

## RSS16-I2-D-ST8H



- without latching
- Thermoplastic enclosure
- Series-wiring unlimited
- Suitable for series-wiring
- 1 x connector plug M12, 8-pole
- Door stop with magnetic latching
- 3 different directions of actuation
- Connection terminal or plug connection
- Coding level "High" according to ISO 14119
- Repeated individual coding with RFID technology
- RFID-technology for needs-based protection against tampering

### Data

#### Ordering data

RSS16-I2-D-ST8H

103004339

EAN (European Article Number) 4030661456928

eCl@ss number, Version 9.0 27-27-24-03

#### Approval - Standards

TÜV  
cULus  
EAC  
FCC  
IC

#### General data

RSS16

IEC 60947-5-3

general information Individual coding, multiple teaching

Coding level according to ISO 14119 High

RFID

|                                         |                                                                   |
|-----------------------------------------|-------------------------------------------------------------------|
| Housing construction form               | Block                                                             |
| Installation conditions<br>(mechanical) | not flush                                                         |
| Sensor topology                         | Sensor for series wiring                                          |
| Enclosure material                      | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing |
| Active area                             | Glass-fibre, reinforced thermoplastic                             |
| Gross weight                            | 275 g                                                             |
| Time to readiness, maximum              | 2,000 ms                                                          |
| Reaction time, maximum                  | 100 ms                                                            |
| Duration of risk, maximum               | 200 ms                                                            |

#### General data - Features

|                                                             |     |
|-------------------------------------------------------------|-----|
| Diagnostic output                                           | Yes |
| Short circuit detection                                     | Yes |
| Short-circuit recognition                                   | Yes |
| Series-wiring                                               | Yes |
| Safety functions                                            | Yes |
| Cascadable                                                  | Yes |
| Integral System Diagnostics,<br>status                      | Yes |
| Number of LEDs                                              | 2   |
| Number of semi-conductor<br>outputs with signaling function | 1   |
| Number of fail-safe digital<br>outputs                      | 2   |

#### Safety appraisal

|                                                 |                                                       |
|-------------------------------------------------|-------------------------------------------------------|
|                                                 | ISO 13849-1<br>IEC 60947-5-3<br>EN 62061<br>IEC 61508 |
| Performance level, up to                        | e                                                     |
| Control category to EN13849                     | 4                                                     |
| PFH-value                                       | $6.30 \times 10^{-11}$ /h                             |
| Safety Integrity Level (SIL),<br>applicable for | 3                                                     |
| Mission Time                                    | 20 Year(s)                                            |

#### Mechanical data

|                  |                                     |
|------------------|-------------------------------------|
| Actuating panels | front side<br>rear<br>from head     |
| Active area      | lateral<br>front side<br>cover-side |

|                                       |                             |
|---------------------------------------|-----------------------------|
| Mounting                              | 2 x M5, Cylinder head screw |
| Switch distance                       | 15 mm                       |
| Ensured switch distance "ON" S        | 12 mm                       |
| ao                                    |                             |
| Ensured switch distance "OFF" S       | 30 mm                       |
| ar                                    |                             |
| Hysteresis (Switch distance), maximum | 2 mm                        |
| Repeat accuracy R R                   | 0.5 mm                      |
| Tightening torque of nuts, maximum    | 2 Nm                        |

#### Mechanical data - Connection technique

|                    |                                                                                                                                                                                 |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Terminal Connector | Connector M12, 8-pole                                                                                                                                                           |
| Note               | The cable section of the interconnecting cable must be observed for both wiring variants! Cable length and cable section alter the voltage drop depending on the output current |

#### Mechanical data - Dimensions

|                  |       |
|------------------|-------|
| Height of sensor | 30 mm |
| Length of sensor | 91 mm |
| Width of sensor  | 52 mm |

#### Ambient conditions

|                                            |                                                                         |
|--------------------------------------------|-------------------------------------------------------------------------|
| Protection class                           | IP 65 to IEC/EN 60529<br>IP 66 to IEC/EN 60529<br>IP 67 to IEC/EN 60529 |
| Ambient temperature, minimum               | -25 °C                                                                  |
| Ambient temperature, maximum               | +70 °C                                                                  |
| Storage and transport temperature, minimum | -25 °C                                                                  |
| Storage and transport temperature, maximum | +85 °C                                                                  |
|                                            | 30 g / 11 ms                                                            |
| Protection rating                          | 0                                                                       |

#### Ambient conditions - Insulation value

|                                 |        |
|---------------------------------|--------|
| Rated impulse withstand voltage | 0.8 kV |
|                                 | III    |
|                                 | 3      |

#### Electrical data

|                 |                     |
|-----------------|---------------------|
| Voltage type    | DC (direct current) |
| No-load current | 100 mA              |

|                                                      |          |
|------------------------------------------------------|----------|
| Rated operating voltage, minimum                     | 20.4 VDC |
| Rated operating voltage, maximum                     | 26.4 VDC |
| Operating current                                    | 2,100 mA |
| Required rated short-circuit current to EN 60947-5-1 | 100 A    |
| Switching frequency, approx.                         | 1 Hz     |

#### Electrical data - Fail-safe digital outputs

|                                             |          |
|---------------------------------------------|----------|
| Rated operating current (safety outputs)    | 1,000 mA |
| Output current, (fail-safe output), maximum | 1 A      |
| Versions                                    | p-type   |
| Voltage drop $U_d$ , maximum                | 1 V      |
| Current leakage                             | 0.5 mA   |
| Voltage, Utilisation category DC12          | 24 VDC   |
| Current, Utilisation category DC12          | 1 A      |
| Voltage, Utilisation category DC13          | 24 VDC   |
| Current, Utilisation category DC13          | 1 A      |

#### Electrical data - Diagnostic output

|                                       |        |
|---------------------------------------|--------|
| Operating current (diagnostic output) | 50 mA  |
| Versions                              | p-type |
| Voltage drop $U_d$ , maximum          | 2 V    |
| Voltage, Utilisation category DC12    | 24 VDC |
| Current, Utilisation category DC12    | 0.1 A  |
| Voltage, Utilisation category DC13    | 24 VDC |
| Current, Utilisation category DC13    | 0.1 A  |

#### Electrical data - Electromagnetic compatibility (EMC)

IEC 61000-6-4  
IEC 60947-3

## Status indication

|                                         |                                 |
|-----------------------------------------|---------------------------------|
| Note (LED switching conditions display) | Multi-coloured LED: Green, Red  |
|                                         | LED yellow: Operating condition |
|                                         | LED green: Supply voltage       |
|                                         | LED red: Fault                  |

## Scope of delivery

|                      |                                       |
|----------------------|---------------------------------------|
| Included in delivery | Actuators must be ordered separately. |
|----------------------|---------------------------------------|

## Accessory

RST16-1  
RST-U-2  
PROTECT PSC1  
SRB-E-301ST  
SRB-E-201LC

## Ordering code

Product type description:

RSS16 (1)-(2)-(3)-(4)

(1)

**without** Standard coding

**I1** Individual coding

**I2** Individual coding, for multiple applications

(2)

**D** With diagnostic output

**SD** With serial diagnostic function

(3)

**without** without latching

**R** With latching, latching force 40 ... 60 N

(4)

**ST8H** With connector plug M12 in the middle

**CC** with cage clamps

**SK** Screw connection

## Pictures

## Photo/Product/Catalogue

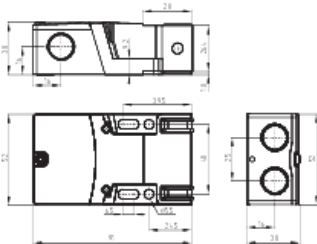


ID: krss1f02

| 1,3 MB | .jpg | 352.778 x 745.772 mm - 1000 x 2114  
Pixel - 72 dpi

| 100,6 kB | .png | 74.083 x 156.633 mm - 210 x 444  
Pixel - 72 dpi

## Dimension/Product/Basic

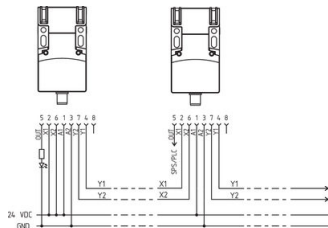


ID: krss1g01

| 4,7 kB | .png | 74.083 x 56.444 mm - 210 x 160 Pixel  
- 72 dpi

| 141,1 kB | .jpg | 352.778 x 268.817 mm - 1000 x 762  
Pixel - 72 dpi

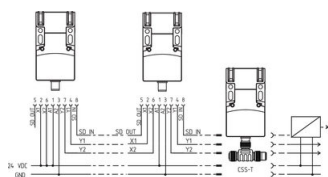
## Graphic/Product/Wiring



ID: krss1i02

| 101,2 kB | .jpg | 352.778 x 247.297 mm - 1000 x 701  
Pixel - 72 dpi

## Graphic/Product/Wiring



ID: krss1i03

| 112,1 kB | .jpg | 352.778 x 183.444 mm - 1000 x 520  
Pixel - 72 dpi

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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.

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