

Datasheet - ZV14H 236-02z



Position switch / 236 Thermoplastic enclosure - EN 50047 with Actuator / 236 Roller lever
14H



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

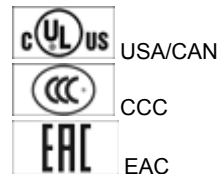
- Thermoplastic enclosure
- Good resistance to oil and petroleum spirit
- Wide range of alternative actuators
- 30 mm x 58,5 mm x 30 mm
- Snap action with constant contact pressure up to switching point
- 1 Cable entry M 20 x 1.5
- Double-insulated
- Mounting details to EN 50047
- Actuator heads can be repositioned by 4 x 90°
- Lever angle adjustable in 10° steps

Ordering details

| | |
|--------------------------|---------------|
| Product type description | ZV14H 236-02Z |
| Article number | 101148704 |
| EAN Code | 4030661147987 |
| eCl@ss | 27-27-26-01 |

Approval


Approval



Classification

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

Global Properties

| | |
|--|---|
| Permanent light | Z 236 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 | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing |
| - Lever material | Metal film |
| - Roller material | Plastic |
| - Material of the contacts | Silver |
| Housing coating | None |
| Housing construction form | Norm construction design |
| Weight | 55 |


Mechanical data

| | |
|---|---|
| Design of electrical connection | Screw connection |
| Cable section | |
| - Min. Cable section | 0,75 |
| - Max. Cable section | 2.5 |
| 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 |
| Switchover time | < 5.5 |
| 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

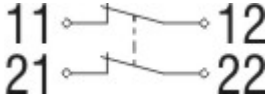
| | |
|---|--|
| Design of control element | Opener (NC) |
| Switching principle | Snap switch element |
| - positive break NC contact  | |
| Number of auxiliary contacts | 0 |
| Number of safety contacts | 2 |
| Rated impulse withstand voltage U_{imp} | 6 kV |
| Rated insulation voltage U_i | 500 V |
| Thermal test current I_{the} | 10 A |
| Utilisation category | AC-15: 230 V / 4 A, DC-13: 24 V / 1 A |
| Required rated short-circuit current | 1000 A |
| Max. fuse rating | 6 A gG D-fuse |

Dimensions

Dimensions of the sensor

| | |
|--------------------|--------|
| - Width of sensor | 30 mm |
| - Height of sensor | 112 mm |
| - Length of sensor | 46 mm |

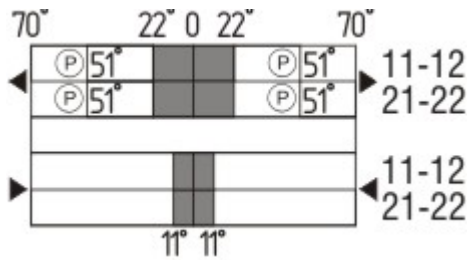
Diagram



Note Diagram

- positive break NC contact
- active
- no active
- Normally-open contact
- Normally-closed contact

Switch travel diagram



Notes Switch travel diagram

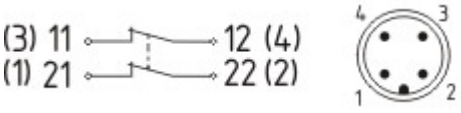
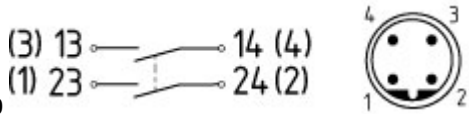
- Contact closed
- Contact open
- Setting range
- Break point
- Positive opening sequence/- angle
- VS** adjustable range of NO contact
- VÖ** adjustable range of NC contact
- N** after travel

Ordering suffix

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

Order example: ZV14H 236-02z-**1637**

| | |
|-------------------|---|
|- 1637 | 0,3 µm gold-plated contacts |
|- NPT | Cable entry NPT 1/2" |
|- 1297 | Enclosure with transverse slotted holes |
|- ID | IDC method of termination |

| | | |
|----------|---|---|
| ...-RMS | | Available with metal roller |
| ...-Z | | Actuator head gasket |
| ...-ST |  | <p>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.</p> |
| ...-2310 |  | <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.</p> |

Ordering code

(1)(2) 2(3)6-(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) | |
| without | Cable entry M20 |

| | |
|----------------|--|
| ID | IDC method of termination |
| NPT | cable entry NPT 1/2" |
| ST | M12 connector with A-coding |
| ST-2310 | M12 connector with B-coding |
| (7) | |
| 1297 | Enclosure with transverse slotted holes |
| (8) | |
| 2138 | Roller lever 7H for Position switches with safety function |
| (9) | |
| 1637 | gold-plated contacts |

Documents

Operating instructions and Declaration of conformity (en) 160 kB, 15.06.2018

Code: mrlk_zt235_236_en

Operating instructions and Declaration of conformity (es) 161 kB, 21.06.2018

Code: mrlk_ZT235_236_es

Operating instructions and Declaration of conformity (de) 160 kB, 15.06.2018

Code: mrlk_ZT235_236_de

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

Code: mrlk_ZT235_236_pl

Operating instructions and Declaration of conformity (nl) 162 kB, 15.06.2018

Code: mrlk_ZT235_236_nl

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

Code: mrlk_ZT235_236_pt

Operating instructions and Declaration of conformity (it) 162 kB, 15.06.2018

Code: mrlk_ZT235_236_it

Operating instructions and Declaration of conformity (fr) 164 kB, 15.06.2018

Code: mrlk_ZT235_236_fr

Operating instructions and Declaration of conformity (cs) 194 kB, 25.01.2019

Code: mrlk_ZT235_236_cs

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 (cn) 4 MB, 11.04.2018

Code: q_235p02

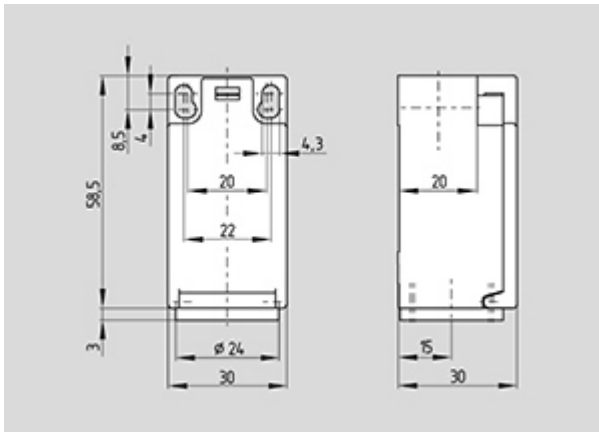
CCC certification (en) 4 MB, 27.10.2017

Code: q_235p01

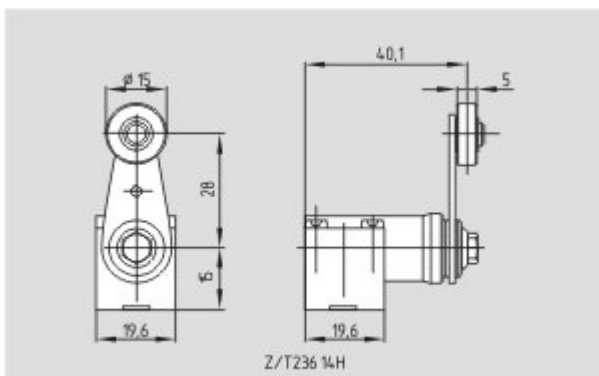
EAC certification (ru) 844 kB, 05.10.2015

Code: q_6037p17_ru

Images



Dimensional drawing (basic component)



Dimensional drawing (actuator)

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

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