

## PS215-Z12-K230



- Metal enclosure
- Design to EN 50047
- cable entry 1 x M20 x 1,5
- Simple and quick to adjust the control elements by 45°.
- Quick connection technology as connection terminals rotated by 45°
- Actuation from bottom parallel to the switch, therefore only suitable for small housings.

### Data

#### Ordering data

|                               |                |
|-------------------------------|----------------|
| Product type description      | PS215-Z12-K230 |
| Article number (order number) | 103014965      |
| EAN (European Article Number) | 4030661501581  |

#### Certifications

|              |                     |
|--------------|---------------------|
| Certificates | cULus<br>CCC<br>EAC |
|--------------|---------------------|

#### General data

|                                      |                                    |
|--------------------------------------|------------------------------------|
| Product name                         | PS215 with angle roller lever K230 |
| Standards                            | IEC 60947-5-1                      |
| Housing construction form            | Norm construction design           |
| Enclosure material                   | Metal, zinc die-cast               |
| Enclosure coating material           | painted                            |
| Material of the contacts, electrical | Silver                             |
| Gross weight                         | 205 g                              |

#### General data - Features

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

|                           |   |
|---------------------------|---|
| Number of safety contacts | 2 |
|---------------------------|---|

### Safety appraisal

|           |             |
|-----------|-------------|
| Standards | 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 K230 |
|-------------------|-------------------------|

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

|                    |                  |
|--------------------|------------------|
| Terminal Connector | Screw connection |
|--------------------|------------------|

|                        |                      |
|------------------------|----------------------|
| Cable section, minimum | 0.34 mm <sup>2</sup> |
|------------------------|----------------------|

|                        |                     |
|------------------------|---------------------|
| Cable section, maximum | 1.5 mm <sup>2</sup> |
|------------------------|---------------------|

### Mechanical data - Dimensions

|                  |         |
|------------------|---------|
| Height of sensor | 93.5 mm |
|------------------|---------|

|                  |         |
|------------------|---------|
| Length of sensor | 32.5 mm |
|------------------|---------|

|                 |       |
|-----------------|-------|
| Width of sensor | 31 mm |
|-----------------|-------|

### Ambient conditions

|                  |              |
|------------------|--------------|
| Protection class | IP66<br>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        | Snap switch element         |
| Switching frequency        | 5,000 /h                    |

## Ordering code

Product type description:

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

(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
- 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

(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

(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  
**K230** Angle roller lever - plastic roller Ø 14 mm  
**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  
**N210** Roller lever - adjustable in 2 mm steps (24...66mm) - plastic roller Ø 20mm - width 5 mm - long-angled - locking washer  
**N280** Roller lever -adjustable in 2 mm steps (24...66mm) - plastic roller Ø 20mm - width 5 mm - long -locking washer  
**J200** Rod lever - plastic - 200mm -Ø 6mm  
**J201** Rod lever - stainless steel - 200mm -Ø 6mm (Standard)  
**J203** Rod lever - aluminium - 200mm -Ø 6mm  
**F230** Spring rod - plastic  
**F231** Spring rod - stainless steel  
**A200** Special actuating bolt - plastic - valve control

(9)

**without** no intent rotation (Standard)

- U1** intent rotation 45°
- U2** intent rotation 90°
- U3** intent rotation 135°
- U4** intent rotation 180°
- U5** intent rotation 225°
- U6** intent rotation 275°
- U7** intent rotation 315°

(10)

**without** no lever rotation (Standard)

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

## Documents

### UL Certificate

(211,5 kB, 01.08.2019)

### EAC certification

## Pictures

### Product picture (catalogue individual photo)

ID: kps1kf21



| 13,1 kB | .png | 74.083 x 50.447 mm - 210 x 143  
Pixel - 72 dpi

| 129,8 kB | .jpg | 352.778 x 239.536 mm - 1000 x 679  
Pixel - 72 dpi

| 20,1 kB | .jpg | 27.093 x 18.373 mm - 320 x 217 Pixel  
- 300 dpi

### Product picture (catalogue individual photo)



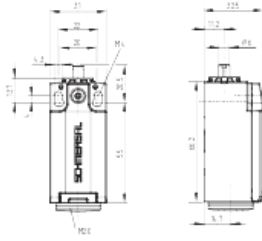
ID: kps2kf07

| 850,1 kB | .jpg | 352.778 x 612.069 mm - 1000 x  
1735 Pixel - 72 dpi

| 52,2 kB | .png | 74.083 x 128.411 mm - 210 x 364  
Pixel - 72 dpi

| 87,2 kB | .jpg | 27.093 x 46.99 mm - 320 x 555 Pixel -  
300 dpi

## Dimensional drawing basic component



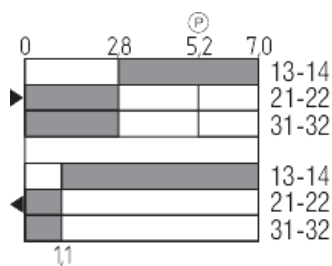
ID: kps2xg01

| 4,4 kB | .png | 74.083 x 68.086 mm - 210 x 193 Pixel  
- 72 dpi

| 111,3 kB | .jpg | 352.778 x 323.85 mm - 1000 x 918  
Pixel - 72 dpi

| 26,4 kB | .jpg | 112.889 x 103.717 mm - 320 x 294  
Pixel - 72 dpi

## Switch travel diagram

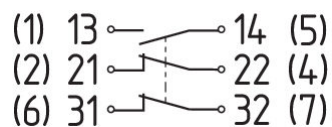


ID: kps11s30

| 29,4 kB | .jpg | 112.889 x 90.311 mm - 320 x 256  
Pixel - 72 dpi

| 2,5 kB | .png | 74.083 x 59.267 mm - 210 x 168 Pixel  
- 72 dpi

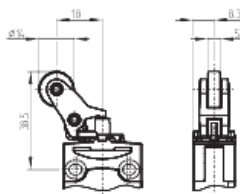
## Diagram



ID: kps2xk07

| 26,2 kB | .jpg | 112.889 x 49.389 mm - 320 x 140  
Pixel - 72 dpi

## Dimensional drawing actuator



ID: kps11b06

| 4,1 kB | .png | 74.083 x 61.736 mm - 210 x 175 Pixel  
- 72 dpi

| 150,0 kB | .jpg | 352.778 x 290.689 mm - 1000 x 824  
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 23.06.2020 14:52:00