


## Datasheet - TESZ10/45

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 45 mm profiles

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

### Ordering details

Product type description	TESZ10/45
Article number	101030523
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	456

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	Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	0
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

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



- 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)

without

ST1

ST2

Screw connection

male connector bottom (M12, 8-pole)

Connector above (M12, 8-pole)

(5)

without

S

with additional hinge

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

5°

switching angle Opener (NC) at 4°

switching angle Opener (NC) at 5°

8°

switching angle Opener (NC) at 8°

## Documents

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**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

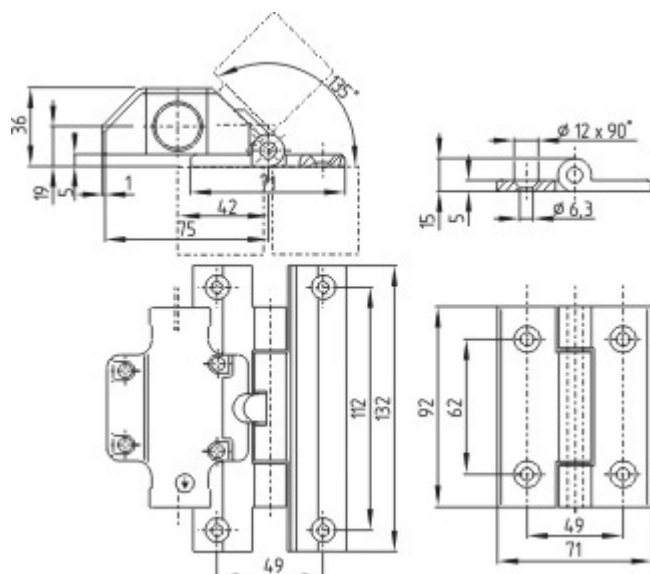
Code: q\_teszp01

## EAC certification (ru) 844 kB, 05.10.2015

Code: q\_6037p17\_ru

## Images

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Dimensional drawing (basic component)

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## System components

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### Accessories



101028411 - additional hinge TES/S/45