



# 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.

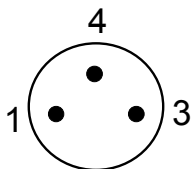
## CONNECTIONS

BROWN 1 + 10 ... 30 Vdc

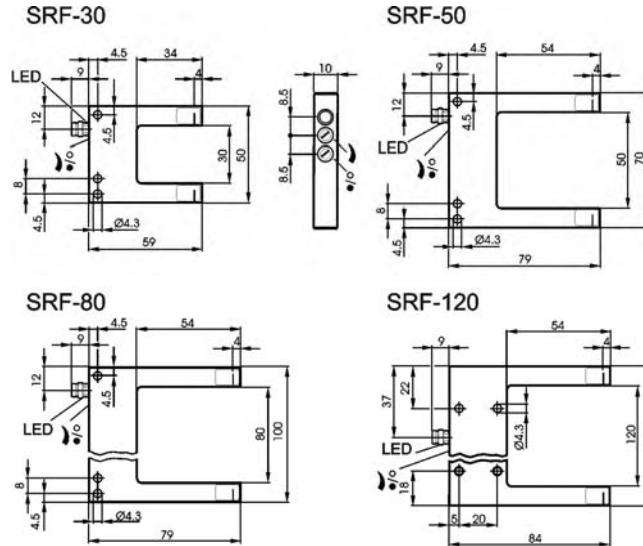
BLACK 4 OUPUT

BLUE 3 0 V

M8 connector



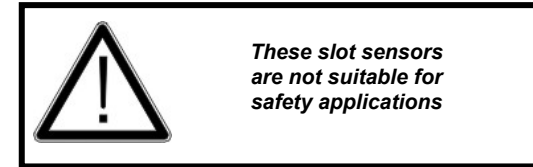
## DIMENSIONS



## 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.



## 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:	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	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:	Aluminium			
Lenses:	Glass			
Protection class:	IP65			
Connections:	M8 3 pole connector			
Weight:	36 g.	54 g.	77 g.	118 g.

### DECLARATION OF CONFORMITY

We DATASENSOR S.p.A. declare under our sole responsibility that these products are conform to the 2004/108 CEE, 73/23 CEE Directives and successive amendments.



### WARRANTY

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.

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