

Datasheet - TV8S 335-11Z

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



Preferred typ



- 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
- LED version available

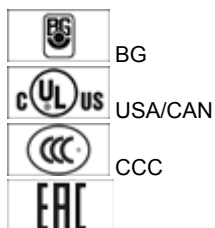
(Minor differences between the printed image and the original product may exist!)

Ordering details

| | |
|--------------------------|---------------|
| Product type description | TV8S 335-11Z |
| Article number | 101155141 |
| EAN code | 4030661175492 |
| eCl@ss | 27-27-26-01 |

Approval

Approval



Classification

| | |
|------------------------|----------------|
| Standards | EN ISO 13849-1 |
| B10d Opener (NC) | 20.000.000 |
| Mission time notice | 20 Years |

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

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

Global Properties

| | |
|------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Product name | TV.S 335 |
| Standards | EN 60947-5-1, BG-GS-ET-15 |
| Compliance with the Directives (Y/N)  | Yes |
| Materials | |
| - Material of the housings | Aluminium |
| - Material of the contacts | Silver |
| Housing coating | painted |
| Weight | 265 g |

Mechanical data

| | |
|---------------------------------|-------------------------------------------------------------------------------|
| Design of electrical connection | Screw connection |
| Cable entry M 20 x 1.5 | 1 |
| Cable section | |
| - Min. Cable section | 0,75 mm ² |
| - Max. Cable section | 2.5 mm ² |
| Mechanical life | > 1.000.000 operations |
| Switching frequency | max. 1000/h |
| notice | All indications about the cable section are including the conductor ferrules. |
| Design of actuating element | Other |
| Shaft bore | Ø 8 mm |
| 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 | Normally open contact (NO), Opener (NC) |
| Switching principle | Creep circuit element |
| Number of auxiliary contacts | 1 piece |
| Number of safety contacts | 1 piece |
| 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

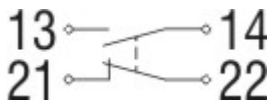
Setting assistance

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.

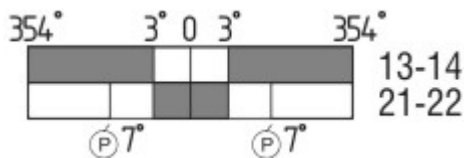
Diagram



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

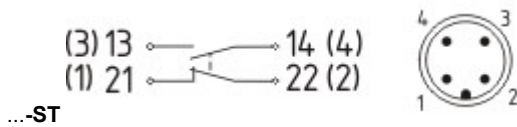
The applicable ordering suffix is added at the end of the part number of the safety switch.

Order example: TV8S 335-11Z-NPT

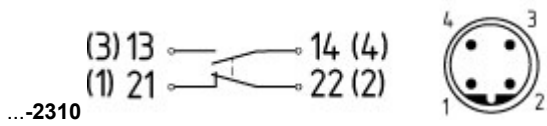
...-NPT

Cable entry NPT 1/2"

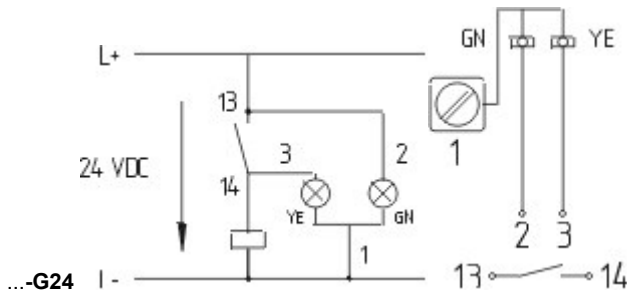
M12 connector with A-coding
Rated impulse withstand voltage U_{imp} : 0,8 kV



Rated insulation voltage U_i : 50 V
 Rated operating voltage U_e : 50 V
 Operating current I_e : 4 A
 Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.



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



only available for version with one NO and one NC contact.
 Protected against incorrect polarity and voltage spikes.

Ordering code

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

(1)

8

Shaft bore \varnothing 8 mm

10

Shaft bore \varnothing 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) 281 kB, 05.01.2016

Code: mrl_tvs335-355_de

Operating instructions and Declaration of conformity (fr) 280 kB, 28.01.2016

Code: mrl_tvs335-355_fr

Operating instructions and Declaration of conformity (es) 276 kB, 28.01.2016

Code: mrl_tvs335-355_es

Operating instructions and Declaration of conformity (jp) 792 kB, 22.09.2011

Code: mrl_tvs335-355_jp

Operating instructions and Declaration of conformity (nl) 456 kB, 04.05.2011

Code: mrl_tvs335-355_nl

Operating instructions and Declaration of conformity (it) 277 kB, 28.01.2016

Code: mrl_tvs335-355_it

Operating instructions and Declaration of conformity (en) 277 kB, 05.01.2016

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) 298 kB, 07.11.2012

Code: mrl_tvs335-355_pt

Operating instructions and Declaration of conformity (pl) 309 kB, 28.01.2016

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

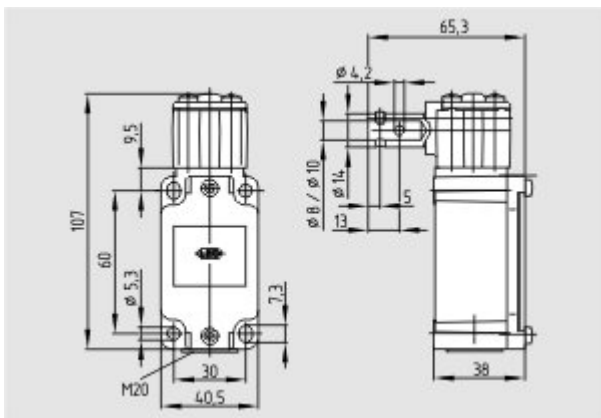
CCC certification (cn) 609 kB, 12.12.2006

Code: q_349p03

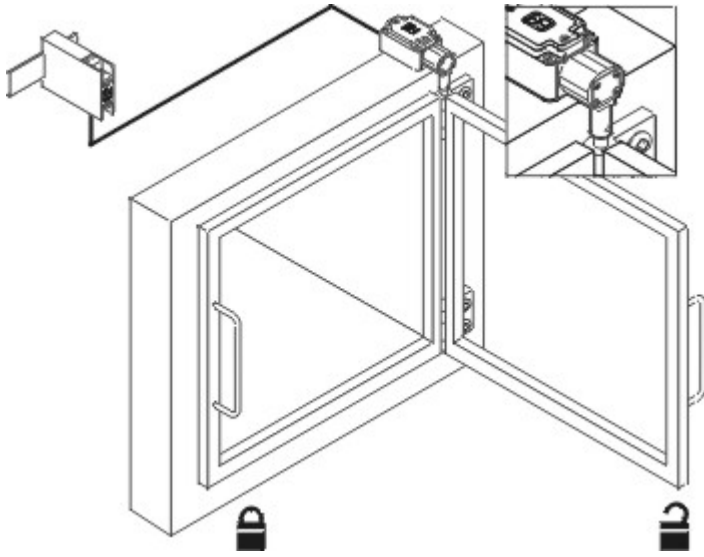
EAC certification (ru) 844 kB, 05.10.2015

Code: q_6037p17_ru

Images



Dimensional drawing (basic component)



Application

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 19.07.2016 - 22:32:15h Kasbase 3.2.4.F.64I