# Datasheet - TESZ1102/S/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 30 mm profiles

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

# **Ordering details**

Product type description TESZ1102/S/30
Article number 101030509

EAN Code

eCl@ss 27-27-26-01

**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

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

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

#### **Global Properties**

Permanent light

Standards

Compliance with the Directives (Y/N)  $\zeta \in$ 

Materials

- Material of the housings

- Material of the contacts - Material of the hinge

Housing coating

Weight

**TESZ** 

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

Yes

Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

Silver

Aluminium

None

316

#### **Mechanical data**

Design of electrical connection

Cable entry M 20 x 1.5

Cable section

- Min. Cable section

- Max. Cable section

Mechanical life

Switching frequency

notice

Positive break angle

Positive break force additional hinge (Y/N)

mounting hinge (Y/N)

Screw connection

2

0,5

> 1.000.000 operations

120

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

10 1

No

Yes

## **Ambient conditions**

Ambient temperature

- Min. environmental temperature

- Max. environmental temperature

Protection class

-25

+65

IP65

# **Electrical data**

Switching principle

Design of control element

Number of auxiliary contacts

Number of safety contacts Rated impulse withstand voltage

Rated insulation voltage

Thermal test current Utilisation category

Max. fuse rating

Creep circuit element

Normally open contact (NO), Opener (NC)

1 2

2.5 250

2.5 A

AC-15: 230 V / 2 A, DC-13: 24 V / 1 A

2 A gG D-fuse

**ATEX** 

Explosion protection categories for gases

Explosion protected category for dusts

None

None

**Dimensions** 

Dimensions of the sensor

- Width of sensor 111.5 - Height of sensor 92 - Length of sensor 36 30

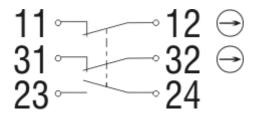
Suitable for mounting to profile systems

# 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

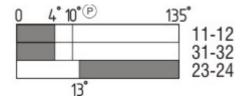
 $^{\scriptsize\textcircled{\scriptsize{1}}}_{\rm active}$ 

no active

o-\_\_-o Normally-open contact

o-t--- Normally-closed contact

# Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

 $^{\textcircled{L}}_{\text{Break point}}$ 

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)

X

without

Material of the hinge Aluminium 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 without additional hinge S (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°

switching angle Opener (NC) at 8°

#### **Documents**

8°

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

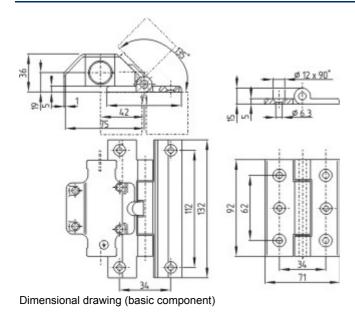
CCC certification (en) 762 kB, 02.08.2016

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 - 14:33:51h Kasbase 3.3.0.F.64I