

## Datasheet - EX-TR 335-02Y



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



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

- 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

### Ordering details

Product type description	EX-TR335-02Y
Article number	101212054
EAN Code	
eCl@ss	27-27-26-01

### Approval


Approval	ATEX IECEX INMETRO
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### Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	20.000.000
Mission time notice	20 Years $MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{sp} \times h_{sp} \times 3600 \text{ s/h}}{t_{cycle}}$

### Global Properties

Permanent light	EX-T335 Rollendruckbolzen R
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Standards	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) 	Yes
Suitable for safety functions (Y/N)	Yes
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

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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

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Ambient temperature	
- Min. environmental temperature	-20
- Max. environmental temperature	+55 °C at Cable section 2.5 +50 °C at Cable section 1 mm
Protection class	IP65

## Electrical data

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Design of control element	Opener (NC)
Switching principle	Slow action
- positive break NC contact 	
Number of auxiliary contacts	0
Number of safety contacts	2
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

## ATEX

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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

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

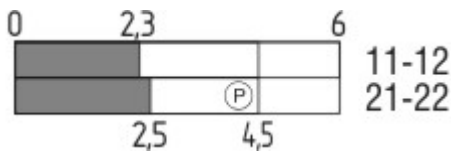
## Keywords

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Keywords	Ex, EEx, ATEX, Ex 235, Ex 235, 235 Ex, 235ex, 235ex, ATEX 235
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## Switch travel diagram

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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 code

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

(1)

S

R

H

10H

7H

7H-2138

1K

3K

(2)

11

02

Plunger S

Roller plunger R

Roller lever H

Rod lever 10H

Roller lever 7H

Roller lever 7H for Position switches with safety function

Offset roller lever 1K

Angle roller lever 3K

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

2 Opener (NC)

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

## Documents

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**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

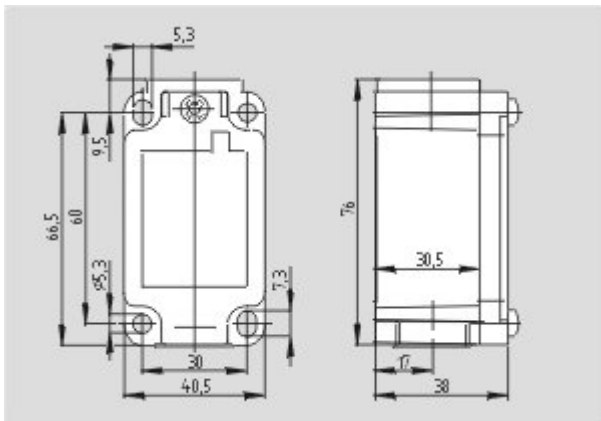
Code: q\_ex-p04

**IECEx certification** (en) 141 kB, 26.11.2018

Code: p\_exp01

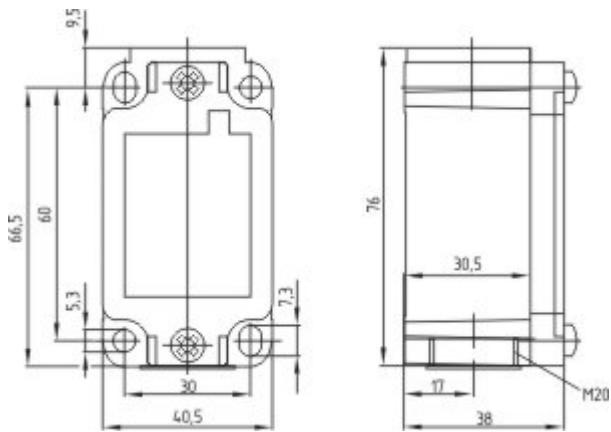
## Images

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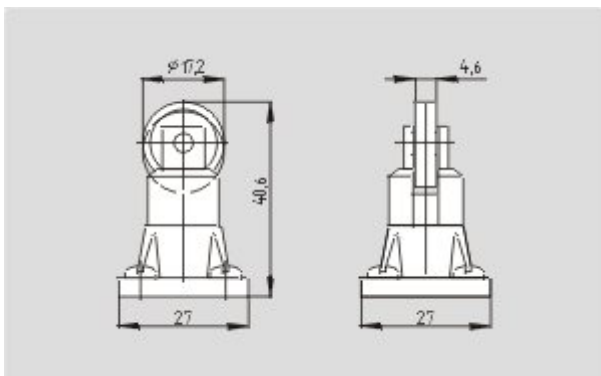
Dimensional drawing (basic component)

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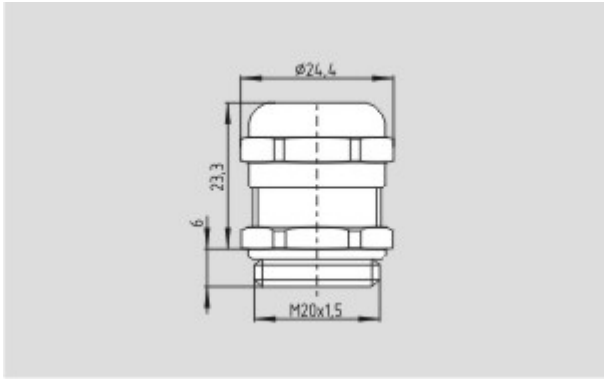
Dimensional drawing (basic component)

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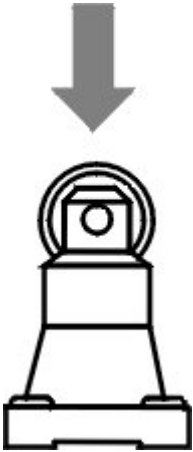
Dimensional drawing (actuator)

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Dimensional drawing (miscellaneous)

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Operating principle

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K.A. Schmersal GmbH & Co. KG, Mödinghofe 30, D-42279 Wuppertal

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

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