

Datasheet - PS116-Z11-ST-H200



Position switch / PS116 Thermoplastic enclosure - EN 50047 with Actuator / PS116 Roller lever H200



- Thermoplastic enclosure
- Symmetric enclosure
- Lever angle adjustable in 15° steps
- Protection class IP66, IP67
- Actuator heads can be repositioned by 8 x 45°
- connector plug M12, bottom
- Snap action 1 Normally open contact (NO) / 1 Opener (NC)

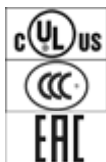
(Minor differences between the printed image and the original product may exist!)

Ordering details

| | |
|--------------------------|-------------------|
| Product type description | PS116-Z11-ST-H200 |
| Article number | 103006659 |
| EAN Code | |
| 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 | $MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{ap} \times h_{cp} \times 3600 \text{ s/h}}{t_{cycle}}$ |

Global Properties

| | |
|--|---|
| Permanent light | PS116 Rollenschwenkhebel H200 |
| Standards | IEC 60947-5-1 |
| Compliance with the Directives (Y/N)  | Yes |
| Suitable for safety functions (Y/N) | Yes |
| Actuator type | A to EN 50047 |
| Materials | |
| - Material of the housings | Plastic, glass-fibre reinforced thermoplastic, zinc die-cast, chromated |
| - Material of the contacts | Silver |
| Housing coating | None |
| Housing construction form | Norm construction design |
| Weight | 110 g |


Mechanical data

| | |
|--|-----------------------|
| Design of electrical connection | Connector M12, 4-pole |
| Connector | bottom |
| Mechanical life | 10.000.000 operations |
| Switching frequency | max. 5000 /h |
| Design of actuating element | Roller lever H200 |
| Actuating force | min. 15 Ncm |
| Bounce duration | < 3 ms |
| Switchover time | < 5.5 ms |
| Positive break force | 60 Ncm |
| Actuating speed for vertical actuation | |
| - Min. Actuating speed | 92 mm/min |
| - Max. Actuating speed | 1 m/s |

Ambient conditions

| | |
|----------------------------------|------------|
| Ambient temperature | |
| - Min. environmental temperature | -30 °C |
| - Max. environmental temperature | +80 °C |
| Protection class | IP66, 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} | 2.5 kV |
| Rated insulation voltage U_i | 300 V |
| Thermal test current I_{the} | 2.5 A |
| Utilisation category | AC-15: 240 V / 1,5 A, DC-13: 24 V / 1,5 A |
| Required rated short-circuit current | 1000 A |
| Max. fuse rating | 6 A gG D-fuse (quick-blow) |

ATEX

| | |
|---|------|
| Explosion protection categories for gases | None |
|---|------|

Dimensions

Dimensions of the sensor

| | |
|--------------------|---------|
| - Width of sensor | 31 mm |
| - Height of sensor | 101 mm |
| - Length of sensor | 16.6 mm |
| Roller diameter | 16 mm |
| Lever length | 24 mm |

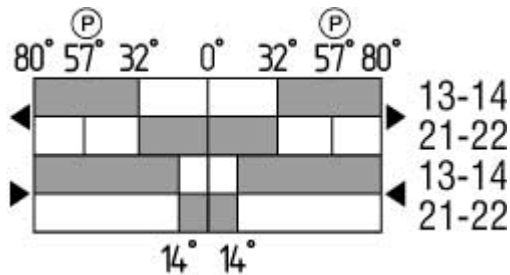
Diagram



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 code

PS116-(1)-(2)-(3)-(4)

(1)

| | |
|------|--|
| Z11 | Snap action 1 Normally open contact (NO) / 1 Opener (NC) |
| Z02 | Snap action 2 Opener (NC) |
| Z12 | Snap action 1 Normally open contact (NO) / 2 Opener (NC) |
| Z11R | Snap action 1 Normally open contact (NO) / 1 Opener (NC) with Latching |
| Z02R | Snap action 2 Opener (NC) with Latching |

| | |
|-------|--|
| Z12R | Snap action 1 Normally open contact (NO) / 2 Opener (NC) with Latching |
| T11 | Slow action 1 Normally open contact (NO) / 1 Opener (NC) |
| T02 | Slow action 2 Opener (NC) |
| T20 | Slow action 2 Normally open contact (NO) |
| T12 | Slow action 1 Normally open contact (NO) / 2 Opener (NC) |
| T21 | Slow action 2 Normally open contact (NO) / 1 Opener (NC) |
| T03 | Slow action 3 Opener (NC) |
| T11UE | Slow action with overlapping contacts 1 Normally open contact (NO) / 1 Opener (NC) |
| T02H | Slow action with staggered contacts 2 Opener (NC) |
| (2) | |
| L200 | Pre-wired cable bottom, Cable length 2 m |
| LR200 | Pre-wired cable right, Cable length 2 m |
| ST | connector plug M12, bottom |
| STR | connector plug M12, right |
| (3) | |
| S20 | Plunger S200 |
| R20 | Roller plunger R200 |
| K20 | Offset roller lever K200 |
| K21 | Offset roller lever K210 |
| K23 | Angle roller lever K230 |
| K24 | Angle roller lever K240 |
| K25 | Angle roller lever K250 |
| H20 | Roller lever H200 |
| N20 | Roller lever N200 |
| J20 | Rod lever J200 |
| (4) | |
| 0 | Material Castor/Roller: Plastic |
| 1 | Material Castor/Roller: Stainless steel |
| 2 | Material Castor/Roller: Brass |
| 3 | Material Castor/Roller: Aluminium |
| 4 | Material Castor/Roller: Steel |

Documents

Operating instructions (en) 628 kB, 06.07.2018

Code: mrlk_ps116_en

Operating instructions (pl) 659 kB, 16.02.2017

Code: mrlk_ps116_pl

Operating instructions (pt) 628 kB, 17.03.2017

Code: mrlk_ps116_pt

Operating instructions (nl) 0 Byte, 28.02.2018

Code: mrlk_ps116_nl

Operating instructions (es) 627 kB, 06.07.2018

Code: mrlk_ps116_es

Operating instructions (de) 630 kB, 06.07.2018

Code: mrlk_ps116_de

Operating instructions (fr) 629 kB, 11.05.2017

Code: mrlk_ps116_fr

Operating instructions (it) 626 kB, 30.06.2017

Code: mrlk_ps116_it

Declaration of conformity (en) 88 kB, 22.11.2017

Code: konfi_mrl_ps116_en

Declaration of conformity (de) 87 kB, 22.11.2017

Code: konfi_mrl_ps116_de

Brochure (jp) 1 MB, 14.10.2015

Code: b_ps116_jp

Brochure (cs) 1 MB, 14.10.2015

Code: b_ps116_cs

Brochure (de) 2 MB, 09.10.2015

Code: b_ps116_de

Brochure (en) 1 MB, 14.10.2015

Code: b_ps116_en

Brochure (nl) 1 MB, 14.10.2015

Code: b_ps116_nl

Brochure (it) 1 MB, 14.10.2015

Code: b_ps116_it

Brochure (pl) 1 MB, 14.10.2015

Code: b_ps116_pl

Brochure (pt) 1 MB, 14.10.2015

Code: b_ps116_pt

Brochure (es) 1 MB, 14.10.2015

Code: b_ps116_es

Brochure (fr) 1 MB, 14.10.2015

Code: b_ps116_fr

CCC certification (en) 1 MB, 22.06.2017

Code: q_ps1p01

CCC certification (cn) 1 MB, 22.06.2017

Code: q_ps1p02

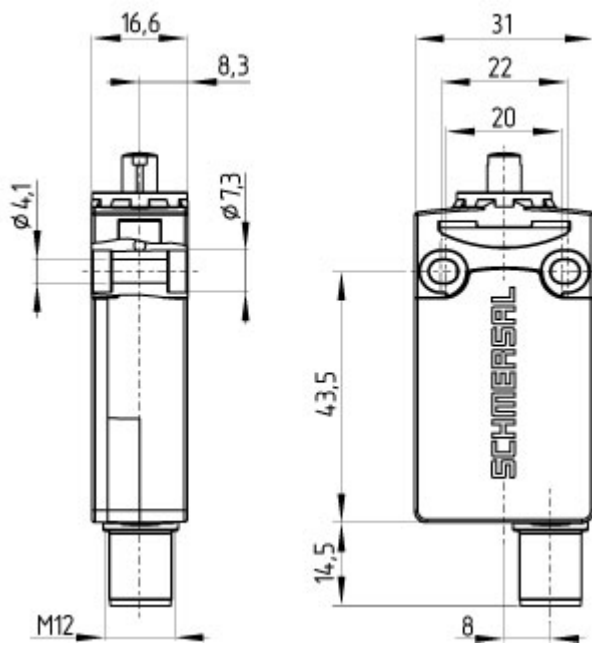
EAC certification (ru) 844 kB, 05.10.2015

Code: q_6037p17_ru

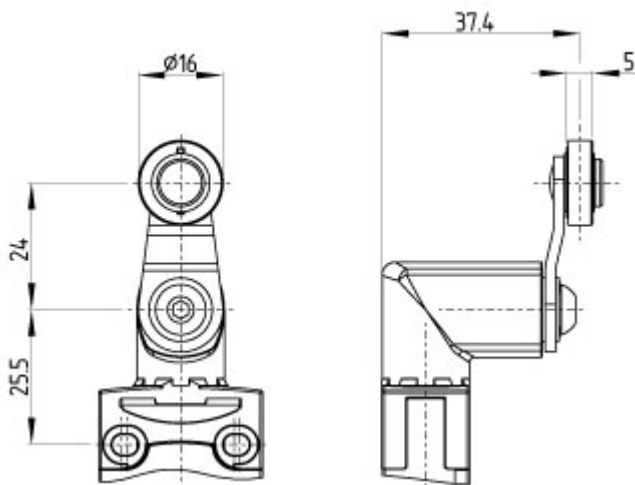
Images



Product photo



Dimensional drawing (basic component)



Dimensional drawing (actuator)