



## PS216-Z12-N200

- Lever angle adjustable in 15° steps
- Simple and quick to adjust the control elements by 45°.
- thermoplastic enclosure with foldable latching cover
- Quick connection technology as connection terminals rotated by 45°
- cable entry 1 x M20 x 1,5
- Design to EN 50047
- length adjustable in 2 mm steps
- LED version available

## Data

### Ordering data

|                               |                |
|-------------------------------|----------------|
| Product type description      | PS216-Z12-N200 |
| Article number (order number) | 103015019      |
| EAN (European Article Number) | 4030661502144  |
| eCl@ss number, version 12.0   | 27-27-26-01    |
| eCl@ss number, version 11.0   | 27-27-26-01    |
| eCl@ss number, version 9.0    | 27-27-26-01    |
| ETIM number, version 7.0      | EC000030       |
| ETIM number, version 6.0      | EC000030       |

### Approvals - Standards

|              |       |
|--------------|-------|
| Certificates | cULus |
|              | CCC   |
|              | EAC   |

## General data

|                                      |                                 |
|--------------------------------------|---------------------------------|
| Standards                            | EN IEC 60947-5-1                |
| Housing construction form            | Norm construction design        |
| Enclosure material                   | Plastic, glass-fibre-reinforced |
| Material of the contacts, electrical | Silver                          |
| Gross weight                         | 137 g                           |

## General data - Features

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

## Safety classification

|              |                |
|--------------|----------------|
| Standards    | EN ISO 13849-1 |
| Mission time | 20 Year(s)     |

## Safety classification - Safety outputs

|                                               |                       |
|-----------------------------------------------|-----------------------|
| B <sub>10D</sub> Normally-closed contact (NC) | 20,000,000 Operations |
|-----------------------------------------------|-----------------------|

## Mechanical data

|                               |                       |
|-------------------------------|-----------------------|
| Actuating element             | Roller lever N200     |
| Mechanical life, minimum      | 10,000,000 Operations |
| Positive break force, minimum | 40 N                  |
| Actuating speed, minimum      | 10 mm/min             |
| Actuating speed, maximum      | 1 m/s                 |

## Mechanical data - Connection technique

|                        |                           |
|------------------------|---------------------------|
| Termination            | Screw terminals M20 x 1.5 |
| Cable section, minimum | 0.34 mm <sup>2</sup>      |
| Cable section, maximum | 1.5 mm <sup>2</sup>       |

## Mechanical data - Dimensions

|                  |          |
|------------------|----------|
| Length of sensor | 32.5 mm  |
| Width of sensor  | 31 mm    |
| Height of sensor | 150.5 mm |

## Ambient conditions

|                              |              |
|------------------------------|--------------|
| Degree of protection         | IP67<br>IP66 |
| Ambient temperature, minimum | -30 °C       |
| Ambient temperature, maximum | +80 °C       |

## Ambient conditions - Insulation values

|                                           |       |
|-------------------------------------------|-------|
| Rated insulation voltage $U_i$            | 300 V |
| Rated impulse withstand voltage $U_{imp}$ | 4 kV  |

## Electrical data

|                                      |         |
|--------------------------------------|---------|
| Thermal test current                 | 5 A     |
| Required rated short-circuit current | 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 | Snap action                 |
| Switching frequency | 5,000 /h                    |

## Ordering code

Product type description:

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

(1)

|                |                                                 |
|----------------|-------------------------------------------------|
| <b>without</b> | non-EX version                                  |
| <b>EX</b>      | Types of protection Ex d and t, to Zone 1/21    |
| <b>EXI</b>     | Types of protection Ex i and t, up to Zone 1/21 |

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|            |                                      |
|------------|--------------------------------------|
| <b>215</b> | Metal enclosure                      |
| <b>216</b> | Thermoplastic enclosure              |
| <b>226</b> | Plastic housing with 2 cable entries |

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|                |                   |
|----------------|-------------------|
| <b>without</b> | L-hole (standard) |
| <b>L</b>       | elongated hole    |

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|             |                                                       |
|-------------|-------------------------------------------------------|
| <b>Z11</b>  | Snap action 1 NO contact / 1 NC contact               |
| <b>Z02</b>  | Snap action 2 NC contacts                             |
| <b>Z12</b>  | Snap action 1 NO contact / 2 NC contact               |
| <b>Z11R</b> | Snap action 1 NO contact / 1 NC contact with latching |
| <b>Z01R</b> | Snap action 1 NC contact with latching                |
| <b>Z02R</b> | Snap action 2 NC contacts with latching               |
| <b>T11</b>  | Slow action 1 NO contact / 1 NC contact               |
| <b>T02</b>  | Slow action 2 NC contacts                             |

|              |                                                                   |
|--------------|-------------------------------------------------------------------|
| <b>T20</b>   | Slow action 2 NO contact                                          |
| <b>T12</b>   | Slow action 1 NO contact / 2 NC contact                           |
| <b>T21</b>   | Slow action 2 NO contact / 1 NC contact                           |
| <b>T03</b>   | Slow action 3 NC contacts                                         |
| <b>T11UE</b> | Slow action 1 NO contact / 1 NC contact with overlapping contacts |
| <b>T02H</b>  | Slow action 2 NC contacts with staggered contacts                 |
| <b>T11K</b>  | Slow action 1 NO contact + 1 NC contact - short-stroke            |
| <b>T10</b>   | Slow action 1 NO contact                                          |
| <b>T02K</b>  | Slow action 2 NO contacts short-stroke                            |
| <b>T20H</b>  | Slow action 2 NO contacts staggered                               |

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|                |                                   |
|----------------|-----------------------------------|
| <b>without</b> | Contacts silver plated (Standard) |
| <b>A1</b>      | Gold contacts 0,3 µm              |
| <b>A2</b>      | Gold contacts 1,0 µm              |
| <b>A3</b>      | Gold contacts 3,0 µm              |

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|                |                           |
|----------------|---------------------------|
| <b>without</b> | without indication light  |
| <b>G</b>       | integrated status display |

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|                |                                       |
|----------------|---------------------------------------|
| <b>without</b> | Cable entry M20                       |
| <b>M16</b>     | cable entry M16                       |
| <b>ST</b>      | Connector plug M12 - plastic - bottom |
| <b>STR</b>     | Connector plug M12, right             |
| <b>STL</b>     | Connector plug M 12, left             |
| <b>STM</b>     | Connector plug M12, metal             |

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|             |                     |
|-------------|---------------------|
| <b>S200</b> | plunger S200 Ø 6 mm |
|-------------|---------------------|

|             |                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------|
| <b>S210</b> | Plunger Ø 8,6 mm                                                                                 |
| <b>S211</b> | Plunger Ø 10,3 mm                                                                                |
| <b>S221</b> | Plunger Ø 9,8 mm                                                                                 |
| <b>R200</b> | Roller plunger R200                                                                              |
| <b>R201</b> | Roller plunger - stainless steel roller Ø 9,5mm                                                  |
| <b>R210</b> | Roller plunger - plastic roller Ø 12mm                                                           |
| <b>K201</b> | Roller plunger - stainless steel roller - width 5,3 mm - Ø 12mm                                  |
| <b>K200</b> | Offset roller lever - plastic roller- width 5.3 mm - Ø 12 mm                                     |
| <b>K201</b> | Roller plunger - stainless steel roller - width 5,3 mm - Ø 12mm                                  |
| <b>K210</b> | Offset roller lever - plastic roller- width 5mm - Ø 14mm                                         |
| <b>K211</b> | Offset roller lever - stainless steel roller - width 5mm - Ø 14mm                                |
| <b>K220</b> | Offset roller lever - plastic roller- width 7.6 mm - Ø 14 mm                                     |
| <b>K230</b> | Angle roller lever - plastic roller Ø 14 mm                                                      |
| <b>K231</b> | Roller plunger - stainless steel roller Ø 14mm (Standard)                                        |
| <b>K240</b> | Angle roller lever with plastic roller Ø 22 mm - right-bent                                      |
| <b>K250</b> | Angle roller lever with plastic roller Ø 22 mm - left-bent                                       |
| <b>H200</b> | Roller lever - plastic roller Ø 16 m - lever length 24 mm                                        |
| <b>H202</b> | Roller lever - brass roller Ø 16mm - lever length 24mm (Standard)                                |
| <b>H230</b> | Roller lever - plastic roller Ø 16mm - lever length 28 mm                                        |
| <b>H232</b> | Roller lever - brass roller Ø 16mm - lever length 28 mm                                          |
| <b>H236</b> | Roller lever - rubber roller Ø 16mm - lever length 28 mm                                         |
| <b>N200</b> | Roller lever 2 mm Toothing (24...26mm) - Plastic roller Ø 20 mm - Width 9.8 mm                   |
| <b>N201</b> | Roller lever adjustable in 2 mm steps (24...66mm) - stainless steel roller Ø 20mm - width 9,8 mm |
| <b>N202</b> | Roller lever - adjustable in 2 mm steps (24...66mm) - brass roller Ø 20mm - width 9,8 mm         |

|             |                                                                                                                          |
|-------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>N206</b> | 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                                                                         |

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|                |                               |
|----------------|-------------------------------|
| <b>without</b> | 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°          |

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|                |                              |
|----------------|------------------------------|
| <b>without</b> | 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° |
| <b>X23</b> | lever rotation 345° |

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|                |                           |
|----------------|---------------------------|
| <b>without</b> | Roller outside (Standard) |
| <b>I</b>       | Roller inside             |

(12)

|                |                        |
|----------------|------------------------|
| <b>without</b> | -30...+80°C (Standard) |
| <b>T</b>       | -40...+80°C            |

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|  |  |
|--|--|
|  |  |
|--|--|

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|                |               |
|----------------|---------------|
| <b>without</b> | Zone 2 and 22 |
| <b>3GD</b>     | Zone 2 and 22 |

2D

Zone 21

3D

Zone 22

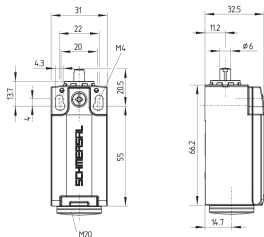
Pictures

Product picture (catalogue individual photo)



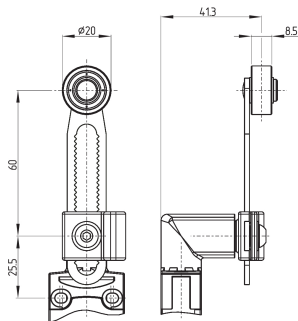
ID: kps2nf02  
| 1.2 MB | .jpg | 352.778 x 1026.936 mm - 1000 x 2911 px - 72 dpi  
| 89.2 kB | .png | 74.083 x 215.547 mm - 210 x 611 px - 72 dpi

Dimensional drawing basic component



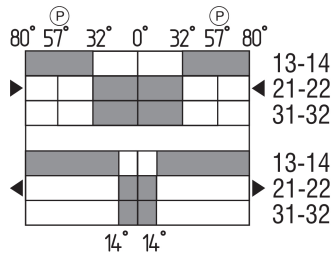
ID: kps2xg01  
| 4.4 kB | .png | 74.083 x 68.086 mm - 210 x 193 px - 72 dpi  
| 111.3 kB | .jpg | 352.778 x 323.85 mm - 1000 x 918 px - 72 dpi

Dimensional drawing actuator



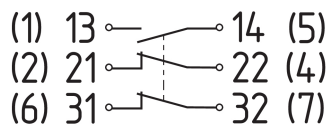
ID: kps11b10  
| 445.4 kB | .ai | 141.812 x 138.775 mm - 401 x 393 px - 72 dpi  
| 13.7 kB | .png | 74.083 x 72.672 mm - 210 x 206 px - 72 dpi  
| 195.0 kB | .jpg | 352.778 x 383.469 mm - 1000 x 1087 px - 72 dpi

Switch travel diagram



ID: kps11s57  
 | 3.2 kB | .png | 74.083 x 57.856 mm - 210 x 164 px - 72 dpi  
 | 126.1 kB | .jpg | 352.778 x 275.519 mm - 1000 x 781 px - 72 dpi

**Diagram**



ID: kps2xk07  
 | 85.7 kB | .jpg | 352.778 x 154.517 mm - 1000 x 438 px - 72 dpi  
 | 3.6 kB | .png | 74.083 x 32.456 mm - 210 x 92 px - 72 dpi

Schmersal, Inc., 15 Skyline Drive, Hawthorne, NY 10532  
 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: 12/16/2022, 1:08 AM