

ITEM 089527 SN03R12-2508-M

Description	Technical data	Accessories	Downloads
-------------	----------------	-------------	-----------



### Features

- › plunger spacing 12 mm
- › Upright housing, small flange
- › Degree of protection IP67 according to IEC 60529

### Switching elements

**ES 502 E** Snap-action switching contact 1 NC + 1 NO

**ES 508** Slow-action switching contact 1 NC $\ominus$

On the usage of safety switching elements, the dog distance (3.0.5) must be maintained to achieve the positively driven travel. The dogs must be positively mounted according to EN ISO 14119, i.e. riveted, welded or secured in some other way against becoming loose.

### Approvals



## Mechanical values and environment

Contact bounce time	
Switching element ES502E	< 3ms <sup>[1]</sup>
Contact closing time	
Switching element ES502E	< 4ms <sup>[2]</sup>
Design	Upright
Housing material	Die-cast aluminum, anodized
Weight	
Net	0,45 kg
Ambient temperature	-5 ... 80 °C
Degree of protection	IP67
Mechanical life	30 x 10 <sup>6</sup>
Contact material	Silver alloy, gold flashed
Switching principle	
Switching element ES508	Slow-action switching contact <sup>[3]</sup>
Switching element ES502E	Snap-action switching contact <sup>[4]</sup>
Plunger spacing	12 mm
Installation position	Any
Number of switching elements	3
Number of positively driven contacts	2
Number of NC contacts	1
Number of NO contacts	1
Connection	2 x M20 x 1.5
Approach speed	0,01 ... 80 m/min
Actuating element	Roller plunger <sup>[5]</sup>
Roller diameter	8 mm
Actuating force	min.20 N
Operating point accuracy	± 0.01 <sup>[6]</sup>

## Electrical connection ratings

Rated thermal current I <sub>th</sub>	8 A
Utilization category according to EN 60947-5-1	
AC-15	6A 230V
DC-13	6A 24V
AC-12	8 A, 250 V <sup>[7]</sup>
Short circuit protection according to IEC 60269-1	
(Fuse)	8A gG
Rated insulation voltage U <sub>i</sub>	250 V
Rated impulse withstand voltage U <sub>imp</sub>	2,5 kV
Switching current	
Min. at DC 24V switching element ES508	min.10 mA <sup>[8]</sup>

Min. at DC 12V switching element ES502E	min.10 mA <b>[9]</b>
Connection cross-section	0,34 ... 1,5 mm <sup>2</sup>

### Miscellaneous

Additional information	Mixed contact assembly <b>[10]</b>
------------------------	------------------------------------

### Reliability values acc. to EN ISO 13849-1

B10 <sub>D</sub>	20 x 10 <sup>6</sup>
------------------	----------------------

**[1, 2, 4, 7, 9]** Applies from station 3

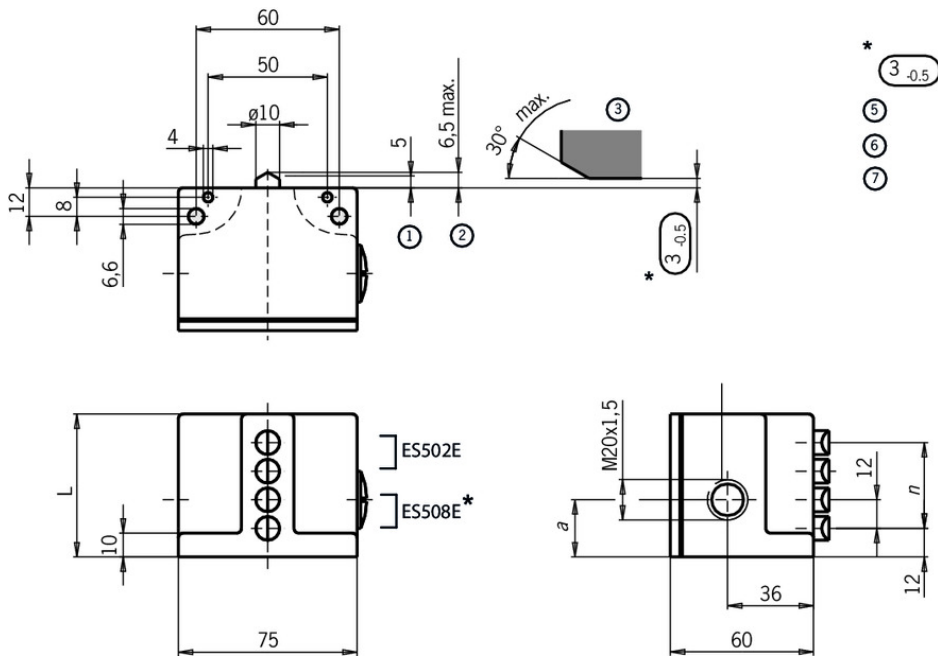
**[3, 8]** Applies for station 1-2

**[5]** Plain bearing

**[6]** The reproducible switching point accuracy refers to the axial travel of the plunger after the switching element ES 502 E has been run-in with approx. 2000 operating cycles.

**[10]** On upright multiple limit switches it is necessary to start with the safety station/s on the flange side. If several safety stations are to be fitted, these must be fitted directly one after the other.

## Dimension drawing



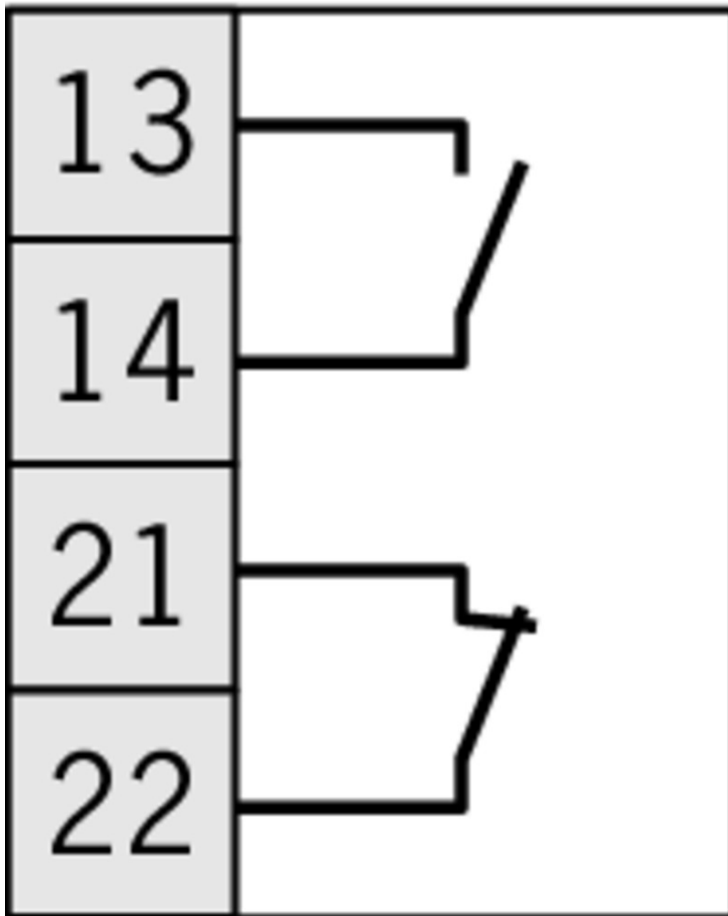
6	84	24
5	72	24
4	60	24
3	48	24
n	L	a
Anzahl der Stößel ④		

## Legende

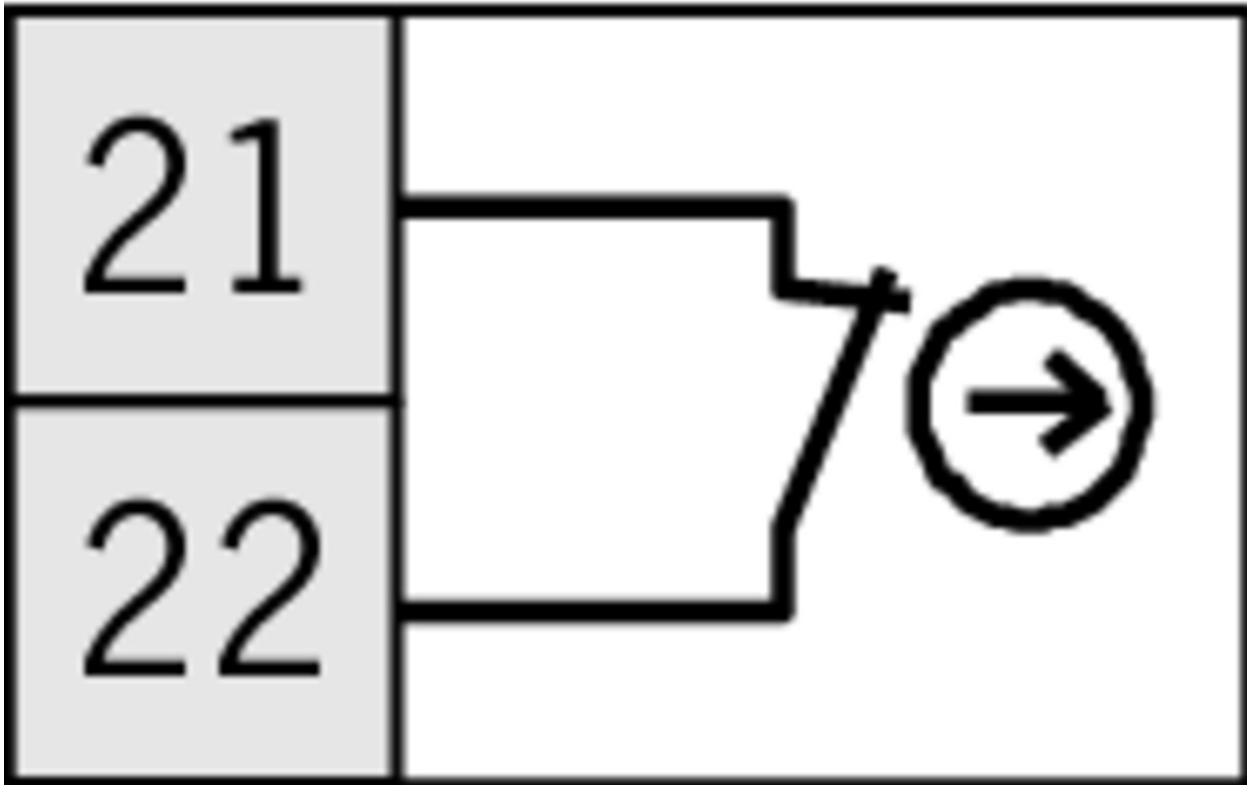
- 1 Operating point
- 2 Free position
- 3 Dog
- 4 n Number of plungers
- \* Safety switching element ES 508E positively driven. Positive opening function is dependent on maintaining this distance.
- 5 Actuators (dogs) must be connected to the machine in a flush position.
- 6 Switch can be replaced only with the same type.
- 7 Pressure sensitive label 041734 applied.

Switching element

# ES 502 E



# ES 508



## Instructions

Betriebsanleitung Präzisions-Reihengrenztaster SN 12/16 mm

	Doc. no.	Version	Language	Download
Betriebsanleitung Präzisions-Reihengrenztaster SN 12/16 mm Mode d'emploi Boîtiers multipistes de précision SN 12/16 mm Istruzioni di impiego Finecorsa multipli di precisione SN 12/16 mm Operating Instructions Precision Multiple Limit Switches SN 12/16 mm	032308	08-07/16	   	1.2 MB

## CAD data

CAD data for this item on TraceParts