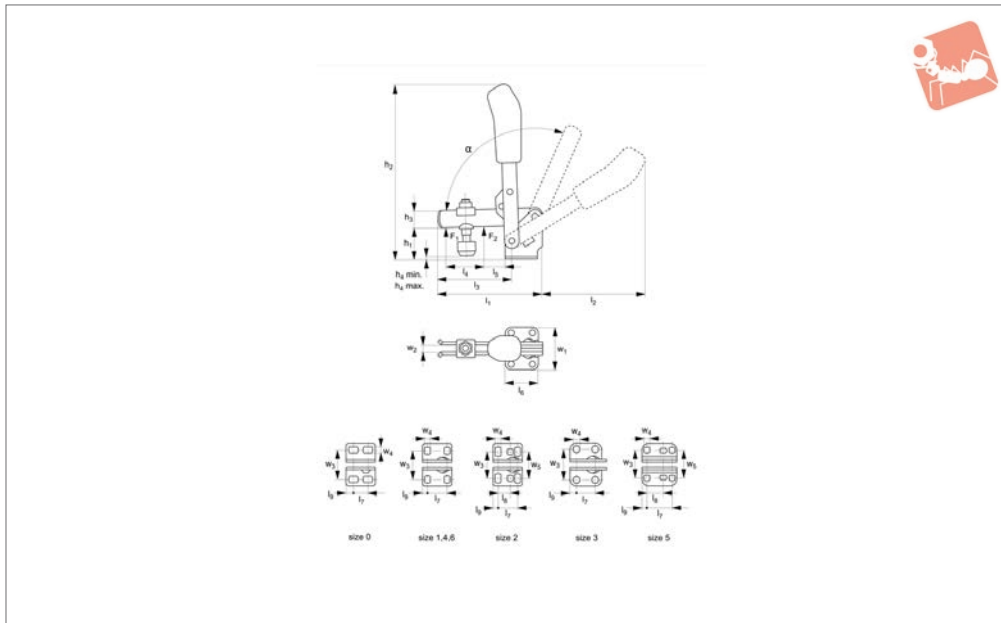




Vertical Acting Toggle Clamps

open arm - horizontal base



40000.1

STEEL TOGGLE CLAMPS

Material

Body: steel, zinc plated.
 Rivets: stainless steel running in hardened bushes (sizes 2-6). Pre-lubricated bearings (grease suitable for food industry use).
 Ergonomic, soft feel, oil-resistant handle with large grip area. Supplied complete

with clamping screw (with rubber pad).

Technical Notes

For fastening to mounting plates, etc.
 Opening angle (symbola/symbol/symbola/symbol*) can be changed by pressing in a stop pin on the clamp body.

Temperature range -10°C to +80°C.

Tips

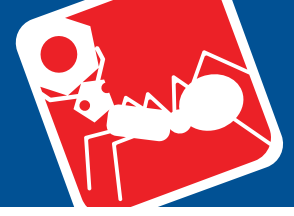
This product is also available in stainless steel, matt black and ESD.

| Order No. | Size | F ₁ kN | F ₂ kN | Clamping screw | h ₁ | h ₂ | h ₃ | h ₄ min. | h ₄ max. | l ₁ | l ₂ | Weight g |
|-------------|------|----------------------|----------------------|----------------|----------------|----------------|----------------|------------------------|------------------------|----------------|----------------|-------------|
| 40000.W0000 | 0 | 0.5 | 0.7 | M 4x25 | 18.0 | 81 | 8 | -1.5 | 3.5 | 49 | 50 | 60 |
| 40000.W0001 | 1 | 0.6 | 1.1 | M 5x30 | 19.0 | 98 | 10 | -4.0 | 2.0 | 61 | 58 | 105 |
| 40000.W0002 | 2 | 0.8 | 1.2 | M 6x35 | 23.0 | 140 | 12 | -3.0 | 4.5 | 78 | 89 | 175 |
| 40000.W0003 | 3 | 1.2 | 2.5 | M 8x45 | 33.0 | 186 | 18 | 2.0 | 11.0 | 112 | 112 | 410 |
| 40000.W0004 | 4 | 1.7 | 3.0 | M 8x65 | 42.5 | 221 | 20 | -6.0 | 22.5 | 141 | 130 | 630 |
| 40000.W0005 | 5 | 3.0 | 5.0 | M12x80 | 55.8 | 281 | 25 | -3.0 | 27.5 | 195 | 185 | 1480 |
| 40000.W0006 | 6 | 3.4 | 5.5 | M12x110 | 81.0 | 333 | 30 | -2.5 | 55.0 | 231 | 206 | 2200 |

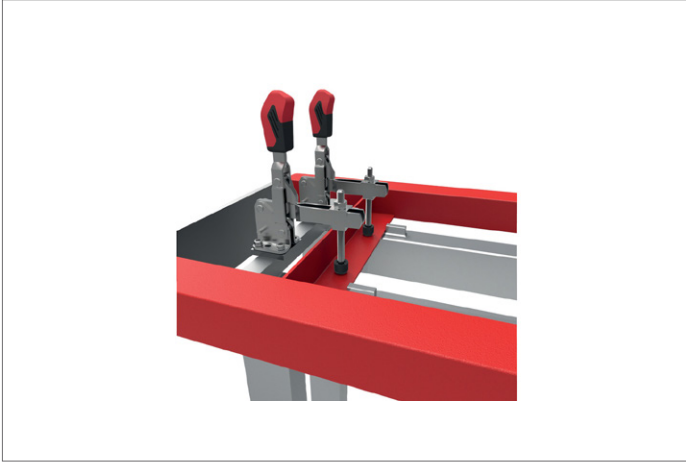
| Order No. | l ₃ | l ₄ | l ₅ | l ₆ | l ₇ | l ₈ | l ₉ | w ₁ | w ₂ | w ₃ | w ₄ | w ₅ | α | α* |
|-------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|-----|
| 40000.W0000 | 31.0 | 14 | 5.5 | 22 | 8,5-13,5 | - | 5.5 | 32 | 4 | 23.0 | 4.5 | - | 95° | - |
| 40000.W0001 | 39.0 | 18 | 6.0 | 27 | 16.0 | - | 5.5 | 34 | 5 | 22,5-26,0 | 4.5 | - | 95° | - |
| 40000.W0002 | 52.0 | 25 | 11.0 | 32 | 20.0 | 12.5 | 6.0 | 43 | 6 | 23,0-31,0 | 5.5 | 27 | 105° | 60° |
| 40000.W0003 | 79.0 | 37 | 19.0 | 35 | 20.0 | - | 7.5 | 46 | 8 | 32.5 | 7.5 | - | 105° | 60° |
| 40000.W0004 | 101.0 | 54 | 16.0 | 53 | 32.0 | - | 13.0 | 64 | 10 | 43,0-46,5 | 8.6 | - | 105° | 60° |
| 40000.W0005 | 140.0 | 73 | 34.0 | 65 | 45.0 | 26,5-31,5 | 9.5 | 70 | 14 | 45,0-50,0 | 8.5 | 45 | 115° | 60° |
| 40000.W0006 | 165.5 | 89 | 28.0 | 90 | 50.5 | - | 24.5 | 100 | 14 | 67,5-72,5 | 13.0 | - | 140° | 60° |

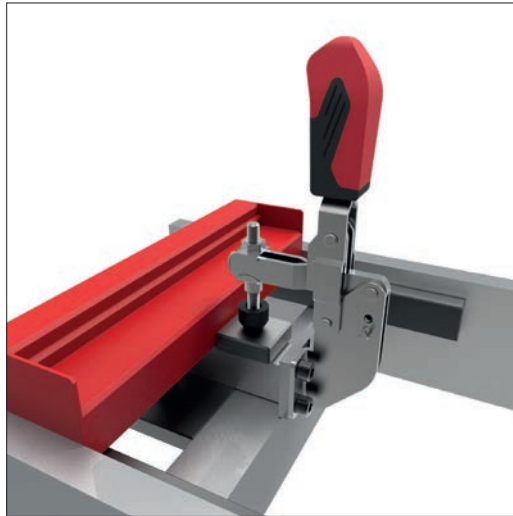
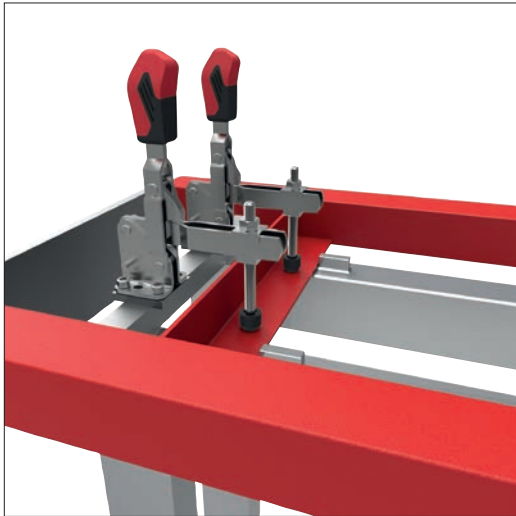
Steel Toggle Clamps

Vertical Acting Toggle Clamps open arm - horizontal base

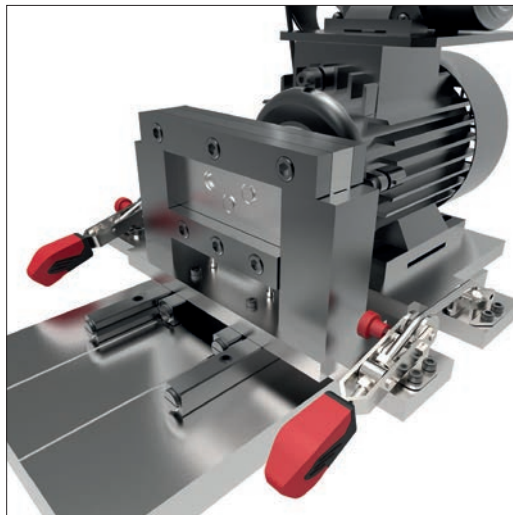
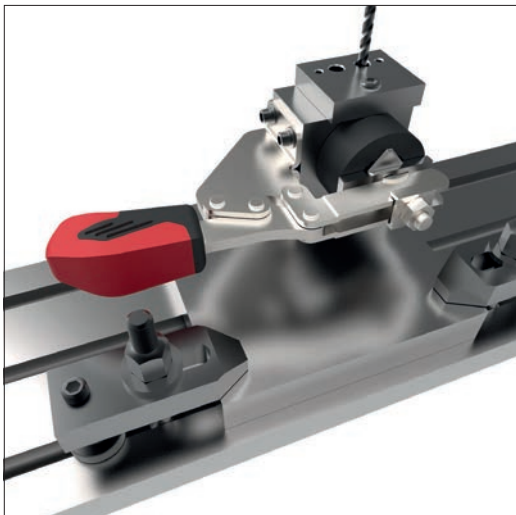


STEEL TOGGLE CLAMPS

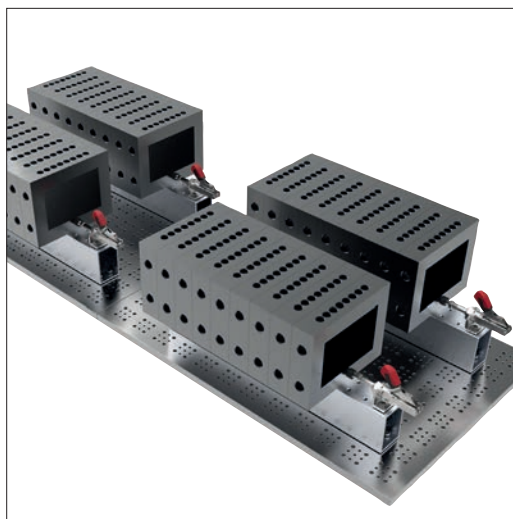
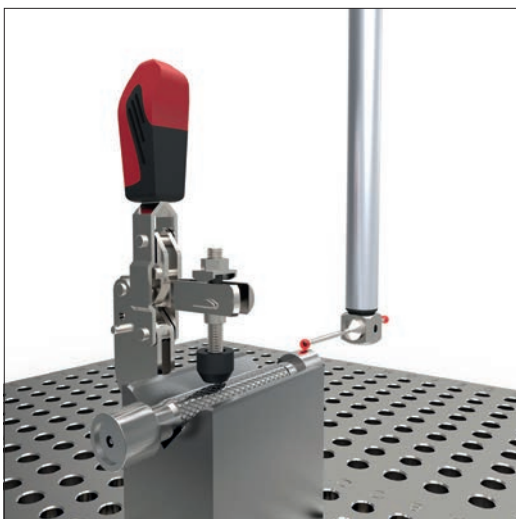




Welding Fixtures



Machining and Jig Assemblies



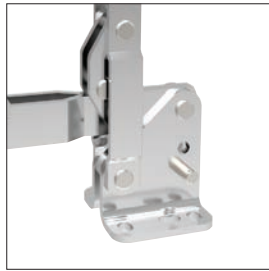
Cmm's

STEEL TOGGLE CLAMPS

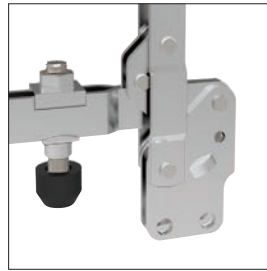
ov-W40000.1-A-T-W42070-A-T-a-rmh- Updated -27-10-2022



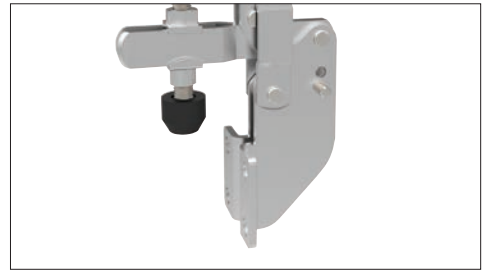
Mounting Base Variations



Horizontal base



Vertical base



Angled base

Clamping Variations



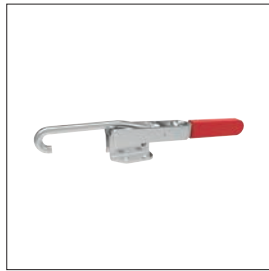
Vertical acting



Horizontal acting



Push-pull



Hook type

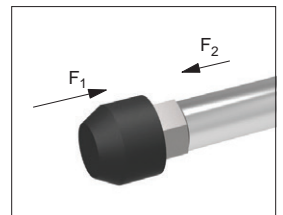
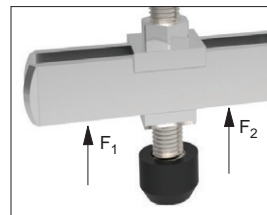


Latch type

Explanation of forces

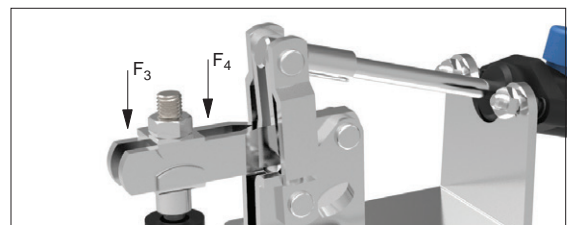
Holding Forces F_1 or F_2

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).



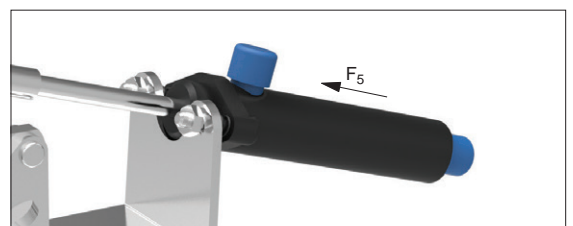
Clamping Forces F_3 or F_4

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.



Piston Forces F_5

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

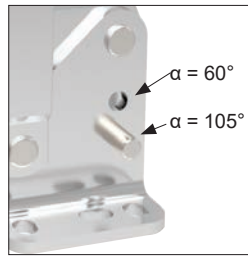




Ergonomic soft grip
2-component handle



Stainless rivets and
hardened bushings

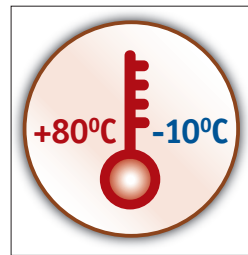


Moveable stop for
variable opening angle



Operator
finger protection

Quality Features



Temperature resistant

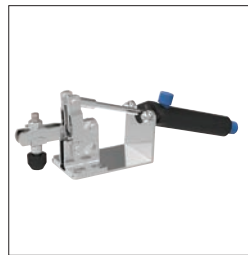
STEEL TOGGLE CLAMPS



Safety catches



Heavy duty versions



Pneumatic versions



Matt black surface for
optical measurement

Unique Features



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.

Materials

ov-W40000.1-A-T-W42070-A-T-c-rmh- Updated -27-10-2022