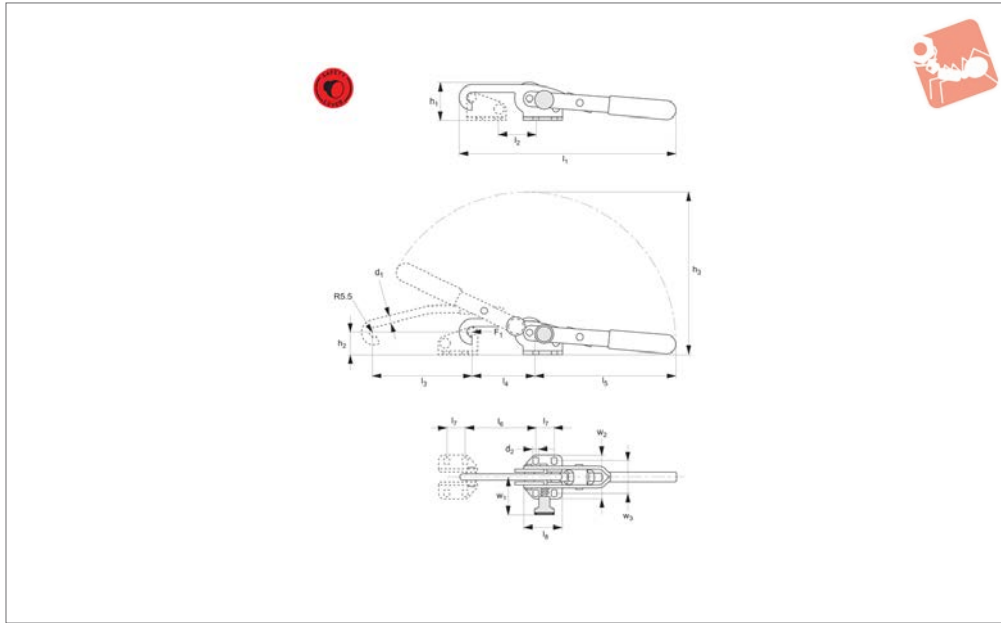




# Hook Clamp safety knob

# Safety Lever Toggle Clamps



**41600**

SAFETY LEVER TOGGLE CLAMPS

### Material

Body: steel, zinc plated.  
Rivets: stainless steel running in hardened bushes. Pre-lubricated bearings (grease suitable for food industry use).  
Handle: oil-resistant plastic handle with large grip area.

### Technical Notes

The safety knob locks the clamp in the

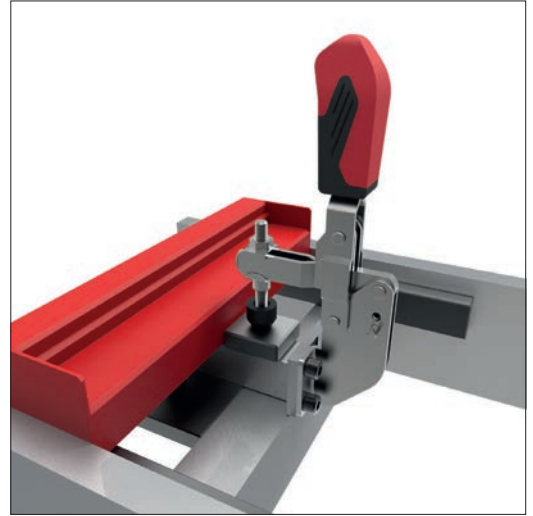
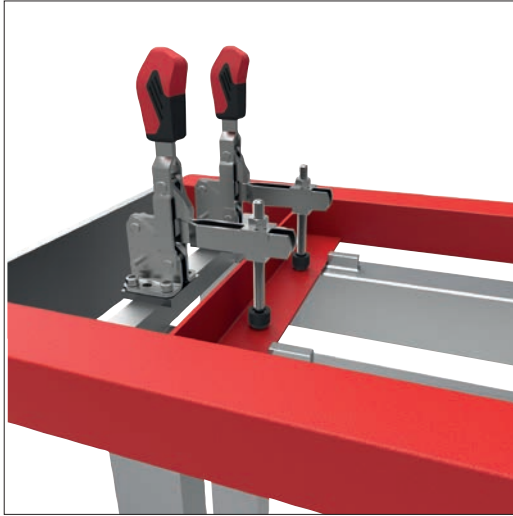
closed position. This prevents opening under vibration or inadvertent movement of the clamping arm when loading or unloading a fixture.  
Pull out the safety knob to release the clamp.  
The  $h_2$  engagement height (23mm) must be adhered to, ensure safety knob functionality.

The length of the hook is adjustable up to 12mm. Adjustment is made by rotating the threaded hook to extend or contract its reach.  
Use counter strike 41740.W0013, order separately.  
Temperature range -10°C to +80°C.

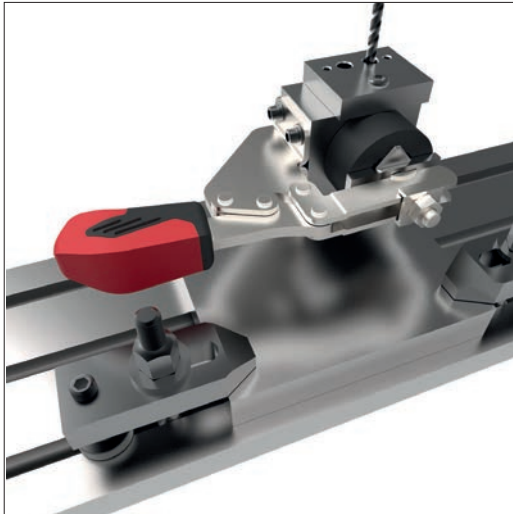
| Order No.          | Size  | $F_1$<br>kN | $h_1$ | $h_2$ | $h_3$ | $l_1$ | $l_2$ | $l_3$ | Weight<br>g |       |
|--------------------|-------|-------------|-------|-------|-------|-------|-------|-------|-------------|-------|
| <b>41600.W0003</b> | 3     | 3           | 38    | 23    | 181   | 240   | 41-50 | 98    | 295         |       |
| Order No.          | $l_4$ | $l_5$       | $l_6$ | $l_7$ | $l_8$ | $w_1$ | $w_2$ | $w_3$ | $d_1$       | $d_2$ |
| <b>41600.W0003</b> | 67-76 | 151         | 74-83 | 19    | 40    | 38.5  | 45    | 32-36 | 7.1         | 5.6   |



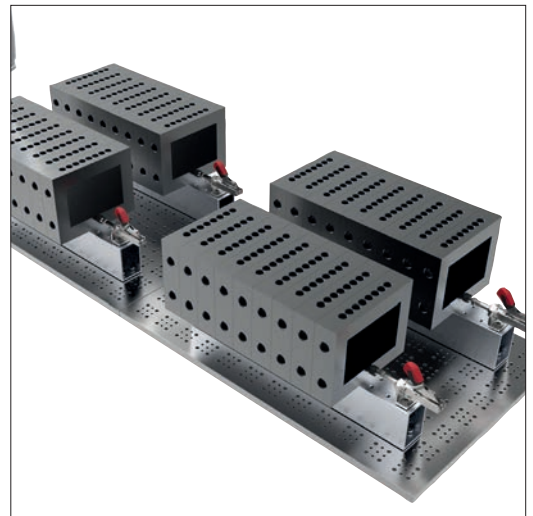
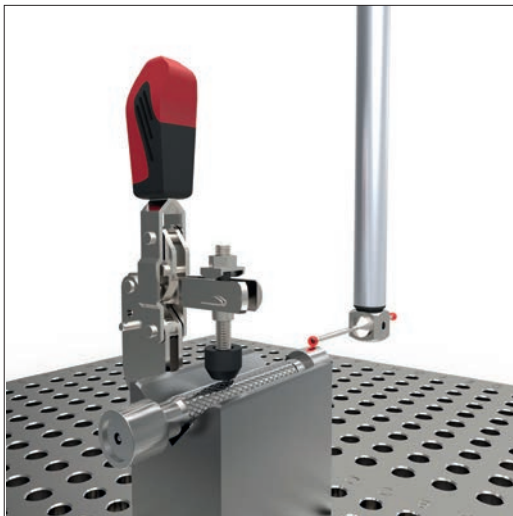
## Welding Fixtures



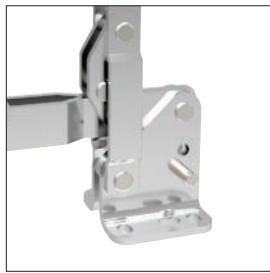
## Machining and Jig Assemblies



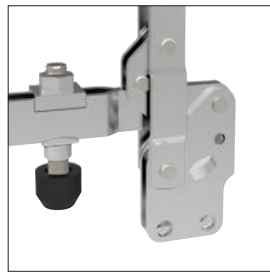
## Cmm's



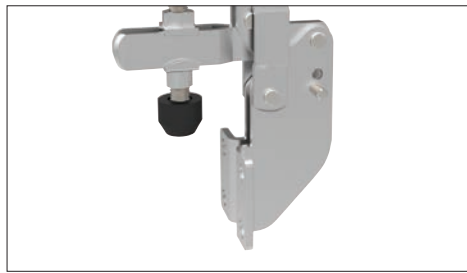
SAFETY LEVER TOGGLE CLAMPS



Horizontal base



Vertical base



Angled base

### Mounting Base Variations



Vertical acting



Horizontal acting



Push-pull

### Clamping Variations



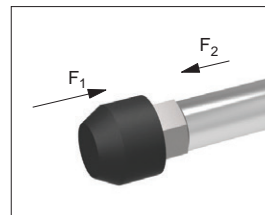
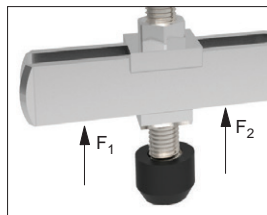
Hook type



Latch type

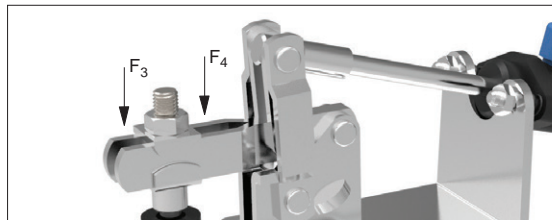
### Explanation of forces

The force transmitted to the workpiece by the toggle clamp's closed arm, without itself being deformed when machine forces are applied. The holding force value is dependent upon the proximity of the measuring load point to the toggle clamp's pivot point (therefore two values,  $F_1$  and  $F_2$  are provided).



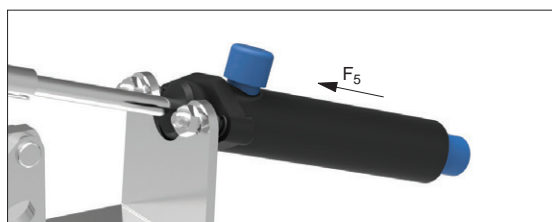
### Holding Forces $F_1$ or $F_2$

The force applied to the workpiece when the toggle clamp's arm is closed. These clamping forces can only be stated for pneumatic toggle clamps, clamping forces of manual clamps cannot be easily measured as they are dependent upon the operator.



### Clamping Forces $F_3$ or $F_4$

For pneumatically controlled toggle clamps only,  $F_5$  is the piston force required (at 6 bar to) achieve the stated clamping force.



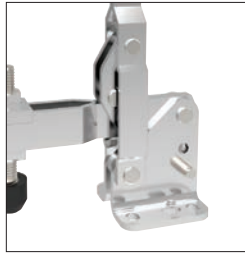
### Piston Forces $F_5$



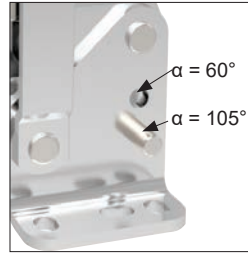
### Quality Features



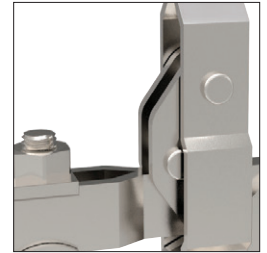
Ergonomic soft grip  
2-component handle



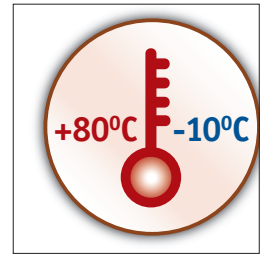
Stainless rivets and  
hardened bushings



Moveable stop for  
variable opening angle



Operator  
finger protection



Temperature resistant

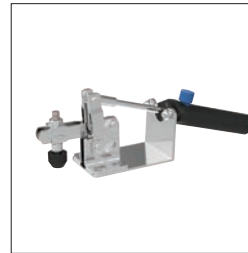
### Unique Features



Safety catches



Heavy duty versions



Pneumatic versions



Matt black surface for  
optical measurement

### Materials



Steel, zinc plated  
and passivated



Stainless steel (304)



Steel, matt black  
vario-spektron coated



Protective cap and  
handle made of an  
electrostatic conductive  
(dissipative) material.