

Datasheet - EX-TV10S 335-03Z-3D

Safety switch for hinged guards / EX-TV.S 335



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

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

Ordering details

| | |
|--------------------------|---------------------|
| Product type description | EX-TV10S 335-03Z-3D |
| Article number | EX-TV10S 335-03Z |
| EAN Code | |
| eCl@ss | 27-27-26-01 |

Approval


Approval



Classification

| | |
|-----------------------------------|--|
| Standards | ISO 13849-1 |
| B10d Normally-closed contact (NC) | 20.000.000 |
| Mission time | 20 Years |
| notice | $MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$ |

Global Properties

| | |
|--|--|
| Permanent light | EX-TV.S 335 |
| Standards | EN 60947-5-1, BG-GS-ET-15, EN 60079-0, EN 60079-31 |
| Compliance with the Directives (Y/N)  | Yes |
| Materials | |
| - Material of the housings | light alloy die-casting |
| - Material of the actuator | stainless steel, 1.4301 |
| - Material of the contacts | Silver |
| Housing coating | painted |
| Weight | |

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 | 1000 |
| notice | All indications about the cable section are including the conductor ferrules. |
| Design of actuating element | Other |
| Shaft bore | Ø 10 |
| Positive break angle | 7 |
| Positive break torque | 60 |
| Positive break force | 5 N for each NC contact fitted |
| positive break travel | 10.7 |
| Impact energy | 4 |
| Actuating speed | max. 1 m/s |

Ambient conditions

| | |
|----------------------------------|------|
| Ambient temperature | |
| - Min. environmental temperature | -20 |
| - Max. environmental temperature | +60 |
| 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 | 6 |
| Rated insulation voltage | 500 |
| Thermal test current | 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

| | |
|---|--------------------------------|
| EX-marking | EX II 3D Ex tc IIIC T90°C Dc X |
| Explosion protection categories for gases | None |

| | |
|--|---------------------------------|
| Explosion protection Zones for gases | None |
| Explosion protected category for dusts | ATEX dust ex-protection, Cat. 3 |
| Explosion protection Zones for dusts | 22 |

Dimensions

| | |
|--------------------------|------|
| Dimensions of the sensor | |
| - Width of sensor | 40.5 |
| - Height of sensor | 107 |
| - Length of sensor | 65.3 |

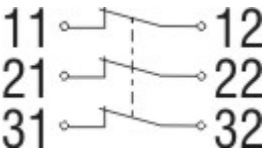
notice

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)

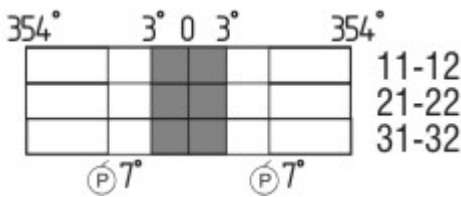
By turning the head in 90° steps, 8 actuating planes are possible. A Torx T10 screwdriver is needed for this purpose. Even when the screw is removed, the head is self-retaining. The switch can still not be tampered.

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 code

EX-TV(1)S 335-(2)

| | |
|------------|--|
| (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) |

Documents

Operating instructions and Declaration of conformity (de) 259 kB, 17.11.2017
Code: mrl_ex-tvs335_de

Operating instructions and Declaration of conformity (pl) 321 kB, 17.01.2018
Code: mrl_ex-tvs335_pl

Operating instructions and Declaration of conformity (nl) 300 kB, 17.01.2018
Code: mrl_ex-tvs335_nl

Operating instructions and Declaration of conformity (it) 300 kB, 17.01.2018
Code: mrl_ex-tvs335_it

Operating instructions and Declaration of conformity (es) 302 kB, 17.01.2018
Code: mrl_ex-tvs335_es

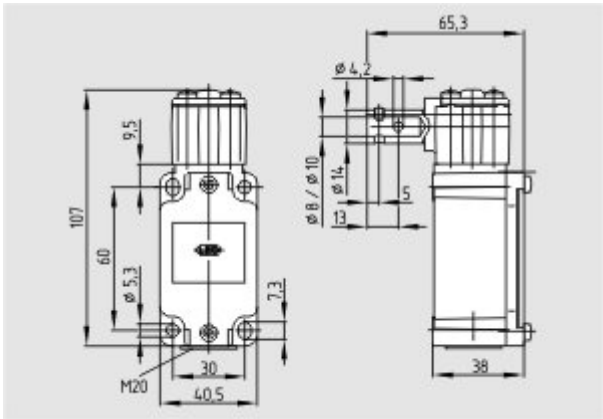
Operating instructions and Declaration of conformity (en) 295 kB, 17.11.2017
Code: mrl_ex-tvs335_en

Operating instructions and Declaration of conformity (fr) 306 kB, 17.01.2018
Code: mrl_ex-tvs335_fr

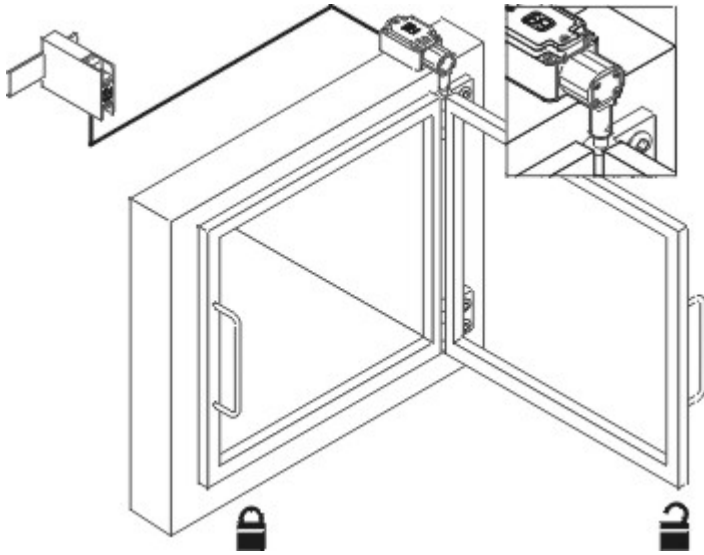
Operating instructions and Declaration of conformity (jp) 505 kB, 05.07.2011
Code: mrl_ex-tvs335_jp

Operating instructions and Declaration of conformity (pt) 305 kB, 17.01.2018
Code: mrl_ex-tvs335_pt

Images



Dimensional drawing (basic component)



Application

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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