13.02.2019

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# Datasheet - TESZ102/45

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	TESZ102/45
Article number	101030524
EAN Code	
eCl@ss	27-27-26-01

#### Approval

Approval



Thermoplastic enclosure
Double-insulated

111,5 mm x 92 mm x 36 mm
2 cable entries M 20 x 1.5

· Good resistance to oil and petroleum spirit

Simple fitting, especially on 45 mm profiles

## 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<sub>d</sub> = $\frac{B_{100}}{0.1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oycle}}$

# **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	462

### 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	1.5
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	1
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

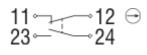
Dimensions of the sensor	
- Width of sensor	111.5
- Height of sensor	92
- Length of sensor	36
Suitable for mounting to profile systems	45

#### notice

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

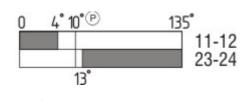
The opening angle has been set to 4° in factory.

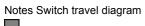
#### Diagram

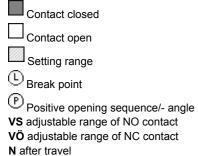


Note Diagram → positive break NC contact active no active Normally-open contact Normally-closed contact

### Switch travel diagram







## 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)
(3) 10 102	1 Opener (NC) 1 Opener (NC) / 1 Normally open contact (NO)

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 $4^\circ$
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

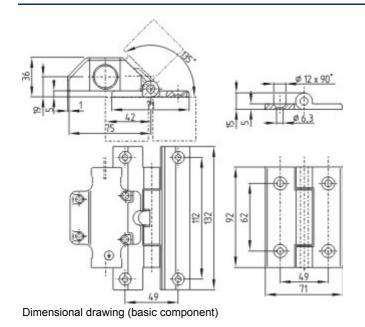
BG-test certificate (en) 1 MB, 31.07.2018 Code: z\_tesp05

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



101028411 - additional hinge TES/S/45

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