RSS 36-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	
	RSS 36-I1-D-ST
	101216958
EAN (European Article Number)	4030661416380
eCl@ss number, Version 9.0	27-27-24-03
Approval - Standards	
	TÜV cULus ECOLAB EAC FCC IC

General data	
	RSS 36 IEC 60947-5-3
general information	Individual coding
Coding level according to ISO 14119	High
	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	
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	
	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 x 10^{-10} /h

Safety Integrity Level (SIL), applicable for	3
Mission Time	20 Year(s)
Mechanical data	
Actuating panels	lateral
Active area	lateral
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 $_{R}$)	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	
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	
Height of sensor	25 mm
Length of sensor	22 mm
Width of sensor	106.3 mm
Ambient conditions	
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
	30 g / 11 ms
	III

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
	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	
Rated operating current (safety outputs)	250 mA
Output current, (fail-safe output), maximum	0.3 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	0.3 A

Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	0.3 A
Electrical data - Diagnostic output	
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)	LED yellow: Operating condition LED green: Supply voltage LED red: Fault
Pin assignment	
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	
Included in delivery	Actuators must be ordered separately.
Accessory	
	RST 36-1 RST 36-1-R

	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

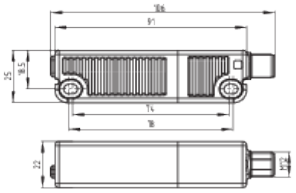
Photo/Product/Catalogue



ID: krss3f11

| 501,7 kB | .jpg | 196.144 x 572.911 mm - 556 x 1624 Pixel - 72 dpi
| 106,3 kB | .png | 74.083 x 216.253 mm - 210 x 613 Pixel - 72 dpi

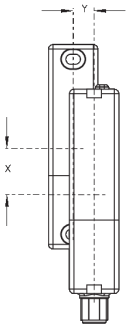
Dimension/Product/Basic



ID: 1rss3g03

| 8,8 kB | .png | 74.083 x 51.506 mm - 210 x 146 Pixel - 72 dpi
| 124,2 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 Pixel - 72 dpi
| 55,0 kB | .cdr |

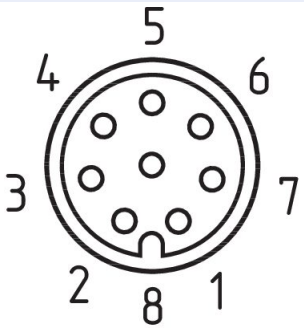
Illistration/Product/Function



ID: krss3a01

| 182,6 kB | .jpg | 352.778 x 920.75 mm - 1000 x 2610 Pixel - 72 dpi
| 4,2 kB | .png | 74.083 x 193.322 mm - 210 x 548 Pixel - 72 dpi

Graphic/Product/PIN



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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