

# SAFETY RFID SENSOR

## YSR-xxK4-xESE-xxxx



22 MM SIZE

CAT. 4 / PL e

### OUTSTANDING FEATURES

- Random or teachable code
- Safe switch on distance Sao : 8 mm
- Safe switch off distance Sar : 18 mm
- PVC cable or M12 pigtail connection
- Type 4, high coding level according to ISO 14119
- Category 4, PL e according to ISO 13849-1
- Extremely compact size
- ECOLAB certified

### TECHNICAL DATA

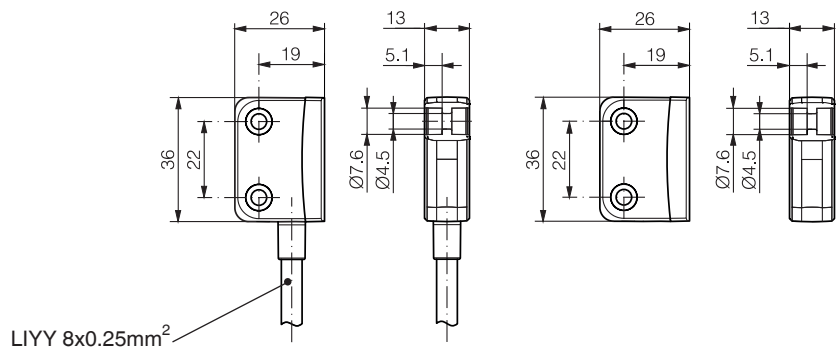
Supply voltage range	24 VDC ± 10 %
Load current	max 400 mA (-25°C...+70°C)
Switching frequency	< 3 Hz
Safe switch on distance Sao	8 mm
Safe switch off distance Sar	18 mm
Dimensions	36 mm x 26 mm x 13 mm
Usage category	DC 12 - 13
Repeat accuracy	< 0.5 mm
Actuation	Random or teachable code
Hysteresis	2 mm
Output	2x OSSD
Ambient temperature range	-25 ... +70 °C
Storage temperature range	-25 ... +70 °C
Enclosure rating	IP 67 (EN 60529) and IP 6K9K (ISO 20653)
Housing material	PBT yellow, PC black
Max. torque for fastening screw	0.7 Nm
Weight	see type-specific data (page 2)
Connection	5 m PVC cable 8x0,25mm <sup>2</sup> or 0.15 m PVC pigtail with M12 8-pins connector
Cable diameter	Ø 6 mm ± 0,25 mm
Max. torque for fastening connector	0.6 Nm
Cable runs	30 m max.
Safety level	Cat.4 / PL e (EN ISO 13849-1) SIL <sub>CL</sub> 3 (IEC/EN 62061) SIL 3 (IEC/EN 61508)
PFH <sub>d</sub> (1/h)	2,24 x 10 <sup>-9</sup>
Vibration resistance	10 Hz ... 55 Hz (EN 60947-5-2), 1 mm amplitude
Shock resistance	30 g / 11 ms (EN 60947-5-2)
Max. rated insulation voltage U <sub>i</sub>	50 V
Rated impulse withstand voltage U <sub>imp</sub>	1 kV
Status indicator	Green, red and yellow LEDs
Serial connection	Max. 30 sensors
Content in each bag	Sensor and actuator (kit)

**TYPE-SPECIFIC DATA**

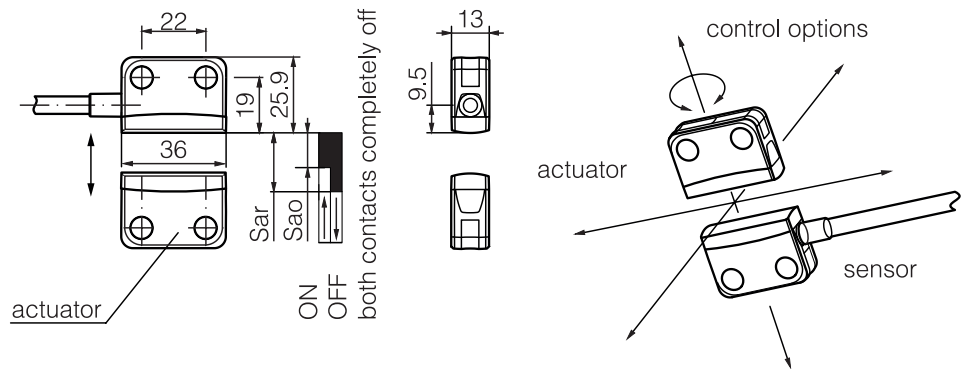
**YSR-22 SERIES**

Part reference	Dimensions [mm]	Sao	Sar	Actuation	Connection	Weight sensor	Weight actuator
YSR-22K4-RESE-C050	36 x 26 x 13	8 mm	18 mm	Random code	PVC, 5 m, 4 wire	312 g	11 g
YSR-22K4-TESE-C050	36 x 26 x 13	8 mm	18 mm	Teachable code	PVC, 5 m, 4 wire	312 g	11 g
YSR-22K4-RESE-P012	36 x 26 x 13	8 mm	18 mm	Random code	PVC, 0.15 m, M12 8-pins	45 g	11 g
YSR-22K4-TESE-P012	36 x 26 x 13	8 mm	18 mm	Teachable code	PVC, 0.15 m, M12 8-pins	45 g	11 g

**DIMENSIONS**

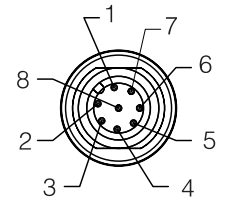
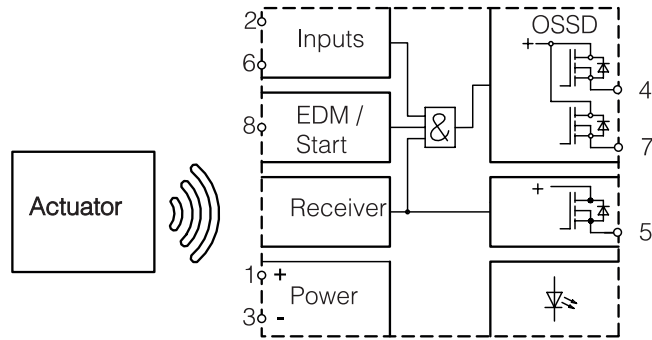


**INSTALLATION**



Active surface marked with ▲

**PIN ASSIGNMENT**



0.15m, M12 8-pins pigtail

ASSIGNMENT	FUNCTION	PINS/WIRES ON SENSOR	
		M12*	OPEN CABLE
Power supply	24 VDC	1 (white)	brown
Input	Safety input 1	2 (brown)	white
Power supply	GND	3 (green)	blue
Output	OSSD 1	4 (yellow)	black
Output	Diagnostic	5 (grey)	grey
Input	Safety input 2	6 (pink)	pink
Output	OSSD 2	7 (blue)	violet
Input	EDM	8 (red)	orange

\*Color assigned when a Contrinex cable-connector is connected