

Datasheet - T4C 235-02Z-ST

Safety switch for hinged guards / Flap safety switches / T.C 235 / T.C 235 Swing-door version



- Metal enclosure
- Good resistance to oil and petroleum spirit
- 30 mm x 88,5 mm x 30 mm
- Actuator heads can be repositioned by 4 x 90°
- Connector M12 x 1, 4-pole

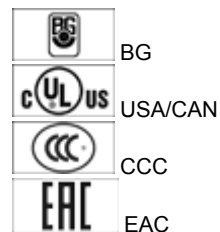
(Minor differences between the printed image and the original product may exist!)

Ordering details

| | |
|--------------------------|----------------|
| Product type description | T4C 235-02Z-ST |
| Article number | T4C 235-02Z-ST |
| EAN Code | |
| eCl@ss | 27-27-26-01 |

Approval

Approval




Classification

| | |
|-----------------------------------|----------------|
| Standards | EN ISO 13849-1 |
| B10d Normally-closed contact (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

| | |
|--|------------------------------|
| Permanent light | T.C 235 Pendeltürenauführung |
| 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 actuator | Stainless steel |
| - Material of the contacts | Silver |
| Housing coating | painted |

Mechanical data

| | |
|---------------------------------|------------------------|
| Design of electrical connection | Connector M12 |
| Mechanical life | > 1.000.000 operations |
| Switching frequency | max. 5000 /h |
| Design of actuating element | Swivel lever |
| Opening angle | 2 x 90 ° |
| Positive break angle | 12.5 ° |
| Positive break torque | 18.5 Ncm |
| actuator | 78 mm |

Ambient conditions

| | |
|----------------------------------|--------|
| Ambient temperature | |
| - Min. environmental temperature | -30 °C |
| - Max. environmental temperature | +80 °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 | 2 |
| Rated impulse withstand voltage U_{imp} | 0,8 kV |
| Rated insulation voltage U_i | 50 V |
| Thermal test current I_{the} | 10 A |
| Utilisation category | AC-15: 50 V / 4 A, DC-13: 24 V / 1 A |
| Max. fuse rating | 6 A gG D-fuse |
| notice | Caution! The versions with connector may only be used in PELV circuits to EN 60204-1. |

ATEX

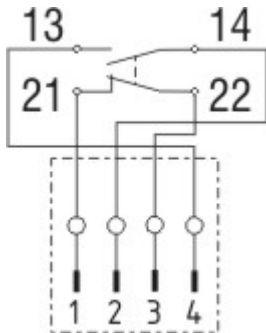
| | |
|---|------|
| Explosion protection categories for gases | None |
| Explosion protected category for dusts | None |

Dimensions

Dimensions of the sensor

| | |
|--------------------|-----|
| - Width of sensor | 30 |
| - Height of sensor | 161 |
| - Length of sensor | 30 |

Diagram



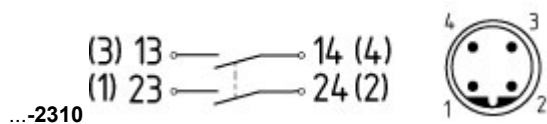
Note Diagram

- positive break NC contact
- active
- no active
- Normally-open contact
- Normally-closed contact

Ordering suffix

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

Order example: T4C 235-02Z-ST-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

T(1)C 235-(2)Z-(3)

(1)

3

4

5

(2)

01

02

11

(3)

without

ST

ST-2310

left-hand model

Swing-door version

right-hand model

1 Opener (NC)

2 Opener (NC)

1 Normally open contact (NO) / 1 Opener (NC)

Cable entry M20

M12 connector with A-coding (Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.)

M12 connector with B-coding (Caution! The versions with connector may

Documents

Operating instructions and Declaration of conformity (pl) 317 kB, 17.07.2017

Code: mrl_tc235_236_pl

Operating instructions and Declaration of conformity (it) 263 kB, 10.05.2017

Code: mrl_tc235_236_it

Operating instructions and Declaration of conformity (pt) 283 kB, 13.04.2017

Code: mrl_tc235_236_pt

Operating instructions and Declaration of conformity (es) 282 kB, 03.05.2017

Code: mrl_tc235_236_es

Operating instructions and Declaration of conformity (jp) 378 kB, 09.10.2017

Code: mrl_tc235_236_jp

Operating instructions and Declaration of conformity (nl) 314 kB, 05.07.2018

Code: mrl_tc235_236_nl

Operating instructions and Declaration of conformity (en) 279 kB, 28.03.2017

Code: mrl_tc235_236_en

Operating instructions and Declaration of conformity (de) 267 kB, 28.03.2017

Code: mrl_tc235_236_de

Operating instructions and Declaration of conformity (fr) 286 kB, 17.05.2017

Code: mrl_tc235_236_fr

BG-test certificate (de) 140 kB, 02.10.2015

Code: z_tc2p01

BG-test certificate (en) 140 kB, 02.10.2015

Code: z_tc2p02

CCC certification (cn) 4 MB, 11.04.2018

Code: q_235p02

CCC certification (en) 4 MB, 27.10.2017

Code: q_235p01

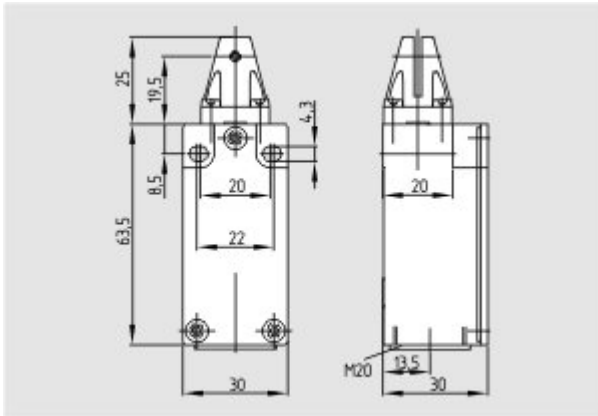
EAC certification (ru) 844 kB, 05.10.2015

Code: q_6037p17_ru

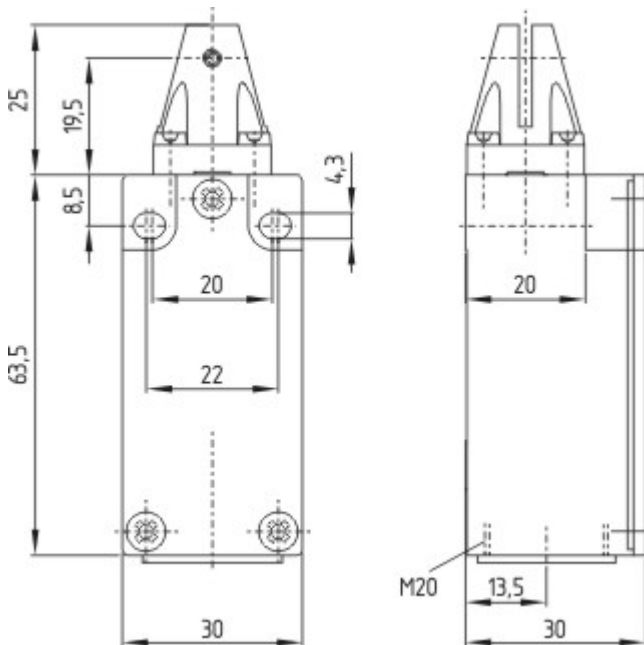
Images



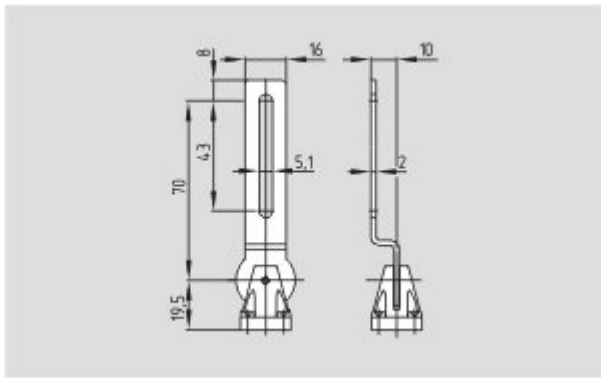
Product photo



Dimensional drawing (basic component)



Dimensional drawing (basic component)



Dimensional drawing (miscellaneous)

System components

Connector



S-K4M12

- Connector without cable
- 4-pole



A-K4M12

- Pre-wired cable
- 4-pole

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

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