

Datasheet - ZR 336-11z



Position switch / 336 thermoplastic enclosure - DIN EN 50041 with Actuator / 336 Roller plunger R

Preferred typ



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

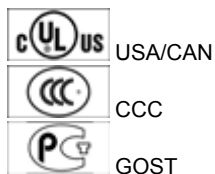
(Minor differences between the printed image and the original product may exist!)

Ordering details

Product type description	ZR 336-11Z
Article number	101156135
EAN code	4030661177441

Approval


Approval



Classification

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

Global Properties

Product name	336 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	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the contacts	Silver
Housing coating	None
Housing construction form	Norm construction design
Weight	105 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
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
notice	All indications about the cable section are including the conductor ferrules.

Ambient conditions

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

Electrical data

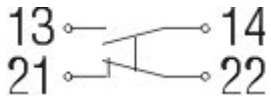
Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Snap switch element
- positive break NC contact 	
Number of auxiliary contacts	1 piece
Number of safety contacts	1 piece
Rated impulse withstand voltage U_{imp}	6 kV
Rated insulation voltage U_i	500 V
Thermal test current 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

Dimensions

Dimensions of the sensor

- Width of sensor 40.5 mm
- Height of sensor 116.5 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

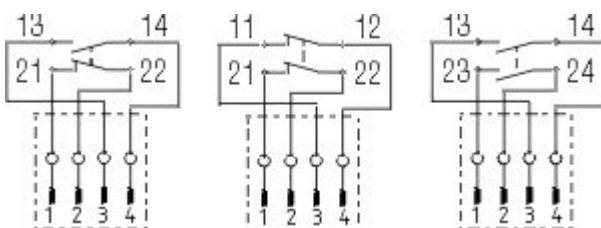
The applicable ordering suffix is added at the end of the part number of the safety switch.
Order example: ZR 336-11z-NPT

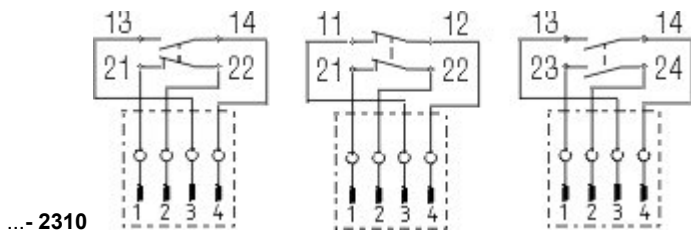
...-NPT

Cable entry NPT 1/2"

...-ST

M12 connector with A-coding

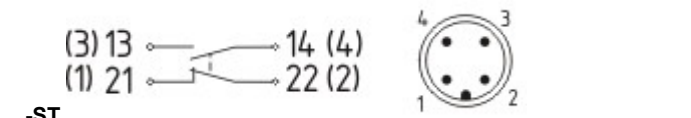




M12 connector with B-coding

...-1637

0,3 µm gold-plated contacts



M12 connector with A-coding

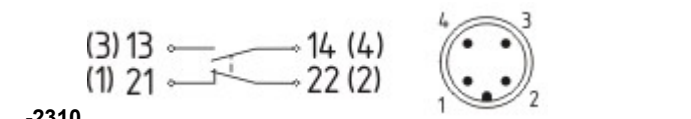
Rated impulse withstand voltage U_{imp} : 0,8 kV

Rated insulation voltage U_i : 50 V

Operating current I_e : AC-15: 50 V / 4 A

Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.

...-ST



M12 connector with B-coding

Rated impulse withstand voltage U_{imp} : 0,8 kV

Rated insulation voltage U_i : 50 V

Operating current I_e : AC-15: 50 V / 4 A

Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.

...-2310

Ordering code

(1)(2) 336-(3)Z(4)-(5)-(6)-(7)

(1)

Z

T

(2)

S

R

H

10H

7H

1K

3K

(3)

11

02

20

01/01

(4)

H

UE

(5)

without

NPT

ST

2310

(6)

2138

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

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

Slow action with staggered contacts

Slow action with overlapping contacts

Cable entry M20

cable entry NPT 1/2"

M12 connector with A-coding

M12 connector with B-coding

Roller lever 7H for Position switches with safety function

Documents

Operating instructions and Declaration of conformity (de) 310 kB, 03.04.2013

Code: mrl_zt332-335-336-355_de

Operating instructions and Declaration of conformity (it) 308 kB, 04.04.2013

Code: mrl_zt332-335-336-355_it

Operating instructions and Declaration of conformity (fr) 325 kB, 04.04.2013

Code: mrl_zt332-335-336-355_fr

Operating instructions and Declaration of conformity (cn) 797 kB, 02.03.2010

Code: mrl_zt332-335-336-355_cn

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) 1 MB, 22.11.2010

Code: mrl_zt332-335-336-355_jp

Operating instructions and Declaration of conformity (pt) 327 kB, 04.04.2013

Code: mrl_zt332-335-336-355_pt

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

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) 337 kB, 03.04.2013

Code: mrl_zt332-335-336-355_en

Operating instructions and Declaration of conformity (pl) 358 kB, 04.04.2013

Code: mrl_zt332-335-336-355_pl

CCC certification (en) 317 kB, 04.02.2014

Code: q_347p02

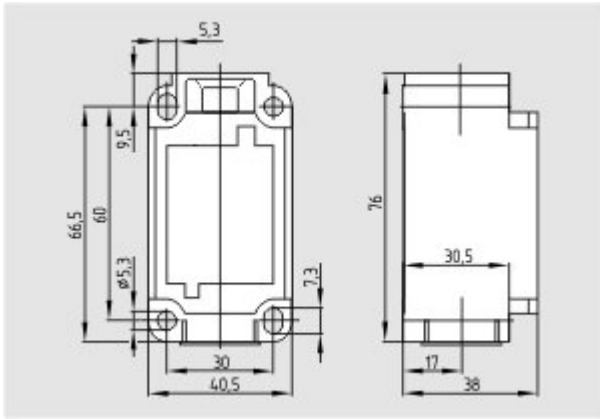
CCC certification (cn) 315 kB, 04.02.2014

Code: q_347p03

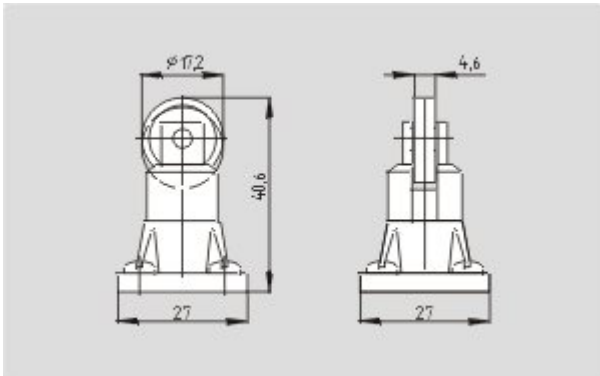
Gost certification (ru) 2 MB, 07.07.2011

Code: q_az1p01

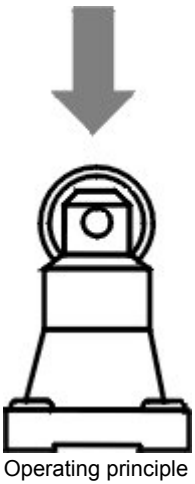
Images



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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