Datasheet - ZS 336-11z

Position switch / 336 thermoplastic enclosure - DIN EN 50041 with Actuator / 336 Plunger S

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

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

Ordering details

Product type description	ZS 336-11Z
Article number	1156136
EAN code	4030661177458

Approval

Approval	cULus USA/CAN CCC

Classification

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

Global Properties

Product name	336 Druckbolzen S
Standards	EN 60947-5-1 BG-GS-ET-15

Compliance with the Directives (Y/N) CE	Yes
Suitable for safety functions (Y/N)	Yes
Actuator type	B 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 actuating element	Plunger
Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	0,75 mm²
- Max. Cable section	2.5 mm²
Mechanical life	30.000.000 operations
Switching frequency	max. 5000 /h
Actuating force	min. 12 N
Bounce duration	in accordance with actuating speed
Switchover time	< 2 ms
Actuating speed for vertical actuation	
- 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

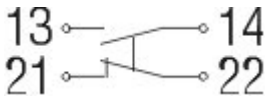
Electrical data

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
Max. fuse rating	6 A gG D-fuse

Dimensions

Dimensions of the sensor	
- Width of sensor	40.5 mm
- Height of sensor	103.5 mm
- Length of sensor	38 mm

Diagram



Note Diagram

positive break NC contact

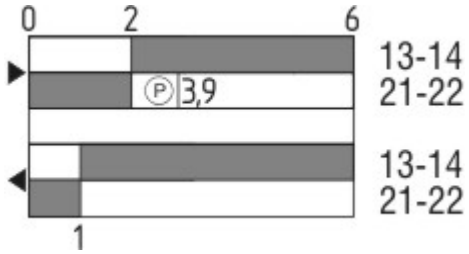
active

no active

Normally-open contact

Normally-closed contact

Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

Break point

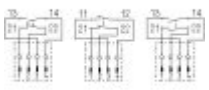
Positive opening sequence/- angle

VS adjustable range of NO contact
VÖ adjustable range of NC contact
N after travel

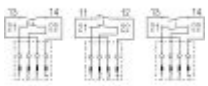
Ordering suffix

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

...**-NPT**	Cable entry NPT 1/2“



...**-ST**	M12 connector with A-coding



...**- 2310**	M12 connector with B-coding

Ordering code

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

(1)

Z	Snap action
T	Slow action

(2)

S	Plunger S
R	Roller plunger R
H	Roller lever H
10H	Rod lever 10H
7H	Roller lever 7H
1K	Offset roller lever 1K
3K	Angle roller lever 3K

(3)

11	1 Normally open contact (NO) / 1 Opener (NC)
02	2 Opener (NC)
20	2 Normally open contact (NO), *(Switch with 2 NO contacts are not for security tasks)*
01/01	1 Opener (NC) left / 1 Opener (NC) right

(4)

H	Slow action with staggered contacts
UE	Slow action with overlapping contacts

(5)

without	Cable entry M20
NPT	cable entry NPT 1/2"
ST	M12 connector with A-coding
2310	M12 connector with B-coding

(6)

2138	Roller lever 7H for Position switches with safety function

(7)

1637	gold-plated contacts

Documents

Operating instructions and Declaration of conformity (nl) 710 kB, 01.12.2009
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Z332/bedien/NL/mrl_zt332-335-336-355_nl.pdf

Operating instructions and Declaration of conformity (pt) 586 kB, 01.03.2010
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Z332/bedien/PT/mrl_zt332-335-336-355_pt.pdf

Operating instructions and Declaration of conformity (it) 513 kB, 01.12.2009
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Z332/bedien/IT/mrl_zt332-335-336-355_it.pdf

Operating instructions and Declaration of conformity (cn) 797 kB, 02.03.2010
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Z332/bedien/CN/mrl_zt332-335-336-355_cn.pdf

Operating instructions and Declaration of conformity (en) 605 kB, 22.03.2010
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Z332/bedien/EN/mrl_zt332-335-336-355_en.pdf

Operating instructions and Declaration of conformity (de) 581 kB, 27.11.2009
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Z332/bedien/DE/mrl_zt332-335-336-355_de.pdf

Operating instructions and Declaration of conformity (es) 516 kB, 27.11.2009
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Z332/bedien/ES/mrl_zt332-335-336-355_es.pdf

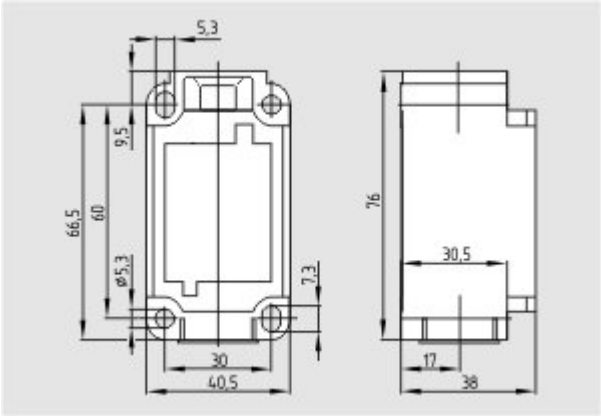
Operating instructions and Declaration of conformity (jp) 677 kB, 27.11.2009
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Z332/bedien/JP/mrl_zt332-335-336-355_jp.pdf

Operating instructions and Declaration of conformity (fr) 525 kB, 01.12.2009
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Z332/bedien/FR/mrl_zt332-335-336-355_fr.pdf

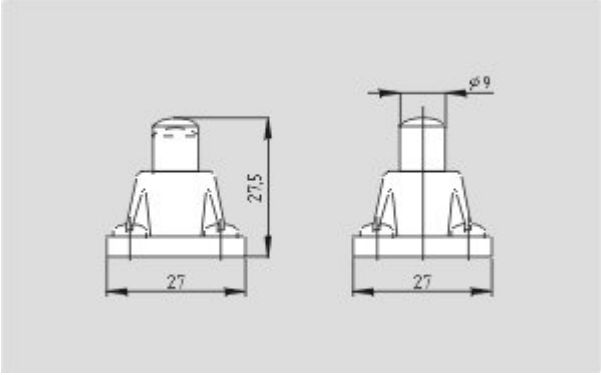
CCC certification (en) 584 kB, 12.12.2006
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Zt235/zertifikat/q_347p02.pdf

CCC certification (cn) 605 kB, 12.12.2006
http://www.schmersal.net/Bilddata/Si_f1/Pdf/Zt235/zertifikat/q_347p03.pdf

Images



Dimensional drawing (basic component)



Dimensional drawing (actuator)