

Datasheet - EX-TR 355-20ZH-3G/D



Position switches with safety function / EX-355 Metal enclosure with Actuator / EX-355 Roller plunger r



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

- Metal enclosure
- Wide range of alternative actuators
- Good resistance to oil and petroleum spirit
- 66,7 mm x 76 mm x 38 mm
- Actuator heads can be repositioned by 4 x 90°
- Including Ex-certified screwed cable gland and screw plug
- Mounting details to EN 50041
- 3 cable entries M 20 x 1.5
- Ex certified

Ordering details

Product type description	EX-TR 355-20ZH-3G/D
Article number	10EX-TR 355-20ZH-3G/D
EAN Code	
eCl@ss	27-27-26-01

Approval

Approval



Classification

Standards	ISO 13849-1
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-T 355 Rollendruckbolzen R
Standards	IEC 60947-5-1, EN 60079-0, EN 60079-15, EN 60079-31, BG-GS-ET-15
Compliance with the Directives (Y/N)	Yes



Suitable for safety functions (Y/N)	No
Actuator type	C to EN 50041
Materials	
- Material of the housings	light alloy die-casting
- Material of the contacts	Silver
Housing coating	painted
Housing construction form	Norm construction design
Weight	

Mechanical data

Design of electrical connection	Screw connection
Cable cross-section of the cable glands	
- Min. Cable cross-section of the cable glands	7
- Max. Cable cross-section of the cable glands	12
Cable section	
- Min. Cable section	0,75
- Max. Cable section	2.5
AWG-Number	13
Mechanical life	30.000.000 operations
Switching frequency	5000
notice	All indications about the cable section are including the conductor ferrules.
Design of actuating element	Roller plunger
Actuating force	17
Bounce duration	< 2
Switchover time	in accordance with actuating speed
Impact energy	1
Actuating speed with actuating angle 30° to switch axis	
- Min. Actuating speed	
- Max. Actuating speed	0,5

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-20
- Max. environmental temperature	+60
Protection class	IP67

Electrical data

Design of control element	Normally open contact (NO)
Switching principle	Slow action with staggered contacts
Number of auxiliary contacts	2
Number of safety contacts	0
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 / 1 A
Max. fuse rating	6 A gG D-fuse

ATEX

EX-marking	EX II 3G Ex nC IIC T5 Gc X, EX II 3D Ex tc IIIC T90°C Dc X
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Explosion protection categories for gases
 Explosion protection Zones for gases
 Explosion protected category for dusts
 Explosion protection Zones for dusts

ATEX gas ex-protection, Cat. 3
 2
 ATEX dust ex-protection, Cat. 3
 22

Dimensions

Dimensions of the sensor

- Width of sensor	40.5
- Height of sensor	116.6
- Length of sensor	38

notice

Switch with 2 NO contacts are not for security tasks

Keywords

Keywords

Ex, EEx, ATEX, Ex 235, Ex 235, 235 Ex, 235ex, 235ex, ATEX 235

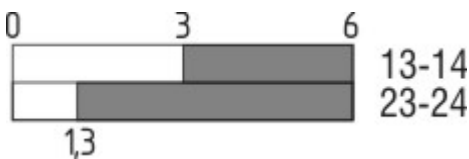
Diagram



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: EX-TR 355-20ZH-3G/D-1297

....-1297

Enclosure with transverse slotted holes

....-1637

0,3 µm gold-plated contacts

Documents

Operating instructions and Declaration of conformity (es) 373 kB, 24.01.2018

Code: mrl_ex-zt355_es

Operating instructions and Declaration of conformity (jp) 572 kB, 05.07.2011

Code: mrl_ex-zt355_jp

Operating instructions and Declaration of conformity (fr) 376 kB, 01.02.2018

Code: mrl_ex-zt355_fr

Operating instructions and Declaration of conformity (en) 380 kB, 11.01.2019

Code: mrl_ex-zt355_en

Operating instructions and Declaration of conformity (it) 371 kB, 16.02.2018

Code: mrl_ex-zt355_it

Operating instructions and Declaration of conformity (pl) 392 kB, 16.02.2018

Code: mrl_ex-zt355_pl

Operating instructions and Declaration of conformity (de) 337 kB, 11.01.2019

Code: mrl_ex-zt355_de

Operating instructions and Declaration of conformity (pt) 378 kB, 23.01.2018

Code: mrl_ex-zt355_pt

Operating instructions and Declaration of conformity (nl) 375 kB, 31.01.2018

Code: mrl_ex-zt355_nl

Brochure (de) 7 MB, 19.10.2016

Code: b_atep01_de

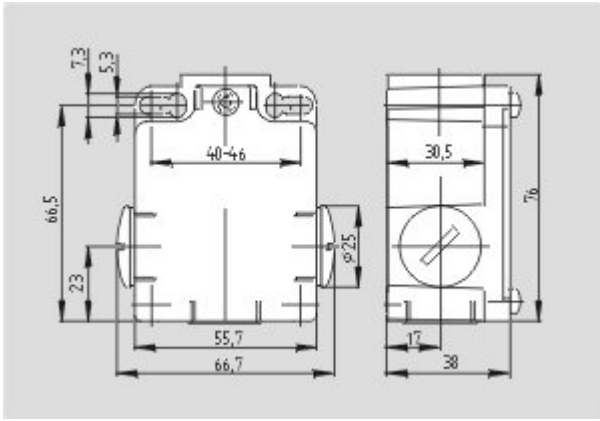
Brochure (en) 7 MB, 19.10.2016

Code: b_atep01_en

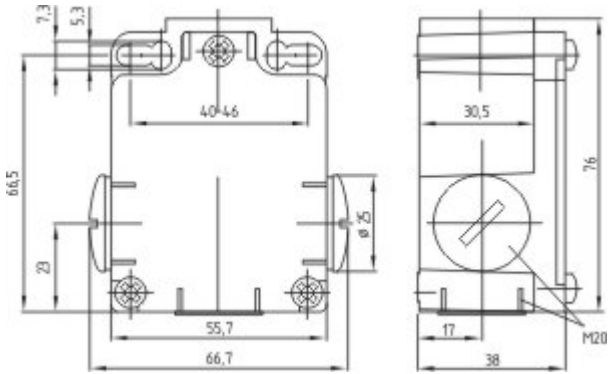
Brochure (it) 3 MB, 20.07.2007

Code: b_atep05

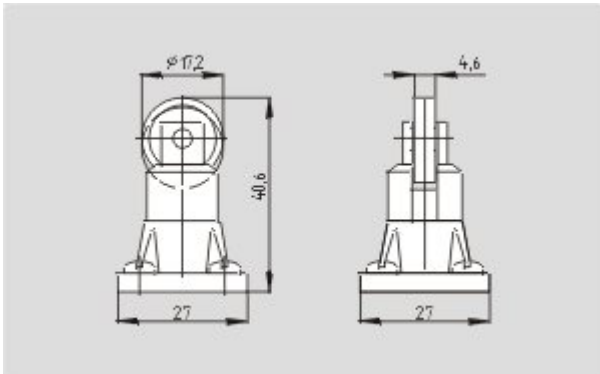
Images



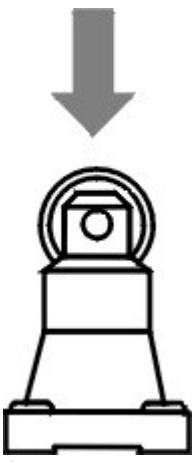
Dimensional drawing (basic component)



Dimensional drawing (basic component)



Dimensional drawing (actuator)



Operating principle