

ITEM 089525 SN03D12-1508AM-M

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



Features

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

Exterior diaphragm

The exterior diaphragm protects the plunger guide against the entry of very fine dust (dust from grinding, casting, glass, etc.) and prevents the plunger seizing. At the same time, plunger sticking, caused by resinous lubricating coolants, can be prevented with this exterior diaphragm version.

Switching elements

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

ES 508 Slow-action switching contact 1 NC →

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.

LED function display (on request)

LED function display possible on request.

Approvals



Mechanical values and environment

| | |
|--------------------------------------|-----------------------------------|
| Contact bounce time | |
| Switching element ES502E | < 3ms [1] |
| Contact closing time | |
| Switching element ES502E | < 4ms [2] |
| 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 ⁶ |
| Contact material | Silver alloy, gold flashed |
| Switching principle | |
| Switching element ES508 | Slow-action switching contact [3] |
| Switching element ES502E | Snap-action switching contact [4] |
| Plunger spacing | 12 mm |
| Installation position | Any |
| Number of switching elements | 3 |
| Number of positively driven contacts | 1 |
| Number of NC contacts | 2 |
| Number of NO contacts | 2 |
| Connection | 2 x M20 x 1.5 |
| Approach speed | 0,01 ... 20 m/min |
| Actuating element | Chisel plunger |
| Actuating force | min.20 N |
| Operating point accuracy | ± 0.002 [5] |

Electrical connection ratings

| | |
|--|---------|
| Rated thermal current I _{th} | 8 A |
| Utilization category according to EN 60947-5-1 | |
| AC-15 | 6A 230V |
| DC-13 | 6A 24V |

| | | |
|---|--------|------------------------------|
| | AC-12 | 8 A, 250 V [6] |
| Short circuit protection according to IEC 60269-1 | | |
| | (Fuse) | 8A gG |
| Rated insulation voltage U _i | | 250 V |
| Rated impulse withstand voltage U _{imp} | | 2,5 kV |
| Switching current | | |
| Min. at DC 24V switching element ES508 | | min.10 mA [7] |
| Min. at DC 12V switching element ES502E | | min.10 mA [8] |
| Connection cross-section | | 0,34 ... 1,5 mm ² |

Miscellaneous

| | |
|------------------------|------------------------------|
| Additional information | |
| | Mixed contact assembly [9] |
| | Exterior diaphragm = AM [10] |

Reliability values acc. to EN ISO 13849-1

| | |
|------------------|----------------------|
| B10 _D | 20 x 10 ⁶ |
|------------------|----------------------|

[1, 2, 4, 6, 8] Applies from station 2

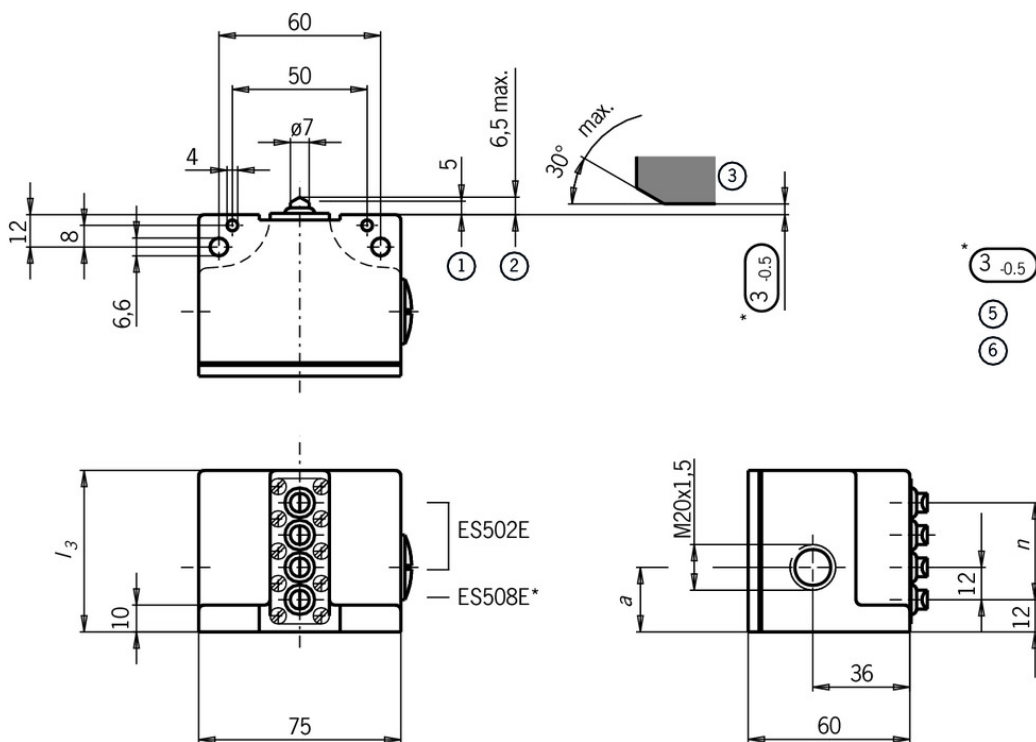
[3, 7] Applies for station 1

[5] 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.

[9] 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.

[10] The exterior diaphragm provides additional protection to the plunger guide. Plunger sticking, primarily caused by resinous lubricating coolants, can be prevented by this exterior diaphragm version.

Dimension drawing

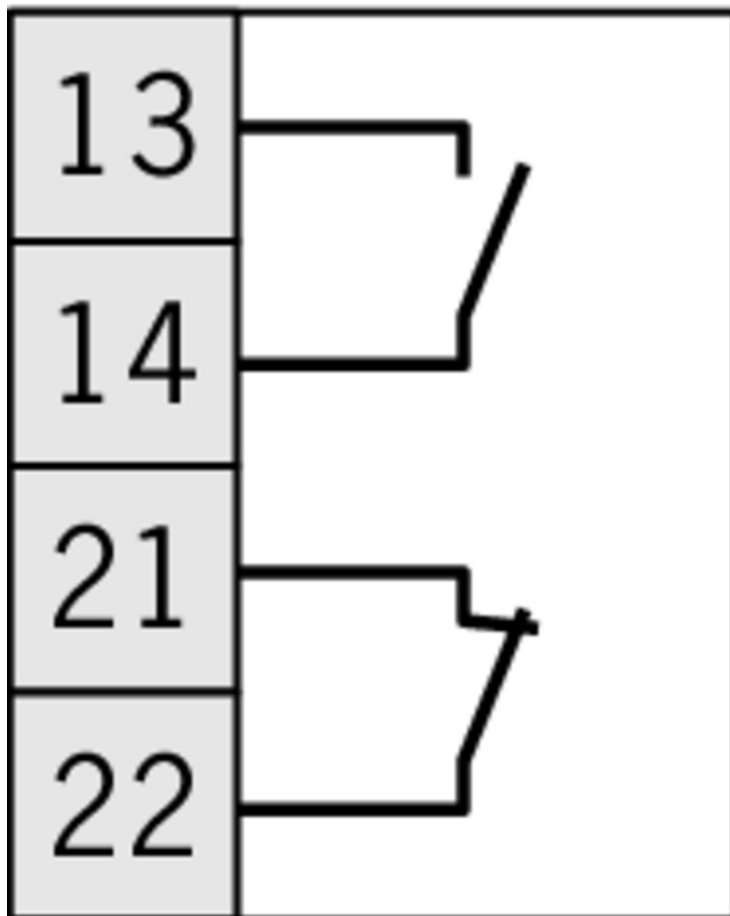


| | | |
|-------------------|----|----|
| 6 | 84 | 24 |
| 5 | 72 | 24 |
| 4 | 60 | 24 |
| 3 | 48 | 24 |
| 2 | 36 | 19 |
| n | 13 | a |
| Anzahl der Stößel | | |
| 4 | | |

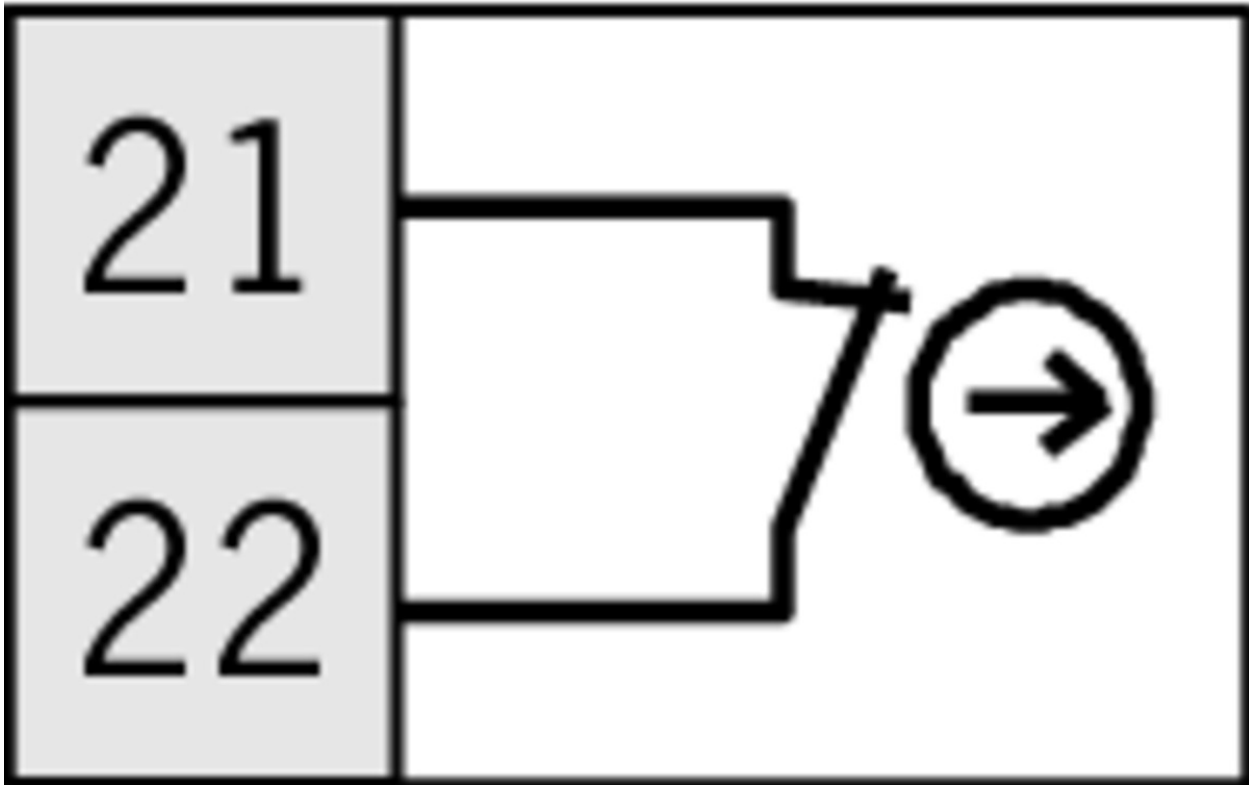
Legende

- 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.

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