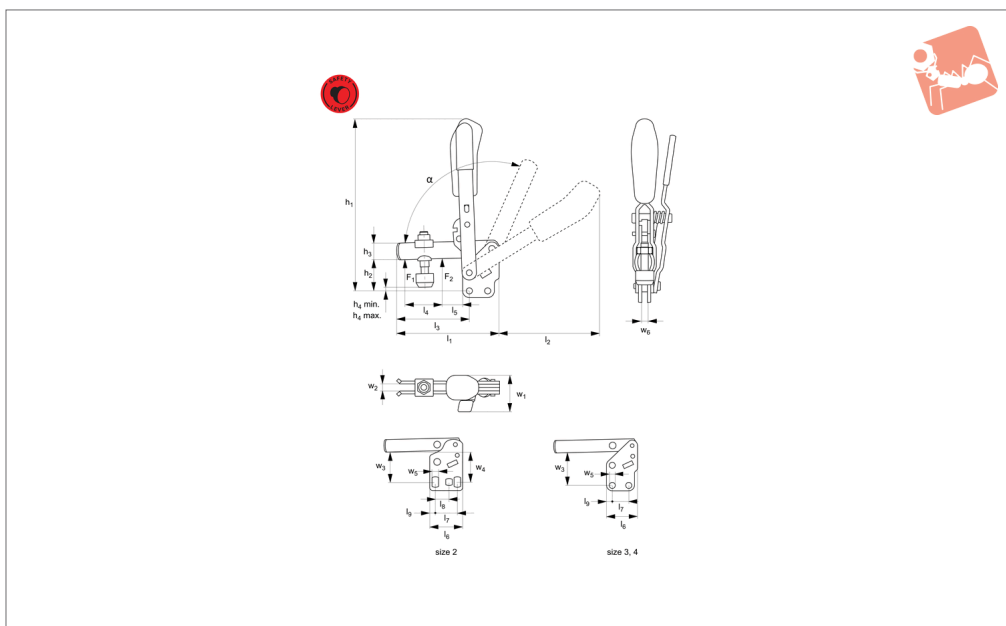




Vertical Acting Toggle Clamps

safety lever - open arm - vertical base

Safety Lever Toggle Clamps



40060.1

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). Ergonomic soft feel oil-resistant handle with large grip area. Supplied complete with clamping screw

(with rubber pad).

Technical Notes

Ideal for mounting to struts and on welding jigs. The safety lever holds the clamp in both the open and the closed position. This prevents opening under vibration or inad-

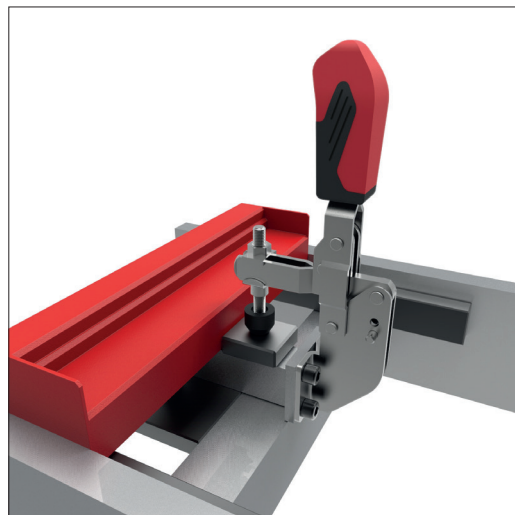
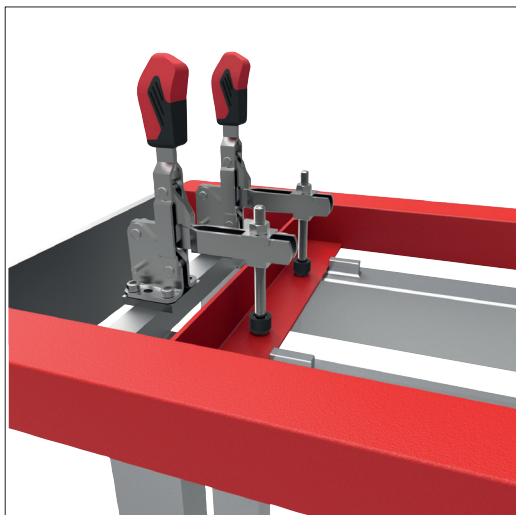
vertent movement of the clamping arm when loading or unloading a fixture. Opening angle (symbol α) can be changed by pressing in a stop pin on the clamp body. Temperature range -10°C to +80°C.

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	l ₃	Weight g
40060.W0002	2	1.0	1.2	M 6x35	154	38	12	11.5	19.5	78	89	52	175
40060.W0003	3	1.4	2.5	M 8x45	200	48	18	10.0	18.5	111	114	79	470
40060.W0004	4	2.0	3.0	M 8x65	244	65	20	16.5	45.5	141	130	101	690

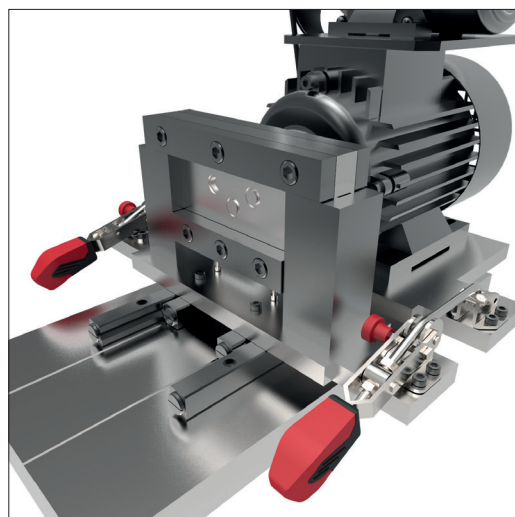
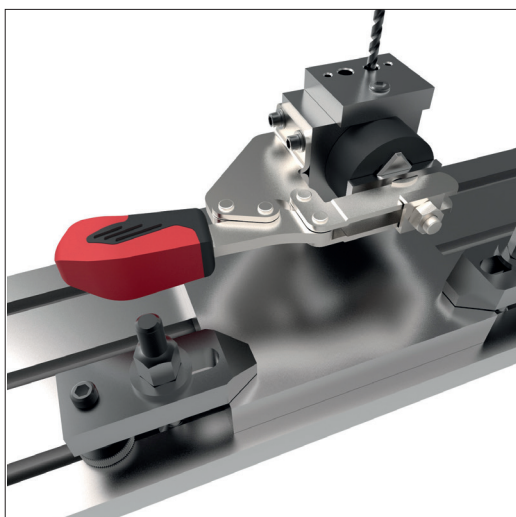
Order No.	l ₄	l ₅	l ₆	l ₇	l ₈	l ₉	w ₁	w ₂	w ₃	w ₄	w ₅	w ₆	α	α^*
40060.W0002	25	11	32	20	12.5	6.0	37.5	6	28,5-32,0	30	5.5	5	105°	60°
40060.W0003	37	19	40	20	-	7.5	48.0	8	41.0	-	7.5	6	105°	60°
40060.W0004	54	16	53	32	-	13.0	53.0	10	55.5	-	8.6	8	105°	60°



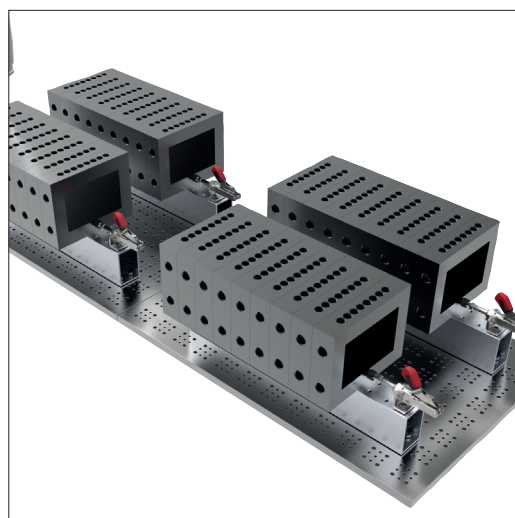
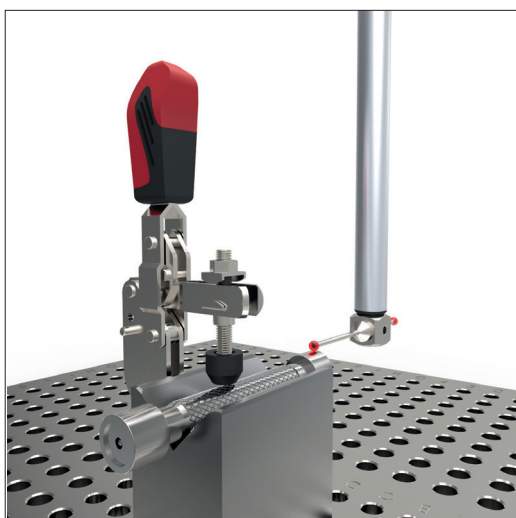
Welding Fixtures



Machining and Jig Assemblies

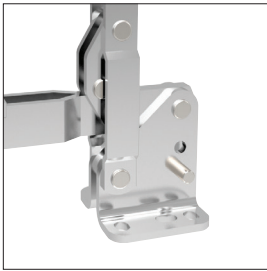


Cmm's

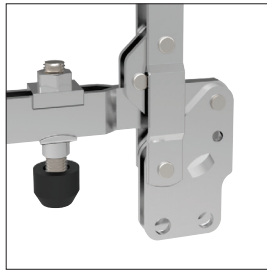




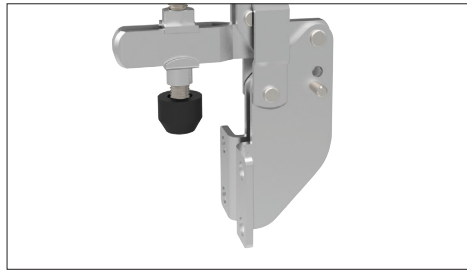
Mounting Base Variations



Horizontal base



Vertical base



Angled base

Clamping Variations



Vertical acting



Horizontal acting



Push-pull



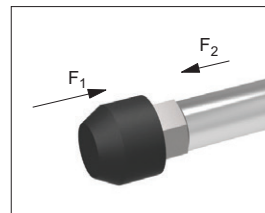
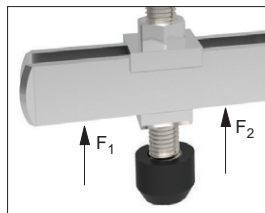
Hook type



Latch type

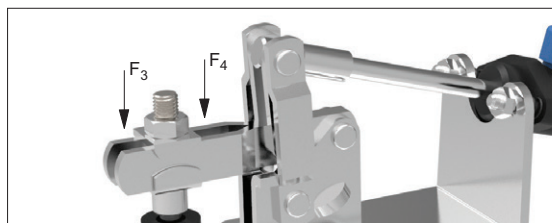
Explanation of forces

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).



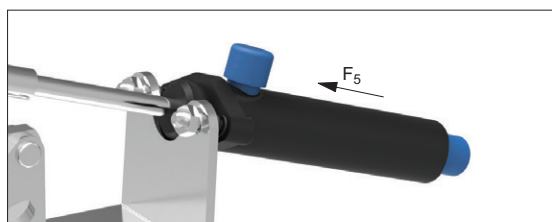
Holding Forces F_1 or F_2

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

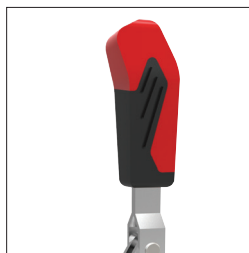
For pneumatically controlled toggle clamps only, F_5 is the piston force required (at 6 bar to) achieve the stated clamping force.



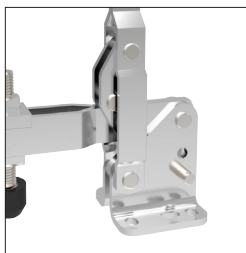
Piston Forces F_5



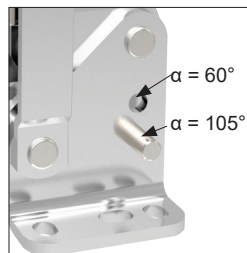
Quality Features



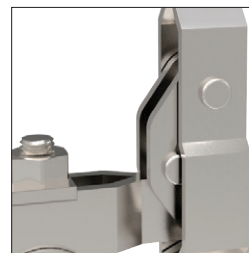
Ergonomic soft grip
2-component handle



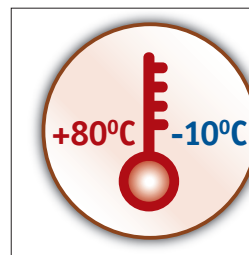
Stainless rivets and
hardened bushings



Moveable stop for
variable opening angle



Operator
finger protection



Temperature resistant

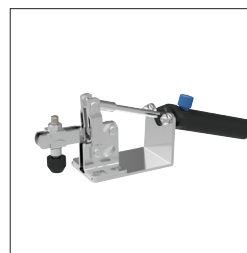
Unique Features



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.