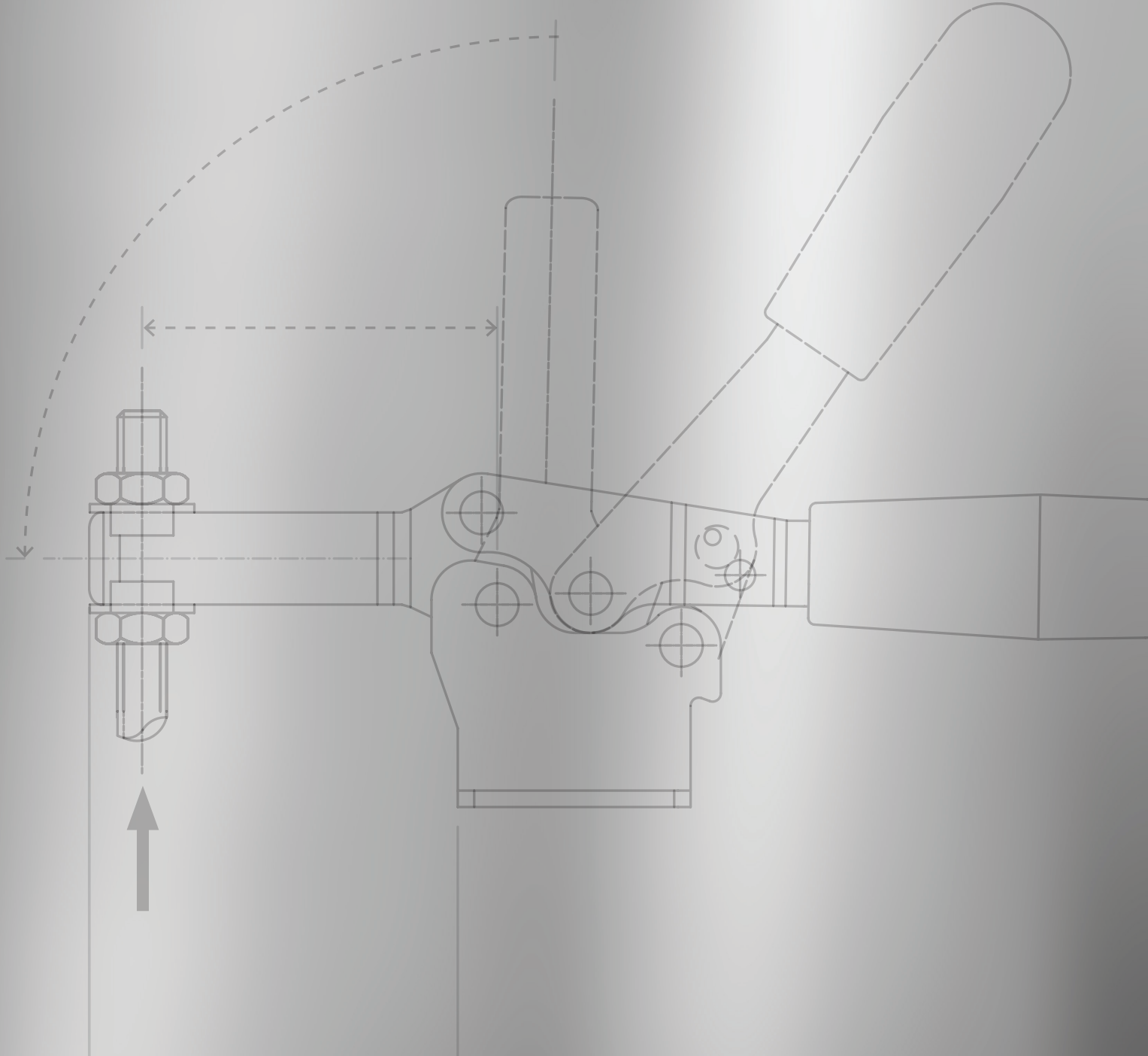


HORIZONTAL SERIES

HORIZONTAL



Here you can download
2D and 3D CAD drawings
of all products.



The tools of this family are characterized by the horizontal position of the control lever in the clamping position. The clamping and control levers normally move in opposite directions.

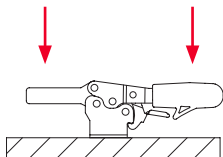
They are available in two different executions:

LIGHT SERIES:

It has holding forces from 40 to 620 daN.
They are available in galvanized steel and stainless steel.

HIGH TEMPERATURE SERIES:

It has holding forces from 100 to 180 daN. These tools are free of plastic parts and with the appropriate modifications compared to the light series models (couplings with different tolerances, changes in geometries, different finishes, etc., etc.) that make them suitable for use in environments that can reach 240-300 °C. The products are made of phosphated weldable steel. They are normally used in the rotational moulding of plastic that requires a type of clamping capable of working safely and quickly at high temperatures without uncertainties in closing and opening.



ML/MLX - OL/OLX

HORIZONTAL TOGGLE CLAMPS WITH FOLDED BASE AND SAFETY LEVER

Material:

Galvanized steel (ML/OL) or **AISI 304 stainless steel** (MLX/OLX).

Riveted Pivots:

Galvanized steel (ML/OL) or **AISI 304 stainless steel** (MLX/OLX).

Supporting bushes (for ML/OL sizes ≥ 355):

Hardened and ground steel.

Handle:

Red polyurethane; resistant to oils, greases and other chemical agents.

Executions:

- **ML/MLX**: open clamping lever with two folded washers, included in the supply.
- **OL/OLX**: full clamping lever and bolt retainer, included in the supply, to be welded in the desired position and angle.

Safety lever:

Galvanized steel (ML/OL) or **AISI 304 stainless steel** (MLX/OLX), red PVC coating.

Features and applications:

The safety lever ensures the perfect anchoring of the tool, even in the open position, preventing any accidental openings caused by vibrations or shocks. In fact, opening the tool requires a mechanical action by the operator to disengage the retaining system.

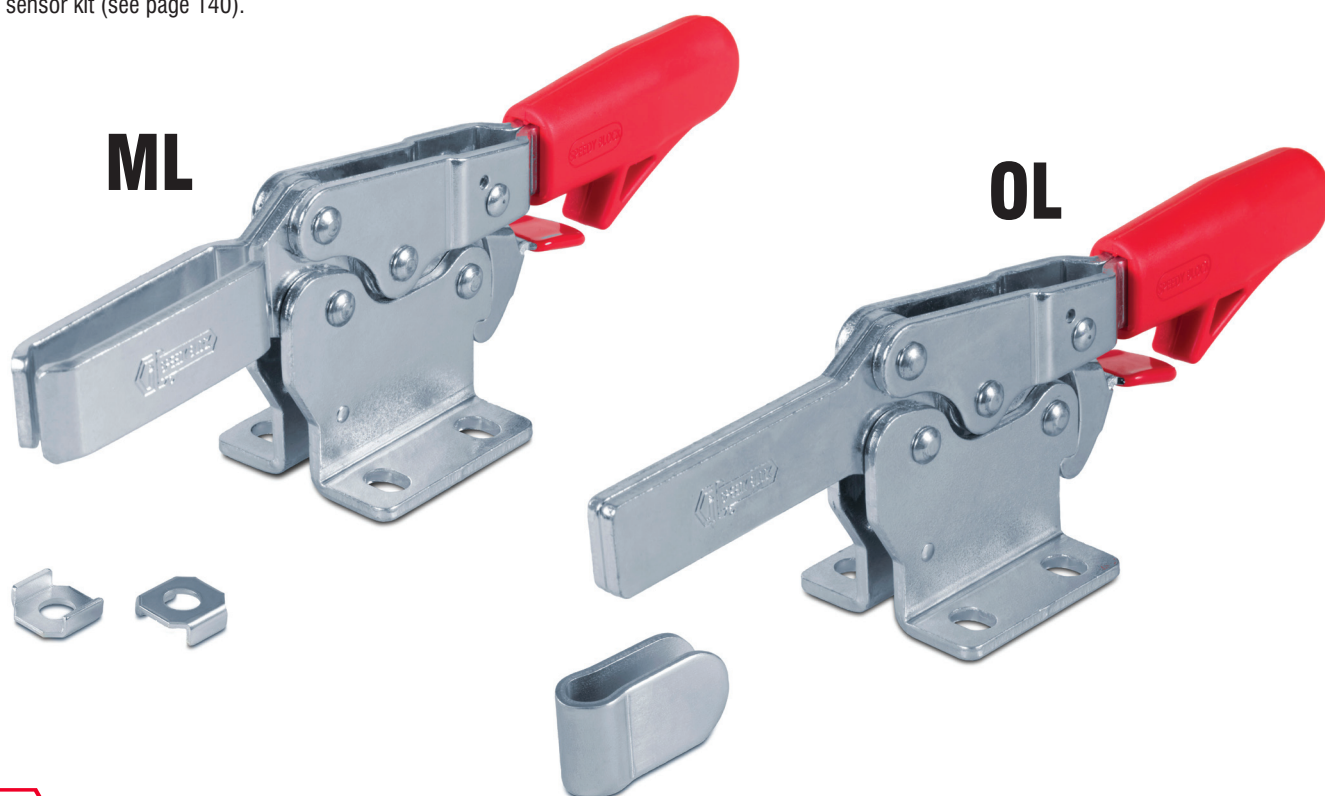
During closing, the clamping lever is guided laterally to ensure greater stability against any transverse stresses.

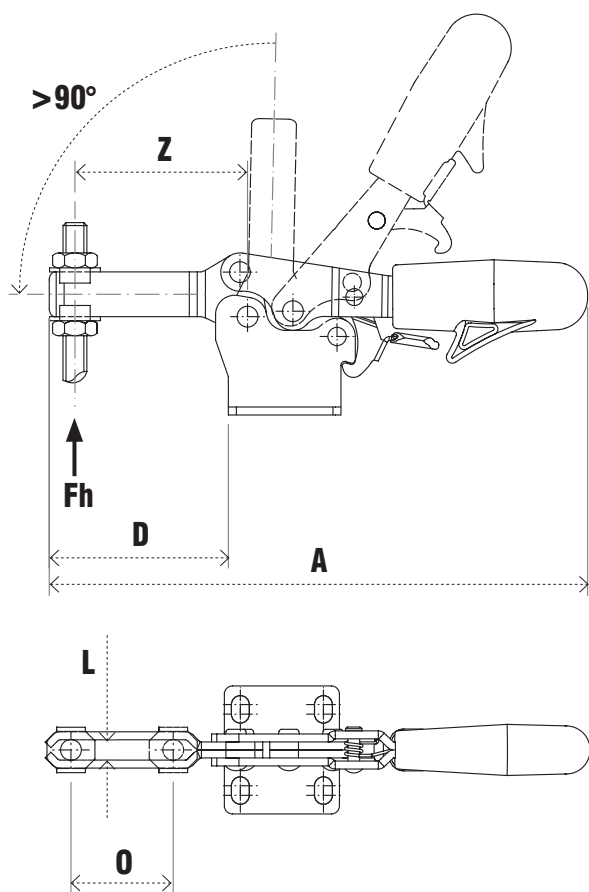
The movement of the levers has been designed to ensure the safety of the operator's fingers and prevent them from being crushed during the movement of the tool.

A special grease is applied to the contact surfaces to reduce friction and make the movement smoother.

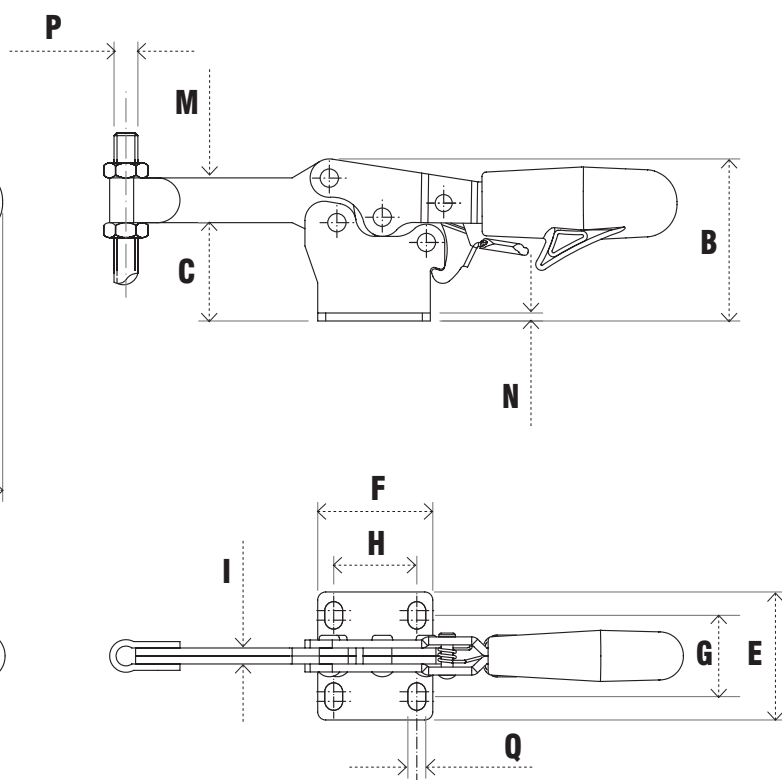
Accessories:

- Spindles (see page 152).
- Lever crossbar for ML/MLX (see page 155).
- Safety sensor kit (see page 140).





ML/MLX



OL/OLX

Code	Description	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	Z	Fh (daN)	Gr. Δ
AD092	75/ML	118	37	20	39	26	28	16 ÷ 19	13.5		5.3	11	2	20	M5	4.5	36	90	90
AD096	75/OL	118.5	37	20	39.5	26	28	16 ÷ 19	13.5	4		11	2		M5	4.5		90	90
AD152	130/ML	171.5	51	30.5	56.5	40	36	24.4 ÷ 28.4	26		6.3	16	2.5	32	M6	5.6	55	100	200
AD156	130/OL	172	51	30.5	57	40	36	24.4 ÷ 28.4	26	5		16	2.5		M6	5.6		100	200
AD290	230/ML	196	61.5	36.5	65	44	44	26 ÷ 31.5	26		8.5	18	3	37	M8	6.6	62	170	320
AD294	230/OL	196.5	61.5	36.5	66	44	44	26 ÷ 31.5	26	6		18	3		M8	6.6		170	330
AD390	355/ML	270	83	50	100	58	60	38.8 ÷ 43	41		10.5	22	3.5	58	M10	8.6	98	180	750
AD394	355/OL	271	83	50	101	58	60	38.8 ÷ 43	41	7		22	3.5		M10	8.6		180	750
AD490	455/ML	305	99	60	114	65	70	40 ÷ 43	41.5		12.5	26	4	65	M12	8.7	113	320	1200
AD494	455/OL	306.5	99	60	115.5	65	70	40 ÷ 43	41.5	10		26	4		M12	8.7		320	1220



Code	Description	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	Z	Fh (daN)	Gr. Δ
DS100	75/MLX	118	37	20	39	26	28	16 ÷ 19	13.5		5.3	11	2	20	M5	4.5	36	90	90
DS104	75/OLX	118.5	37	20	39.5	26	28	16 ÷ 19	13.5	4		11	2		M5	4.5		90	90
DS152	130/MLX	171.5	51	30.5	56.5	40	36	24.4 ÷ 28.4	26		6.3	16	2.5	32	M6	5.6	55	100	200
DS156	130/OLX	172	51	30.5	57	40	36	24.4 ÷ 28.4	26	5		16	2.5		M6	5.6		100	200
DS287	230/MLX	196	61.5	36.5	65	44	44	26 ÷ 31.5	26		8.5	18	3	37	M8	6.6	62	170	320
DS291	230/OLX	196.5	61.5	36.5	66	44	44	26 ÷ 31.5	26	6		18	3		M8	6.6		170	330

