13.02.2019

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# Datasheet - EX-TR335-20Y

Position switches with safety function / EX-T335 Metal enclosure with Actuator / EX-T 335 Roller plunger r





• Explosion protection for ATEX Zones 1 and 21

Metal enclosure

- Wide range of alternative actuators
- · Good resistance to oil and petroleum spirit
- 40,5 mm x 76 mm x 38 mm
- Actuator heads can be repositioned by 4 x 90°
- Ex-certified screwed cable gland
- Mounting details to EN 50041
- 1 Cable entry M 20 x 1.5
- Ex certified

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

#### **Ordering details**

Product type description Article number EAN Code	EX-TR335-20Y 101212053
eCl@ss	27-27-26-01
Approval	
Approval	ATEX IECEx INMETRO
Classification	
Standards	EN ISO 13849-1
Mission time	20 Years
notice	$MTTF_{d} = \frac{B_{10d}}{0.1 \times n_{op}}$
	$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oyole}}$

### **Global Properties**

Permanent light Standards EX-T335 Rollendruckbolzen R EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31, EN 60947-5-1, BG-GS-ET-15

Compliance with the Directives (Y/N) C $\epsilon$	Yes
Suitable for safety functions (Y/N)	No
Actuator type	C to EN 50041
Materials	
- Material of the housings	zinc die-cast
- Material of the contacts	Silver
Housing coating	painted
Housing construction form	Norm construction design
Weight	320

# 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	1
- Max. Cable section	2.5
AWG-Number	13
Mechanical life	> 1.000.000 operations
Switching frequency	1800
notice	All indications about the cable section are including the conductor ferrules.
Design of actuating element	Roller plunger
Actuating force	17
Bounce duration	< 3
Switchover time	in accordance with actuating speed
Impact energy	7
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	+55 °C at Cable section 2.5 +50 °C at Cable section 1 mm

IP65

Protection class

#### **Electrical data**

Design of control element	Normally open contact (NO)
Switching principle	Slow action
Number of auxiliary contacts	2
Number of safety contacts	0
Rated impulse withstand voltage	4
Rated insulation voltage	250
Thermal test current	5 A
Utilisation category	AC-1
Max. fuse rating	6 A gG D-fuse

EX-marking	EX II 2D Ex tb IIIC T80°C Db EX II 2G Ex d e IIC T6 Gb	
Explosion protection categories for gases	2G	
Explosion protection Zones for gases	1	
Explosion protected category for dusts	2D	
Explosion protection Zones for dusts	21	
Dimensions		

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

#### notice

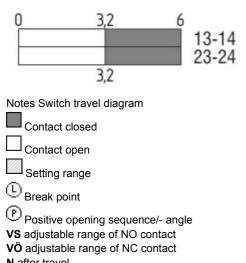
Switch with 2 NO contacts are not for security tasks

#### Keywords

Keywords

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

#### Switch travel diagram



N after travel

#### Ordering code

# EX-T(1) 335-(2)Y(3)-(4)-(5)

(1)	
S	Plunger S
R	Roller plunger R
н	Roller lever H
10H	Rod lever 10H
7H	Roller lever 7H
7H-2138	Roller lever 7H for Position switches with safety function
1K	Offset roller lever 1K
ЗК	Angle roller lever 3K
(2)	

11 02	1 Normally open contact (NO) / 1 Opener (NC) 2 Opener (NC)
20	2 Normally open contact (NO) (Switch with 2 NO contacts are not for security tasks)
(3) UE	Slow action with overlapping contacts
without (4) 2138	Slow action with staggered contacts Roller lever 7H for Position switches with safety function
(5) RMS	Castor aus Brass

#### **Documents**

**Operating instructions and Declaration of conformity** (pl) 403 kB, 06.12.2018 Code: mrl\_ext335\_pl

**Operating instructions and Declaration of conformity** (jp) 493 kB, 23.01.2018 Code: mrl\_ext335\_jp

**Operating instructions and Declaration of conformity** (en) 347 kB, 24.03.2014 Code: mrl\_ext335\_en

**Operating instructions and Declaration of conformity** (en) 481 kB, 16.11.2011 Code: mrl\_ext335\_en

**Operating instructions and Declaration of conformity** (en) 385 kB, 25.10.2018 Code: mrl\_ext335\_en

**Operating instructions and Declaration of conformity** (pt) 389 kB, 25.10.2018 Code: mrl\_ext335\_pt

**Operating instructions and Declaration of conformity** (it) 381 kB, 23.01.2018 Code: mrl\_ext335\_it

**Operating instructions and Declaration of conformity** (fr) 389 kB, 06.12.2018 Code: mrl\_ext335\_fr

**Operating instructions and Declaration of conformity** (de) 351 kB, 25.10.2018 Code: mrl\_ext335\_de

**Operating instructions and Declaration of conformity** (de) 481 kB, 10.11.2011 Code: mrl\_ext335\_de

**Operating instructions and Declaration of conformity** (es) 387 kB, 06.12.2018 Code: mrl\_ext335\_es

**Operating instructions and Declaration of conformity** (nl) 383 kB, 12.11.2018 Code: mrl\_ext335\_nl

**Operating instructions and Declaration of conformity** (br) 390 kB, 25.10.2018 Code: mrl\_ext335\_br

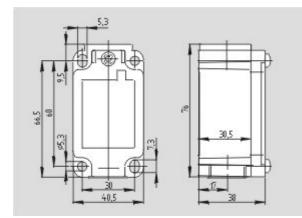
**Operating instructions and Declaration of conformity** (sv) 389 kB, 25.10.2018 Code: mrl\_ext335\_pt **BG-test certificate** (en) 483 kB, 26.11.2018 Code: z\_ex-p02

**BG-test certificate** (de) 476 kB, 26.11.2018 Code: z\_ex-p01

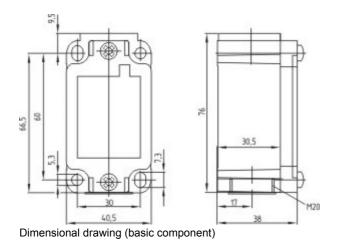
INMETRO certification (br) 533 kB, 24.07.2017 Code: q\_ex-p04

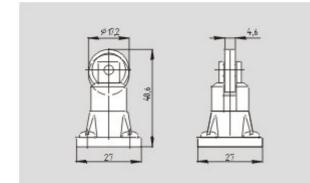
**IECEx certification** (en) 141 kB, 26.11.2018 Code: p\_exp01

#### Images

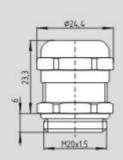


Dimensional drawing (basic component)

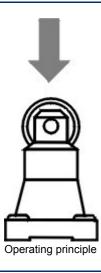




Dimensional drawing (actuator)



Dimensional drawing (miscellaneous)



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 - 14:11:46h Kasbase 3.3.0.F.64I