

## Datasheet - Z1K 336-02z



Position switch / 336 Thermoplastic enclosure - EN 50041 with Actuator / 336 Offset roller lever 1K



- 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

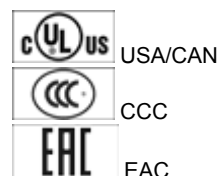
(Minor differences between the printed image and the original product may exist!)

### Ordering details

Product type description	Z1K 336-02Z
Article number	101102905
EAN Code	4030661045382
eCl@ss	27-27-26-01

### Approval


Approval



### Classification

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

### Global Properties

Permanent light	336 Rollenhebel 1K
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	110


## Mechanical data

Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	0,75
- Max. Cable section	2.5
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	Offset roller lever
Actuating force	min. 12 N
Bounce duration	in accordance with actuating speed
Switchover time	< 2
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

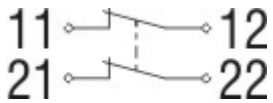
Design of control element	Opener (NC)
Switching principle	Snap switch element
- positive break NC contact 	
Number of auxiliary contacts	0
Number of safety contacts	2
Rated impulse withstand voltage $U_{imp}$	6 kV
Rated insulation voltage $U_i$	500 V
Thermal test current $I_{the}$	10 A
Utilisation category	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	118.5 mm
- Length of sensor	38 mm

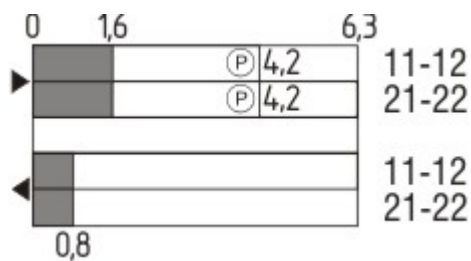
## Diagram



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

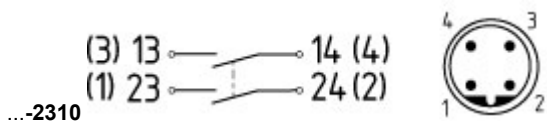
## Ordering suffix

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

Order example: Z1K 336-02z-NPT

...-NPT	Cable entry NPT 1/2"
...-1637	0,3 µm gold-plated contacts
...-ST	<p>M12 connector with A-coding  Rated impulse withstand voltage <math>U_{imp}</math>: 0,8 kV  Rated insulation voltage <math>U_i</math>: 50 V  Operating current <math>I_e</math>: AC-15: 50 V / 4 A  Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.</p>

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.

## 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  
 ST-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 (de) 157 kB, 18.06.2018

Code: mrlk\_zt332-335-336-355\_de

Operating instructions and Declaration of conformity (nl) 162 kB, 27.06.2018

Code: mrlk\_zt332-335-336-355\_nl

Operating instructions and Declaration of conformity (it) 162 kB, 27.06.2018

Code: mrlk\_zt332-335-336-355\_it

Operating instructions and Declaration of conformity (pt) 163 kB, 27.06.2018

Code: mrlk\_zt332-335-336-355\_pt

**Operating instructions and Declaration of conformity** (pl) 198 kB, 27.06.2018

Code: mrlk\_zt332-335-336-355\_pl

**Operating instructions and Declaration of conformity** (en) 160 kB, 18.06.2018

Code: mrlk\_zt332-335-336-355\_en

**Operating instructions and Declaration of conformity** (fr) 164 kB, 27.06.2018

Code: mrlk\_zt332-335-336-355\_fr

**Declaration of conformity** (es) 91 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_es

**Declaration of conformity** (pl) 130 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_pl

**Declaration of conformity** (it) 89 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_it

**Declaration of conformity** (pt) 90 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_pt

**Declaration of conformity** (fr) 89 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_fr

**Declaration of conformity** (de) 581 kB, 07.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_de

**Declaration of conformity** (en) 579 kB, 07.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_en

**Declaration of conformity** (nl) 89 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_nl

**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

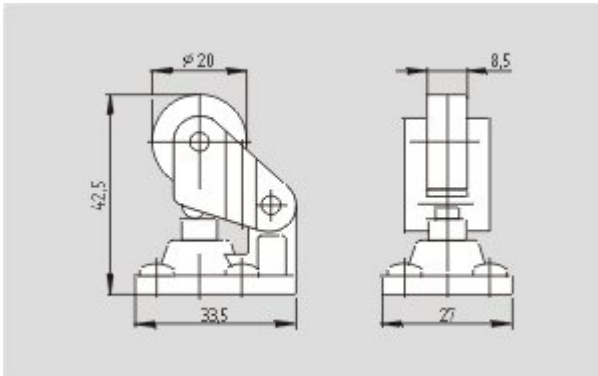
## Images

---



Dimensional drawing (basic component)

---



Dimensional drawing (actuator)

---

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

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

Generiert am 13.02.2019 - 13:24:45h Kasbase 3.3.0.F.64I