

SRF



ULTIMATE PRECISION USING LED OR LASER EMISSIONS FOR HIGH RESOLUTION

- Visible red emission models
- High resolution LASER models
- Sensitivity adjustment trimmer and dark/light selectors
- Industrial metal housing with glass lenses

APPLICATIONS

- Packaging and labeling machinery
- Automotive
- Packaging lines

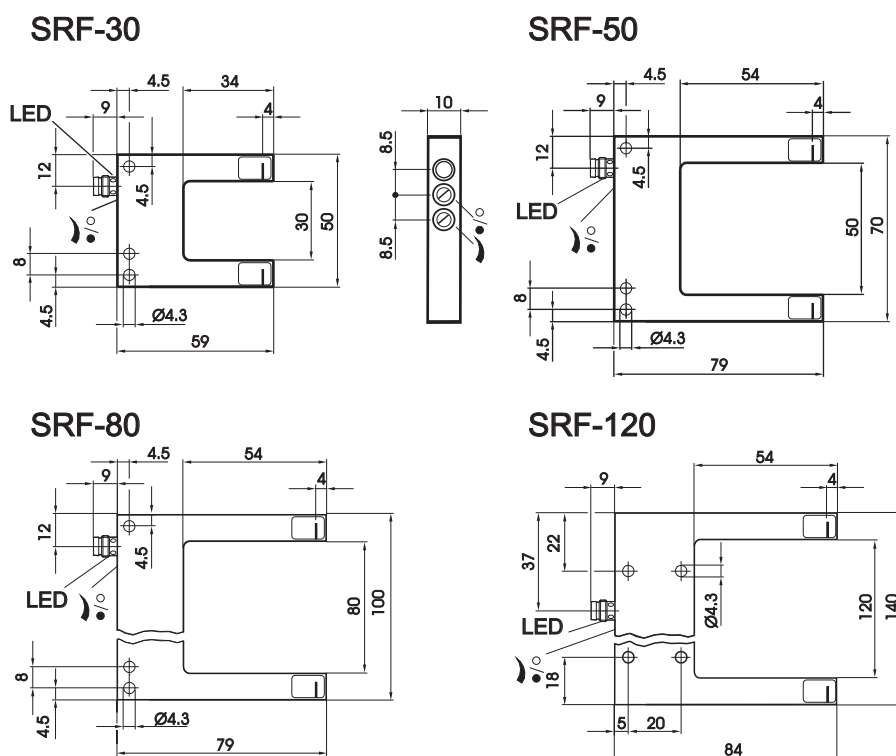


SRF-30/50/80/120	
Slot width	30 mm (SRF-30)
	50 mm (SRF-50)
	80 mm (SRF-80)
	120 mm (SRF-120)
Slot depth	34 mm (SRF-30)
	54 mm (SRF-50/80/120)
Switching frequency	1,5 kHz
	5 kHz (class 2 LASER)
Light emission	red LED
	red LASER (class 2)
Setting	trimmer
	10...30 V
Power supply	Vdc
	Vac
	Vac/dc
Output	PNP
	NPN
	NPN/PNP
	relay
	other
Connection	cable
	connector
	pig-tail
Approximate dimensions (mm)	10x50x59 (SRF-30)
	10x70x79 (SRF-50)
	10x100x79 (SRF-80)
	10x140x84 (SRF-120)
Housing material	Aluminium
Mechanical protection	IP67

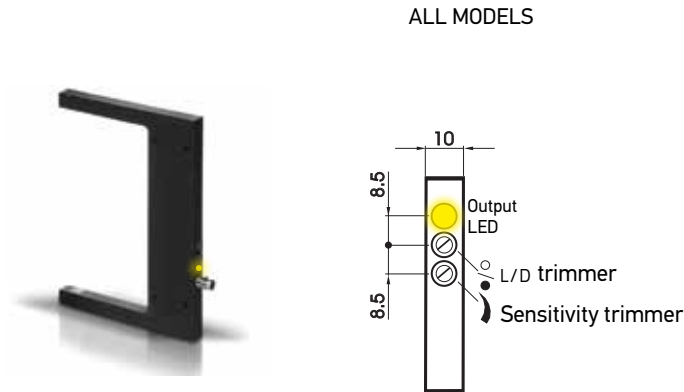
TECHNICAL DATA

Power supply	10 ... 30 Vdc (reverse polarity protection)
Ripple	2 Vpp max.
Consumption (output current excluded)	35 mA max. 20 mA max. (Laser mod.)
Light emission	red LED 640 nm red Laser 650 nm
Setting	sensitivity trimmer and N.O./N.C. trimmer
Operating mode	LIGHT/DARK configurable
Indicators	yellow LED
Output	PNP or NPN; NO; NC
Output current	200 mA max.
Saturation voltage	3 V max. PNP, 2,5 V max. NPN
Response time	333 µs 100 µs (Laser mod.)
Switching frequency	1,5 kHz 5 kHz (Laser mod.)
Connection	M8 3-pole connector
Dielectric strength	500 Vac, 1 min between electronics and housing
Insulating resistance	>20 MΩ, 500 Vdc between electronics and housing
Electrical protection	class 1
Mechanical protection	IP67
Ambient light rejection	5 kLux
Vibrations	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, 50, 80, 120 mm
Resolution	0,3 mm (mod. SRF...30), 0,5 mm (mod. SRF...50/80), 0,8 mm (mod. SRF...120) 0,05 mm (Laser mod. SRF...30), 0,08 mm (Laser mod. SRF...50), 0,1 mm (Laser mod. SRF...80), 0,15 mm (Laser mod. SRF...120)
Housing material	Gd-Zn Alloy
Lens material	glass
Operating temperature	-10 ... 60 °C
Storage temperature	-20 ... 70 °C
Weight	36 g (mod. SRF...30), 54 g (mod. SRF...50), 77 g (mod. SRF...80), 118 g (mod. SRF...120) 66 g (Laser mod. SRF...30), 110 g (Laser mod. SRF...50), 135 g (Laser mod. SRF...80), 210 g (Laser mod. SRF...120)

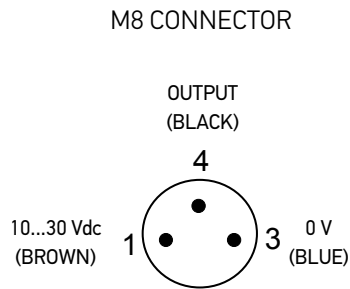
DIMENSIONS



INDICATORS AND SETTINGS



CONNECTIONS



MODEL SELECTION AND ORDER INFORMATION

OPTIC FUNCTION	EMISSION	CONNECTION	OUTPUT	MODEL	ORDER No.
Fork sensor (30 mm)	Red LED	M8 Connector	PNP	SRF-30-5-P	95B020050
	LASER		NPN	SRF-30-5-N	95B020090
Fork sensor (50 mm)	Red LED	M8 Connector	PNP	SRF-L-30-5-P	95B020130
	LASER		PNP	SRF-50-5-P	95B020060
Fork sensor (80 mm)	Red LED	M8 Connector	NPN	SRF-50-5-N	95B020100
	LASER		PNP	SRF-L-50-5-P	95B020140
Fork sensor (120 mm)	Red LED	M8 Connector	PNP	SRF-80-5-P	95B020070
	LASER		NPN	SRF-80-5-N	95B020110
Fork sensor (120 mm)	Red LED	M8 Connector	PNP	SRF-L-80-5-P	95B020150
	LASER		PNP	SRF-120-5-P	95B020080
Fork sensor (120 mm)	Red LED	M8 Connector	NPN	SRF-120-5-N	95B020120
	LASER		PNP	SRF-L-120-5-P	95B020160

CABLES

TYPE	DESCRIPTION	LENGTH	MODEL	ORDER No.
Axial M8 connector	3-pole, Grey, P.V.C.	3 m	CS -B1-01-G-03	95A251490
		5 m	CS -B1-01-G-05	95A251510
Radial M8 connector		3 m	CS -B2-01-G-03	95A251500
		5 m	CS -B2-01-G-05	95A251520

Rev. 03, 04/2019