



## PS316-Z02-S300

- Design to EN 50041
- 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

PS316-Z02-S300

103015130

EAN (European Article Number)

4030661502410

#### Approval - Standards

cULus

CCC

EAC

#### General data

Product name

PS316 with plunger S300

IEC 60947-5-1

Housing construction form

Norm construction design

Actuator type to DIN EN 50047

B

Enclosure material

Plastic, glass-fibre-reinforced

Material of the contacts, electrical

Silver

Gross weight

116 g

#### General data - Features

Safety functions

Yes

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

Plunger S300

Mechanical life, minimum

10,000,000 Operations

Positive break force, minimum

50 N

Actuating speed, minimum

10 mm/min

Actuating speed, maximum

0.5 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

104 mm

Length of sensor

37 mm

Width of sensor

41 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

10 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   | 2 NC contact        |
| Switching principle | Snap switch element |
| Switching frequency | 5,000 /h            |

## Ordering code

Product type description:

PS(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)

**315** Metal enclosure

**316** Thermoplastic enclosure

(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

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

**STM** Connector plug M12, metal

(8)

**S200** plunger S200 Ø 6 mm

**S300** Plunger - plastic - tappet width Ø 9 mm

**S310** Plunger - plastic - tappet width Ø 9 mm - with bellows

**R300** Roller plunger - plastic roller - width 4.6 mm

**R302** Roller plunger - brass roller - width 4.6 mm

**R310** Roller plunger - plastic roller - width 4.6 mm

**K360** Angle roller lever with plastic roller Ø 20 mm - left-bent

**K370** Angle roller lever with plastic roller Ø 20 mm - right-bent

**H300** Roller lever - plastic roller Ø 25 mm

**H301** Roller lever - stainless steel roller Ø 25 mm

**H302** Roller lever - brass roller Ø 25 mm

**H310** Roller lever - plastic roller Ø 20 mm

**H311** Roller lever - stainless steel roller Ø 20 mm

**H312** Roller lever - brass roller Ø 20mm

**H326** Roller lever - rubber roller Ø 20mm

**N300** Roller lever - plastic roller Ø 25 mm

**N301** Roller lever - stainless steel roller Ø 20 mm

**N306** Roller lever - rubber roller Ø 50mm

**N360** Roller lever - plastic roller Ø 20 mm - width 9.8 mm - long

**N370** Roller lever - plastic roller Ø 20 mm - width 9.8 mm - very long

**J300** Rod lever - plastic - 200mm -Ø 6mm

**F230** Spring rod - stainless steel - 150.4 mm

**F231** Spring rod - stainless steel - 70.2 mm

**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

(13)

(14)

**without** Zone 2 and 22

**3GD**      Zone 2 and 22

**2D**      Zone 21

**3D**      Zone 22

## Pictures

## Photo/Product/Catalogue



ID: kps3sf02

| 52,1 kB | .png | 74.083 x 126.647 mm - 210 x 359  
Pixel - 72 dpi

| 872,5 kB | .jpg | 352.778 x 603.956 mm - 1000 x 1712 Pixel - 72 dpi

## Photo/Product/Catalogue

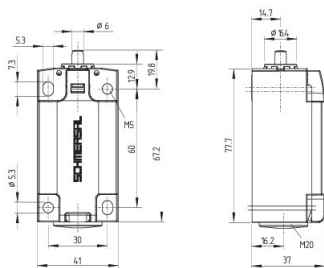


ID: kps3sf03

| 42,0 kB | .png | 74.083 x 104.069 mm - 210 x 295  
Pixel - 72 dpi

| 604,1 kB | .jpg | 352.778 x 496.358 mm - 1000 x 1407 Pixel - 72 dpi

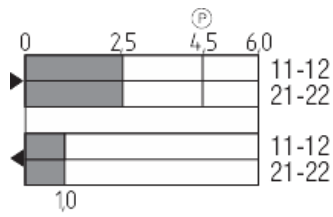
### Dimension/Product/Basic



ID: kps3xg05

| 123,9 kB | .jpg | 352.778 x 289.278 mm - 1000 x 820  
Pixel - 72 dpi

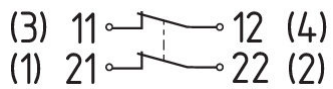
## Diagramm/Product/Travel



ID: kps11s02

| 71,4 kB | .jpg | 352.778 x 226.483 mm - 1000 x 642  
Pixel - 72 dpi  
| 2,1 kB | .png | 74.083 x 47.625 mm - 210 x 135 Pixel  
- 72 dpi

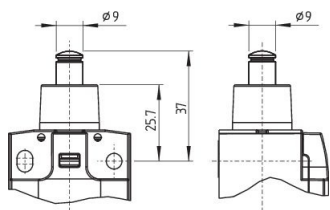
## Graphic/Product/Contact



ID: kps2xk08

| 56,1 kB | .jpg | 352.778 x 110.067 mm - 1000 x 312  
Pixel - 72 dpi

## Dimension/Product/Actuator



ID: kps3xb08

| 101,2 kB | .jpg | 352.778 x 225.425 mm - 1000 x 639  
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 212021-01-31T03:02:21+01:000301Europe/BerlinSun, 31 Jan 2021 03:02:21

+010021amSunday.31am31Europe/BerlinCET0201Europe/BerlinJanuary2021Sun, 31 Jan 2021 03:02:21

+010001am31