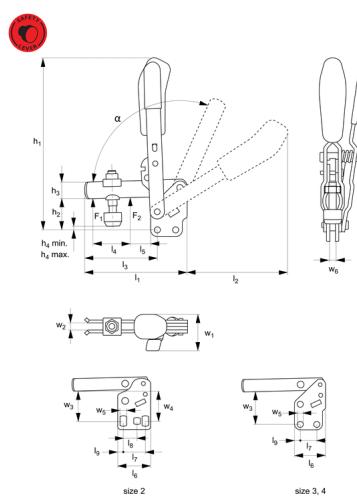


Vertical Acting Toggle Clamps

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-

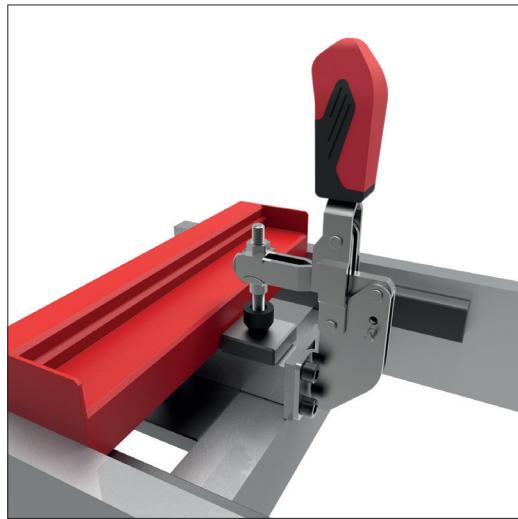
vertent movement of the clamping arm when loading or unloading a fixture. Opening angle (symbola/symbolsymbola/symbol*) can be changed by pressing in a stop pin on the clamp body. Temperature range -10°C to +80°C.

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°

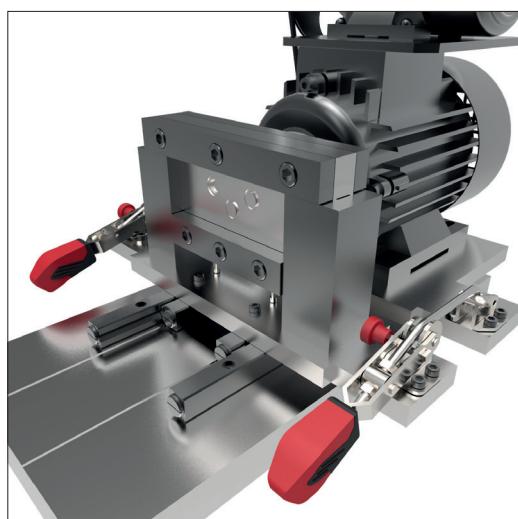
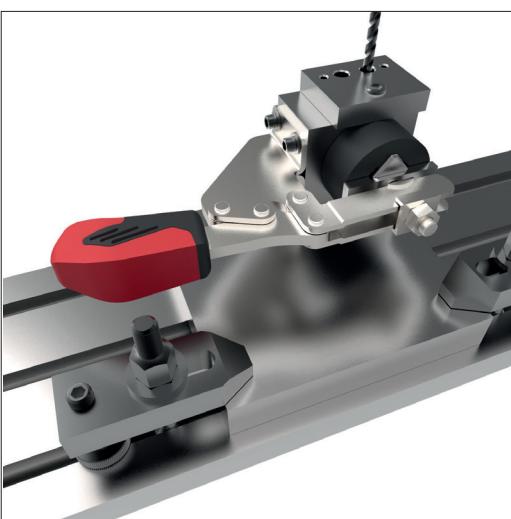


Welding Fixtures

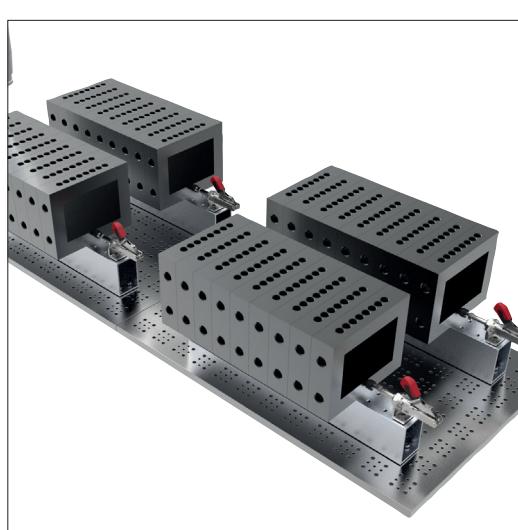
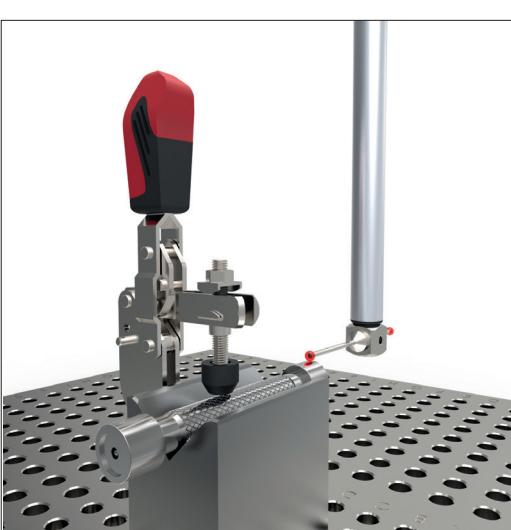
SAFETY LEVER TOGGLE CLAMPS



Machining and Jig Assemblies

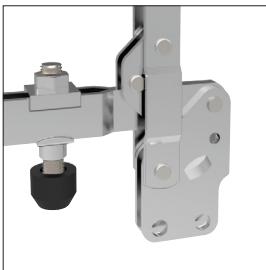


Cmm's





Horizontal base



Vertical base



Angled base

Mounting Base Variations



Vertical acting



Horizontal acting



Push-pull

Clamping Variations



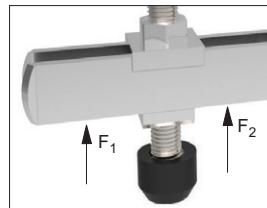
Hook type



Latch type

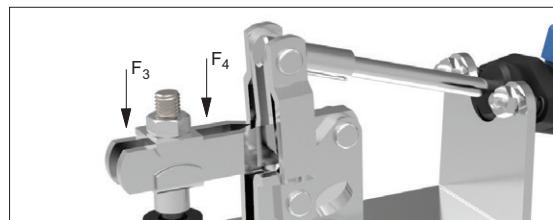
Explanation of forces

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).



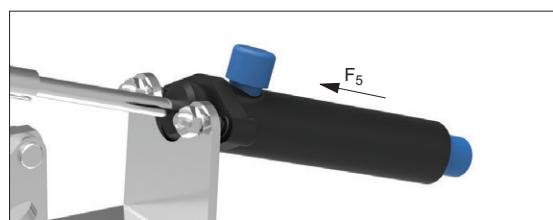
Holding Forces F_1 or F_2

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

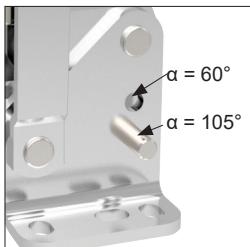
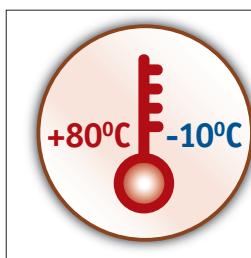
For pneumatically controlled toggle clamps only, F_5 is the piston force required (at 6 bar) to achieve the stated clamping force.



Piston Forces F_5



Quality Features

Ergonomic soft grip
2-component handleStainless rivets and
hardened bushingsMoveable stop for
variable opening angleOperator
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 coatedProtective cap and
handle made of an
electrostatic conductive
(dissipative) material.