


## Datasheet - TESZ1102/30

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	TESZ1102/30
Article number	101030045
EAN Code	
eCl@ss	27-27-26-01

### Approval

Approval




### Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	2.000.000
B10d Normally open contact (NO)	1.000.000
Mission time	20 Years
notice	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$

## Global Properties

---

Permanent light	TESZ
Standards	IEC/EN 60947-5-1, BG-GS-ET-15
Compliance with the Directives (Y/N) 	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	468

## 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)	Yes
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, 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

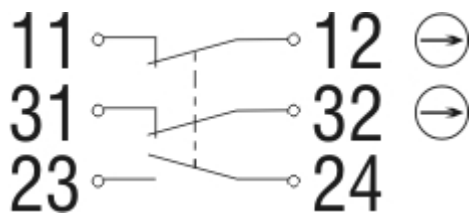
- Width of sensor	111.5
- Height of sensor	92
- Length of sensor	36
Suitable for mounting to profile systems	30

### 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.

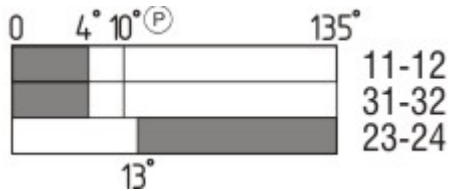
### Diagram



#### Note Diagram

- positive break NC contact
- active
- no active
- Normally-open contact
- Normally-closed contact

### 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 Wiederanlaufsperr
(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)	
<i>without</i>	Screw connection
ST1	male connector bottom (M12, 8-pole)
ST2	Connector above (M12, 8-pole)
(5)	
<i>without</i>	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
<i>without</i>	Suitable for mounting to profile systems 40 mm
45	Suitable for mounting to profile systems 45 mm
(7)	
<i>without</i>	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

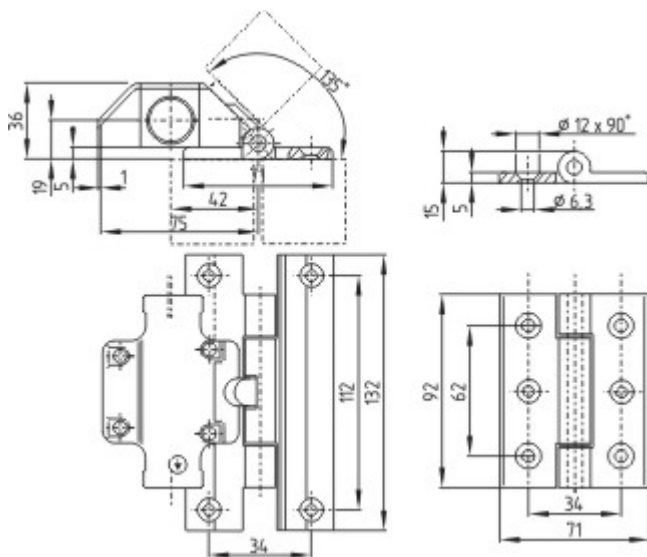
Code: q\_teszp01

**EAC certification (ru)** 844 kB, 05.10.2015

Code: q\_6037p17\_ru

## Images

---



Dimensional drawing (basic component)

---

## 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 thoroughly. Technical modifications and errors excepted.

Generiert am 13.02.2019 - 14:33:47h Kasbase 3.3.0.F.64I