

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

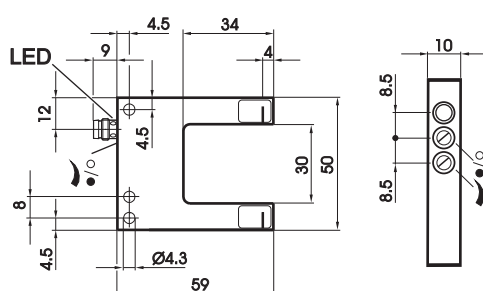
Slot width		30 mm (SRF-30) 50 mm (SRF-50) 80 mm (SRF-80) 120 mm (SRF-120)
Slot depth		34 mm (SRF-30) 54 mm (SRF-50/80/120)
Switching frequency		1,5 kHz 5 kHz (class 2 LASER)
Light emission		red LED red LASER (class 2)
Setting		trimmer
Power supply	Vdc	10...30 V
	Vac	
	Vac/dc	
	PNP	▪
Output	NPN	▪
	NPN/PNP	
	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

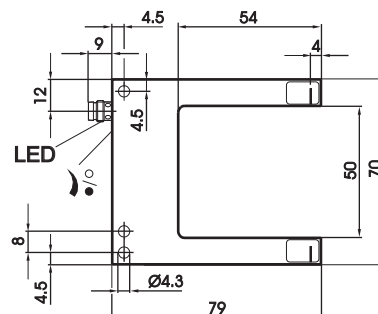
Power supply	10 ... 30 Vdc (reverse polarity protection)
Ripple	2 Vpp max.
Consumption (output current excluded)	35 mA max. 20 mA max. (Laser mod.)
Light emission	red LED 640 nm red Laser 650 nm
Setting	sensitivity trimmer and N.O./N.C. trimmer
Operating mode	LIGHT/DARK configurable
Indicators	yellow 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	GDZn
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

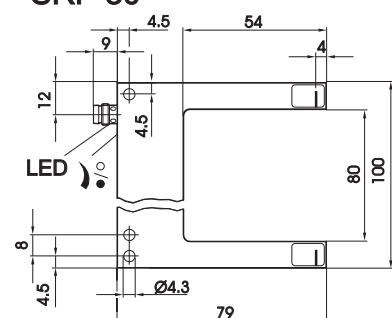
SRF-30



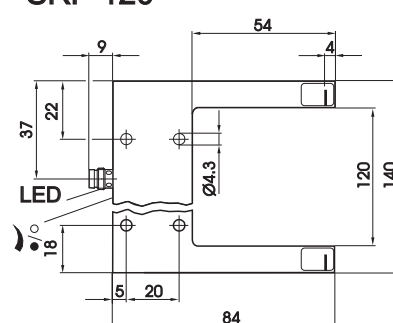
SRF-50



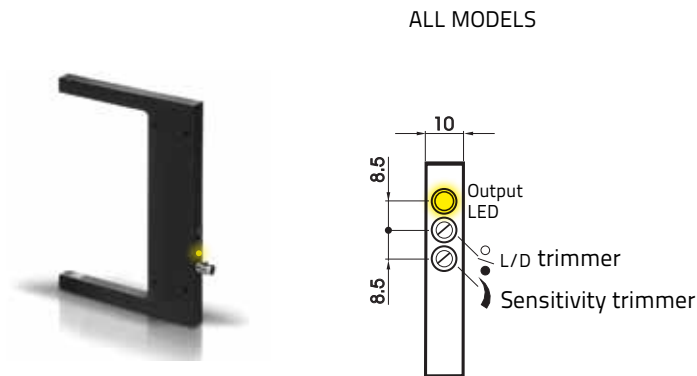
SRF-80



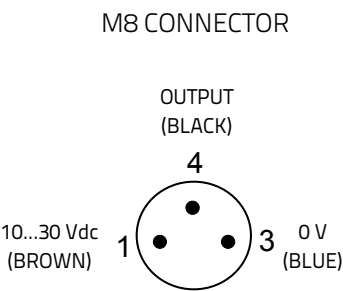
SRF-120



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
			NPN	SRF-30-5-N	95B020090
	LASER		PNP	SRF-L-30-5-P	95B020130
Fork sensor (50 mm)	Red LED	M8 Connector	PNP	SRF-50-5-P	95B020060
			NPN	SRF-50-5-N	95B020100
	LASER		PNP	SRF-L-50-5-P	95B020140
Fork sensor (80 mm)	Red LED	M8 Connector	PNP	SRF-80-5-P	95B020070
			NPN	SRF-80-5-N	95B020110
	LASER		PNP	SRF-L-80-5-P	95B020150
Fork sensor (120 mm)	Red LED	M8 Connector	PNP	SRF-120-5-P	95B020080
			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
3 m		CS -B2-01-G-03	95A251500	
5 m		CS -B2-01-G-05	95A251520	