

**ITEM 082163 SN03R12-502-M**

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



**Features**

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

**Switching element**

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

**Approvals**



**Mechanical values and environment**

|                  |                             |
|------------------|-----------------------------|
| 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          |               | Snap-action switching contact <b>[1]</b> |
| Plunger spacing              |               | 12 mm                                    |
| Installation position        |               | Any                                      |
| Number of switching elements |               | 3  |
| Number of NC contacts        |               | 3  |
| Number of NO contacts        |               | 3  |
| Connection                   |               |  |
|                              |               | 2 x M20 x 1.5                            |
| Approach speed               |               |  |
|                              | max.          | 0,01 ... 80 m/min                        |
| Actuating element            |               |  |
|                              | Plain bearing | Roller plunger <b>[2]</b>                |
| Actuating force              |               | min.20 N                                 |

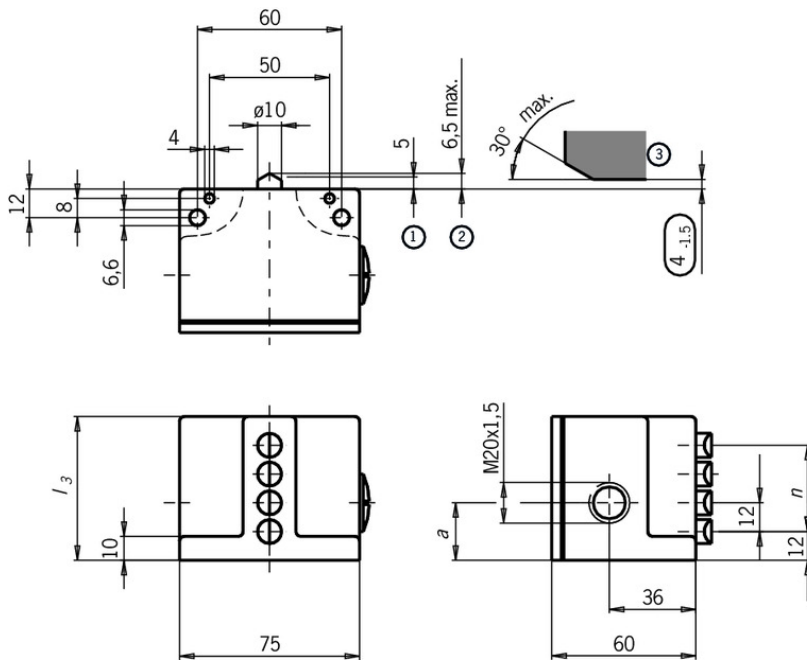
### Electrical connection ratings

|   |                |                              |
|---|----------------|------------------------------|
| 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                   |
| 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 12V | min.10 mA                    |
| Connection cross-section                          |                | 0,34 ... 1,5 mm <sup>2</sup> |

**[1]** Contact closing time < 4 contact bounce time < 3

**[2]** Operating point accuracy ± 0.01 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.

## Dimension drawing



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

## Legende

- 1 Operating point
- 2 Free position
- 3 Dog
- 4 n Number of plungers

## Switching element

# ES 502 E



## Instructions

- Betriebsanleitung Präzisions-Reihengrenztaster SN 12/16 mm

|  | Doc. no. | Version  | Language  | Download   |
|--|----------|----------|---|--|
| Betriebsanleitung Präzisions-Reihengrenztaster SN 12/16 mm           | 032308   | 08-07/16 |  |  1.2 MB |
| 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 |          |          |  |  |

## Catalogs

- Positionsschalter und Reihengrenztaster Position Switches and Multiple Limit Switches Interrupteurs de position et boîtiers multipistes

|   | <b>Doc. no.</b> | <b>Version</b> | <b>Language</b>   | <b>Download</b>  |
|---|-----------------|----------------|---|--|
| Positionsschalter und Reihengrenztaster           | 157835          | 01-03/18       |  |  4.1 MB |
| Interrupteurs de position et boîtiers multipistes | 157837          | 01-03/18       |  |  4.1 MB |
| Position Switches and Multiple Limit Switches     | 157836          | 01-03/18       |  |  4.1 MB |

### **CAD data**

CAD data for this item on TraceParts