

# MAYSER®

## Polymer Electric



### Product Information



## DIY SE 1 TPE moulding technology

**MAYSER®** GmbH & Co. KG  
Polymer Electric  
Örlinger Straße 1-3  
89073 Ulm  
GERMANY  
Tel. +49 731 2061-0  
Fax +49 731 2061-222  
E-Mail: [info.ulm@mayser.com](mailto:info.ulm@mayser.com)  
Internet: [www.mayser.com](http://www.mayser.com)

## Content

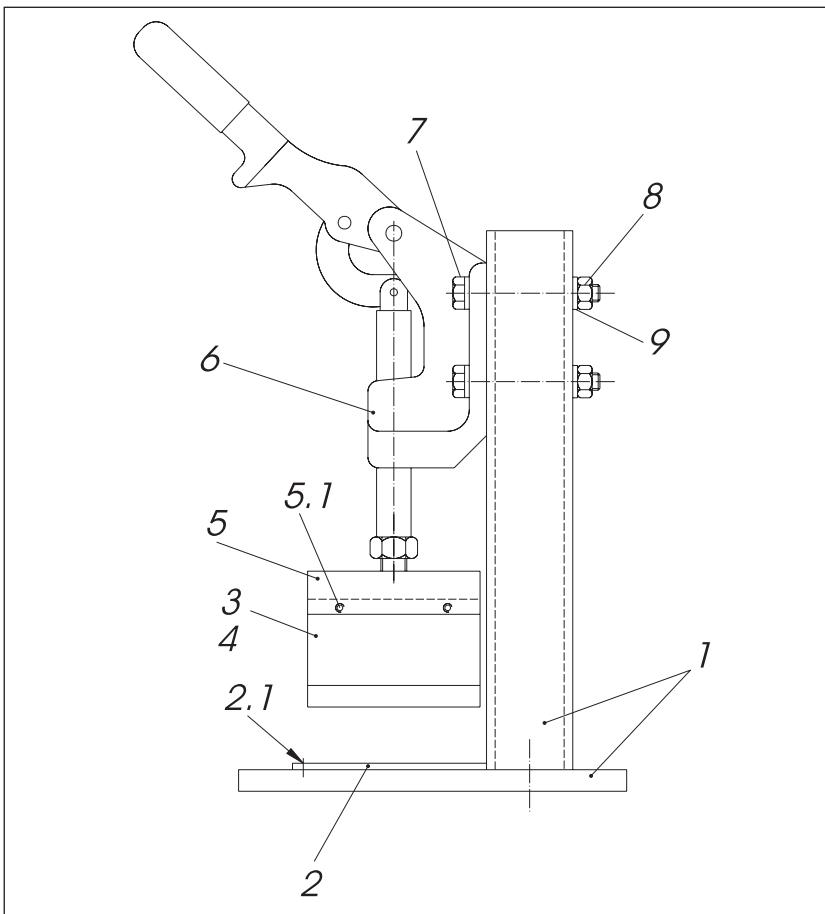
<b>Double cutting device</b> .....	<b>3</b>
<b>Sealing device ASW 4</b> .....	<b>4</b>
<b>Materials list</b> .....	<b>5</b>
Physical resistance.....	5
Chemical resistance .....	6
<b>Technical data</b> .....	<b>7</b>

### Copyright

The reproduction, distribution and utilization of this document as well as the communication of its contents without express authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design.

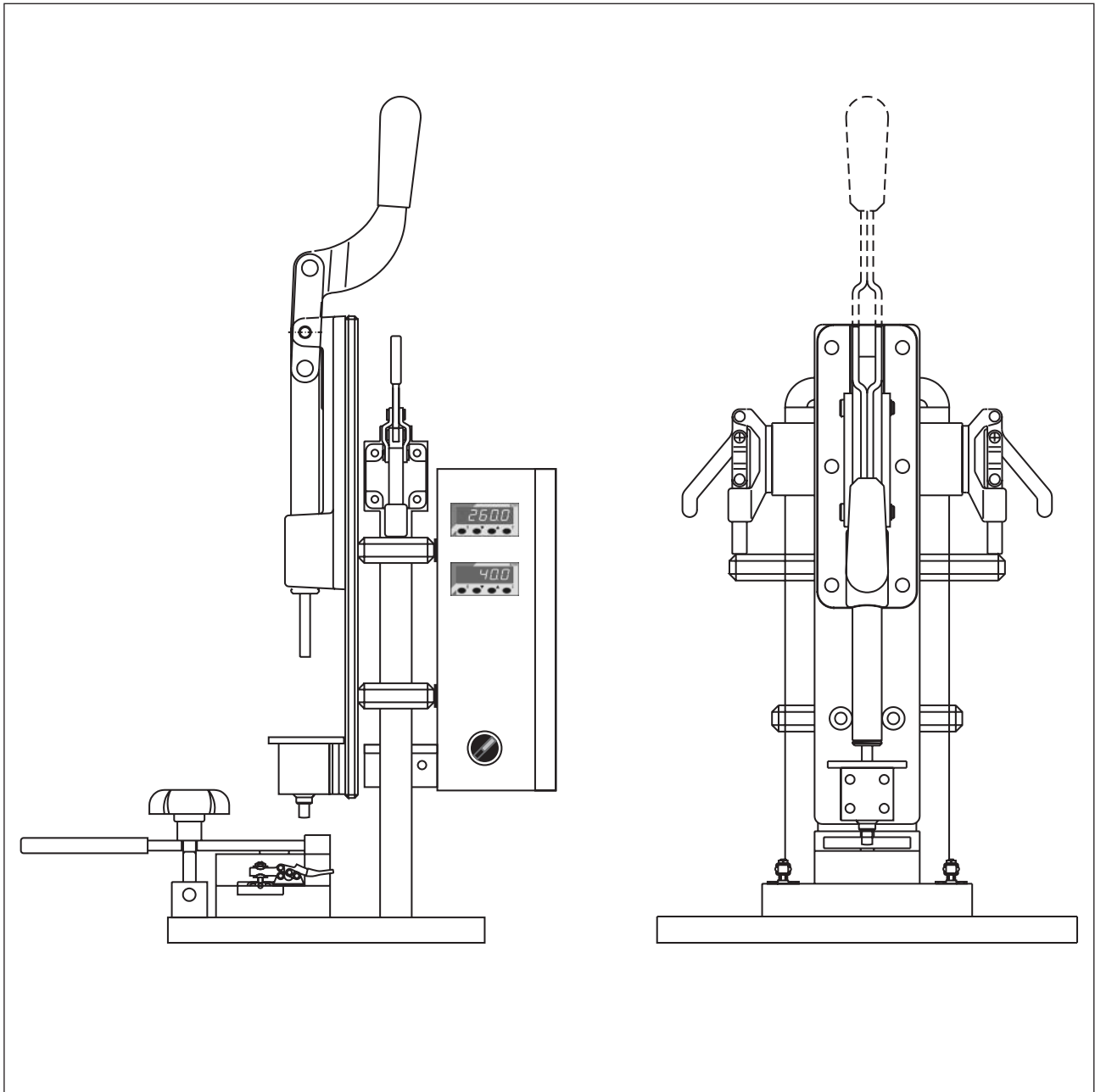
© Mayser Ulm 2014

## Double cutting device



9	8	pcs.	Washer	1001678	Galvanised DIN 125-B
8	4	pcs.	Nut	1001677	Galvanised DIN 934
7	4	pcs.	Screw	1001676	Galvanised DIN 931
6	1	pc.	Clamp	1001679	
5.1	6	pcs.	Threaded pin M4×6	1002150	DIN 913
5	1	pc.	Cutter holder	1002154	
4	2	pcs.	Cutter, stripping	1002152	Strip steel
3	1	pc.	Cutter	1000936	Strip steel
2.1	2	pcs.	Cylinder screw M5×16	1000729	Galvanised DIN 912
2	1	pc.	Profile guide	1002153	Aluminium
1	1	pc.	Base body	1001673	Galvanised
<i>Pos.</i>	<i>Qty.</i>	<i>Unit</i>	<i>Description</i>	<i>Part no.</i>	<i>Material / Standard</i>

## Sealing device ASW 4



*Subject to technical modifications.*

## Materials list

Part no.	Designation	Pack. unit
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.
1001705	PCB with resistor 1k2	100 pcs.
1001706	PCB with resistor 8k2	100 pcs.
1001707	PCB with resistor 22k1	100 pcs.
7502152	Sealing device ASW 4	1 pc.
7500496	Double cutting device	1 pc.
7500492	Unwinding device	1 pc.

## Application

The complete Safety Element SE 1 TPE is inserted into a **suitable** rubber profile. Suitable rubber profiles are:

GP 22, GP38(L), GP 39(L), GP 50(L), GP 58(L) GP 60, GP 68, GP 88, GP 120 und GP 302.

If you use a **different** rubber profile, make sure the rubber profile, when in a state of rest does not apply any pressure on the contact tube.

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

## Resistances

### Physical resistance

Safety Element SE 1	TPE
Degree of protection (IEC 60529)	IP65
Hardness as per Shore A	55 ±5

*Subject to technical modifications.*

## Chemical resistance

The Safety Element is resistant against normal chemical influences such as diluted acids and alkalis as well as alcohol over an exposure period of 24 hrs.

The values in the table are results of tests carried out in our laboratory to the best of our knowledge and belief. The suitability of our products for your specific application purpose must always be verified with your own practical tests.

Explanation of symbols:

- + = resistant
- ± = limited resistance
- = not resistant

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

**Note:**

Tests are carried out at room temperature (+23 °C).

*Subject to technical modifications.*

## Technical data

Safety Element SE 1 TPE manufactured with resistor for 2-wire technology or without resistor for 4-wire technology.



1:1

<b>Switching characteristics at <math>v_{\text{test}} = 50 \text{ mm/s}</math></b>	
Switching operations	$> 1 \times 10^5$
Actuating force	<b>+23 °C</b> <b>-25 °C</b>
Test piece (rod) Ø 4 mm	< 20 N      < 30 N
Test piece (rod) Ø 200 mm	< 30 N      < 50 N
Actuating distance	
Test piece (cylinder) Ø 80 mm	< 3.0 mm
Actuation angle	
Test piece (cylinder) Ø 80 mm	< 50°
<b>Mechanical operating conditions</b>	
Safety element length (min./max.)	min. 100 mm / max. 50 m
Bend radii, minimum	
A / B / C / D	350 / - / - / - mm
Tensile load, cable	max. 30 N
EN 60529: Protection class	IP65
Operating temperature	
short-term	-25 to +80 °C
	-40 to +100 °C
Behaviour in fire	
as per DIN 75200	approx. 40 mm/min
also complies with	limit values of the StVZO, TA 29
<b>Electrical operating conditions</b>	
Terminal resistance	
1k2 / 8k2 / 22k1	$\pm 5\%$ / $\pm 3\%$ / $\pm 2\%$
Output	max. 250 mW
Contact transition resistance	< 400 Ohm
	(per Safety Element)
More than one sensor	5 in series max.
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 <sup>2</sup>
<b>Chemical resistance</b>	
	The Safety Element is resistant against normal chemical influences over an exposure period of 24 hrs. (see p. 6).
<b>Dimensional tolerances</b>	
Length as per	ISO 3302 L2
Profile section as per	ISO 3302 E2

Bend radii:

