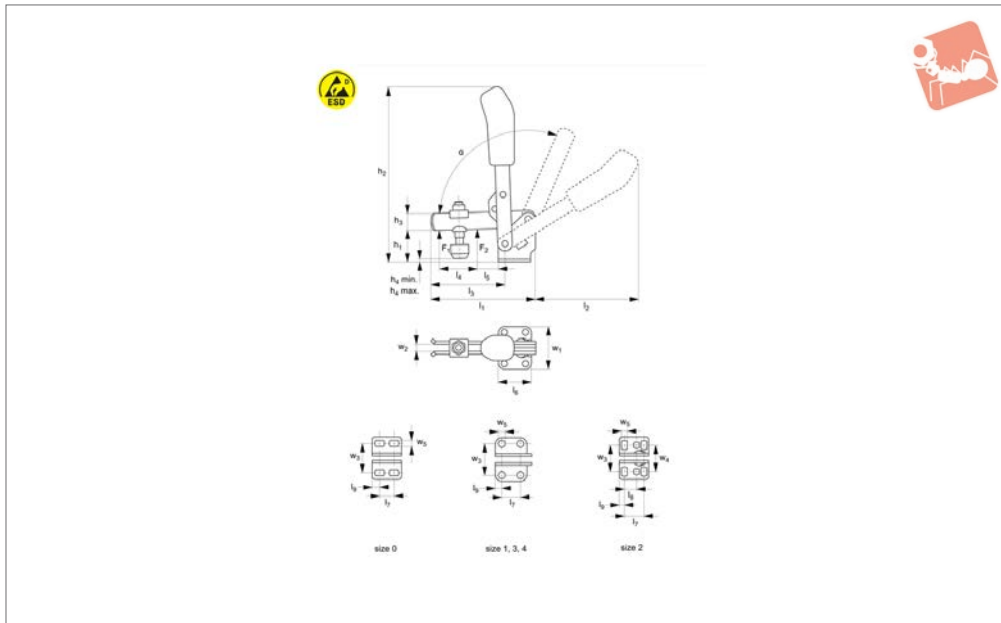




Vertical Acting Toggle Clamps

ESD - open arm - horizontal base



40000.3

ESD TOGGLE CLAMPS

Material

Body: steel, zinc plated.
 Rivets: stainless steel running in hardened bushings (sizes 2-3). Bearing positions are greased.
 With protective cap and handle made of electrostatic conductive (dissipative) material. The handle is ergonomic, soft

feel, oil-resistant and with large grip area. Safety clamping piece with finger protection, retainer for the clamping screw at the end of the clamping arm.
 Complete with zinc plated and tempered clamping screw no. 45060.W0300- .W0303.

Technical Notes

Temperature range -10°C to +80°C.
The ESD (electrostatically sensitive devices) vertical clamp is non-insulating. It must not be used in areas where open voltages are used.

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
40000.W0200	0	0.5	0.7	M 4x25	18	81	8	-1.5	3.5	49	50	31	60
40000.W0201	1	0.6	1.1	M 5x30	19	98	10	-4.0	2.0	61	58	39	105
40000.W0202	2	0.8	1.2	M 6x35	23	140	12	-3.0	4.5	78	89	52	175
40000.W0203	3	1.2	2.5	M 8x45	33	186	18	2.0	11.0	112	112	79	410

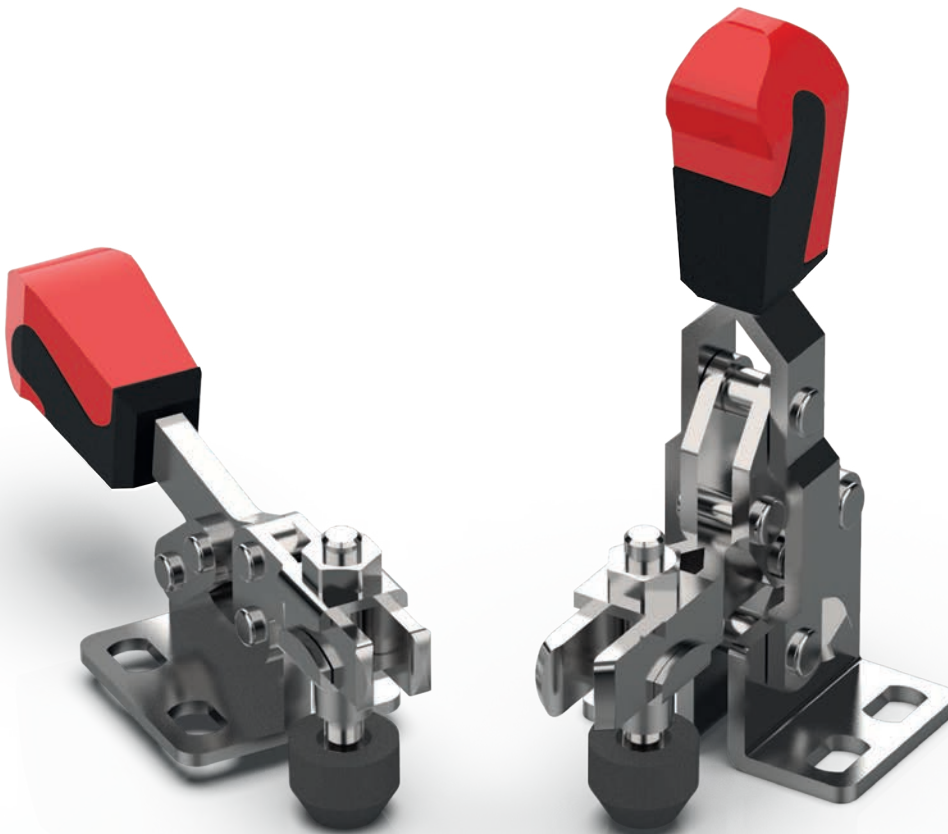
Order No.	l ₄	l ₅	l ₆	l ₇	l ₈	l ₉	w ₁	w ₂	w ₃	w ₄	w ₅	α	α*
40000.W0200	14	5	22	8,5-13,5	-	5.5	32	4	23.0	-	4.5	95°	-
40000.W0201	18	6	27	16.0	-	5.5	34	5	22,5-26,0	-	4.5	95°	-
40000.W0202	25	11	32	20.0	12.5	6.0	43	6	23,0-31,0	27	5.5	105°	60°
40000.W0203	37	19	35	20.0	-	7.5	46	8	32.5	-	7.5	105°	60°

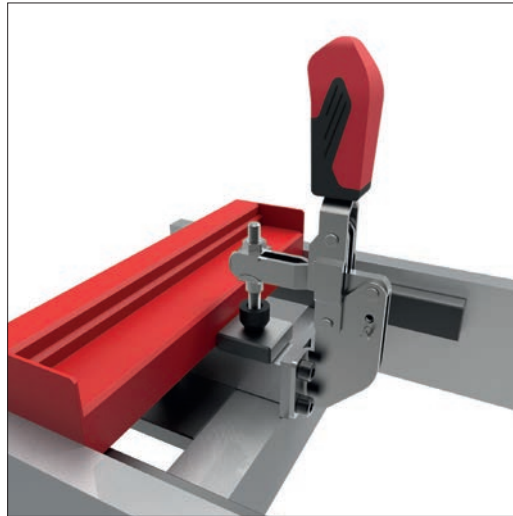
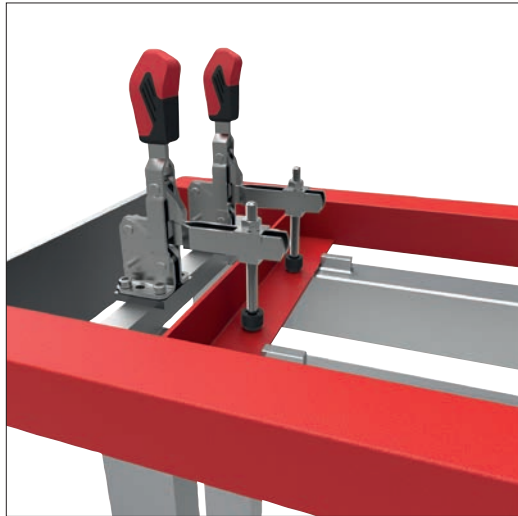


The ESD toggle clamps have been specially developed for working with electrostatically sensitive components, assemblies or devices in ESD protection zones (EPA) in accordance with the standard DIN EN 61340-5-1. All our toggle clamps have been tested and certified by an independent expert regarding leakage resistance, discharge time and surface tension.

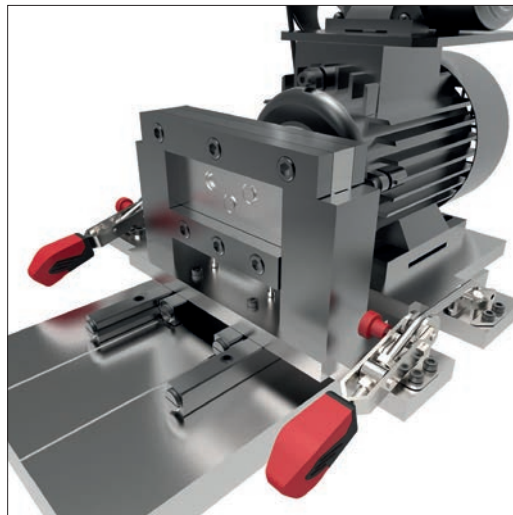
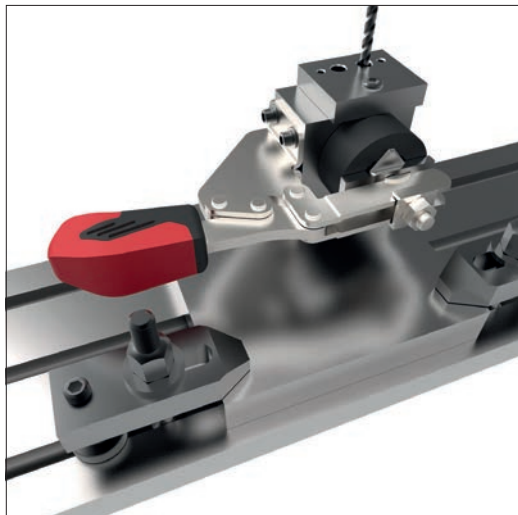
Features

- Leakage resistance according to DIN IEC / TR 61340-5-2 between 10^{04} and 10^{09} Ohm.
- Discharge time according to DIN IEC / TR 61340-5-2 < 2 seconds.
- Surface tension (electric field strength) according to DIIN EN 61340-5-1 < 100 Volt.

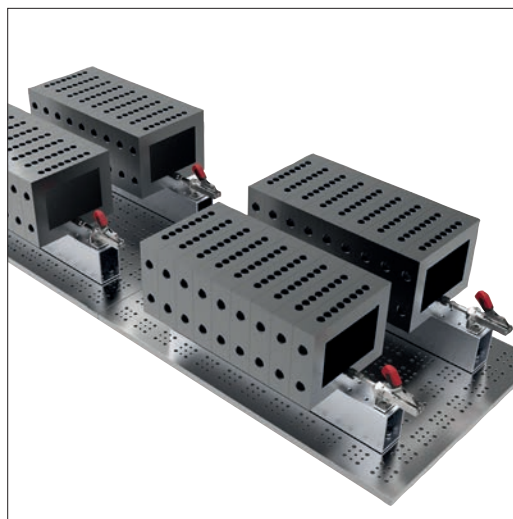
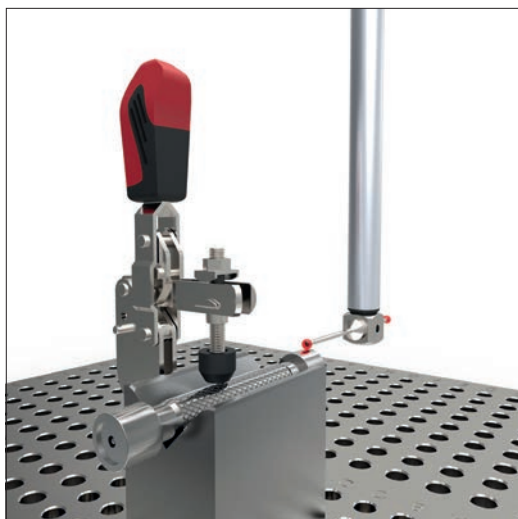




Welding Fixtures



Machining and Jig Assemblies



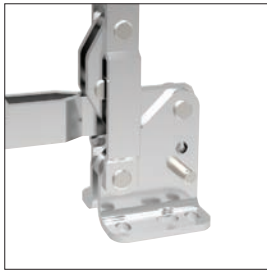
Cmm's

ESD TOGGLE CLAMPS

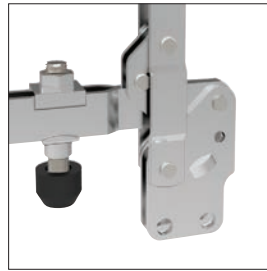
ov-W40000.1-A-T-W42070-A-T-a-rmh- Updated -27-10-2022



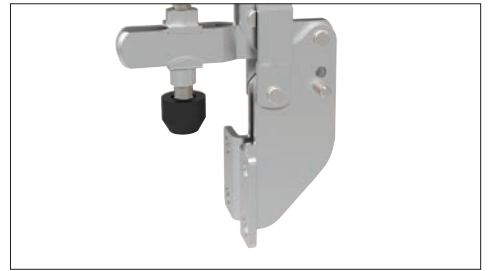
Mounting Base Variations



Horizontal base



Vertical base



Angled base

Clamping Variations



Vertical acting



Horizontal acting



Push-pull



Hook type

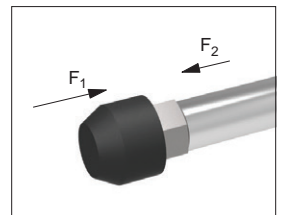
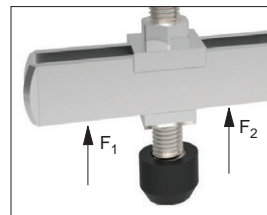


Latch type

Explanation of forces

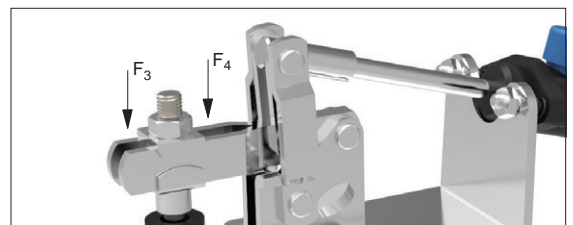
Holding Forces F_1 or F_2

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).



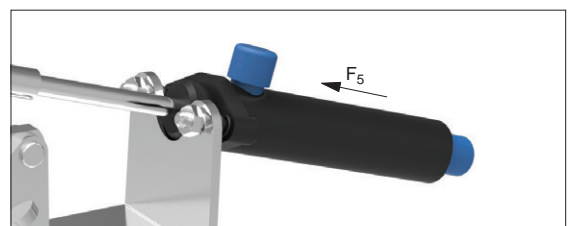
Clamping Forces F_3 or F_4

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.

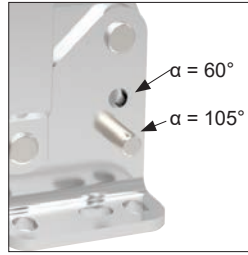




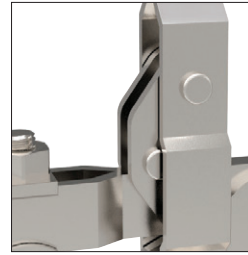
Ergonomic soft grip
2-component handle



Stainless rivets and
hardened bushings

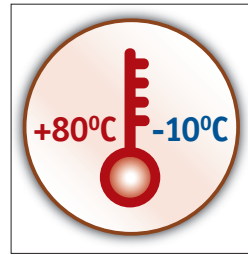


Moveable stop for
variable opening angle



Operator
finger protection

Quality Features



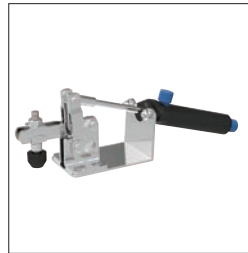
Temperature resistant



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