

Datasheet - ZR 335-11z

Position switch / 335 Metal enclosure - DIN EN 50041 with Actuator / 335 Roller plunger r



☒ Preferred typ



- Metal enclosure
- Wide range of alternative actuators
- Good resistance to oil and petroleum spirit
- 40,5 mm x 76 mm x 38 mm
- Snap action with constant contact pressure up to switching point
- Actuator heads can be repositioned by 4 x 90°
- 1 Cable entry M 20 x 1.5
- Design to EN 50041

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

Ordering details

Product type description	ZR 335-11Z
Article number	101154447
EAN code	4030661172286
eCl@ss	27-27-26-01

Approval

Approval



Classification

Standards	EN ISO 13849-1
B _{10d} Normally-closed contact (NC)	20.000.000
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

Product name	Z 335 Rollendruckbolzen R
Standards	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	Aluminium
- Material of the contacts	Silver
Housing coating	painted
Housing construction form	Norm construction design
Weight	135 g

Mechanical data

Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	0,75 mm ²
- Max. Cable section	2.5 mm ²
Mechanical life	30.000.000 operations
Switching frequency	max. 5000 /h
notice	All indications about the cable section are including the conductor ferrules.
Design of actuating element	Roller plunger
Actuating force	min. 12 N
Bounce duration	in accordance with actuating speed
Switchover time	< 2 ms
Actuating speed with actuating angle 30° to switch axis	
- Min. Actuating speed	
- Max. Actuating speed	0,5 m/s

Ambient conditions

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

Electrical data

Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Snap switch element
- positive break NC contact 	
Number of auxiliary contacts	1 piece
Number of safety contacts	1 piece
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 / 4 A
Required rated short-circuit current	1000 A
Max. fuse rating	6 A gG D-fuse

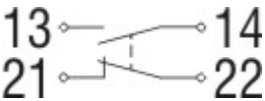
ATEX

Explosion protection categories for gases	None
Explosion protected category for dusts	None

Dimensions

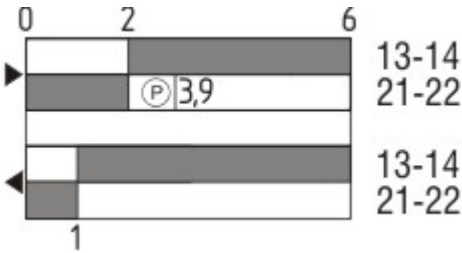
Dimensions of the sensor	
- Width of sensor	40.5 mm
- Height of sensor	116.6 mm
- Length of sensor	38 mm

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

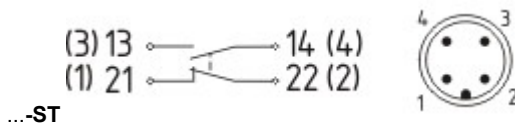
Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.
 Order example: ZR 335-11z-**1637**

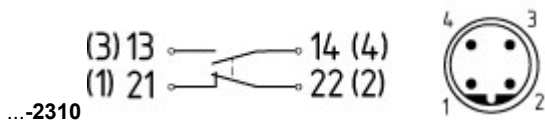
....-**1637** 0,3 µm gold-plated contacts

....-**NPT** Cable entry NPT 1/2"

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

(1)(2) 3(3)5-(4)Z(5)-(6)-(7)-(8)-(9)

(1)

Z

T

(2)

S

R

H

10H

7H

1K

3K

(3)

3

5

(4)

11

02

20

01/01

12

03

(5)

H

UE

(6)

G24

(7)

without

NPT

ST

ST-2310

(8)

Snap action

Slow action

Plunger S

Roller plunger R

Roller lever H

Rod lever 10H

Roller lever 7H

Offset roller lever 1K

Angle roller lever 3K

slim design

large design

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

2 Opener (NC)

2 Normally open contact (NO) (Switch with 2 NO contacts are not for security tasks)

1 Opener (NC) left / 1 Opener (NC) right

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

3 Opener (NC)

Slow action with staggered contacts

Slow action with overlapping contacts

with LED

Cable entry M20

cable entry NPT 1/2"

M12 connector with A-coding (Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.)

M12 connector with B-coding (Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.)

2138	Roller lever 7H for Position switches with safety function
(9)	
1637	gold-plated contacts

Documents

Operating instructions and Declaration of conformity (br) 335 kB, 01.03.2017

Code: ace_mrl_zt332-335-336-355_br

Operating instructions and Declaration of conformity (de) 318 kB, 18.03.2016

Code: mrl_zt332-335-336-355_de

Operating instructions and Declaration of conformity (it) 329 kB, 25.07.2016

Code: mrl_zt332-335-336-355_it

Operating instructions and Declaration of conformity (fr) 336 kB, 25.07.2016

Code: mrl_zt332-335-336-355_fr

Operating instructions and Declaration of conformity (nl) 321 kB, 04.04.2013

Code: mrl_zt332-335-336-355_nl

Operating instructions and Declaration of conformity (jp) 172 kB, 12.05.2017

Code: mrl_zt332-335-336-355_jp

Operating instructions and Declaration of conformity (cs) 371 kB, 07.10.2014

Code: mrl_zt332-335-336-355_cs

Operating instructions and Declaration of conformity (pt) 338 kB, 25.07.2016

Code: mrl_zt332-335-336-355_pt

Operating instructions and Declaration of conformity (es) 333 kB, 10.02.2017

Code: mrl_zt332-335-336-355_es

Operating instructions and Declaration of conformity (da) 323 kB, 04.04.2013

Code: mrl_zt332-335-336-355_da

Operating instructions and Declaration of conformity (en) 352 kB, 18.03.2016

Code: mrl_zt332-335-336-355_en

Operating instructions and Declaration of conformity (pl) 369 kB, 25.07.2016

Code: mrl_zt332-335-336-355_pl

CCC certification (en) 187 kB, 03.08.2015

Code: q_347p02

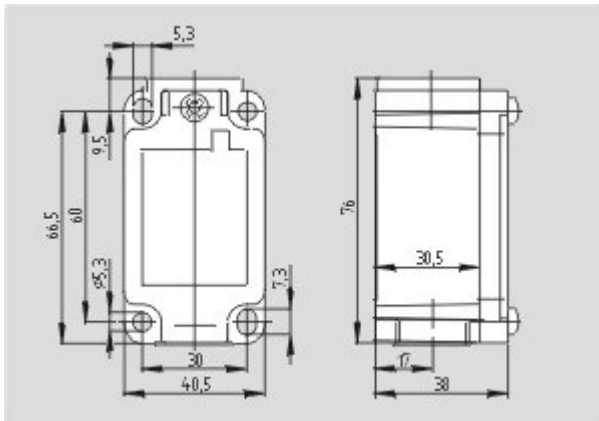
CCC certification (cn) 166 kB, 03.08.2015

Code: q_347p03

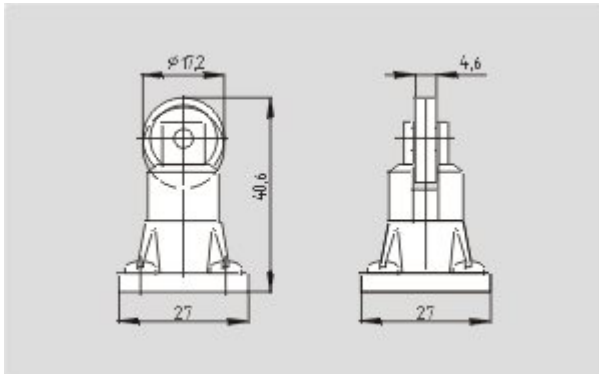
EAC certification (ru) 844 kB, 05.10.2015

Code: q_6037p17_ru

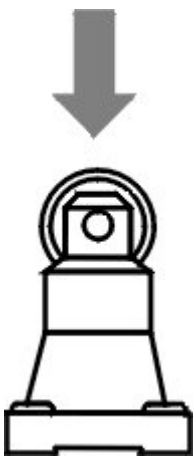
Images



Dimensional drawing (basic component)



Dimensional drawing (actuator)



Operating principle

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

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

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