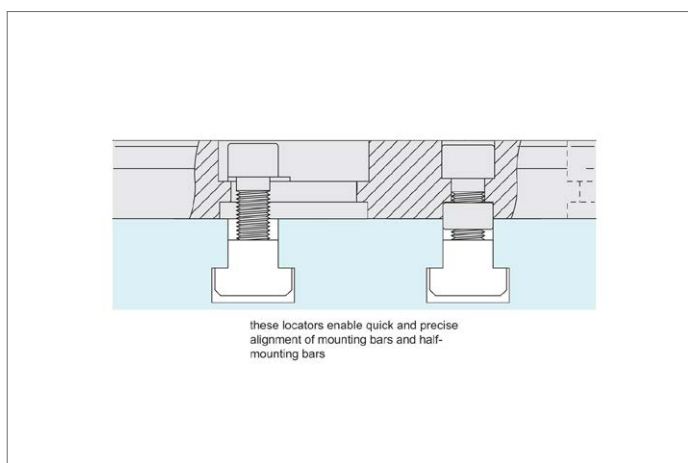
HEAVY-DUTY SIDE CLAMPING

### Tips

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

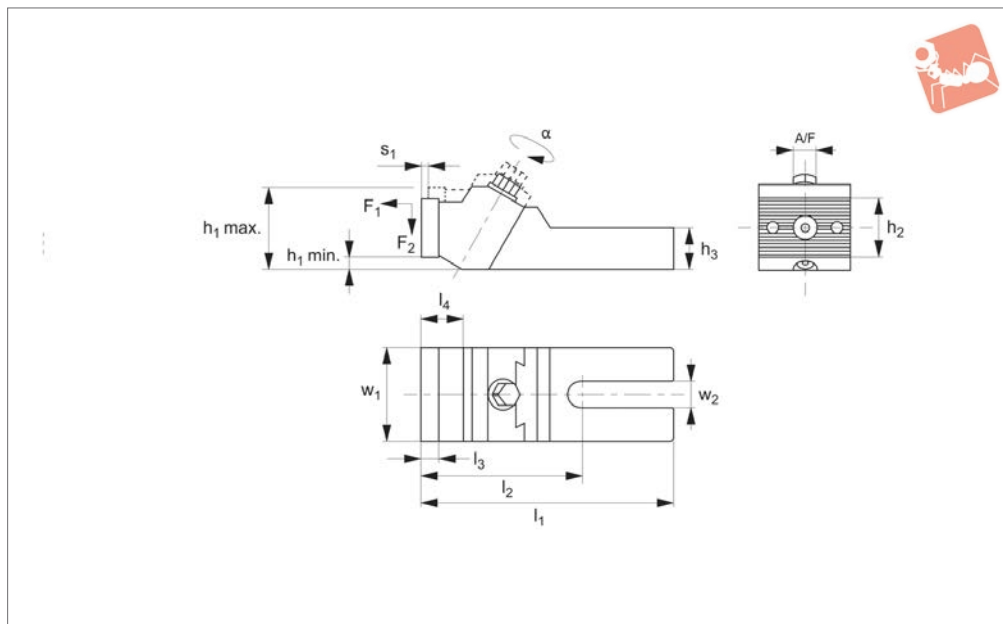
enables immediate alignment of the clamp to the T-slot and hence prevents any movement of components.

Order No.	Slot size	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>
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





## 12318



### Material

Body: steel, tempered.  
Clamping jaws: steel, case hardened.

### Technical Notes

Reversible clamping jaws with smooth side for machined workpieces and serrated side for rough clamping surfaces.

### Tips

The large clamping surface makes these solid clamping jaws suitable for laterally clamping workpieces. We recommend using two clamping studs for fastening the solid clamping jaw on the machine table. Screws for T-slots No. 21000 - two screws per

clamping jaw - should be ordered separately as a fastening bolt depending on the width of the machine T-slot.

### Important Notes

\*Clamping forces  $F_1$  and  $F_2$  depend on the T-slot size.

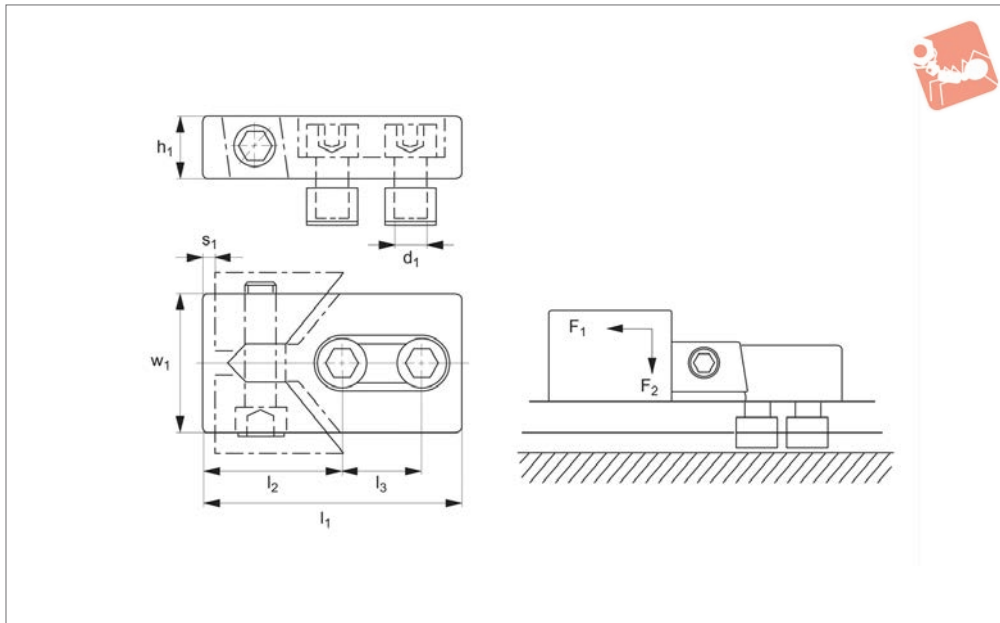
Order No.	For T-slot	$w_1$	$w_2$	$h_1$ min.	$h_1$ max.	$h_2$	$h_3$	$l_1$ max.	$l_2$	$l_3$	$l_4$	Stroke $s_1$	A/F	Weight g
12318.W0012	12-14	40	13	3	33.5	25.4	20	128	82	8	19	3.0	13	840
12318.W0014	12-18	65	19	20	60.0	40	30	177	113	12	29	6.0	16	3020
12318.W0024	20-30	75	26	33	73.0	40	36	224	135	12	29	7.5	18	4880
12318.W0036	32-42	90	38	51	91.5	40	46	256	152	12	34	10.0	21	7715



# Clamping Jaws - Low Height downhold action



## Heavy-Duty Side Clamping



**12200**

HEAVY-DUTY SIDE CLAMPING

### Material

Steel, heat treated, blackened.

Acutated on one side via hex. key (provided).

wards into the workpiece.  
**Sold in pairs.**

### Technical Notes

Ideal for clamping low-profile plates.

### Tips

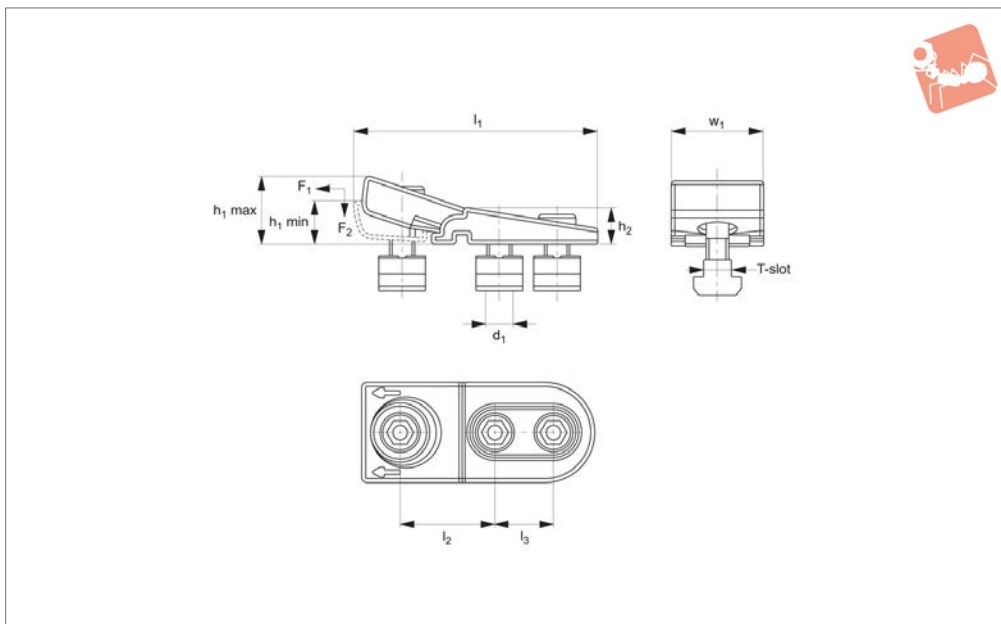
Clamping action is forwards and down-

Order No.	T-slot size	w <sub>1</sub>	d <sub>1</sub>	h <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	Stroke s <sub>1</sub>	F <sub>1</sub> kN	F <sub>2</sub> kN	Weight/pair g
<b>12200.W0012</b>	12	40	M10	20	80	39	26	3	16	0.6	1150
<b>12200.W0014</b>	14	40	M12	20	80	39	26	3	22	0.9	1250
<b>12200.W0016</b>	16	40	M12	20	80	39	26	3	22	0.9	1330
<b>12200.W0017</b>	16	50	M14	25	100	46	34	4	32	1.2	2340
<b>12200.W0018</b>	18	50	M16	25	100	46	34	4	36	1.4	2540
<b>12200.W0020</b>	20	50	M16	25	100	46	34	4	36	1.4	2660
<b>12200.W0022</b>	22	78	M20	30	140	65	50	5	36	1.4	5980
<b>12200.W0024</b>	24	78	M20	30	140	65	50	5	36	1.4	6330
<b>12200.W0028</b>	28	78	M24	30	140	65	50	5	40	1.6	7060
<b>12200.W0030</b>	30	78	M24	30	140	65	50	5	40	1.6	7580





## 12205



### Material

Steel, tempered and burnished.

Suitable for horizontal and vertical applications.

### Technical Notes

Low height clampings of thin workpieces.

### Tips

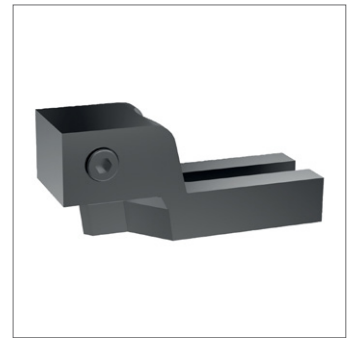
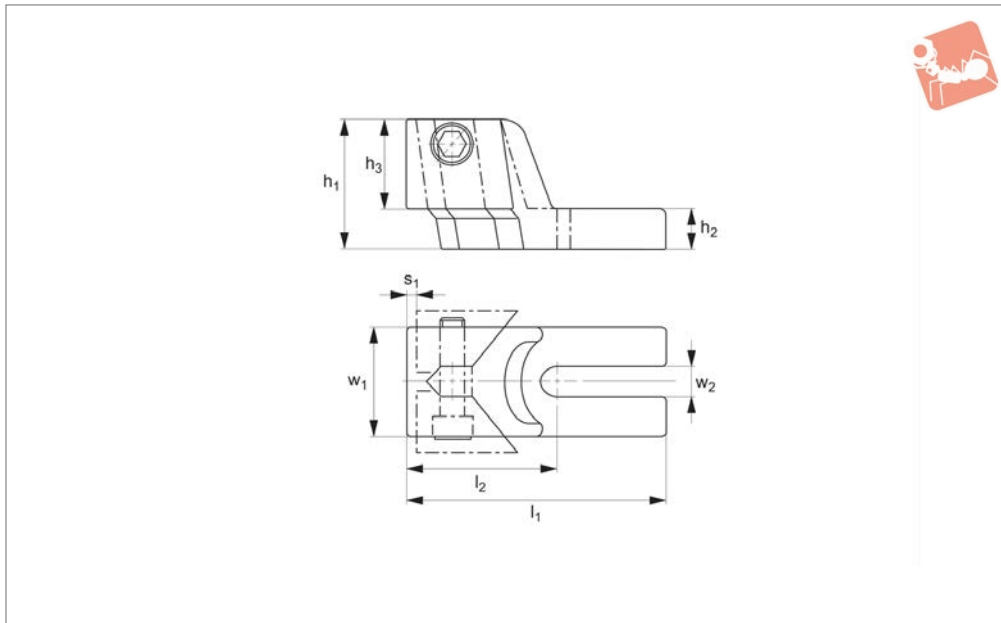
For clamping of low profile workpieces.

Order No.	T-slot size	w <sub>1</sub>	d <sub>1</sub>	h <sub>1</sub> min.	h <sub>1</sub> max.	h <sub>2</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	F <sub>1</sub> kN	F <sub>2</sub> kN	Weight g
12205.W0014	14	15	M12	16	25	16	110	45-48	26	15	7.5	579
12205.W0016	16	15	M12	16	25	16	110	45-48	26	15	7.5	600
12205.W0018	18	20	M16	19	30	19	130	50-54	33	20	10.0	1011
12205.W0020	20	20	M16	19	30	19	130	50-54	33	20	10.0	1055
12205.W0022	22	30	M20	22	36	22	152	58-63	41	30	15.0	1670
12205.W0024	24	30	M20	22	36	22	152	58-63	41	30	15.0	1705
12205.W0028	28	30	M20	22	36	22	152	58-63	41	30	15.0	1807



# Clamping Jaws - Standard downhold action

# Heavy-Duty Side Clamping



**12300**

HEAVY-DUTY SIDE CLAMPING

### Material

Body: cast iron.  
Jaws: steel, hardened.

### Technical Notes

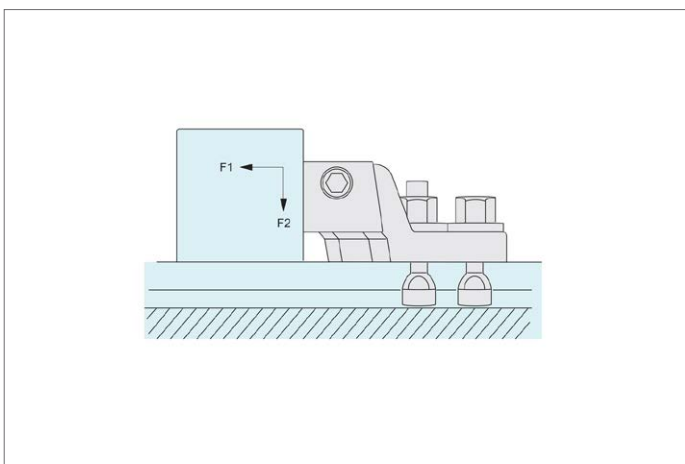
For mounting of each clamp to machine

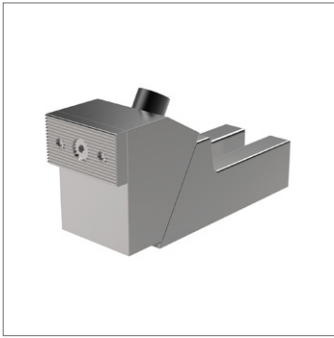
table, two clamping bolts no. 21000,  
washers no. 25000 and fixture nuts no.  
24300 should be ordered separately.  
Hex. key provided.

### Tips

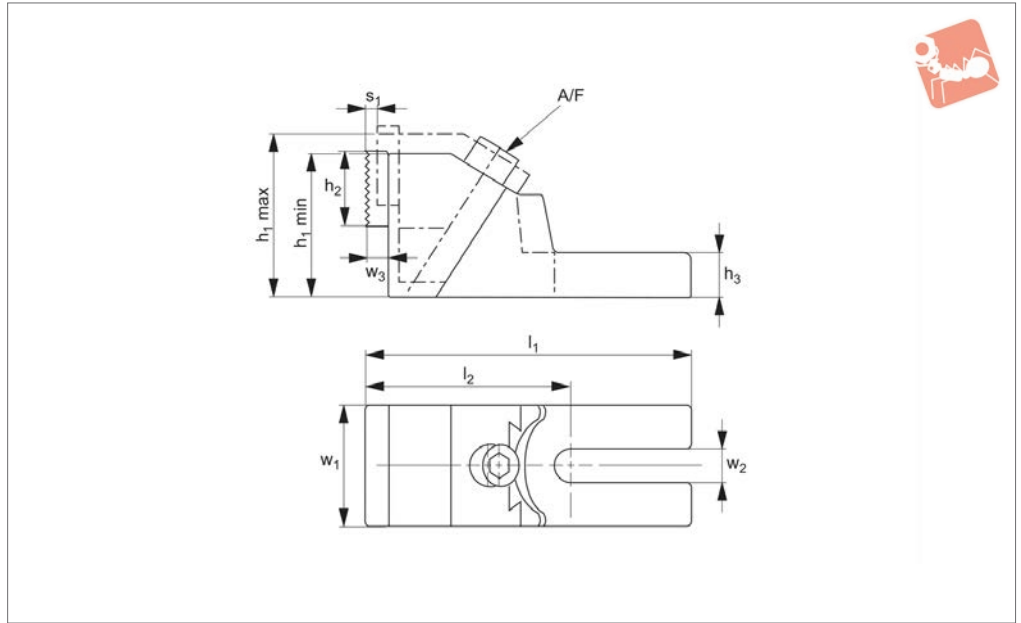
Can be actuated from left hand side only.  
**Sold in pairs.**  
For table of clamping forces, see below.

Order No.	For T-slot	w <sub>1</sub>	w <sub>2</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	Stroke s <sub>1</sub>	Weight g
<b>12300.W0016</b>	10-14	40	13	50	20	30	115	60	3	1590
<b>12300.W0018</b>	16-20	50	19	60	25	35	150	72	4	2940
<b>12300.W0030</b>	22-36	80	31	75	30	45	205	102	5	7900





## 12320



### Material

Body: cast iron.  
Jaws: steel, hardened.

### Technical Notes

Jaw plates are reversible (ribbed/smooth).

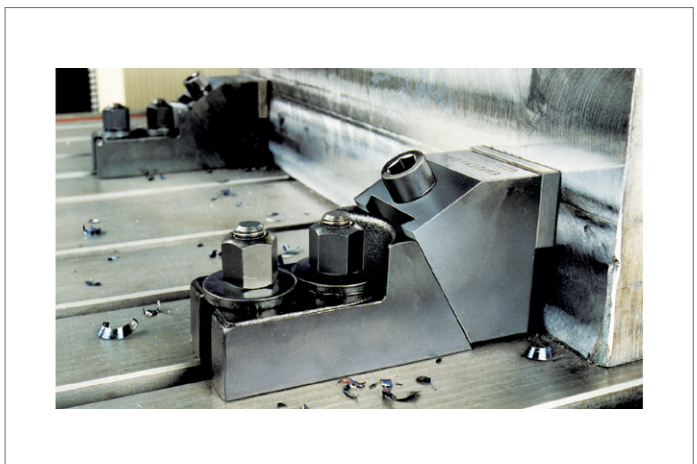
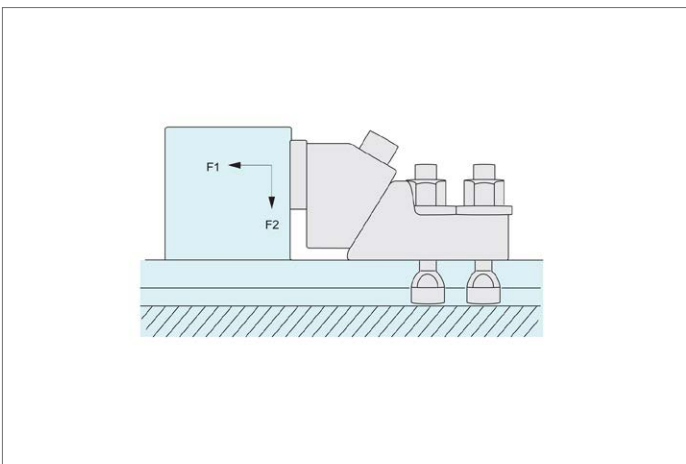
Clamping action is forwards and downwards into the workpiece.

### Tips

Extremely powerful clamps for use where high clamping forces are required. Due to

the high clamping forces we recommend the use of 2 clamping bolts (no. 21000), for each clamp.

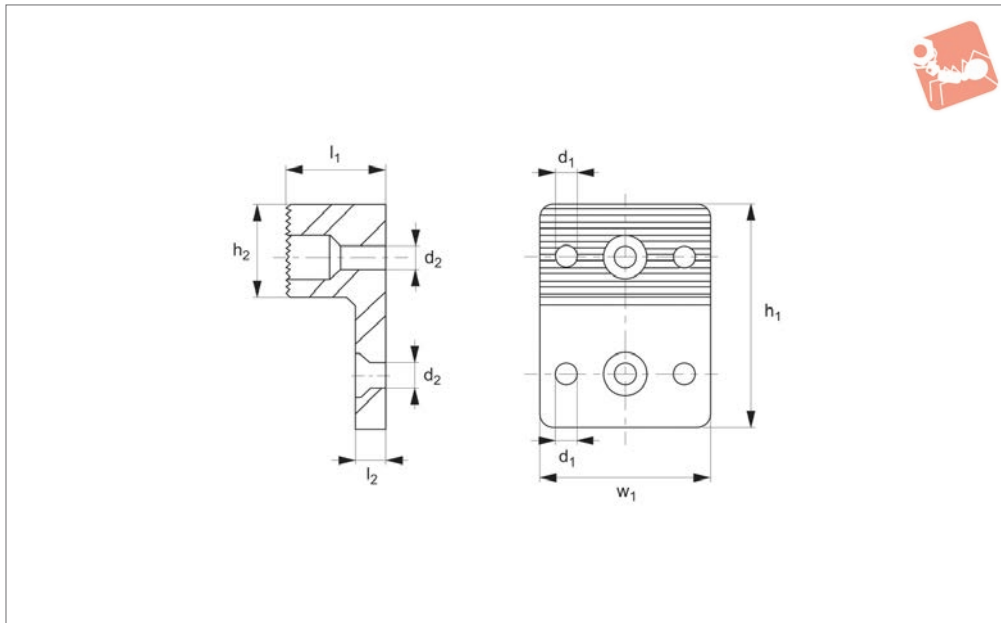
Order No.	For T-slot	w <sub>1</sub>	w <sub>2</sub>	w <sub>3</sub>	h <sub>1</sub> min.	h <sub>1</sub> max.	h <sub>2</sub>	h <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	Stroke s <sub>1</sub>	A/F	Weight g
12320.W0014	12-18	65	19	12	85	99	40	38	179	112.5	8	14	1590
12320.W0024	20-30	75	26	12	100	118	40	45	230	138.5	11	14	2940
12320.W0036	32-42	90	38	12	120	145	40	56	265	158.0	15	17	7900





# Clamping Jaw for clamps 12320

# Heavy-Duty Side Clamping



**12330**

HEAVY-DUTY SIDE CLAMPING

**Material**

Steel, case hardened, with M8 bolts.

machining of rough parts. Can be mounted on the clamping jaw or the stop.

**Tips**

Clamping jaw with serrated surface for

Order No.	For clamp $w_1$	$d_1$	$d_2$	$h_1$	$h_2$	$l_1$	$l_2$	Weight g
12330.W0019	65	8.1	9	85	35	38	12	889
12330.W0026	75	8.1	9	100	45	38	12	1306
12330.W0038	90	8.1	9	120	50	38	12	1829

