

DIY SE 1 18 TPE moulding technology



EN | Product information

Mayser GmbH & Co. KG

Örlinger Strasse 1-3

89073 Ulm

GERMANY

Tel.: +49 731 2061-0

Fax: +49 731 2061-222

E-mail: info.ulm@mayser.com

Website: www.mayser.com

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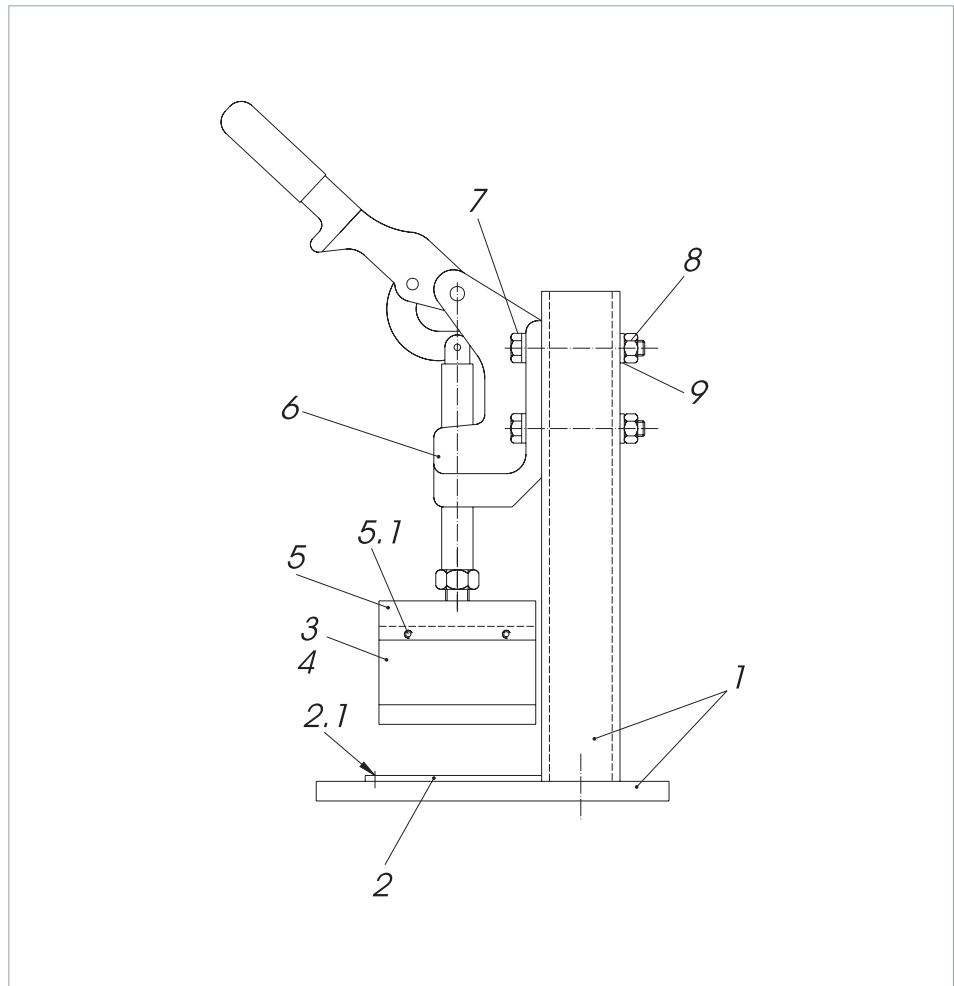
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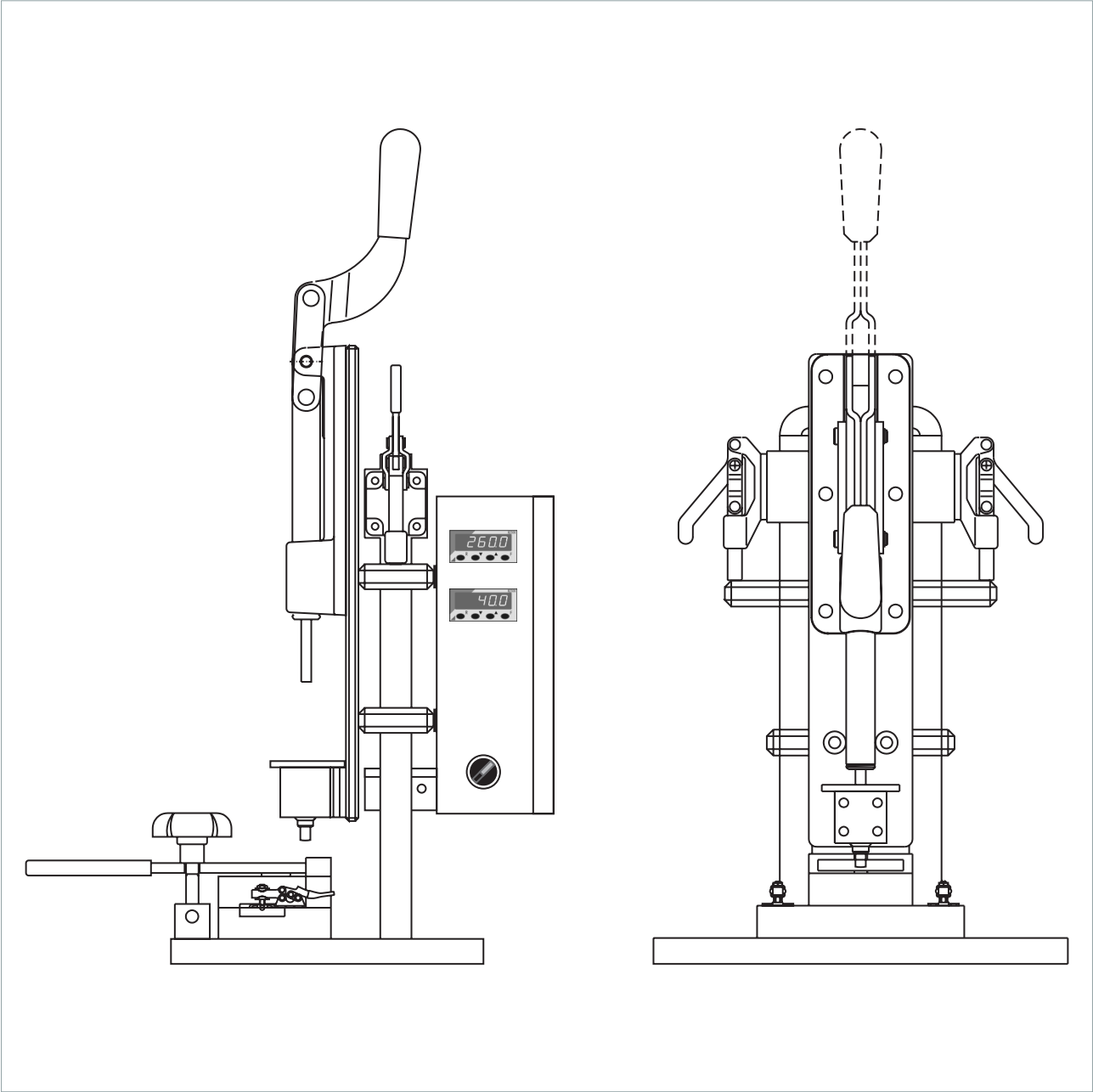
Double cutting device



No.	Designation	Part No.	Material/Standard	PU
1	Base body	1001673	Galvanised	1 pc.
2	Profile guide	1002153	Aluminium	1 pc.
2.1	Cylinder screw M5x16	1000719	Galvanised DIN 912	2 pcs.
3	Cutter	1000936	Strip steel	1 pc.
4	Stripping cutter	1002152	Strip steel	2 pcs.
5	Cutter holder	1002154		1 pc.
5.1	Threaded pin M4x6	1002150	DIN 913	6 pcs.
6	Clamp	1001679		1 pc.
7	Bolt	1001676	Galvanised DIN 931	4 pcs.
8	Nut	1001677	Galvanised DIN 934	4 pcs.
9	Washer	1001678	Galvanised DIN 125-B	8 pcs.

*Subject to technical
modifications.*

Sealing device ASW 4



*Subject to technical
modifications.*

Materials list

Part No.	Designation	PU
7500270	Contact tube TPE, 18 mm (⁴⁵ / ₆₄ "	50 m (164')
7500480	Sealing cartridge	200 pcs.
1001854	PCB with cable 0.4 m (1' 3")	100 pcs.
1001702	PCB with cable 2.0 m (6' 6")	100 pcs.
1001703	PCB with cable 5.0 m (16' 5")	100 pcs.
1001704	PCB with cable 10.0 m (32' 10")	25 pcs.
1001701	PCB with diode	50 pcs.
1001706	PCB with resistor 8k2	100 pcs.
7502504	Sealing device ASW 4	1 pc.
7500496	Double cutting device	1 pc.
7500492	Unwinding device	1 pc.

Application

The complete switch element SE 1 18 TPE is pulled into a **suitable** rubber profile. Suitable rubber profiles are: GP 22-1, GP 39(L)-1, GP 50(L)-1, GP 60-1 and GP 120-1.

If you use a **different** rubber profile, make sure the rubber profile in a state of rest does not apply any pressure on the switch element. In addition, you must check the chemical compatibility of the switch element with **other** rubber profiles to ensure they are suitable (the key thing to watch out for here is plasticiser migration).

If you use the switch element SE 1 18 TPE **without** a rubber profile, make sure it is fixed securely.

Sensor surface

Chemical resistance

The sensor is resistant to a certain extent to normal chemical influences such as diluted acids and alkalis, as well as alcohol, over an exposure period of 24 hours.

The values in the table are the results of tests carried out in our laboratory at room temperature (+23 °C (+73.4 °F)). You must always conduct your own practical tests to verify that our products are suitable for your specific area of application.

Explanation of symbols:

- + = resistant
- ± = resistant to a certain extent
- = not resistant

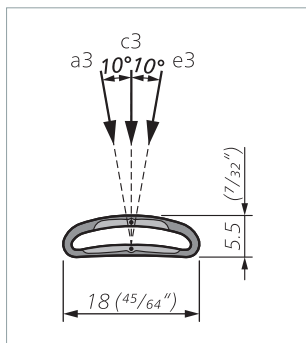
	TPE
Acetone	-
Formic acid	-
Armor All	+
Car shampoo	+
Petrol	-
Brake fluid	+
Buraton	+
Butanol	-
Sodium hypochlorite	-
Disinfectant 1%	+
Diesel	-
Acetic acid 10%	-
Ethanol	+
Ethyl acetate	-
Ethylene glycol	+
Greases	±
Anti-frost agent	+
Skin cream	+
Incidin	+
Incidin Plus	+
Cooling lubricant	-
Plastic cleaner	+
Lyso FD 10	+
Metal working oil	-
Microbac	+
Microbac forte	+
Minutil	+
Saline solution 5%	+
Spirit (ethyl alcohol)	+
Terralin	+
Centring oil	-

Subject to technical modifications.

Technical data

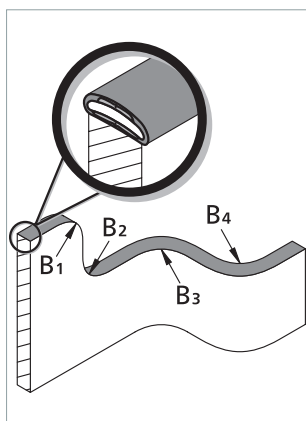
SE 1 18 TPE

Switch element SE 1 18 TPE cut-to-size with resistor 8k2 for 2-wire technology or without resistor for 4-wire technology.



Dimensional tolerances according to ISO 3302 E2/L2

Bend radii:



Switching characteristics at $v_{test} = 50 \text{ mm/min (2 in/min)}$	
Switching operations	$> 1 \times 10^5$
Actuation force (c3)	+23 °C (+73.4 °C) -25 °C (-13 °F)
Test sample $\varnothing 4 \text{ mm (} \frac{5}{32} \text{")}$	$< 20 \text{ N (< 4.5 lbf)}$ $< 30 \text{ N (< 6.7 lbf)}$
Test sample $\varnothing 200 \text{ mm (} 7 \frac{7}{8} \text{")}$	$< 30 \text{ N (< 6.7 lbf)}$ $< 50 \text{ N (< 11.2 lbf)}$
Test specimen length *	1 m (3')
Actuation distance (c3)	
Test sample $\varnothing 80 \text{ mm (} 3 \frac{5}{32} \text{")}$	$< 3.0 \text{ mm (< } \frac{1}{8} \text{")}$
Actuation angle (a3 to e3)	
Test sample $\varnothing 80 \text{ mm (} 3 \frac{5}{32} \text{")}$	$\pm 10^\circ$
Safety classifications	
ISO 13849-1: B _{10D}	1×10^6
Mechanical operating conditions	
Switch element length (min./max.)	100 mm / 50 m (4" / 164')
Cable length (min./max.)	200 mm / 100 m (8" / 328')
Tensile load (max.)	
Cable	30 N (6.7 lbf)
Bend radii, minimum	
B ₁ / B ₂ / B ₃ / B ₄	350 / - / - / - mm (1' 2" / - / - / -)
Installation position	Any
IEC 60529: degree of protection	IP65
Operating temperature	
short-term (max. 10 min)	-25 bis +80 °C (-13 to +176 °F) -40 bis +100 °C (-40 to +212 °F)
Fire behaviour	
according to DIN 75200	Approx. 40 mm/min (1.6 in/min)
also complies with	Limit values of the StVZO, TA 29
Weight	66 g/m (0.7096 oz/ft)
Electrical operating conditions	
Terminal resistance	8k2 $\pm 1\%$, others on request
Nominal output (max.)	250 mW
Contact transition resistance	$< 400 \text{ ohms (per switch element)}$
Several switch elements	Max. 5 in series
Electrical rating	
Voltage	Max. 24 V DC
Current (min./max.)	1 mA / 30 mA
Connection cable	$\varnothing 3.6 \text{ mm TPE } 2 \times 0.25 \text{ mm}^2$ ($\varnothing \frac{9}{64} \text{"} \text{ TPE } 2 \times \text{AWG24}$)

* Shorter test specimens have different actuation forces.