

SRF SERIES INSTRUCTION MANUAL

Slot sensor

CONTROLS

RED LED ON - presence object RED LED OFF - absent object

SENSITIVITY TRIMMER

This trimmer can be used to adjust sensitivity of the sensor.

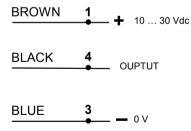
N.O./N.C. TRIMMER - output

This trimmer can be used to adjust the output status.

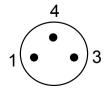
WARNING: The trimmer rotation is limited to 270° by a mechanical stop.

Do not apply excessive torque when adjusting.

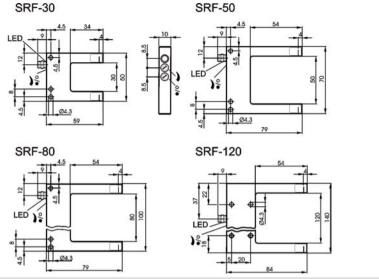
CONNECTIONS



M8 connector



DIMENSIONS



TECHNICAL DATA

| | SRF-30 | SRF-50 | SRF-80 | SRF-120 |
|------------------------------|--|--|-----------|---------|
| Power supply: | 10 30 Vdc; reverse polarity protected | | | |
| Ripple: | 2 Vpp max. | | | |
| Current consumption | 35mA max. | | | |
| (output current excluded): | | | | |
| Outputs: | N.O./N.C. selectable | | | |
| Output current: | 200 mA max. with short-circuit protection | | | |
| Output saturation voltage: | 3 V max. PNP 2.5 V NPN | | | |
| Response time: | 333 μs | | | |
| Switching frequency: | 1500 Hz | | | |
| Hysteresis: | ≤0.1 mm | ≤ 0.15 mm | ≤ 0. | 2 mm |
| Resolution: | 0.3 mm | 0.5 | mm 0.8 mm | |
| Repeatability: | 0.02 mm | 0.04 mm | 0.06 mm | 0.08 mm |
| Humidity: | 35 85% rH non condensing | | | |
| Indicators: | Red LED | | | |
| Setting: | sensitivity trimmer and N.O./N.C. trimmer | | | |
| Operating temperature: | -10 60°C | | | |
| Storage temperature: | -20 70°C | | | |
| Electrical shock protection: | Class 1 | | | |
| Emission type: | RED 640 nm | | | |
| Ambient light rejection: | 10 kLux | | | |
| Vibration: | 0.5 mm amplitude, 10 55 Hz frequency, for every axis (EN60068-2-6) | | | |
| Shock resistance: | 11 ms (| (30 G) 6 shock for every axis (EN60068-2-27) | | |
| Slot width: | 30 mm | 50 mm | 80 mm | 120 mm |
| Housing: | Aluminium | | | |
| Lenses: | Glass | | | |
| Protection class: | IP65 | | | |
| Connections: | M8 3 pole connector | | | |
| Weight: | 36 g. | 54 g. | 77 g. | 118 g. |

SETTING

Sensor setting

- 1) Place the object to read in the sensor slot using the reference marks on the tip for alignment.
- 2) Turn the sensitivity with the trimmer in order to obtain the correct reading of the object.



These slot sensors are not suitable for safety applications

DECLARATION OF CONFORMITY

We DATASENSOR S.p.A. declare under our sole responsibility that these products are conform to the 89/336 CEE, 73/23 CEE Directives and successive amendments.

DATASENSOR S.p.A. warrants its products to be free from defects. DATASENSOR S.p.A. will repair or replace, free of charge, any product found to be defective during the warranty period of 36 months from the manufacturing date.

This warranty does not cover damage or liability deriving from the improper application of DATASENSOR products.

DATASENSOR S.p.A. Via Lavino 265 40050 Monte S. Pietro - Bologna - Italy

Tel: +39 051 6765611 Fax: +39 051 6759324

http://www.datasensor.com e-mail: info@datasensor.com



DATASENSOR S.p.A. cares for the environment: 100% recycled

DATASENSOR S.p.A. reserves the right to make modifications and improvements without prior notification.

826002001 Rev.A