

M12 STANDARD SIZE FOR MULTIPLE USES

CYLINDRICAL MINIATURE

PHOTOELECTRIC SENSORS

KEY ADVANTAGES

- ✓ M12 miniature sensor series
- ✓ Rugged metal housing
- ✓ Accurate and speed-independent target detection; response time 0.5 msec (laser: 0.1 msec)
- ✓ Shock and vibration resistant due to fully vacuum potted electronics
- ✓ High system reserves (excess gain)
- ✓ Easy adjustment (due to visible red light)
- ✓ Laser sensor (protection class 2)

RANGE OVERVIEW	Distance mm	Diffuse	Reflex	Through- beam	Laser
CYLINDRICAL MINIATURE	300	p. 191			
	1500		p. 192		
	10,000			p. 192	
	50,000				p. 193

OVERVIEW

	1120	1121L
Housing material	Chrome-plated brass	Stainless steel V2A
Hysteresis	10 % typ.	10 % typ.
Degree of protection	IP 67	IP 67
Laser protection class	--	2
Supply voltage range	10...36 VDC	10 ... 36 VDC
Ambient temperature range	-25...+55 °C / -13...+131 °F	-10...+50 °C / +14...+122 °F
Output current	≤ 200 mA	≤ 200 mA
Output voltage drop	≤ 2 V	≤ 2 V
Switching frequency	≤ 1000 Hz	≤ 5000 Hz
Switching time	0.5 msec	0.1 msec
Max. ambient light halogen	5000 Lux	5000 Lux
Max. ambient light sun	10,000 Lux	10,000 Lux

HOUSING SIZE

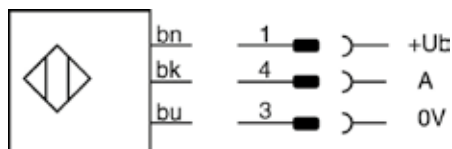
OPERATING PRINCIPLE

SENSING RANGE MM

PHOTOELECTRIC

WIRING DIAGRAM

PNP / NPN Light-ON / Dark-ON / Emitter

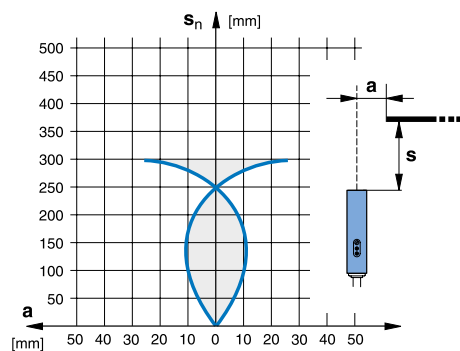
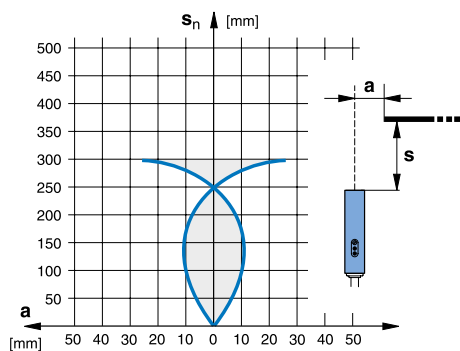


DATA

Standard target
No-load supply current
Emitter
Setup
PNP Light-ON
NPN Light-ON
Other types available

CYLINDRICAL MINIATURE

M12	M12
DIFFUSE SENSOR	DIFFUSE SENSOR
300	300



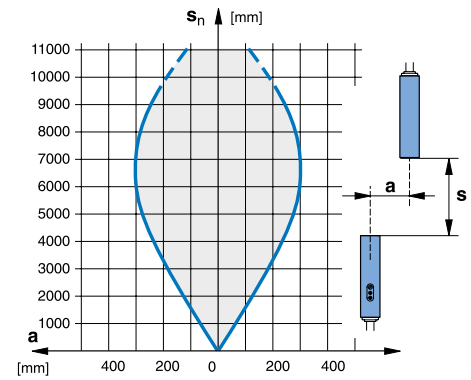
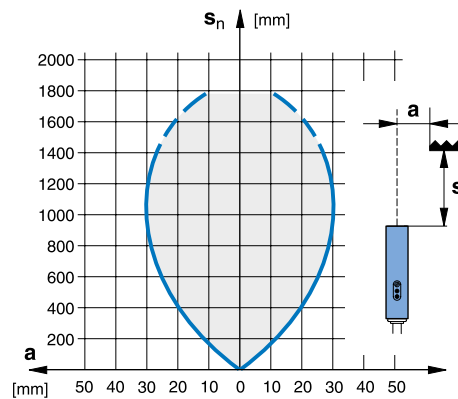
100 x 100 mm white	100 x 100 mm white
≤ 15 mA	≤ 15 mA
LED red 660 nm	LED red 660 nm
Potentiometer	Potentiometer
LTK-1120-303	LTS-1120-303
LTK-1120-301	LTS-1120-301

Inductive
Photoelectric
Ultrasonic
Capacitive
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CYLINDRICAL MINIATURE

PHOTOELECTRIC

HOUSING SIZE	M12	M12
OPERATING PRINCIPLE	REFLEX SENSOR	THROUGH-BEAM SENSOR
SENSING RANGE MM	1500	10,000



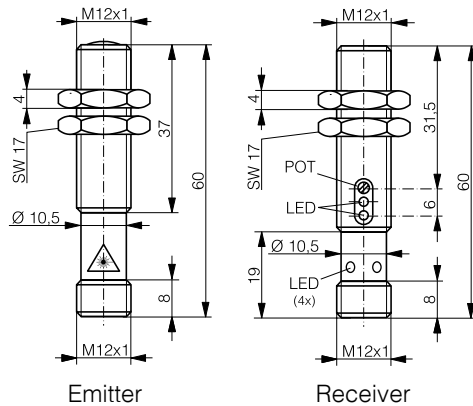
DATA		
Standard target / Reflector type	LXR-0000-084 (see page 247)	-
No-load supply current	≤ 15 mA	≤ 15 mA
Emitter	LED red polarized 660 nm	LED red 660 nm
Setup	-	-
Emitter		LLS-1120-200 (emitter)
PNP Dark-ON	LRS-1120-304	LLS-1120-204 (receiver)
Other types available	NPN Dark-ON, cable version	NPN Dark-ON, cable version

CYLINDRICAL MINIATURE

M12 LASER

THROUGH-BEAM SENSOR

50,000



Emitter

Receiver

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≤ 10 mA

Laser red pulsed 660 nm

LLS-1121L-200 (emitter)

LLS-1121L-204 (receiver)

NPN Dark-ON, cable version