

DIY SE 1 18 TPE moulding technology



EN | Product information

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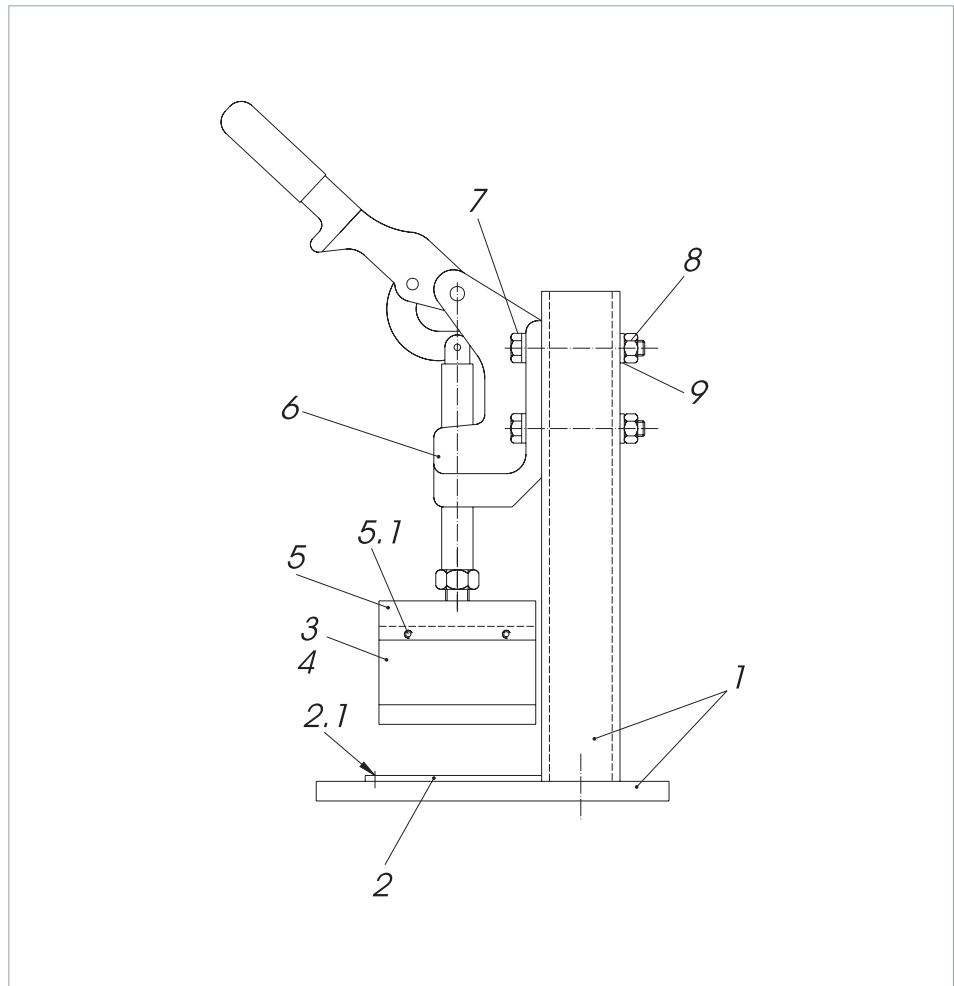
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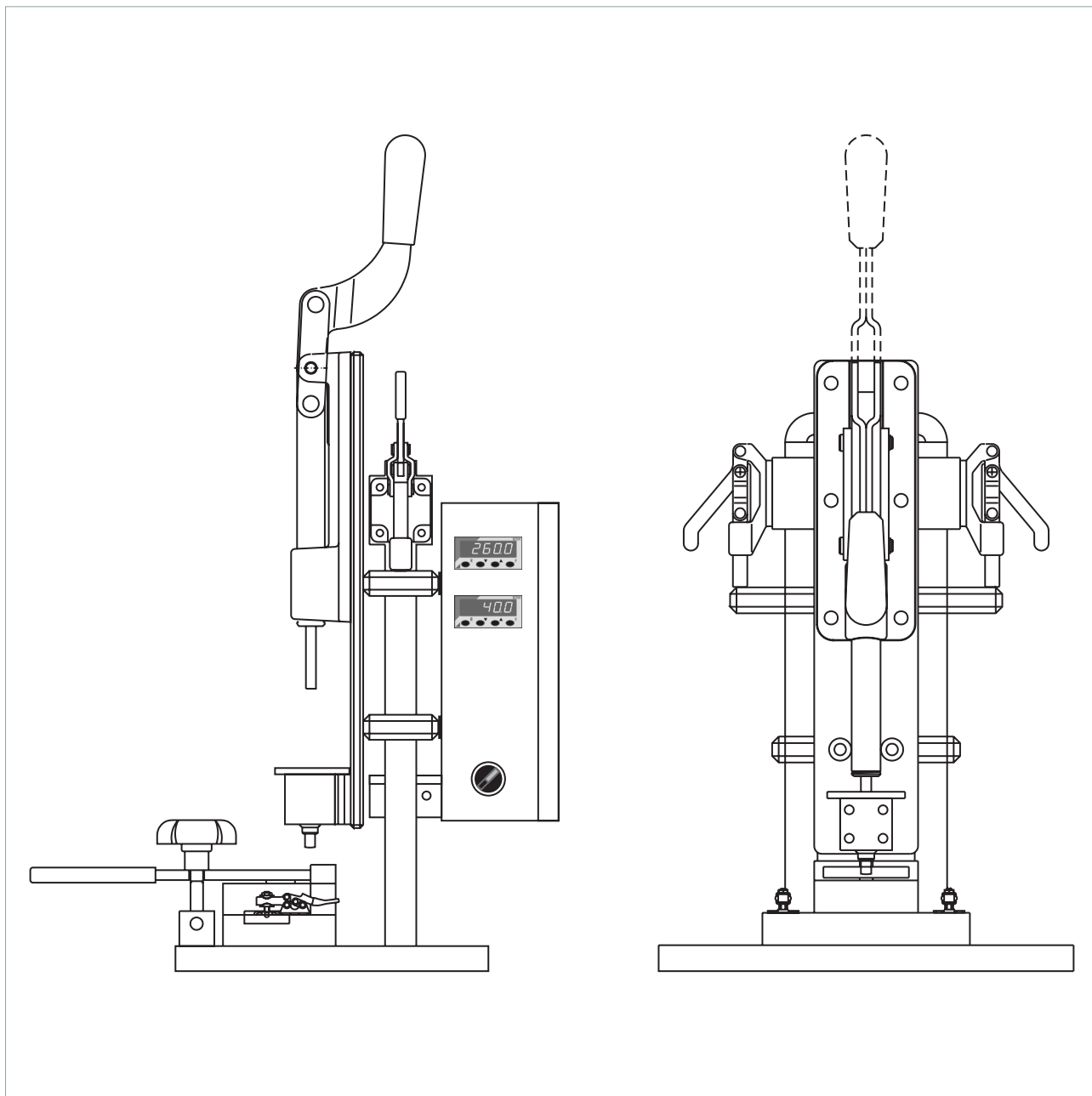
Double cutting device



| 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



Materials list

| Part No. | Designation | PU |
|----------|-------------------------|----------|
| 7500270 | Contact tube TPE, 18 mm | 50 m |
| 7500480 | Sealing cartridge | 200 pcs. |
| 1001854 | PCB with cable 0.4 m | 100 pcs. |
| 1001702 | PCB with cable 2.0 m | 100 pcs. |
| 1001703 | PCB with cable 5.0 m | 100 pcs. |
| 1001704 | PCB with cable 10.0 m | 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). You must always conduct your own practical tests to verify that our products are suitable for your specific area of application.

Explanation of symbols:

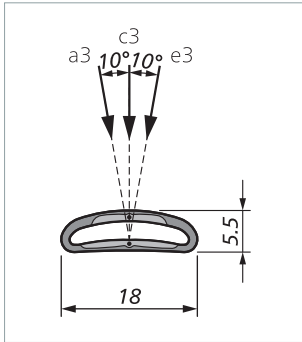
- + = resistant
- ± = resistant to a certain extent
- = not resistant

| | 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 | - |

Technical data

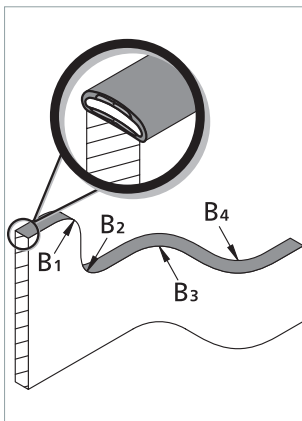
SE 1 18 TPE

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 $v_{test} = 50 \text{ mm/min}$ | |
|---|---|
| Switching operations | $> 1 \times 10^5$ |
| Actuation force (c3) | +23 °C -25 °C |
| Test sample Ø 4 mm | $< 20 \text{ N}$ $< 30 \text{ N}$ |
| Test sample Ø 200 mm | $< 30 \text{ N}$ $< 50 \text{ N}$ |
| Test specimen length * | 1 m |
| Actuation distance (c3) | |
| Test sample Ø 80 mm | $< 3.0 \text{ mm}$ |
| Actuation angle (a3 to e3) | |
| Test sample Ø 80 mm | $\pm 10^\circ$ |
| Safety classifications | |
| ISO 13849-1: B _{10D} | 1×10^6 |
| Mechanical operating conditions | |
| Switch element length (min./max.) | 100 mm / 50 m |
| Cable length (min./max.) | 200 mm / 100 m |
| Tensile load (max.) | |
| Cable | 30 N |
| Bend radii, minimum | |
| B ₁ / B ₂ / B ₃ / B ₄ | 350 / - / - / - mm |
| Installation position | Any |
| IEC 60529: degree of protection | IP65 |
| Operating temperature | -25 bis +80 °C |
| short-term (max. 10 min) | -40 bis +100 °C |
| Fire behaviour | |
| according to DIN 75200 | Approx. 40 mm/min |
| also complies with | Limit values of the StVZO, TA 29 |
| Weight | 66 g/m |
| 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 | Ø 3.6 mm TPE 2x 0.25 mm ² |

* Shorter test specimens have different actuation forces.