

## SRF SERIES INSTRUCTION MANUAL

Slot sensor

### CONTROLS

YELLOW LED ON – object presence  
YELLOW LED OFF – object absent

#### 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.

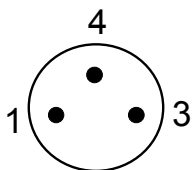
### CONNECTIONS

BROWN 1 + 10 ... 30 Vdc

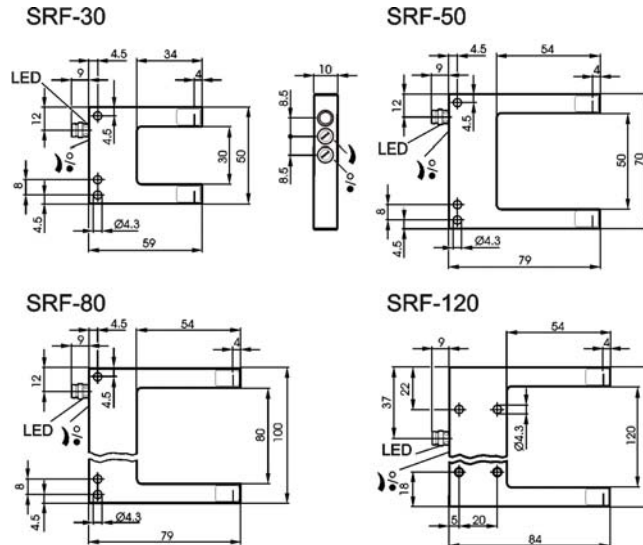
BLACK 4 OUTPUT

BLUE 3 0 V

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 (output current excluded):	35mA max.			
Outputs:	PNP or NPN / N.O. / N.C. selectable			
Output current:	200 mA max. with short-circuit protection			
Output saturation voltage:	3 V max. PNP / 2.5 V max. 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:	YELLOW LED			
Setting:	sensitivity trimmer and N.O./N.C. trimmer			
Operating temperature:	-10 ... 60°C			
Storage temperature:	-20 ... 70°C			
Dielectric strength:	500 Vac 1 min., between electronics and housing			
Insulating resistance:	>20 MΩ 500 Vdc, between electronics and housing			
Emission type:	LED RED 640 nm			
Ambient light rejection:	5 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:	GDZn			
Lenses:	Glass			
Protection class:	IP67			
Connections:	M8 3 pole connector			
Weight:	36 g.	54 g.	77 g.	118 g.

### SETTING

#### Sensor setting

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



The sensors are NOT safety devices, and so MUST NOT be used in the safety control of the machines where installed.

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Helpful links at [www.datalogic.com](http://www.datalogic.com): **Contact Us, Terms and Conditions, Support.**

The warranty period for this product is 36 months. See General Terms and Conditions of Sales for further details.

Under current Italian and European laws, Datalogic is not obliged to take care of product disposal at the end of its life. Datalogic recommends disposing of the product in compliance with local laws or contacting authorised waste collection centres.

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