

Datasheet - Z3K 336-11z



Position switch / 336 thermoplastic enclosure - DIN EN 50041 with Actuator / 336 Angle roller lever 3K



- 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
- Actuation from bottom parallel to the switch, therefore only suitable for small housings.

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

Ordering details

Product type description	Z3K 336-11Z
Article number	1172576
EAN code	4030661301228

Approval

Approval




Classification

Standards	EN ISO 13849-1
B _{10d} Normally-closed contact (NC)	20.000.000
B _{10d} Normally open contact (NO)	1 million operations
Mission time TM	20 Years
notice	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{zyklus}}$

Global Properties

Product name	336 Winkelhebel 3K
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Standards	EN 60947-5-1 BG-GS-ET-15
Compliance with the Directives (Y/N) 	Yes
Suitable for safety functions (Y/N)	Yes
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	125 g


Mechanical data

Design of actuating element	Angle roller lever
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
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

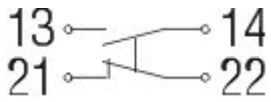
Electrical data

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
Max. fuse rating	6 A gG D-fuse






Dimensions

Dimensions of the sensor	
- Width of sensor	53 mm
- Height of sensor	121.5 mm
- Length of sensor	38 mm

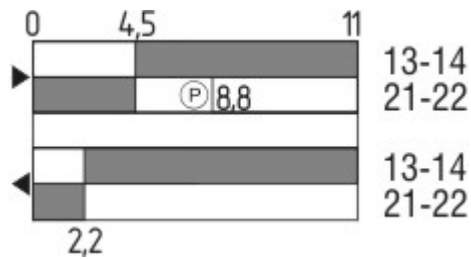
Diagram








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

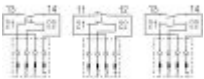
Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.

Order example: Z3K 336-11z-**NPT**

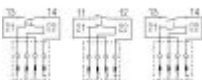
...-**NPT**

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, 01.12.2009http://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, 01.03.2010http://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, 01.12.2009http://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, 02.03.2010http://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, 22.03.2010http://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

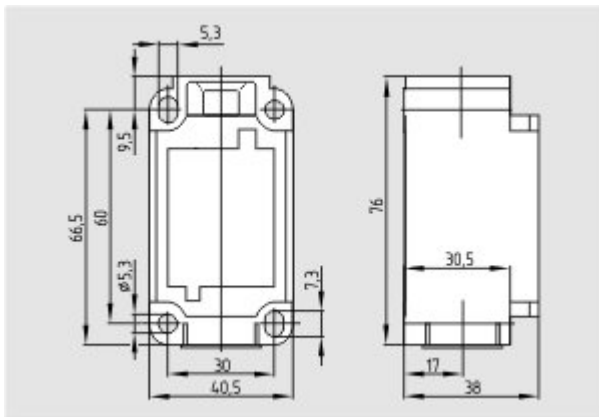
CCC certification (en) 584 kB, 12.12.2006

http://www.schmersal.net/Bilddata/Si_f1/Pdf/Zt235/zertifikat/q_347p02.pdf

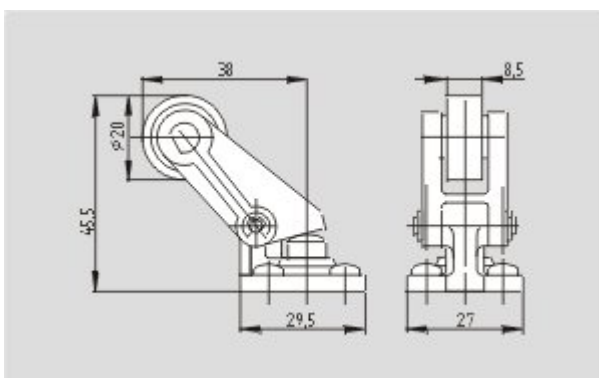
CCC certification (cn) 605 kB, 12.12.2006

http://www.schmersal.net/Bilddata/Si_f1/Pdf/Zt235/zertifikat/q_347p03.pdf

Images



Dimensional drawing (basic component)



Dimensional drawing (actuator)

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

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

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