



## PS216-T12-K240

- Design to EN 50047
- cable entry 1 x M20 x 1,5
- thermoplastic enclosure with foldable latching cover
- Simple and quick to adjust the control elements by 45°.
- Quick connection technology as connection terminals rotated by 45°

### Data

#### Ordering data

|                               |                |
|-------------------------------|----------------|
|                               | PS216-T12-K240 |
|                               | 103015039      |
| EAN (European Article Number) | 4030661501796  |

#### Approval - Standards

cULus  
CCC  
EAC

#### General data

|                                      |                                                     |
|--------------------------------------|-----------------------------------------------------|
| Product name                         | PS216 with angle roller lever K240<br>IEC 60947-5-1 |
| Housing construction form            | Norm construction design                            |
| Enclosure material                   | Plastic, glass-fibre-reinforced                     |
| Material of the contacts, electrical | Silver                                              |
| Gross weight                         | 77.4 g                                              |

#### General data - Features

|                              |     |
|------------------------------|-----|
| Safety functions             | Yes |
| Number of auxiliary contacts | 1   |
| Number of safety contacts    | 2   |

## Safety appraisal

ISO 13849-1

Mission Time

20 Year(s)

## Safety appraisal - Safety outputs

B10d Normally-closed contact (NC)

20,000,000 Operations

## Mechanical data

Actuating element

Angle roller lever K240

Mechanical life, minimum

10,000,000 Operations

Positive break force, minimum

40 N

Actuating speed, minimum

60 mm/min

Actuating speed, maximum

1 m/s

## Mechanical data - Connection technique

Terminal Connector

Screw connection

0.34 mm<sup>2</sup>

1.5 mm<sup>2</sup>

## Mechanical data - Dimensions

Height of sensor

107 mm

Length of sensor

32.5 mm

Width of sensor

31 mm

## Ambient conditions

IP66

IP67

Ambient temperature, minimum

-30 °C

Ambient temperature, maximum

+80 °C

## Ambient conditions - Insulation value

Rated impulse withstand voltage

4 kV

## Electrical data

Thermal test current

5 A

Required rated short-circuit current to EN 60947-5-1

400 A

Utilisation category AC-15

240 VAC

Utilisation category AC-15

3 A

Utilisation category DC-13

24 VDC

Utilisation category DC-13

3 A

|                     |                             |
|---------------------|-----------------------------|
| Switching element   | 1 NO contact, 2 NC contacts |
| Switching principle | Creep circuit element       |
| Switching frequency | 5,000 /h                    |

## Ordering code

Product type description:

PS2(2)-(3)-(4)-(5)-(6)-(7)-(8)-(9)-(10)-(11)-  
(12)

(1)

**without** non-EX version

**EX** Types of protection Ex d and t, to Zone 1/21

**EXI** Types of protection Ex i and t, up to Zone 1/21

(2)

**5** Metal enclosure

**216** Thermoplastic enclosure

**226** Plastic housing with 2 cable entries

(3)

**without** L-hole (standard)

**L** elongated hole

(4)

**Z11** Snap action 1 NO contact / 1 NC contact

**Z02** Snap action 2 NC contacts

**Z12** Snap action 1 NO contact / 2 NC contact

**Z11R** Snap action 1 NO contact / 1 NC contact with latching

**Z01R** Snap action 1 NC contact with latching

**Z02R** Snap action 2 NC contacts with latching

**T11** Slow action 1 NO contact / 1 NC contact

**T02** Slow action 2 NC contacts

**T20** Slow action 2 NO contact

**T12** Slow action 1 NO contact / 2 NC contact

**T21** Slow action 2 NO contact / 1 NC contact

**T03** Slow action 3 NC contacts

**T11UE** Slow action 1 NO contact / 1 NC contact with overlapping contacts

**T02H** Slow action 2 NC contacts with staggered contacts

**T11K** Slow action 1 NO contact + 1 NC contact - short-stroke

**T10** Slow action 1 NO contact

**T02K** Slow action 2 NO contacts short-stroke

**T20H** Slow action 2 NO contacts staggered

(5)

**without** Contacts silver plated (Standard)

**A1** Gold contacts 0,3 µm

**A2** Gold contacts 1,0 µm

**A3** Gold contacts 3,0 µm

(6)

**without** without indication light

**G** integrated status display

(7)

**without** Cable entry M20

**M16** cable entry M16

**ST** Connector plug M12 - plastic - bottom

**STR** Connector plug M12, right

**STL** Connector plug M 12, left

**STM** Connector plug M12, metal

(8)

**S200** plunger S200 Ø 6 mm

**S210** Plunger Ø 8,6 mm

**S211** Plunger Ø 10,3 mm

**S221** Plunger Ø 9,8 mm

**R200** Roller plunger R200

**R201** Roller plunger - stainless steel roller Ø 9,5mm

**R210** Roller plunger - plastic roller Ø 12mm

**K201** Roller plunger - stainless steel roller - width 5,3 mm - Ø 12mm

**K200** Offset roller lever - plastic roller- width 5.3 mm - Ø 12 mm

**K201** Roller plunger - stainless steel roller - width 5,3 mm - Ø 12mm

**K210** Offset roller lever - plastic roller- width 5mm - Ø 14mm

**K211** Offset roller lever - stainless steel roller - width 5mm - Ø 14mm

**K220** Offset roller lever - plastic roller- width 7.6 mm - Ø 14 mm

**K230** Angle roller lever - plastic roller Ø 14 mm

**K231** Roller plunger - stainless steel roller Ø 14mm (Standard)

**K240** Angle roller lever with plastic roller Ø 22 mm - right-bent

**K250** Angle roller lever with plastic roller Ø 22 mm - left-bent

**H200** Roller lever - plastic roller Ø 16 m - lever length 24 mm

**H202** Roller lever - brass roller Ø 16mm - lever length 24mm (Standard)

**H230** Roller lever - plastic roller Ø 16mm - lever length 28 mm

**H232** Roller lever - brass roller Ø 16mm - lever length 28 mm

**H236** Roller lever - rubber roller Ø 16mm - lever length 28 mm

**N200** Roller lever 2 mm Toothing (24...26mm) - Plastic roller Ø 20 mm - Width 9.8 mm

**N201** Roller lever adjustable in 2 mm steps (24...66mm) - stainless steel roller Ø 20mm - width 9,8 mm

**N202** Roller lever - adjustable in 2 mm steps (24...66mm) - brass roller Ø 20mm - width 9,8 mm

**N206** Roller lever - adjustable in 2 mm steps (24...66mm) - rubber roller Ø 50mm - width 16 mm

|             |                                                                                                                         |
|-------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>N210</b> | Roller lever - adjustable in 2 mm steps (24...66mm) - plastic roller Ø 20mm - width 5 mm - long-angled - locking washer |
| <b>N280</b> | Roller lever -adjustable in 2 mm steps (24...66mm) - plastic roller Ø 20mm - width 5 mm - long - locking washer         |
| <b>J200</b> | Rod lever - plastic - 200mm -Ø 6mm                                                                                      |
| <b>J201</b> | Rod lever - stainless steel - 200mm -Ø 6mm (Standard)                                                                   |
| <b>J203</b> | Rod lever - aluminium - 200mm -Ø 6mm                                                                                    |
| <b>F230</b> | Spring rod - stainless steel - 150.4 mm                                                                                 |
| <b>F231</b> | Spring rod - stainless steel - 70.2 mm                                                                                  |
| <b>A200</b> | Special actuating bolt - plastic - valve control                                                                        |

(9)

**without** no intent rotation (Standard)

|           |                      |
|-----------|----------------------|
| <b>U1</b> | intent rotation 45°  |
| <b>U2</b> | intent rotation 90°  |
| <b>U3</b> | intent rotation 135° |
| <b>U4</b> | intent rotation 180° |
| <b>U5</b> | intent rotation 225° |
| <b>U6</b> | intent rotation 275° |
| <b>U7</b> | intent rotation 315° |

(10)

**without** no lever rotation (Standard)

|            |                     |
|------------|---------------------|
| <b>X1</b>  | lever rotation 15°  |
| <b>X2</b>  | lever rotation 30°  |
| <b>X3</b>  | lever rotation 45°  |
| <b>X4</b>  | lever rotation 60°  |
| <b>X5</b>  | lever rotation 75°  |
| <b>X6</b>  | lever rotation 90°  |
| <b>X7</b>  | lever rotation 105° |
| <b>X8</b>  | lever rotation 120° |
| <b>X9</b>  | lever rotation 135° |
| <b>X10</b> | lever rotation 150° |
| <b>X11</b> | lever rotation 165° |
| <b>X12</b> | lever rotation 180° |
| <b>X13</b> | lever rotation 195° |
| <b>X14</b> | lever rotation 210° |
| <b>X15</b> | lever rotation 225° |
| <b>X16</b> | lever rotation 240° |
| <b>X17</b> | lever rotation 255° |
| <b>X18</b> | lever rotation 270° |
| <b>X19</b> | lever rotation 285° |
| <b>X20</b> | lever rotation 300° |
| <b>X21</b> | lever rotation 315° |
| <b>X22</b> | lever rotation 330° |

**X23** lever rotation 345°

(11)

**without** Roller outside (Standard)

**I** Roller inside

(12)

**without** -30...+80°C (Standard)

**T** -40...+80°C

(13)

(14)

**without** Zone 2 and 22

**3GD** Zone 2 and 22

**2D** Zone 21

**3D** Zone 22

## Pictures

### Photo/Product/Catalogue



ID: kps1kf28

| 20,8 kB | .png | 74.083 x 64.206 mm - 210 x 182

Pixel - 72 dpi

| 225,4 kB | .jpg | 352.778 x 305.506 mm - 1000 x 866

Pixel - 72 dpi

### Photo/Product/Catalogue



ID: kps2kf11

| 736,4 kB | .jpg | 352.778 x 696.736 mm - 1000 x 1975

Pixel - 72 dpi

| 51,2 kB | .png | 74.083 x 146.05 mm - 210 x 414

Pixel - 72 dpi

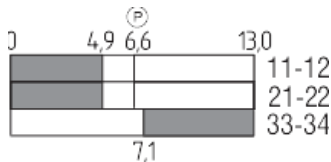
### Dimension/Product/Basic



ID: kps2xg01

| 111,3 kB | .jpg | 352.778 x 323.85 mm - 1000 x 918 Pixel - 72 dpi  
| 4,4 kB | .png | 74.083 x 68.086 mm - 210 x 193 Pixel - 72 dpi

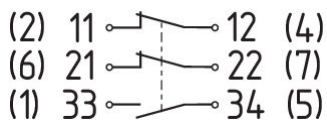
## Diagramm/Product/Travel



ID: kps11s43

| 2,1 kB | .png | 74.083 x 36.336 mm - 210 x 103 Pixel - 72 dpi  
| 66,2 kB | .jpg | 352.778 x 173.214 mm - 1000 x 491 Pixel - 72 dpi

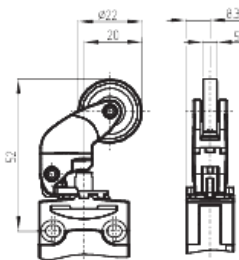
## Graphic/Product/Contact



ID: kps2xk02

| 80,7 kB | .jpg | 352.778 x 148.167 mm - 1000 x 420 Pixel - 72 dpi

## Dimension/Product/Actuator



ID: kps11b07

| 221,1 kB | .jpg | 352.778 x 376.767 mm - 1000 x 1068 Pixel - 72 dpi  
| 5,6 kB | .png | 74.083 x 73.025 mm - 210 x 207 Pixel - 72 dpi

K.A. Schmersal GmbH & Co. KG, Möddinghofe 3, D-42279 Wuppertal

The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

Generated on 172021-01-31T02:37:17+01:000201Europe/BerlinSun, 31 Jan 2021 02:37:17

+010017amSunday.31am31Europe/BerlinCET3701Europe/BerlinJanuary2021Sun, 31 Jan 2021 02:37:17

+010001am31