

## Datasheet - T5C 235-11Z

Safety switch for hinged guards / Flap safety switches / T.C 235 / T.C 235 right-hand model



- 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°
- 1 M 20 x 1.5 cable entries

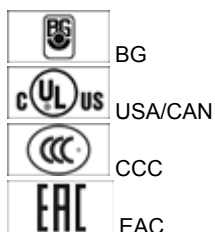
(Minor differences between the printed image and the original product may exist!)

### Ordering details

Product type description	T5C 235-11Z
Article number	101154219
EAN Code	4030661171562
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

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Permanent light	T.C 235 Rechtsausführung
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
Weight	190

## Mechanical data

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Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	0,75
- Max. Cable section	2.5
Mechanical life	> 1.000.000 operations
Switching frequency	max. 5000 /h
notice	All indications about the cable section are including the conductor ferrules.
Design of actuating element	Swivel lever
Opening angle	180 °
Positive break angle	12.5 °
Positive break torque	18.5 Ncm
actuator	78 mm

## Ambient conditions

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Ambient temperature	
- Min. environmental temperature	-30 °C
- Max. environmental temperature	+80 °C
Protection class	IP67

## Electrical data

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Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	1
Number of safety contacts	1
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 / 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.

Explosion protection categories for gases  
Explosion protected category for dusts

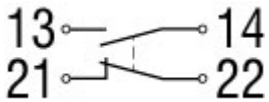
None  
None

## Dimensions

Dimensions of the sensor

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

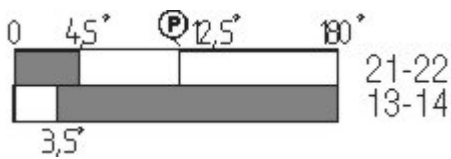
## Diagram



Note Diagram

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

## Switch travel diagram



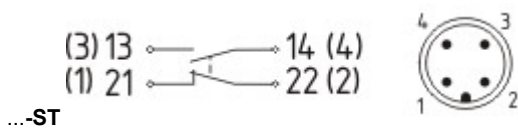
Notes Switch travel diagram

- 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: T5C 235-11Z-**ST**



...-**ST**

M12 connector with A-coding

Rated impulse withstand voltage  $U_{imp}$ : 0,8 kV

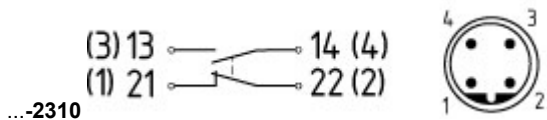
Rated insulation voltage  $U_i$ : 50 V

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.

## Ordering code

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

(1)

3 left-hand model  
 4 Swing-door version  
 5 right-hand model

(2)

01 1 Opener (NC)  
 02 2 Opener (NC)  
 11 1 Normally open contact (NO) / 1 Opener (NC)

(3)

without Cable entry M20  
 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.*)

## 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

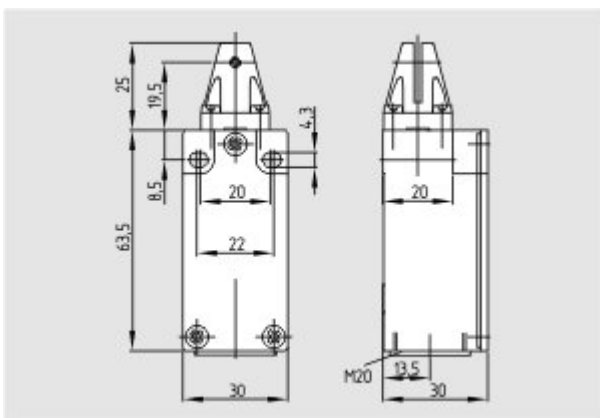
## Images

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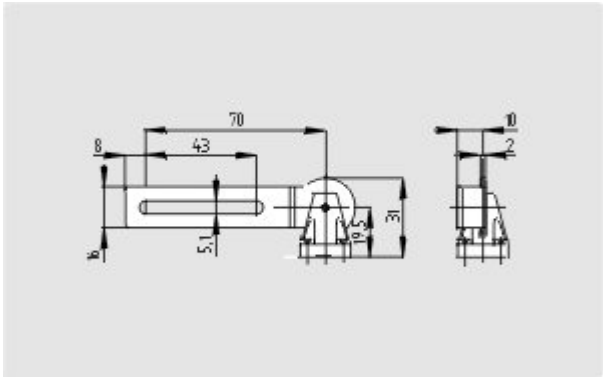
Product photo

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Dimensional drawing (basic component)

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Dimensional drawing (miscellaneous)

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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 13.02.2019 - 14:31:10h Kasbase 3.3.0.F.64I