## Datasheet - TESZ1102/S

Safety switch for hinged guards / Hinge safety switch / TESZ





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

- 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 40 mm profiles

### **Ordering details**

Product type description TESZ1102/S
Article number 101029153

EAN code

eCl@ss 27-27-26-01

### **Approval**

Approval



### Classification

Standards

B<sub>10d</sub> Normally-closed contact (NC)

B<sub>10d</sub> Normally open contact (NO)

Mission time

notice

EN ISO 13849-1

2.000.000

1.000.000

20 Years

$$MTTF_d = \frac{B_{10d}}{0.1 \times n_{op}}$$

$$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oxcle}}$$

## **Global Properties**

Product name TESZ

Standards IEC/EN 60947-5-1, BG-GS-ET-15

Compliance with the Directives (Y/N) € €

Materials

- Material of the housings Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

Yes

- Material of the contacts Silver

- Material of the hinge Aluminium
Housing coating None
Weight 280 g

**Mechanical data** 

Design of electrical connection Screw connection

Cable entry M 20 x 1.5

Cable section

Min. Cable section 0,5 mm²
 Max. Cable section 1 mm²

Mechanical life > 1.000.000 operations

Switching frequency max. 120/h

notice All indications about the cable section are including the conductor ferrules.

IP65

Positive break angle 10°
Positive break force 1 N
additional hinge (Y/N) No
mounting hinge (Y/N) Yes

**Ambient conditions** 

Ambient temperature

- Min. environmental temperature  $$-25\ ^{\circ}\text{C}$$  - Max. environmental temperature  $$+65\ ^{\circ}\text{C}$$ 

Protection class

**Electrical data** 

Design of control element Normally open contact (NO), Opener (NC)

Switching principle Creep circuit element

Number of auxiliary contacts1 pieceNumber of safety contacts2 pieceRated impulse withstand voltage Uimp2.5 kVRated insulation voltage Ui250 VThermal test current Ithe2.5 A

Utilisation category AC-15: 230 V / 2 A,

DC-13: 24 V / 1 A 2 A gG D-fuse

Max. fuse rating 2 A gG D-fi

**ATEX** 

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

**Dimensions** 

Dimensions of the sensor

- Width of sensor 111.5 mm

- Height of sensor

92 mm

- Length of sensor

36 mm

Suitable for mounting to profile systems

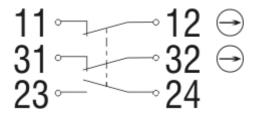
40 mm

### 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



Note Diagram

opositive break NC contact

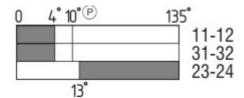




o—\_\_\_o Normally-open contact

o----- Normally-closed contact

## Switch travel diagram



Notes Switch travel diagram

Contact closed

☐Contact open

Setting range

(L) 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

X

(2)

R

(3)

10

102

Material of the hinge Aluminium

Material of the hinge Stainless steel

mechanische Wiederanlaufsperre

1 Opener (NC)

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)

withoutwith additional hingewithout 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)** 

withoutswitching 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) 333 kB, 14.03.2016

Code: mrl\_tesz\_de

Operating instructions and Declaration of conformity (fr)  $469\ kB,\,26.07.2012$ 

Code: mrl\_tesz\_fr

Operating instructions and Declaration of conformity (fr) 337 kB, 29.04.2016

Code: mrl\_tesz\_fr

Operating instructions and Declaration of conformity (es) 335 kB, 06.04.2016

Code: mrl\_tesz\_es

Operating instructions and Declaration of conformity (nl) 339 kB, 02.10.2014

Code: mrl\_tesz\_nl

Operating instructions and Declaration of conformity (en) 339 kB, 14.03.2016

Code: mrl\_tesz\_en

Operating instructions and Declaration of conformity (it) 329 kB, 15.04.2016

Code: mrl\_tesz\_it

Operating instructions and Declaration of conformity (cs) 469 kB, 07.09.2012

Code: mrl\_tesz\_cs

Operating instructions and Declaration of conformity (da) 474 kB, 23.08.2012

Code: mrl\_tesz\_da

Operating instructions and Declaration of conformity (jp) 429 kB, 06.08.2014

Code: mrl\_tesz\_jp

Operating instructions and Declaration of conformity (pl) 371 kB, 15.04.2016

Code: mrl\_tesz\_pl

Operating instructions and Declaration of conformity (pt) 472 kB, 07.09.2012

Code: mrl\_tesz\_pt

BG-test certificate (de) 152 kB, 11.06.2014

Code: z\_tesp04

BG-test certificate (en) 146 kB, 11.06.2014

Code: z\_tesp05

CCC certification (cn) 755 kB, 02.08.2016

Code: q\_teszp02

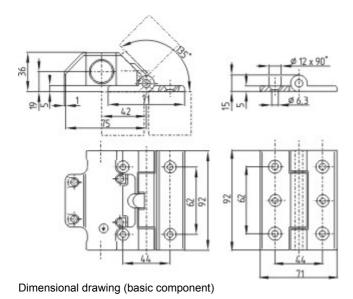
CCC certification (en) 762 kB, 02.08.2016

Code: q\_teszp01

EAC certification (ru) 844 kB, 05.10.2015

Code: q\_6037p17\_ru

## **Images**



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 03.11.2016 - 11:41:36h Kasbase 3.2.5.F.64I