

Datasheet - ZV14H 235-11z

Position switch / 235 Metal enclosure - DIN EN 50047 with Actuator / 235 Roller lever 14H



☒ Preferred typ



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

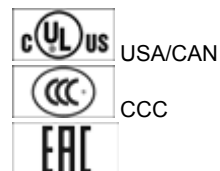
- Metal enclosure
- Wide range of alternative actuators
- Good resistance to oil and petroleum spirit
- 30 mm x 63,5 mm x 30 mm
- Snap action with constant contact pressure up to switching point
- Actuator heads can be repositioned by 4 x 90°
- Mounting details to EN 50047
- 1 Cable entry M 20 x 1.5
- Lever angle adjustable in 10° steps

Ordering details

Product type description	ZV14H 235-11Z
Article number	101161649
EAN code	4030661196220
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 T _M	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 235 Rollenschwenkhebel 14H
Standards	IEC 60947-5-1, ISO 13849-1, BG-GS-ET-15
Compliance with the Directives (Y/N) 	Yes
Suitable for safety functions (Y/N)	Yes
Materials	
- Material of the housings	Zink
- Lever material	Metal film
- Roller material	Plastic
- Material of the contacts	Silver
Housing coating	painted
Housing construction form	Norm construction design
Weight	205 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	20.000.000 operations
Switching frequency	max. 5000 /h
notice	All indications about the cable section are including the conductor ferrules.
Design of actuating element	Roller lever
actuating torque	min. 15 Ncm
Bounce duration	< 3 ms
Switchover time	< 5.5 ms
Positive break torque	18.5 Ncm
Actuating speed with actuating angle 30° to switch axis	
- Min. Actuating speed	687 mm/min
- Max. Actuating speed	1 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 / 1 A
Required rated short-circuit current	1000 A
Max. fuse rating	6 A gG D-fuse

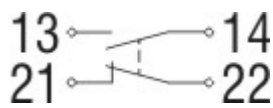
ATEX

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

Dimensions

Dimensions of the sensor	
- Width of sensor	30 mm
- Height of sensor	114 mm
- Length of sensor	46 mm

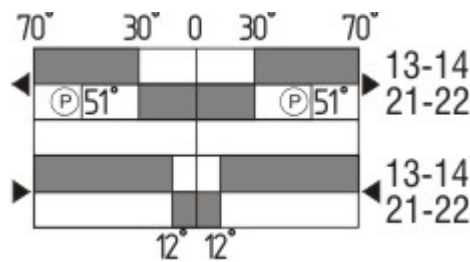
Diagram



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: ZV14H 235-11z-**1637**

...- 1637	0,3 µm gold-plated contacts
...- NPT	Cable entry NPT 1/2"

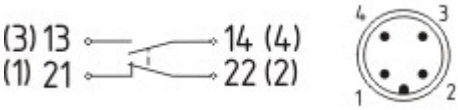
...-Z

Actuator head gasket

...-RMS

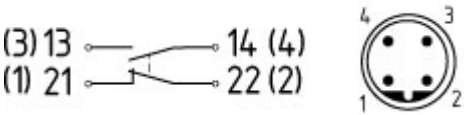
Available with metal roller

...-ST



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.

...-2310



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.

...-2574

\$missingName\$

Ordering code

(1)(2) 2(3)5-(4)Z(5)-(6)-(7)-(8)-(9)	
(1)	
Z	Snap action
T	Slow action
(2)	
S	Plunger S
R	Roller plunger R
4S	Plunger 4S
4R	Roller plunger 4R
1R	Offset roller lever 1R
K	Offset roller lever K
3K	Angle roller lever 3K
4K	Angle roller lever 4K
K4	Angle roller lever K4
1H	Roller lever 1H
7H	Roller lever 7H
10H	Rod lever 10H
12H	Roller lever 12H
14H	Roller lever 14H
AF	Spring rod lever AF
(3)	
3	slim design
5	large design
(4)	
02	2 Opener (NC)
11	1 Normally open contact (NO) / 1 Opener (NC)
20	2 Normally open contact (NO), (Switch with 2 NO contacts are not for security tasks)

(5)	
H	Slow action with staggered contacts
UE	Slow action with overlapping contacts
(6)	
<i>without</i>	Cable entry M20
ID	IDC method of termination
NPT	cable entry NPT 1/2"
ST	M12 connector with A-coding (<i>Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.</i>)
ST-2310	M12 connector with B-coding (<i>Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.</i>)
(7)	
2574	
(8)	
2138	Roller lever 7H for Position switches with safety function
(9)	
1637	gold-plated contacts

Documents

Operating instructions and Declaration of conformity (da) 304 kB, 21.08.2013

Code: mrl_ZT235_236_da

Operating instructions and Declaration of conformity (de) 305 kB, 06.03.2014

Code: mrl_ZT235_236_de

Operating instructions and Declaration of conformity (en) 338 kB, 06.03.2014

Code: mrl_ZT235_236_en

Operating instructions and Declaration of conformity (pl) 358 kB, 16.04.2014

Code: mrl_ZT235_236_pl

Operating instructions and Declaration of conformity (pt) 323 kB, 15.07.2014

Code: mrl_ZT235_236_pt

Operating instructions and Declaration of conformity (es) 303 kB, 02.01.2013

Code: mrl_ZT235_236_es

Operating instructions and Declaration of conformity (it) 300 kB, 16.04.2014

Code: mrl_ZT235_236_it

Operating instructions and Declaration of conformity (fr) 321 kB, 16.04.2014

Code: mrl_ZT235_236_fr

Operating instructions and Declaration of conformity (jp) 574 kB, 16.04.2014

Code: mrl_ZT235_236_jp

Operating instructions and Declaration of conformity (nl) 318 kB, 16.04.2014

Code: mrl_ZT235_236_nl

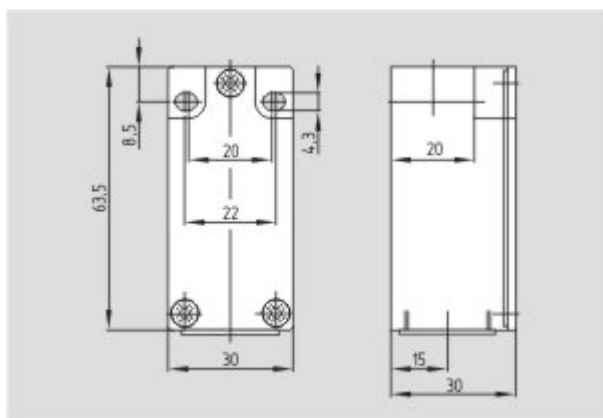
CCC certification (cn) 150 kB, 03.08.2015

Code: q_235p02

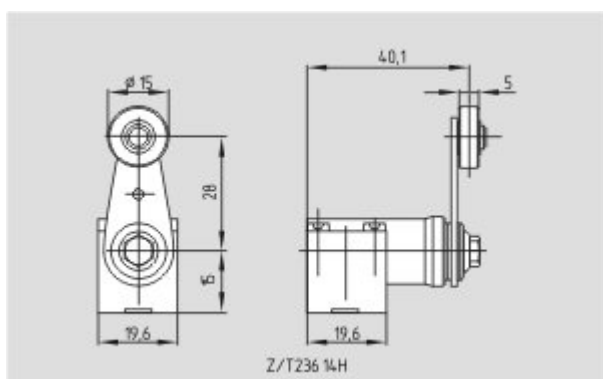
CCC certification (en) 170 kB, 03.08.2015

Code: a_235p01

Images



Dimensional drawing (basic component)



Dimensional drawing (actuator)
