

## ITEM 087110 RGBF03R12-502LE060-M

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



### Features

- › plunger spacing 12 mm
- › Upright housing according to DIN 43697
- › Degree of protection IP67 according to IEC 60529
- › LED function display

### Switching element

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

On the usage of safety switching elements, the dog distance (5.1.5) must be maintained to achieve the positively driven travel. The dogs must be positively mounted according to EN 1088, i.e. riveted, welded or secured in some other way against becoming loose.

### LED function display

Function display is available for the following voltage range (see accessories).

**LE060** 12 ... 60 V AC/DC

## Approvals



## Mechanical values and environment

|                              |  |
|------------------------------|--|
| Design                       | Upright, according to DIN 43697          |
| Housing material             | Die-cast aluminum, anodized              |
| Weight                       |  |
| Net                          | 0,9 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                   |  |
|                              | 4 x M25 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                                 |

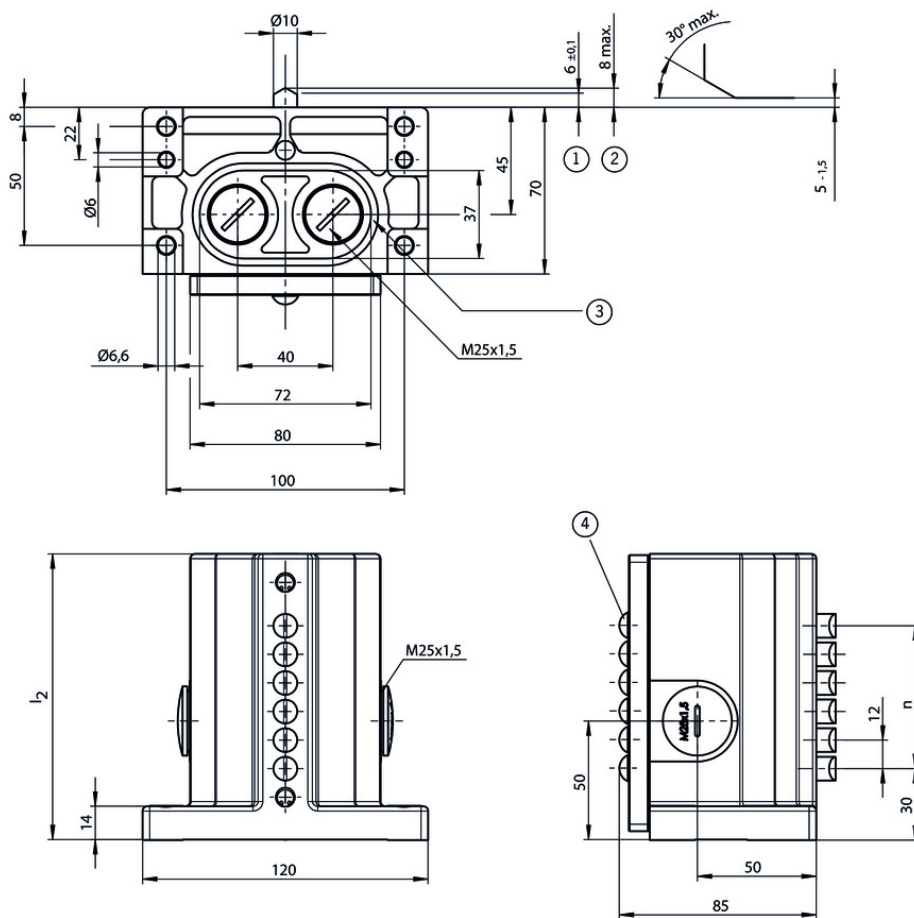
## Electrical connection ratings

|   |                              |
|---|------------------------------|
| 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 ms contact bounce time < 3 ms

[2] Operating point accuracy  $\pm 0.01$ . 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**

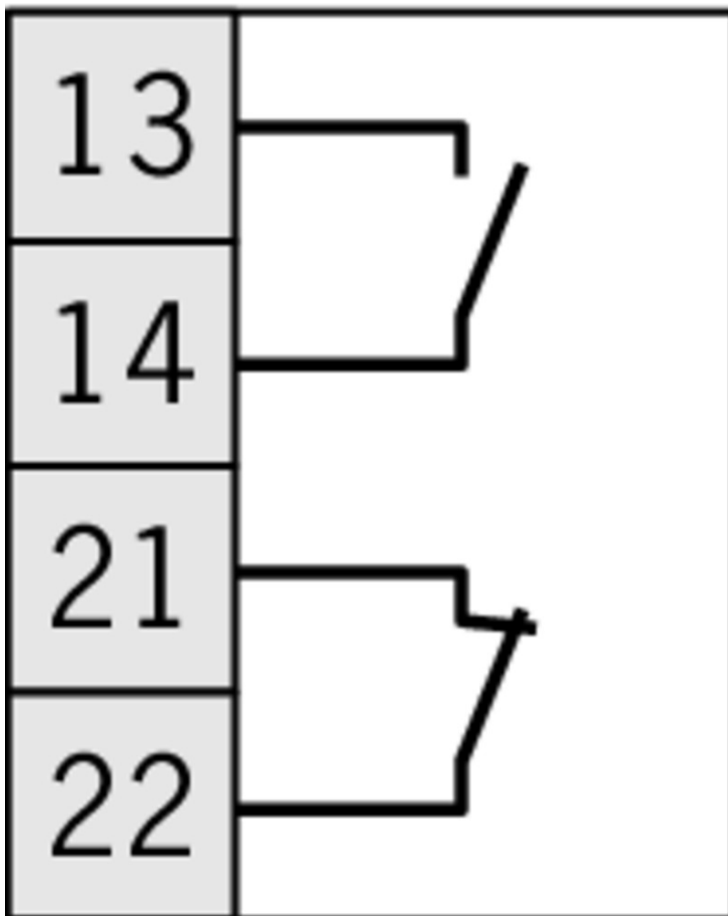


|    |                |
|----|----------------|
| 16 | 240            |
| 14 | 240            |
| 12 | 200            |
| 10 | 170            |
| 8  | 140            |
| 6  | 120            |
| 5  | 105            |
| 4  | 90             |
| 3  | 80             |
| 2  | 70             |
| n  | l <sub>2</sub> |
| 5  |                |

**Legende**

- 1 Operating point
- 2 Free position
- 3 Groove for sealing ring
- 4 LED indicator
- 5 Number of plungers

# ES 502 E



## Instructions

- ✓ Betriebsanleitung Präzisions-Reihengrenztaster RG, GS, GL 12/16 mm

|  | Doc. no. | Version  | Language | Download |
|--|----------|----------|----------|----------|
| Betriebsanleitung Präzisions-Reihengrenztaster<br>RG, GS, GL 12/16 mm          | 032307   | 07-07/16 |          | 1.4 MB   |
| Mode d'emploi Boîtiers multipistes de précision<br>RG, GS, GL 12/16 mm         |          |          |          |          |
| Istruzioni di impiego Finecorsa multipli di<br>precisione RG, GS, GL12/16 mm   |          |          |          |          |
| Operating Instructions Precision Multiple Limit<br>Switches RG, GS, GL12/16 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