

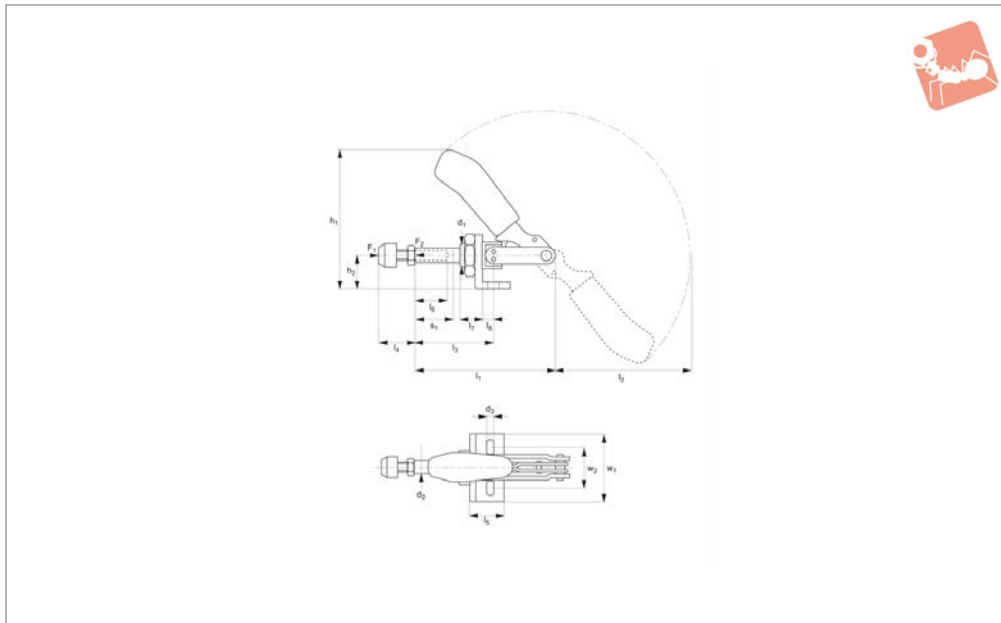


Push-Pull Type Toggle Clamps

extended push rod



Steel Toggle Clamps



42000.1

STEEL 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 no. 45020 (with rubber pad).

Technical Notes

Temperature range -10°C to +80°C.

Tips

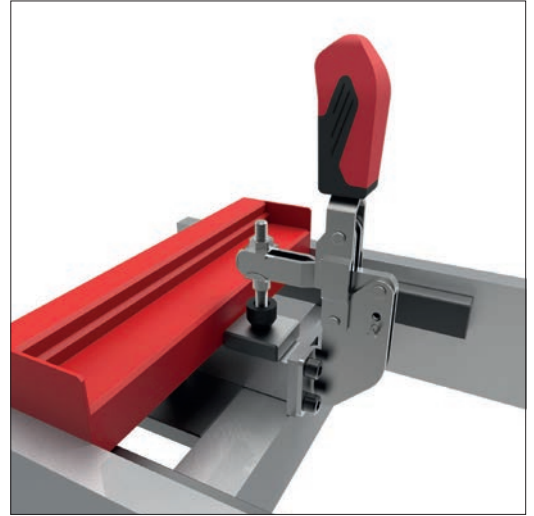
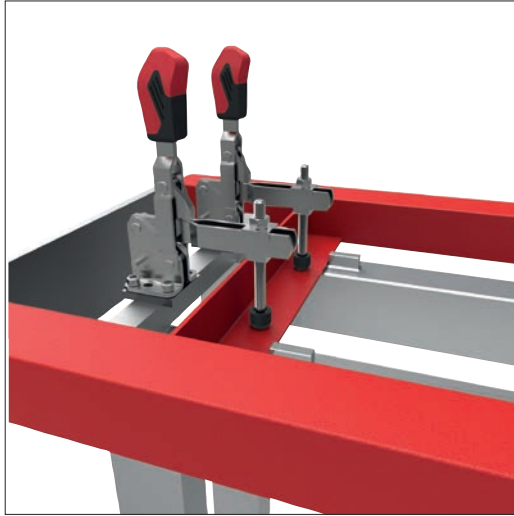
For stainless steel version see part no. 41890.W0000- .W0003.

Order No.	Size	Type	Clamping screw	F ₁ kN	F ₂ kN	d ₁	d ₂	d ₃	h ₁	h ₂	Weight g
42000.W0000	0	With Bracket	M 4x20	0.8	0.8	M10x1,0	6.5	4.5	49.3	12	65
42000.W0001	1	With Bracket	M 4x20	1.0	1.0	M12x1,5	8.0	4.5	60.5	15	125
42000.W0002	2	With Bracket	M 6x25	2.0	2.0	M16x1,5	10.0	5.6	85.5	20	245
42000.W0003	3	With Bracket	M 8x35	2.5	2.5	M20x1,5	12.0	6.5	108.0	25	445
42000.W0005	5	With Bracket	M12x50	4.5	4.5	M24x1,5	16.0	8.5	129.5	30	880
42000.W0006	5-M27	With Bracket	M12x50	4.5	4.5	M27x2,0	16.0	8.5	129.5	30	900
42000.W0010	0	W/o Bracket	M 4x20	0.8	0.8	M10x1,0	6.5	-	37.0	-	60
42000.W0011	1	W/o Bracket	M 4x20	1.0	1.0	M12x1,5	8.0	-	45.5	-	100
42000.W0012	2	W/o Bracket	M 6x25	2.0	2.0	M16x1,5	10.0	-	66.0	-	245
42000.W0013	3	W/o Bracket	M 8x35	2.5	2.5	M20x1,5	12.0	-	82.5	-	330
42000.W0015	5	W/o Bracket	M12x50	4.5	4.5	M24x1,5	16.0	-	99.0	-	700
42000.W0016	5-M27	W/o Bracket	M12x50	4.5	4.5	M27x2,0	16.0	-	99.0	-	720

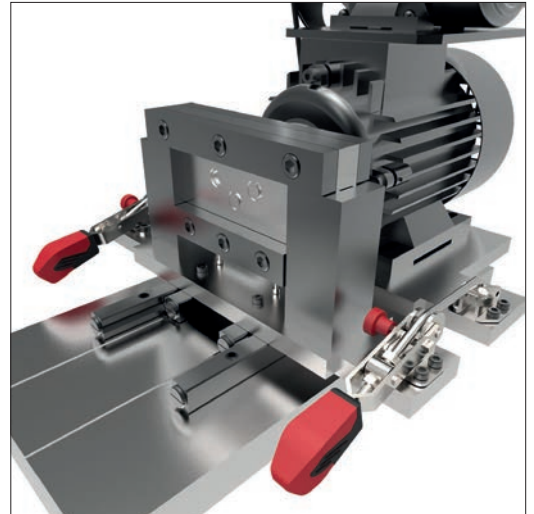
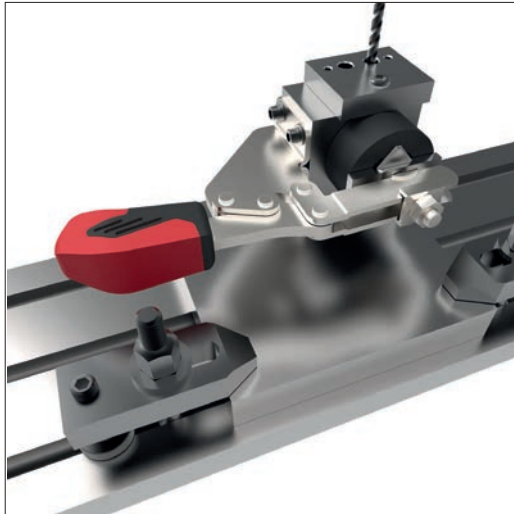
Order No.	l ₁	l ₂	l ₃ min.	l ₃ max.	l ₄ min.	l ₄ max.	l ₅	l ₆	l ₇	l ₈	w ₁	w ₂	Stroke s ₁
42000.W0000	66.5	54.0	17.0	33.0	12	20	16	13	10	6.5	25	16.0	16
42000.W0001	91.0	74.0	24.5	44.5	12	20	20	20	16	7.0	30	16,0-19,5	20
42000.W0002	114.0	105.0	32.5	58.5	17	25	34	20	19	12.5	50	31,8- 36,0	26
42000.W0003	140.0	127.5	37.0	69.0	22	35	30	30	22	13.0	60	29,5-42,5	32
42000.W0005	171.5	158.0	41.5	81.5	30	50	35	50	25	15.5	65	29,0-46,0	40
42000.W0006	171.5	158.0	41.5	81.5	30	50	35	50	25	15.5	65	29,0-46,0	40
42000.W0010	66.5	54.0	10.5	26.5	12	20	-	13	10	-	17	-	16
42000.W0011	91.0	74.0	17.5	37.5	12	20	-	20	16	-	19	-	20
42000.W0012	114.0	105.0	20.0	46.0	17	25	-	20	19	-	24	-	26
42000.W0013	140.0	127.0	24.0	56.0	22	35	-	30	22	-	30	-	32
42000.W0015	171.5	158.0	26.5	66.5	30	50	-	50	25	-	36	-	40
42000.W0016	171.5	158.0	26.5	66.5	30	50	-	50	25	-	41	-	40



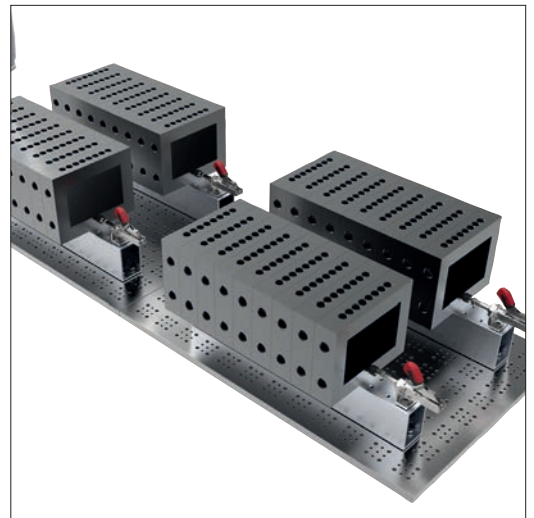
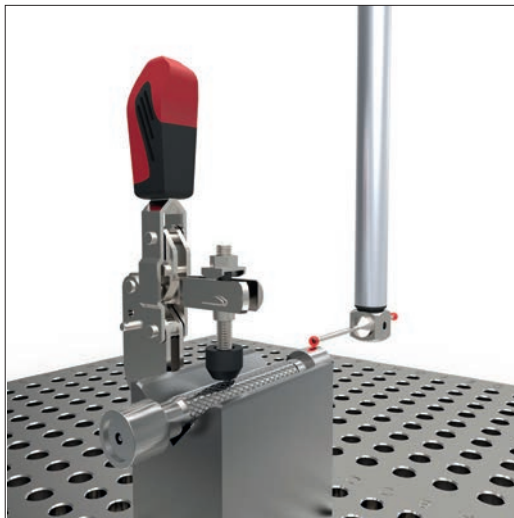
Welding Fixtures



Machining and Jig Assemblies

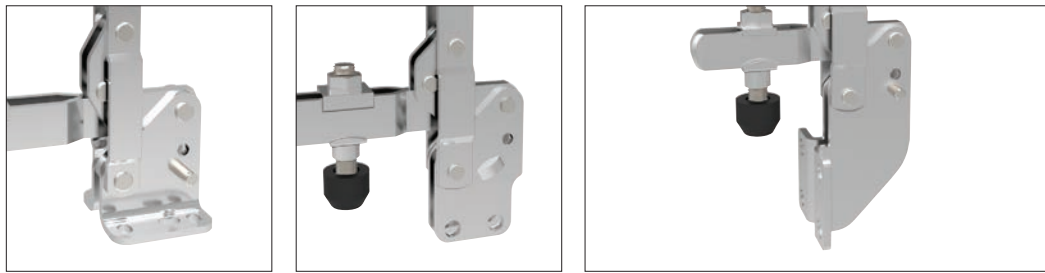


Cmm's





STEEL TOGGLE CLAMPS

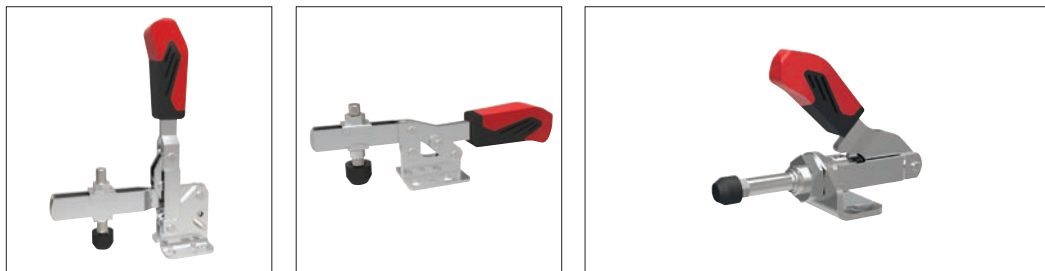


Horizontal base

Vertical base

Angled base

Mounting Base Variations

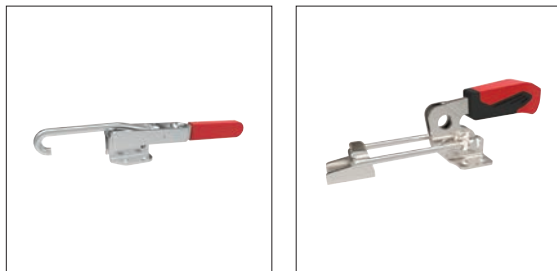


Vertical acting

Horizontal acting

Push-pull

Clamping Variations

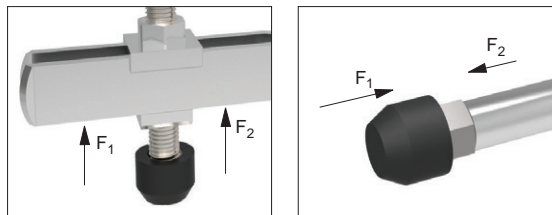


Hook type

Latch type

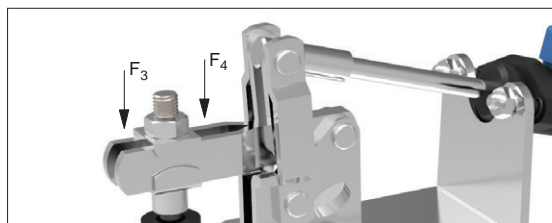
Explanation of forces

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).



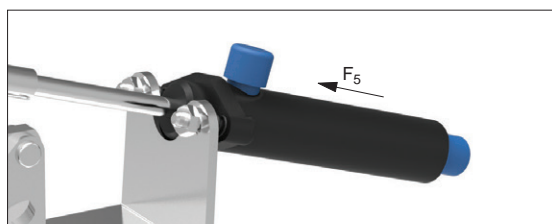
Holding Forces F_1 or F_2

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.



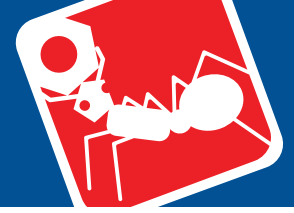
Clamping Forces F_3 or F_4

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

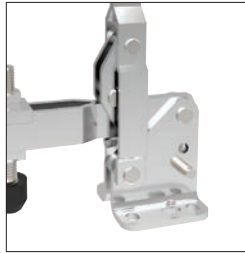
ov-W40000.1-A-T-W42070-A-T-b-rmh- Updated -27-10-2022



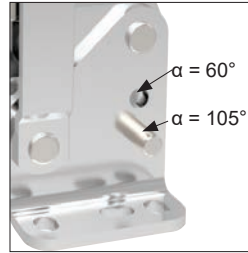
Quality Features



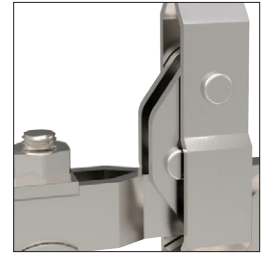
Ergonomic soft grip
2-component handle



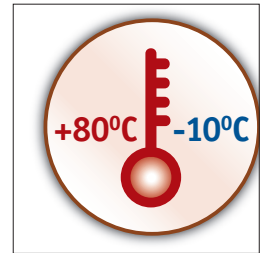
Stainless rivets and
hardened bushings



Moveable stop for
variable opening angle



Operator
finger protection



Temperature resistant

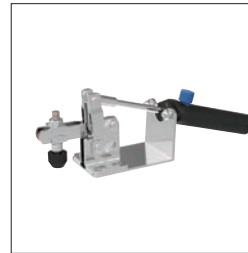
Unique Features



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.