13.02.2019

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# Datasheet - TESZ1102/S/35

Safety switch for hinged guards / Hinge safety switch / TESZ





(Minor differences between the printed image and the original product may exist!)

#### **Ordering details**

Product type description Article number EAN Code eCl@ss

#### Approval

Approval



## Classification

Standards B10d Normally-closed contact (NC) B10d Normally open contact (NO) Mission time notice

EN ISO 13849-1 2.000.000 1.000.000 20 Years  $MTTF_{d} = \frac{B_{10d}}{0.1 \times n_{op}}$ n<sub>op</sub> = d<sub>ap</sub> x h<sub>op</sub> x 3600 s/h t <sub>oyole</sub>



TESZ1102/S/35 101030520

27-27-26-01



- Thermoplastic enclosure
- Double-insulated
- · Good resistance to oil and petroleum spirit
- 111,5 mm x 92 mm x 36 mm
- 2 cable entries M 20 x 1.5
- Simple fitting, especially on 35 mm profiles

## **Global Properties**

| Permanent light                         | TESZ  |
|---|---|
| Standards                               | IEC/EN 60947-5-1, BG-GS-ET-15                                     |
| Compliance with the Directives (Y/N) CE | Yes   |
| Materials                               |   |
| - Material of the housings              | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing |
| - Material of the contacts              | Silver  |
| - Material of the hinge                 | Aluminium   |
| Housing coating                         | None  |
| Weight                                  | 316   |
|   |   |

## Mechanical data

| Design of electrical connection | Screw connection  |
|---------------------------------|---|
| Cable entry M 20 x 1.5          | 2   |
| Cable section                   |   |
| - Min. Cable section            | 0,5   |
| - Max. Cable section            | 1   |
| Mechanical life                 | > 1.000.000 operations  |
| Switching frequency             | 120   |
| notice                          | All indications about the cable section are including the conductor ferrules. |
| Positive break angle            | 10  |
| Positive break force            | 1   |
| additional hinge (Y/N)          | No  |
| mounting hinge (Y/N)            | Yes   |
|                                 |   |

#### **Ambient conditions**

| Ambient temperature              |      |
|----------------------------------|------|
| - Min. environmental temperature | -25  |
| - Max. environmental temperature | +65  |
| Protection class                 | IP65 |

## **Electrical data**

| Design of control element       | Normally open contact (NO), Opener (NC)  |
|---------------------------------|--|
| Switching principle             | Creep circuit element                    |
| Number of auxiliary contacts    | 1  |
| Number of safety contacts       | 2  |
| Rated impulse withstand voltage | 2.5                                      |
| Rated insulation voltage        | 250                                      |
| Thermal test current            | 2.5 A                                    |
| Utilisation category            | AC-15: 230 V / 2 A,<br>DC-13: 24 V / 1 A |
| Max. fuse rating                | 2 A gG D-fuse                            |

## ATEX

| Explosion protection categories for gases | None |
|---|------|
| Explosion protected category for dusts    | None |

## Dimensions

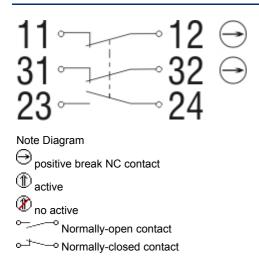
| Dimensions of the sensor                 |       |  |
|--|-------|--|
| - Width of sensor                        | 111.5 |  |
| - Height of sensor                       | 92    |  |
| - Length of sensor                       | 36    |  |
| Suitable for mounting to profile systems | 35    |  |

#### notice

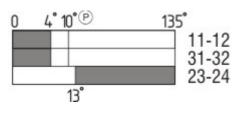
The additional hinge including mounting accessories is also available separately, part number Z 400

The opening angle has been set to 4° in factory.

## Diagram



#### Switch travel diagram



Notes Switch travel diagram

Contact closed Contact open Setting range Break point Positive opening sequence/- angle

VS adjustable range of NO contact VÖ adjustable range of NC contact N after travel

## Ordering code

#### TESZ(1)(2)(3)(4)/(5)(6)/(7)

| (1)     |                                       |
|---------|---------------------------------------|
| without | Material of the hinge Aluminium       |
| X       | Material of the hinge Stainless steel |
| (2)     |                                       |

| R       | mechanische Wiederanlaufsperre                 |
|---------|--|
| (3)     |  |
| 10      | 1 Opener (NC)                                  |
| 102     | 1 Opener (NC) / 1 Normally open contact (NO)   |
| 110     | 2 Opener (NC)                                  |
| 1102    | 2 Opener (NC) / 1 Normally open contact (NO)   |
| 1110    | 3 Opener (NC)                                  |
| (4)     |  |
| without | Screw connection                               |
| ST1     | male connector bottom (M12, 8-pole)            |
| ST2     | Connector above (M12, 8-pole)                  |
| (5)     |  |
| without | with additional hinge                          |
| S       | without additional hinge                       |
| (6)     |  |
| 30      | Suitable for mounting to profile systems 30 mm |
| 35      | Suitable for mounting to profile systems 35 mm |
| without | Suitable for mounting to profile systems 40 mm |
| 45      | Suitable for mounting to profile systems 45 mm |
| (7)     |  |
| without | switching angle Opener (NC) at 4°              |
| 5°      | switching angle Opener (NC) at 5°              |
| 8°      | switching angle Opener (NC) at 8°              |
|         |  |

#### Documents

**Datasheet** (de) 901 kB, 10.09.2012 Code: kteszp01

Datasheet (en) 1 MB, 10.09.2012 Code: gteszp02

**Operating instructions and Declaration of conformity** (de) 331 kB, 09.10.2018 Code: mrl\_tesz\_de

**Operating instructions and Declaration of conformity** (fr) 338 kB, 09.10.2018 Code: mrl\_tesz\_fr

**Operating instructions and Declaration of conformity** (fr) 469 kB, 26.07.2012 Code: mrl\_tesz\_fr

**Operating instructions and Declaration of conformity** (es) 336 kB, 09.10.2018 Code: mrl\_tesz\_es

**Operating instructions and Declaration of conformity** (nl) 374 kB, 09.10.2018 Code: mrl\_tesz\_nl

**Operating instructions and Declaration of conformity** (en) 337 kB, 09.10.2018 Code: mrl\_tesz\_en

**Operating instructions and Declaration of conformity** (cn) 439 kB, 09.10.2018 Code: mrl\_tesz\_cn

Operating instructions and Declaration of conformity (it) 330 kB, 09.10.2018

Code: mrl\_tesz\_it

**Operating instructions and Declaration of conformity** (jp) 438 kB, 09.10.2018 Code: mrl\_tesz\_jp

**Operating instructions and Declaration of conformity** (pl) 371 kB, 09.10.2018 Code: mrl\_tesz\_pl

**Operating instructions and Declaration of conformity** (pt) 342 kB, 09.10.2018 Code: mrl\_tesz\_pt

**BG-test certificate** (de) 1 MB, 31.07.2018 Code: z\_tesp04

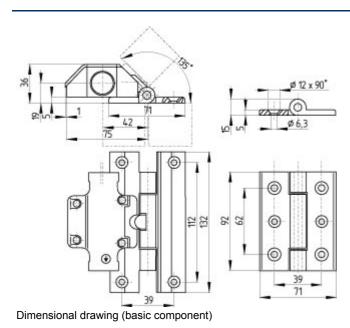
BG-test certificate (en) 1 MB, 31.07.2018 Code: z\_tesp05

CCC certification (cn) 755 kB, 02.08.2016 Code: q\_teszp02

CCC certification (en) 762 kB, 02.08.2016 Code: q\_teszp01

EAC certification (ru) 844 kB, 05.10.2015 Code: q\_6037p17\_ru

#### Images



#### System components

#### Accessories



K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 13.02.2019 - 14:33:52h Kasbase 3.3.0.F.64I