# Datasheet - TESZ110/30

Safety switch for hinged guards / Hinge safety switch / TESZ





- 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

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

## **Ordering details**

Product type description

Article number

EAN code

TESZ110/30 101030504

## **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

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

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

## **Global Properties**

Product name **TESZ** 

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

Compliance with the Directives (Y/N)  $\subset \epsilon$ 

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 462 g

**Mechanical data** 

Design of electrical connection Screw connection

Cable entry M 20 x 1.5

Cable section

- Min. Cable section 0,5 mm<sup>2</sup> - Max. Cable section 1.5 mm<sup>2</sup>

Mechanical life > 1.000.000 operations

Switching frequency max. 120/h

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

IP65

2

Positive break angle Positive break force 1 N additional hinge (Y/N) Yes mounting hinge (Y/N) Yes

**Ambient conditions** 

Ambient temperature

- Min. environmental temperature -25 °C +65 °C - Max. environmental temperature

Protection class

**Electrical data** 

Design of control element Opener (NC)

Creep circuit element Switching principle

Number of auxiliary contacts 0 piece Number of safety contacts 2 piece Rated impulse withstand voltage Uimp 2.5 kV 250 V Rated insulation voltage Ui Thermal test current Ithe 2.5 A

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

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

Max. fuse rating

**ATEX** 

Explosion protection categories for gases None None

Explosion protected category for dusts

**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 30 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



no active

°----- Normally-open contact

o-t--- 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)

without X (2)

R

(1)

(3) 10

102

110 1102

1110

(4)

Material of the hinge Aluminium

Material of the hinge Stainless steel

mechanische Wiederanlaufsperre

1 Opener (NC)

1 Opener (NC) / 1 Normally open contact (NO)

2 Opener (NC)

2 Opener (NC) / 1 Normally open contact (NO)

3 Opener (NC)

without Screw connection

ST1 male connector bottom (M12, 8-pole)
ST2 Connector above (M12, 8-pole)

(5)

withoutwith additional hingeSwithout 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) 390 kB, 17.06.2014

Code: mrl\_tesz\_de

Operating instructions and Declaration of conformity (fr) 340 kB, 15.10.2014

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) 341 kB, 08.08.2014

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)  $391\ kB$ , 17.06.2014

Code: mrl\_tesz\_en

Operating instructions and Declaration of conformity (it) 336 kB, 06.08.2014

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) 409 kB, 11.08.2014

Code: mrl\_tesz\_pl

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

Code: mrl\_tesz\_pt

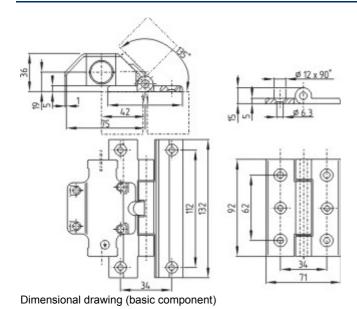
BG-test certificate (de) 152 kB, 11.06.2014

Code: z\_tesp04

BG-test certificate (en) 146 kB, 11.06.2014

Code: z\_tesp05

# **Images**



## **System components**

## **Accessories**



101030511 - additional hinge TESZ/S/30

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 04.12.2014 - 11:44:55h Kasbase 2.2.18.F DBI

