



RSS260-I2-D-ST

- Repeated individual coding with RFID technology
- Coding level "High" according to ISO 14119
- 1 x connector plug M8
- Frontal and lateral actuation enabled
- Thermoplastic enclosure
- Simple mounting without additional angle
- RFID-technology for needs-based protection against tampering

Data

Ordering data

Product type description	RSS260-I2-D-ST
Article number (order number)	103003607
EAN (European Article Number)	4030661436432
eCl@ss number, version 12.0	27-27-46-01
eCl@ss number, version 11.0	27-27-24-03
eCl@ss number, version 9.0	27-27-24-03
ETIM number, version 7.0	EC001829
ETIM number, version 6.0	EC001829

Approvals - Standards

Certificates	TÜV cULus FCC IC UKCA ANATEL
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General data

Standards	EN ISO 13849-1 EN IEC 60947-5-3 EN IEC 61508
Coding	Individual coding, multiple teaching
Coding level according to EN ISO 14119	High
Working principle	RFID
Frequency band RFID	125 kHz
Transmitter output RFID, maximum	-6 dB/m
Housing construction form	Block
Installation conditions (mechanical)	not flush
Sensor topology	Sensor for series wiring
Housing material	Plastic, thermoplastic, self-extinguishing
Active area	Glass-fibre, thermoplastic
Reaction time, maximum	100 ms
Duration of risk, maximum	200 ms
Reaction time, switching off safety outputs via actuator, maximum	100 ms
Gross weight	61 g

General data - Features

Diagnostic output	Yes
Short circuit detection	Yes
Cross-circuit detection	Yes
Series-wiring	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 poles	8
Number of fail-safe digital outputs	2

Safety classification

Standards	EN ISO 13849-1 EN IEC 61508
Performance Level, up to	e
Category	4
PFH value	6.80×10^{-10} /h
PFD value	1.20×10^{-4}
Safety Integrity Level (SIL), suitable for applications in	3
Mission time	20 Year(s)

Mechanical data

Actuating panels	lateral front side
Active area	lateral front
Mounting	A 20 mm screw length usually suffices to mount the sensor. When the mounting plates are used, we recommend 25 mm long screws.
Type of the fixing screws	2x M4
Tightening torque of the fixing screws, maximum	0.8 Nm

Mechanical data - Switching distances according EN IEC 60947-5-3

Typical switching distance, frontal	12 mm
Typical switching distance, lateral	9 mm
Assured switching distance "ON", frontal	10 mm
Assured switching distance "OFF", frontal	18 mm
Assured switching distance "ON", lateral	6 mm
Assured switching distance "OFF", lateral	15 mm
Note (S_{ao})	The specifications of the safety switching distance S_{ao} refer to a temperature range of -10 °C ... +60 °C. For a temperature range of -28 °C ... +65 °C, S_{ao} is reduced by 2 mm.
Note (switching distance)	Axial misalignment, a horizontal and vertical misalignment of the safety sensor and the actuator are tolerated. The possible misalignment depends on the distance of the active surfaces of the sensor and the actuator. The sensor remains active within the tolerance range.
Hysteresis (Switching distance), maximum	2 mm
Repeat accuracy R	0.5 mm
Note (Repeat accuracy 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

Note (length of the sensor chain)	Cable length and cross-section change the voltage drop depending on the output current
Note (series-wiring)	Unlimited number of devices, observe external line fusing, max. 31 devices in case of serial diagnostic SD
Termination	Connector M8, 8-pole

Mechanical data - Dimensions

Length of sensor	29.5 mm
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Width of sensor 39.2 mm

Height of sensor 18 mm

Ambient conditions

Degree of protection IP65
IP67

Ambient temperature -28 ... +65 °C

Storage and transport temperature -28 ... +85 °C

Relative humidity, maximum 93 %

Note (Relative humidity) non-condensing
non-icing

Resistance to vibrations 10 ... 55 Hz, amplitude 1 mm

Resistance to shock 30 g / 11 ms

Permissible installation altitude above sea level, maximum 2,000 m

Ambient conditions - Insulation values

Rated insulation voltage U_i 32 VDC

Rated impulse withstand voltage U_{imp} 0.8 kV

Overvoltage category III

Degree of pollution 3

Electrical data

Operating voltage 24 VDC -15 % / +10 % (stabilised PELV power supply)

Operating current, minimum 0.5 mA

No-load supply current I_0 , typical 35 mA

Rated operating voltage 24 VDC

Operating current 600 mA

Required rated short-circuit current 100 A

Time to readiness, maximum	2,000 ms
Switching frequency, maximum	1 Hz
Utilisation category DC-12	24 VDC / 0.05 A
Electrical fuse rating, maximum	2 A

Electrical data - Safety digital inputs

Designation, Safety inputs	X1 and X2
Current consumption of the safety inputs	5 mA
Test pulse duration, maximum	1 ms
Test pulse interval, minimum	100 ms
Classification ZVEI CB24I, Sink	C1
Classification ZVEI CB24I, Source	C1 C2 C3

Electrical data - Safety digital outputs

Designation, Safety outputs	Y1 and Y2
Rated operating current (safety outputs)	250 mA
Output current, (fail-safe output), maximum	0.25 A
Design of control elements	short-circuit proof, p-type
Voltage drop U_d , maximum	1 V
Leakage current I_r , maximum	0.5 mA
Voltage, Utilisation category DC-12	24 VDC
Current, Utilisation category DC-12	0.25 A

Voltage, Utilisation category	24 VDC
DC-13	
Current, Utilisation category	0.25 A
DC-13	
Test pulse interval, typical	1000 ms
Test pulse duration, maximum	1 ms
Classification ZVEI CB24I, Source	C2
Classification ZVEI CB24I, Sink	C1
	C2

Electrical data - Diagnostic outputs

Designation, Diagnostic outputs	OUT
Operating current	50 mA
Voltage drop U_d , maximum	2 V
Voltage, Utilisation category	24 VDC
DC-12	
Current, Utilisation category	0.05 A
DC-12	
Voltage, Utilisation category	24 VDC
DC-13	
Current, Utilisation category	0.05 A
DC-13	

Electrical data - Electromagnetic compatibility (EMC)

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

Status indication

Note (LED switching conditions display)	(1) LED green: Supply voltage LED yellow: Operating condition LED red: Fault
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Pin assignment

PIN 1	A1 U _e : White
PIN 2	X1 safety input 1: Brown
PIN 3	A2 GND: Green
PIN 4	Y1 safety output 1: Yellow
PIN 5	OUT Diagnostic output OUT Grey
PIN 6	X2 safety input 2: Pink
PIN 7	Y2 safety output 2: Blue
PIN 8	IN without function: Red

Scope of delivery

Scope of delivery	Actuator must be ordered separately.
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Accessory

Recommendation (actuator)	RST16-1 RST-U-2 RST260-1
Recommended safety switchgear	PROTECT PSC1 SRB-E-301ST SRB-E-201LC

Ordering code

Product type description:
RSS260-(1)-(2)-(3)-(4)-(5)

(1)

without	Standard coding
I1	Individual coding
I2	Individual coding, multiple teaching

(2)

D	With diagnostic output
SD	With serial diagnostic function

(3)

without	Standard version without feedback circuit monitoring EDM (External Device Monitoring)
F0	EDM with automatic reset
F1	EDM with manual reset

(4)

without	without emergency-stop
Q	Acknowledge input error with EMERGENCY STOP

(5)

without	Connecting cable (length in m)
ST	Connector plug M8, 8-pole
LSTM12-8-0,25M	Cable 0.25 m long with connector M12, 8-pole
LSTM8-8-0,1M	Cable 0.1 m long with connector M8, 8-pole
LSTM12-5-0.25M	Cable 0.25 m long with connector M12, 5-pole

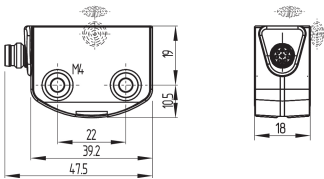
Pictures

Product picture (catalogue individual photo)



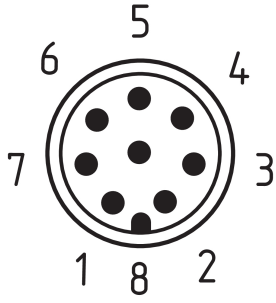
ID: krss2f01
| 509.4 kB | .jpg | 352.778 x 281.164 mm - 1000 x 797 px - 72 dpi
| 40.1 kB | .png | 74.083 x 58.914 mm - 210 x 167 px - 72 dpi
| 59.5 kB | .jpg | 123.472 x 98.425 mm - 350 x 279 px - 72 dpi

Dimensional drawing basic component



ID: krss2g02
| 147.2 kB | .ai | 297 x 210.002 mm - 841 x 595 px - 72 dpi
| 4.8 kB | .png | 74.083 x 39.864 mm - 210 x 113 px - 72 dpi
| 121.3 kB | .jpg | 352.778 x 189.089 mm - 1000 x 536 px - 72 dpi

Contact arrangement



ID: km12-k8b

| 5.3 kB | .png | 73.731 x 87.489 mm - 209 x 248 px - 72 dpi

| 138.6 kB | .jpg | 352.425 x 417.689 mm - 999 x 1184 px - 72 dpi

Schmersal India Pvt. Ltd., Plot No - G-7/1, Ranjangaon MIDC, Tal. - Shirur, Dist.- Pune 412 220

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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