

Datasheet - TESFA/CC/180

Safety switch for hinged guards / Hinge safety switch / TESH



- Metal enclosure
- Good resistance to oil and petroleum spirit
- For left or right hinged doors
- 141 mm x 115 mm x 21,5 mm
- Simple mounting, suitable for all conventional profile systems (30 ... 60 mm)
- 2 cable entries M 16 x 1.5
- with fixed switching angle

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

Ordering details

Product type description	TESFA/CC/180
Article number	101182702
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	TESF
Standards	EN 60947-5-1 / BG-GS-ET-15
Compliance with the Directives (Y/N)	Yes
Materials	

- Material of the housings	zinc die-cast
- Material of the contacts	Silver-nickel alloy 10
Enclosure color	Black ■
Weight	840

Mechanical data

Design of electrical connection	Spring pulley connection
Cable section	
- Min. Cable section	0,5
- Max. Cable section	1
Mechanical life	> 1.000.000 operations
Switching frequency	1200/h
notice	All indications about the cable section are including the conductor ferrules.
Opening angle	180°
Positive break angle	10°
additional hinge (Y/N)	Yes
Adjustable switching angle (Y/N)	No
Alignment aid (Y/N)	Yes
Mounting inside (Y/N)	Yes
Mounting outside (Y/N)	No

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-25 °C
- Max. environmental temperature	+65 °C
Protection class	IP65

Electrical data

Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	2
Number of safety contacts	2
Rated impulse withstand voltage U_{imp}	2.5 kV
Rated insulation voltage U_i	250 V
Thermal test current I_{the}	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
Switching of low voltages	1 / 5

ATEX

Explosion protection categories for gases	None
Explosion protected category for dusts	None

Dimensions

Dimensions of the sensor	
- Width of sensor	141 mm
- Height of sensor	115 mm
- Length of sensor	21.5 mm

notice

Closed guard device = 0° in contact switch travel diagrams.

The factory-set switching angle is 3°.

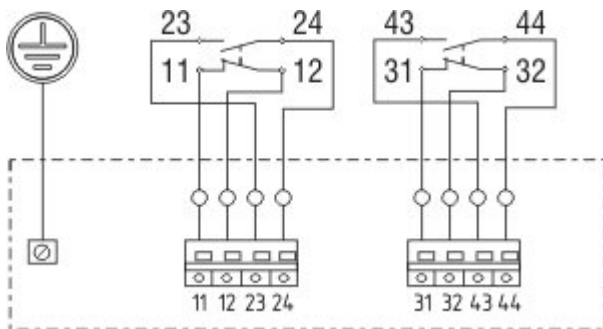
The positive break angle is 5°.

Until the limit of the mechanical life has been reached the angle can increase up to 8° under normal wear-out conditions.

Included in delivery

additional hinge

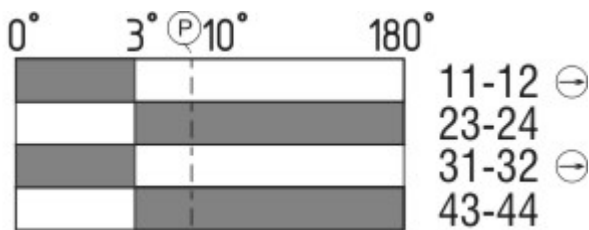
Diagram



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

TESF (1)/(2)/(3)/(4)/(5)

(1)

<i>without</i>	without Alignment aid
A	with Alignment aid
(2)	
<i>without</i>	with additional hinge
S	without additional hinge
(3)	
<i>without</i>	Screw connection
CC	EnSION spring connection
ST24	Connector 24 V
(4)	
.1	male connector bottom
.2	Connector above
(5)	
0	Mounted head-on
180	Mounting inside
U	for setting by the customer

Documents

Operating instructions and Declaration of conformity (de) 699 kB, 09.10.2018

Code: mrl_tesf_de

Operating instructions and Declaration of conformity (cn) 648 kB, 09.10.2018

Code: mrl_tesf_cn

Operating instructions and Declaration of conformity (en) 565 kB, 09.10.2018

Code: mrl_tesf_en

Operating instructions and Declaration of conformity (nl) 538 kB, 09.10.2018

Code: mrl_tesf_nl

Operating instructions and Declaration of conformity (fr) 551 kB, 09.10.2018

Code: mrl_tesf_fr

Operating instructions and Declaration of conformity (it) 549 kB, 09.10.2018

Code: mrl_tesf_it

Operating instructions and Declaration of conformity (jp) 642 kB, 09.10.2018

Code: mrl_tesf_jp

Operating instructions and Declaration of conformity (da) 554 kB, 09.10.2018

Code: mrl_tesf_da

Operating instructions and Declaration of conformity (pl) 571 kB, 09.10.2018

Code: mrl_tesf_pl

Operating instructions and Declaration of conformity (es) 543 kB, 09.10.2018

Code: mrl_tesf_es

BG-test certificate (en) 173 kB, 07.03.2016

Code: z_tesp02

BG-test certificate (de) 184 kB, 07.03.2016

Code: z_tesp01

CCC certification (cn) 499 kB, 15.08.2016

Code: q_tesfp02

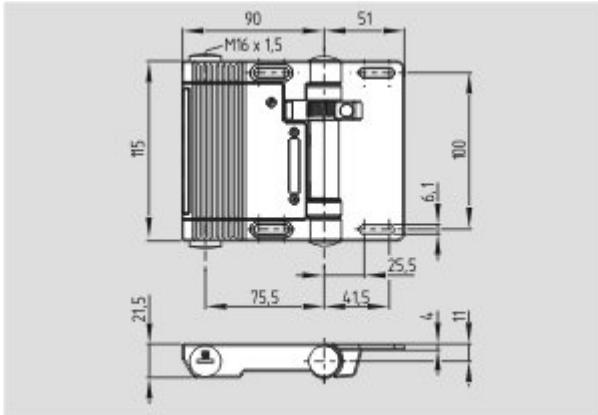
CCC certification (en) 500 kB, 15.08.2016

Code: q_tesfp01

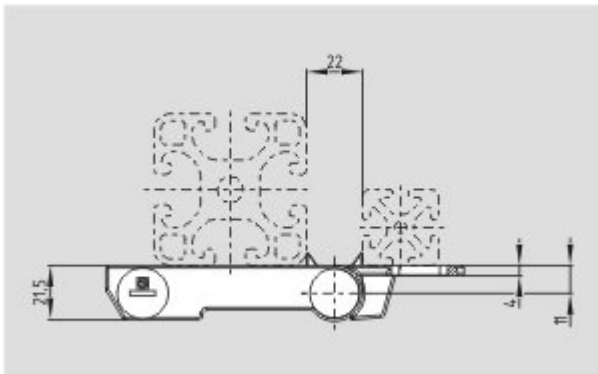
EAC certification (ru) 844 kB, 05.10.2015

Code: q_6037p17_ru

Images



Dimensional drawing (basic component)



Dimensional drawing (miscellaneous)

System components

Accessories

101180239 - Tooling reference TESF-14

