Datasheet - TV8S 335-03Z

Safety switch for hinged guards / Hinge safety switch / TV.S 335

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

- Metal enclosure
- Good resistance to oil and petroleum spirit
- Actuator heads can be repositioned by 4 x 90°
- 40,5 mm x 107 mm x 65,3 mm
- Actuator shaft can be turned 360°
- 1 Cable entry M 20 x 1.5

Ordering details

Product type description	TV8S 335-03Z
Article number	101179251
EAN Code	4030661311692
eCl@ss	27-27-26-01

Approval

Approval	BG USA/CAN CCC EAC

Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	20.000.000
Mission time	20 Years
notice	

$$MTTF_d = \frac{B_{10d}}{0{,}1 \times n_{op}}$$

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

Global Properties

Permanent light	TV.S 335
Standards	EN 60947-5-1, BG-GS-ET-15
Compliance with the Directives (Y/N) CE	Yes
Materials	
- Material of the housings	Aluminium
- Material of the contacts	Silver
Housing coating	painted
Weight	280

Mechanical data

Design of electrical connection	Screw connection
Cable entry M 20 x 1.5	1
Cable section	
- Min. Cable section	0,75
- Max. Cable section	2.5
Mechanical life	> 1.000.000 operations
Switching frequency	max. 1000 /h
notice	
Design of actuating element	Other
Shaft bore	Ø 8
Positive break angle	7 °
Positive break torque	60 Ncm

Ambient conditions

Ambient temperature	
- Min. environmental temperature	−25 °C
- Max. environmental temperature	+70 °C
Protection class	IP67

Electrical data

Design of control element	Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	0
Number of safety contacts	3
Rated impulse withstand voltage U_{imp}	6 kV
Rated insulation voltage U_i	500 V
Thermal test current I_{the}	10 A
Utilisation category	AC-15: 230 V / 4 A, DC-13: 24 V / 4 A
Max. fuse rating	6 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	40.5 mm
- Height of sensor	107 mm
- Length of sensor	65.3 mm

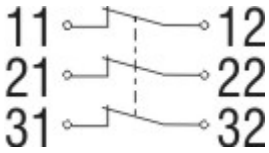
notice

Setting assistance	Grub screw for location, shaft pre-drilled for pin

Universal joint available to compensate for axial displacement (only for shaft bore 10 mm)

By turning the head in 90° steps, 8 actuating planes are possible. A Torx T10 screwdriver is needed for this purpose.
Even when the screw is removed, the head is self-retaining. The switch can still not be tampered.

Diagram



Note Diagram

positive break NC contact

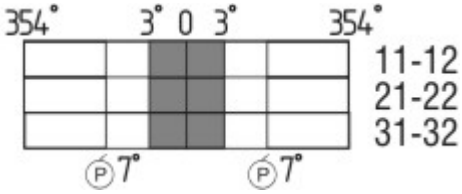
active

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

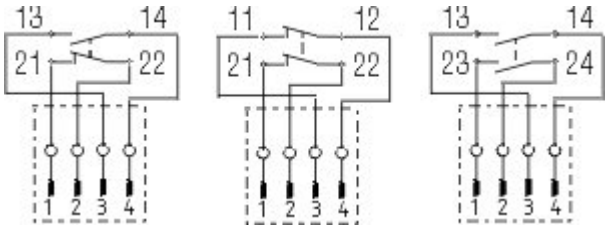
VS adjustable range of NO contact
VÖ adjustable range of NC contact
N after travel

Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.
Order example: TV8S 335-03Z**-NPT**

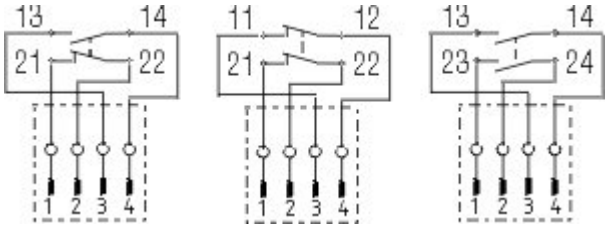
...**-NPT**	Cable entry NPT 1/2“

...**-ST**



M12 connector with A-coding
Rated impulse withstand voltage U_{imp}: 0,8 kV
Rated insulation voltage U_i: 50 V
Operating current I_e: AC-15: 50 V / 4 A
Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.

...**-2310**



M12 connector with B-coding
Rated impulse withstand voltage U_{imp}: 0,8 kV
Rated insulation voltage U_i: 50 V
Operating current I_e: AC-15: 50 V / 4 A
Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.

Ordering code

TV(1)S 335-(2)Z-(3)

(1)	
8	Shaft bore Ø 8 mm
10	Shaft bore Ø 10 mm
(2)	
02	2 Opener (NC)
03	3 Opener (NC)
11	1 Normally open contact (NO) / 1 Opener (NC)
12	1 Normally open contact (NO) / 2 Opener (NC)
(3)	
without	Cable entry M20
NPT	cable entry NPT 1/2"
ST	M12 connector with A-coding *(Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.)*
ST-2310	M12 connector with B-coding (Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.)
G24	with LED *(only available for version with one NO and one NC contact.)*

Documents

Operating instructions and Declaration of conformity (de) 285 kB, 29.03.2017
Code: mrl_tvs335-355_de

Operating instructions and Declaration of conformity (fr) 285 kB, 11.05.2017
Code: mrl_tvs335-355_fr

Operating instructions and Declaration of conformity (es) 281 kB, 03.05.2017
Code: mrl_tvs335-355_es

Operating instructions and Declaration of conformity (jp) 420 kB, 29.11.2017
Code: mrl_tvs335-355_jp

Operating instructions and Declaration of conformity (nl) 312 kB, 05.07.2018
Code: mrl_tvs335-355_nl

Operating instructions and Declaration of conformity (it) 281 kB, 26.06.2017
Code: mrl_tvs335-355_it

Operating instructions and Declaration of conformity (en) 281 kB, 29.03.2017
Code: mrl_tvs335-355_en

Operating instructions and Declaration of conformity (da) 263 kB, 18.06.2013
Code: mrl_tvs335-355_da

Operating instructions and Declaration of conformity (pt) 283 kB, 10.05.2017
Code: mrl_tvs335-355_pt

Operating instructions and Declaration of conformity (pl) 313 kB, 17.07.2017
Code: mrl_tvs335-355_pl

BG-test certificate (en) 166 kB, 09.12.2015
Code: z_tvsp02

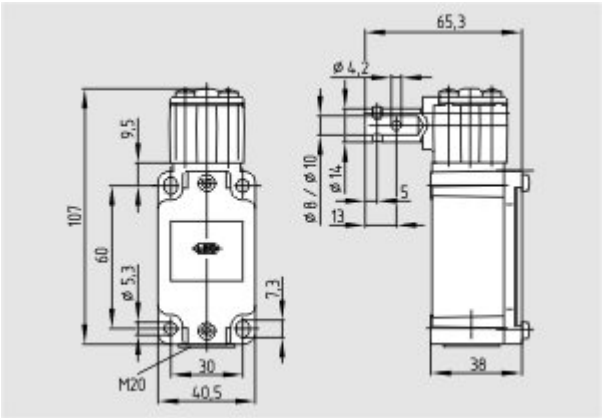
BG-test certificate (de) 160 kB, 09.12.2015
Code: z_tvsp01

CCC certification (en) 577 kB, 12.12.2006
Code: q_349p02

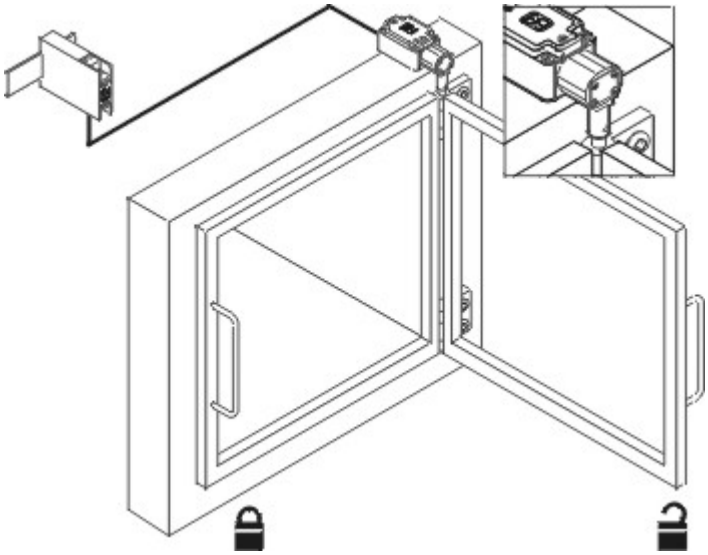
CCC certification (cn) 609 kB, 12.12.2006
Code: q_349p03

EAC certification (ru) 844 kB, 05.10.2015
Code: q_6037p17_ru

Images



Dimensional drawing (basic component)



Application