# Datasheet - TV10S 500L-33Z

Safety switch for hinged guards / Hinge safety switch / T.V10S 500





- Metal enclosure
- · Good resistance to oil and petroleum spirit
- Actuator shaft can be turned 360°
- 110 mm x 110 mm x 84 mm
- 3-channel, alternating monitoring
- 2 Cable entry M 20 x 1.5
- Universal joint to compensate axial displacement

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

## **Ordering details**

Product type description

Article number

EAN Code

eCl@ss

TV10S 500L-33Z

101169795

4030661296463

27-27-26-01

### **Approval**

Approval



#### Classification

Standards

B10d Normally-closed contact (NC)

Mission time

notice

EN ISO 13849-1

20.000.000

20 Years

$$MTTF_d = \frac{B_{10d}}{0.1 \times n_{co}}$$

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

### **Global Properties**

Permanent light

T.V10S 500

Standards EN 60947-5-1, BG-GS-ET-15

Materials

- Material of the housings Aluminium
- Material of the contacts Silver
Housing coating painted
Weight 760

**Mechanical data** 

Design of electrical connection Screw connection

Cable entry M 20 x 1.5

Cable section

- Min. Cable section

- Max. Cable section 1 x 1.5 mm<sup>2</sup>

Design of actuating element Other

Mechanical life 3.000.000 operations

Switching frequency max. 1000 /h

notice All indications about the cable section are including the conductor

ferrules.

Yes

2

Shaft bore Ø 10

Positive break angle 14 °

Positive break torque 15 Ncm socket (Y/N) No

**Ambient conditions** 

Universal joint (Y/N)

Ambient temperature

- Min. environmental temperature -25 °C
- Max. environmental temperature +80 °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 4

Number of safety contacts 2

Rated impulse withstand voltage U<sub>imp</sub> 4 kV

Rated insulation voltage U<sub>i</sub> 250 V

Thermal test current I<sub>the</sub> 6 A

Utilisation category AC-15: 230 V / 4 A, DC-13: 24 V / 1 A

Max. fuse rating 6 A gG D-fuse

ATEX

Explosion protection categories for gases

None
Explosion protected category for dusts

None

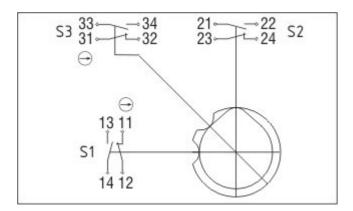
**Dimensions** 

Dimensions of the sensor

- Width of sensor 110 mm

- Length of sensor

# Diagram



Note Diagram

 $\Theta$  positive break NC contact

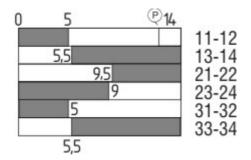
 $^{\textcircled{\scriptsize{1}}}_{\text{active}}$ 

no active

o-\_\_\_o Normally-open contact

o-t--- Normally-closed contact

## Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

 $^{\textcircled{L}}_{\text{Break point}}$ 

Positive opening sequence/- angle

VS adjustable range of NO contact

VÖ adjustable range of NC contact

N after travel

## **Ordering code**

T(1)V10S 500L-(2)Z

(1)

without

1

(2)

33

22

with universal joint with socket

2 Normally open contact (NO) / 2 Opener (NC)

3 Normally open contact (NO) / 3 Opener (NC)

#### **Documents**

Operating instructions and Declaration of conformity (da) 243 kB, 18.06.2013

Code: mrl\_tv10s500\_da

Operating instructions and Declaration of conformity (es) 281 kB, 21.12.2017

Code: mrl\_tv10s500\_es

Operating instructions and Declaration of conformity (pt) 282 kB, 31.01.2018

Code: mrl\_tv10s500\_pt

Operating instructions and Declaration of conformity (fr) 285 kB, 28.11.2017

Code: mrl\_tv10s500\_fr

Operating instructions and Declaration of conformity (nl) 281 kB, 13.08.2018

Code: mrl\_tv10s500\_nl

Operating instructions and Declaration of conformity (jp) 993 kB, 22.09.2011

Code: mrl\_tv10s500\_jp

Operating instructions and Declaration of conformity (de) 263 kB, 14.11.2017

Code: mrl\_tv10s500\_de

Operating instructions and Declaration of conformity (pl) 309 kB, 23.03.2018

Code: mrl\_tv10s500\_pl

Operating instructions and Declaration of conformity (it) 281 kB, 28.11.2017

Code: mrl\_tv10s500\_it

Operating instructions and Declaration of conformity (en) 283 kB, 14.11.2017

Code: mrl\_tv10s500\_en

CCC certification (en) 577 kB, 12.12.2006

Code: q\_349p02

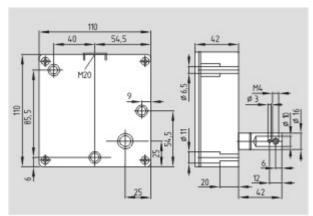
CCC certification (cn) 609 kB, 12.12.2006

Code: q\_349p03

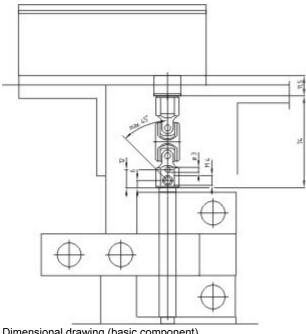
### **Images**



Product photo



Dimensional drawing (basic component)



Dimensional drawing (basic component)

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 13.02.2019 - 14:32:14h Kasbase 3.3.0.F.64l