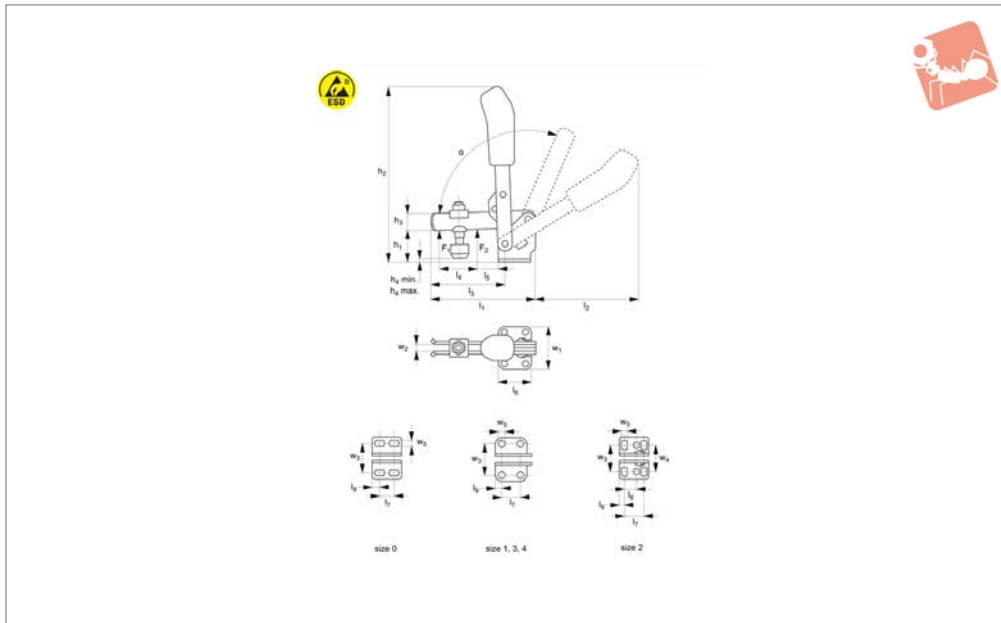




Vertical Acting Toggle Clamps

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

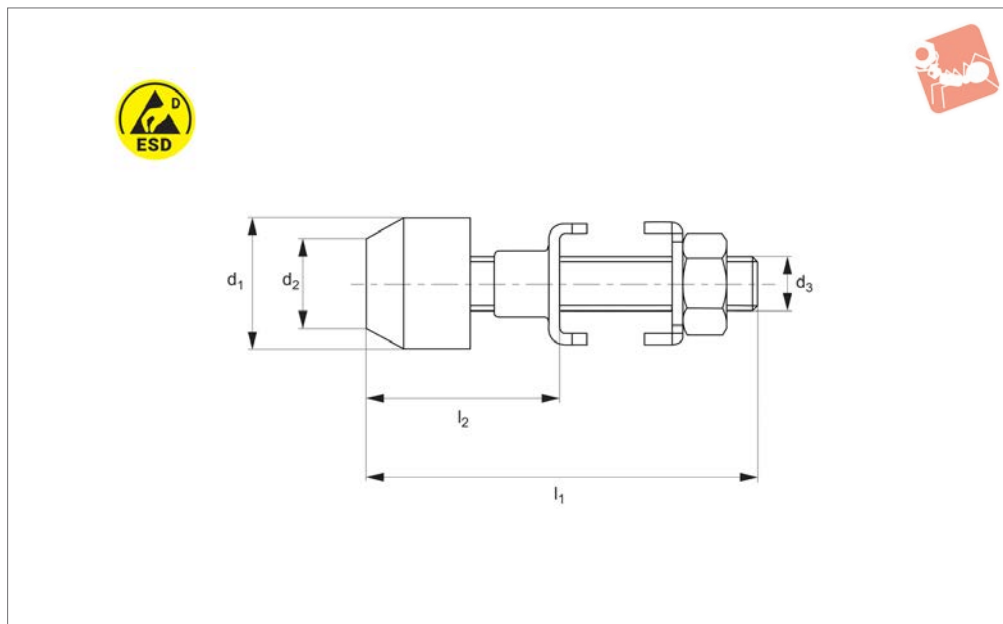
Temperature range -10°C to +80°C.
The ESD (electrostatically sensitive devices) vertical clamp is non-insulating. It must not be used in areas where open voltages are used.

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°



45060.3



Material

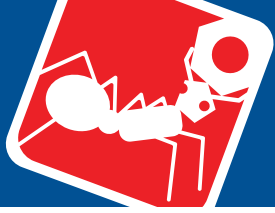
Steel, zinc plated and tempered steel.
Tensile strength class 8.8. With nut and removable rubber pad.

Technical Notes

The ESD (electrostatically sensitive devices) clamping screw is non-insulating. It must not be used in areas

where open voltages are used.

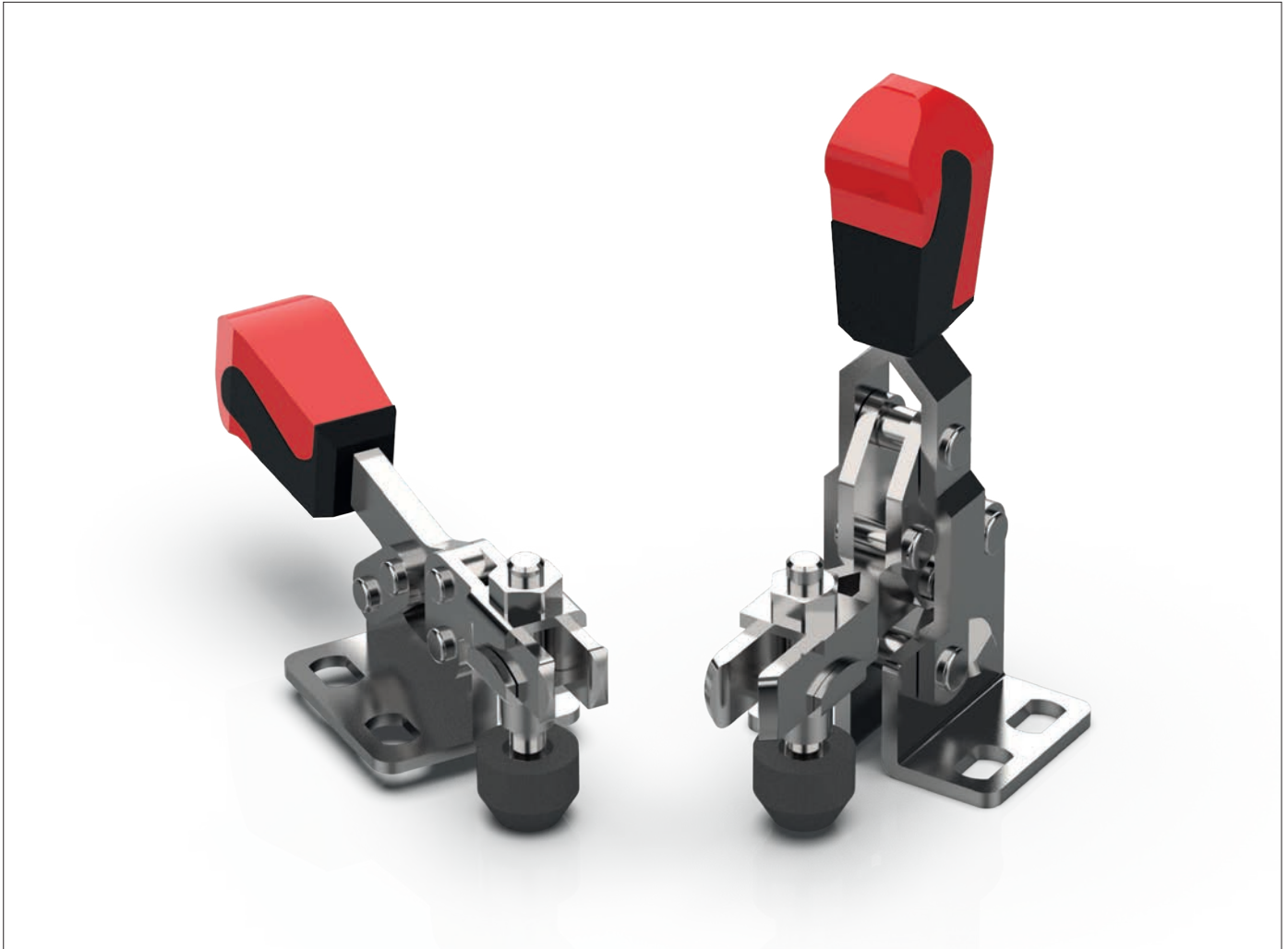
Order No.	Size	Type	Washer size	l_1	l_2	d_1	d_2	Screw DIN 933 $d_3 \times l_3$	Weight g
45060.W0300	0	Steel	0	32	13-20	11.0	7	M 4x25	5
45060.W0301	1	Steel	1	38	17-24	12.5	8	M 5x30	10
45060.W0302	2	Steel	2	45	18-28	15.0	10	M 6x35	22
45060.W0303	3	Steel	3	58	22-34	15.0	10	M 8x45	40



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.

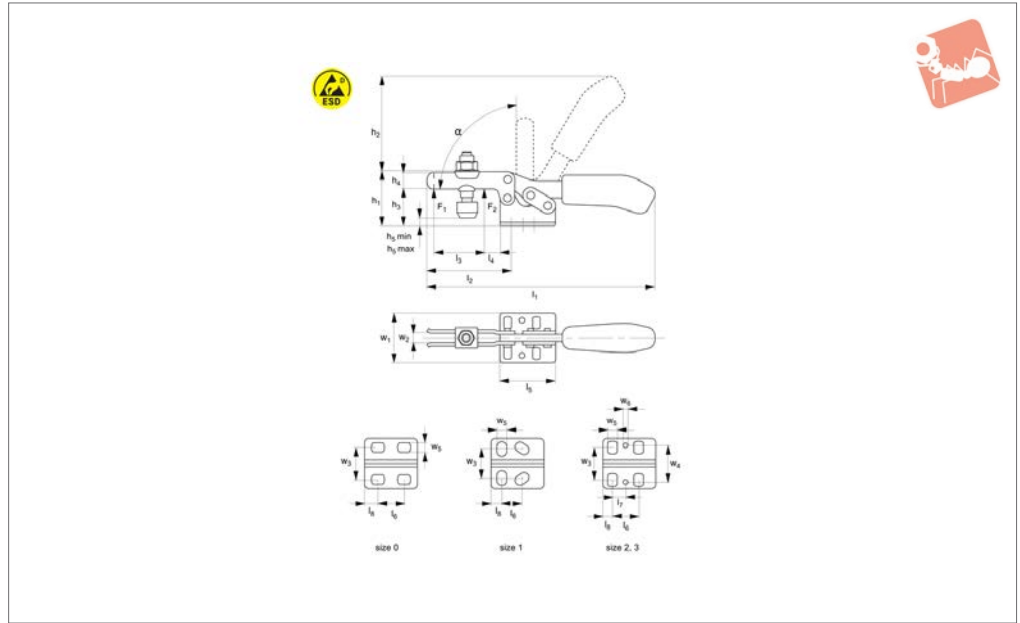
Features

- 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.





41000.3



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. 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) horizontal clamp is non-insulating. It must not be used in areas where open voltages are used.

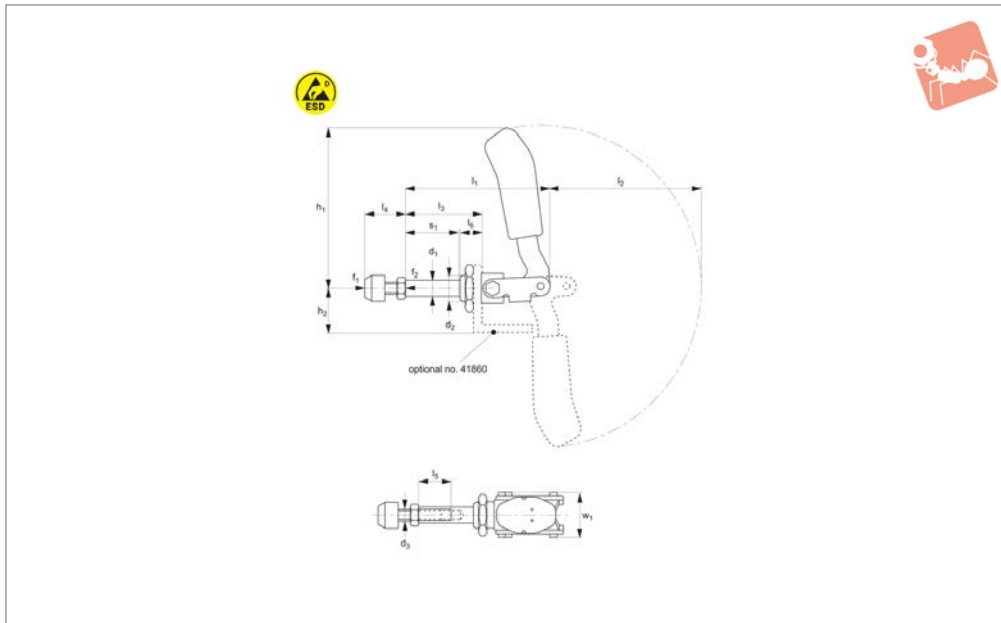
Order No.	Size	F ₁ kN	F ₂ kN	Clamping screw	h ₁	h ₂	h ₃	h ₄	h ₅ min.	h ₅ max.	l ₁	l ₂	Weight g
41000.W0200	0	0.25	0.4	M 4x25	23.0	34	14.5	7.5	-5.5	0.0	79	28	35
41000.W0201	1	0.80	1.1	M 5x30	30.0	49	19.0	10.0	-3.0	2.5	120	42	105
41000.W0202	2	1.00	1.2	M 6x35	45.0	68	24.0	13.2	-1.5	5.0	162	64	185
41000.W0203	3	1.80	2.5	M 8x45	48.5	86	32.0	15.0	-2.0	9.0	206	73	320

Order No.	l ₃	l ₄	l ₅	l ₆	l ₇	l ₈	w ₁	w ₂	w ₃	w ₄	w ₅	w ₆	α
41000.W0200	9.0	5.5	25.5	11,5-15,5	-	6.3	25.0	4	16.0	-	4.6	-	90°
41000.W0201	18.7	8.0	34.0	13,0-14,5	-	5.5	34.0	5	18,0-21,5	-	5.2	-	90°
41000.W0202	32.0	16.0	38.0	26.0	12.7	6.0	42.0	6	19,5-29,5	28.5	5.6	5.6	90°
41000.W0203	38.0	14.0	50.0	25.7	13.0	7.0	45.5	8	22,0-31,8	31.6	6.5	5.1	90°



Push-Pull Toggle Clamps

ESD - compact version



41840.3

ESD TOGGLE CLAMPS

Material

Body: steel, zinc-plated.
 Piston rod: non-rusting steel.
 Shoulder screws: steel, tempered. Bearing positions are greased.
 Long rod-guide with attaching thread and nut.

With protective cap and handle made of electrostatic conductive (dissipative) material. The handle is ergonomic, soft feel, oil-resistant and with large grip area. Complete with zinc plated and tempered clamping screw no. 45020.W0301- .W0303.

Technical Notes

Temperature range -10°C to +80°C.
The ESD (electrostatically sensitive devices) push-pull type toggle 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	h ₁	h ₂	l ₁	l ₂	l ₃	l ₄ min.	Weight g
41840.W0202	2	1.0	1.0	73	24	68.5	68	36	17	130
41840.W0203	3	2.5	2.5	123	33	108.0	115	57	22	320

Order No.	l ₄ max.	l ₅	l ₆	d ₁	d ₂	d ₃	w ₁	Stroke s ₁	Clamping screw
41840.W0202	25	15	13	10	M16x1,5	M 6	30.5	24.5	M 6x25
41840.W0203	35	25	16	12	M20x1,5	M 8	33.0	40.0	M 8x35