

RSS36-I1-D-ST



- Actuation from side
- Thermoplastic enclosure
- 27 mm x 108.2 mm x 35 mm
- Misaligned actuation possible
- 1 x connector socket M12, 8-pole
- Individual coding with RFID technology
- 2 short-circuit proof PNP safety outputs
- Coding level "High" according to ISO 14119
- High repeat accuracy of the switching points
- RFID-technology for needs-based protection against tampering
- Integral cross-short, wire-breakage and external voltage monitoring of the safety cables up to the control cabinet

Data

Ordering data

| | |
|-------------------------------|----------------|
| Product type description | RSS 36-I1-D-ST |
| Article number (order number) | 101216958 |
| EAN (European Article Number) | 4030661416380 |
| eCl@ss number, Version 9.0 | 27-27-24-03 |

Approval - Standards

| | |
|--------------|--------|
| Certificates | TÜV |
| | cULus |
| | ECOLAB |
| | EAC |
| | FCC |
| | IC |

General data

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|--------------|--------|
| Product name | RSS 36 |
|--------------|--------|

| | |
|--------------------------------------|---|
| Standards | IEC 60947-5-3 |
| general information | Individual coding |
| Coding level according to ISO 14119 | High |
| Active principle | RFID |
| Housing construction form | Block |
| Installation conditions (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 | 80 g |
| Time to readiness, maximum | 2,000 ms |
| Reaction time, maximum | 100 ms |
| Duration of risk, maximum | 200 ms |

General data - Features

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|--|-----|
| Diagnostic output | Yes |
| Short circuit detection | Yes |
| Short-circuit recognition | Yes |
| Safety functions | Yes |
| Cascadable | Yes |
| Integral System Diagnostics, status | Yes |
| Number of LEDs | 3 |
| Number of semi-conductor outputs with signaling function | 1 |
| Number of fail-safe digital outputs | 2 |

Safety appraisal

| | |
|--|---|
| Standards | ISO 13849-1 IEC 60947-5-3 EN 62061 IEC 61508 |
| Performance level, up to | e |
| Control category to EN13849 | 4 |
| PFH-value | 2.70×10^{-10} /h |
| Safety Integrity Level (SIL), applicable for | 3 |
| Mission Time | 20 Year(s) |

Mechanical data

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|------------------|---------|
| Actuating panels | lateral |
| Active area | lateral |

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| Mounting | A screw length of 25 mm is sufficient for sensor mounting and for side mounting of the actuators. 30 mm long screws are recommended when the actuator is mounted upright and/or when the sealing discs are used. |
| Switch distance | 12 mm |
| Ensured switch distance "ON" S_{ao} | 10 mm |
| Ensured switch distance "OFF" S_{ar} | 20 mm |
| Hysteresis (Switch distance), maximum | 2 mm |
| Repeat accuracy R_R | 0.5 mm |
| Note (Repeat accuracy R_R) | Axial offset: The long side allows for a maximum height misalignment (x) of sensor and actuator of 8 mm (e.g. mounting tolerance or due to guard door sagging). The axial misalignment (y) is max. ± 18 mm (see figure: Operating principle). Minimum clearance between two sensor systems 100 mm. |

Mechanical data - Connection technique

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

Mechanical data - Dimensions

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|------------------|----------|
| Height of sensor | 25 mm |
| Length of sensor | 22 mm |
| Width of sensor | 106.3 mm |

Ambient conditions

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|---|---|
| Protection class | IP 65 to IEC/EN 60529 IP 67 to IEC/EN 60529 IP 69 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 |
| Material temperature resistance of the cable (in motion), minimum | -10 °C |
| Material temperature resistance of the cable (at rest), minimum | -30 °C |

| | |
|--|------------------------------|
| Material temperature resistance (long-term), maximum | +105 °C |
| Resistance to vibrations to EN 60068-2-6 | 10 ... 55 Hz, amplitude 1 mm |
| Resistance to shock | 30 g / 11 ms |
| Protection rating | III |

Ambient conditions - Insulation value

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|---------------------------------|--------|
| Rated impulse withstand voltage | 0.8 kV |
| Overvoltage category | III |
| Degree of pollution to VDE 0100 | 3 |

Electrical data

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|--|----------------------|
| Voltage type | DC (direct current) |
| No-load current | 100 mA |
| Rated operating voltage | 24 VDC -15 % / +10 % |
| Rated operating voltage, minimum | 20.4 VDC |
| Rated operating voltage, maximum | 26.4 VDC |
| Operating current | 600 mA |
| Required rated short-circuit current to EN 60947-5-1 | 100 A |
| Switching frequency, approx. | 1 Hz |

Electrical data - Fail-safe digital outputs

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|---|--------|
| Rated operating current (safety outputs) | 250 mA |
| Output current, (fail-safe output), maximum | 0.25 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 | 0.25 A |
| Voltage, Utilisation category DC13 | 24 VDC |
| Current, Utilisation category DC13 | 0.25 A |

Electrical data - Diagnostic output

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|------------------------------------|--------|
| Versions | p-type |
| Voltage drop U_d , maximum | 2 V |
| Voltage, Utilisation category DC12 | 24 VDC |
| Current, Utilisation category DC12 | 0.05 A |
| Voltage, Utilisation category DC13 | 24 VDC |
| Current, Utilisation category DC13 | 0.05 A |

Electrical data - Electromagnetic compatibility (EMC)

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|-----------------------|---------------|
| Interfering radiation | IEC 61000-6-4 |
| EMC rating | IEC 60947-3 |

Status indication

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|---|---------------------------------|
| Note (LED switching conditions display) | LED yellow: Operating condition |
| | LED green: Supply voltage |
| | LED red: Fault |

Pin assignment

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|-------|--------------------------------|
| PIN 1 | A1 Ue Brown |
| PIN 2 | X1 Safety input 1 White |
| PIN 3 | A2 GND Blue |
| PIN 4 | Y1 Safety output 1 Black |
| PIN 5 | OUT Diagnostic output OUT Grey |
| PIN 6 | X2 Safety input 2 violet |
| PIN 7 | Y2 Safety output 2 red |
| PIN 8 | IN without function Pink |

Scope of delivery

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

Accessory

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|-------------------------------|--------------|
| Recommendation (actuator) | RST 36-1 |
| | RST 36-1-R |
| Recommended safety switchgear | PROTECT PSC1 |
| | SRB-E-301ST |
| | SRB-E-201LC |

Notes

Note (General) During the individual coding, a RST actuator is taught through a simple routine during start-up, so that any tampering by means of a spare or substitute actuator is permanently excluded.

Ordering code

Product type description:

RSS 36 (1)-(2)-(3)-ST

(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 approx. 18 N

Pictures

Product picture (catalogue individual photo)



ID: krss3f11

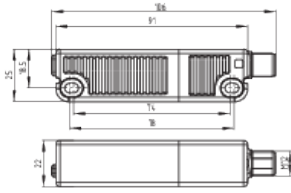
| 106,3 kB | .png | 74.083 x 216.253 mm - 210 x 613

Pixel - 72 dpi

| 501,7 kB | .jpg | 196.144 x 572.911 mm - 556 x 1624

Pixel - 72 dpi

Dimensional drawing basic component



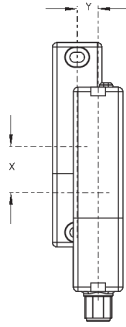
ID: 1rss3g03

| 8,8 kB | .png | 74.083 x 51.506 mm - 210 x 146 Pixel
- 72 dpi

| 55,0 kB | .cdr |

| 124,2 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695
Pixel - 72 dpi

Operating principle

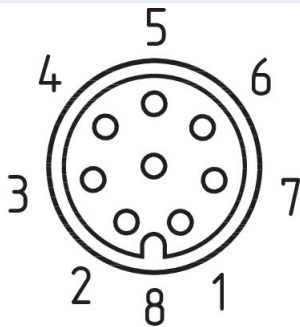


ID: krss3a01

| 4,2 kB | .png | 74.083 x 193.322 mm - 210 x 548
Pixel - 72 dpi

| 182,6 kB | .jpg | 352.778 x 920.75 mm - 1000 x 2610
Pixel - 72 dpi

Contact arrangement



ID: km23-k8a

| 18,0 kB | .cdr |

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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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