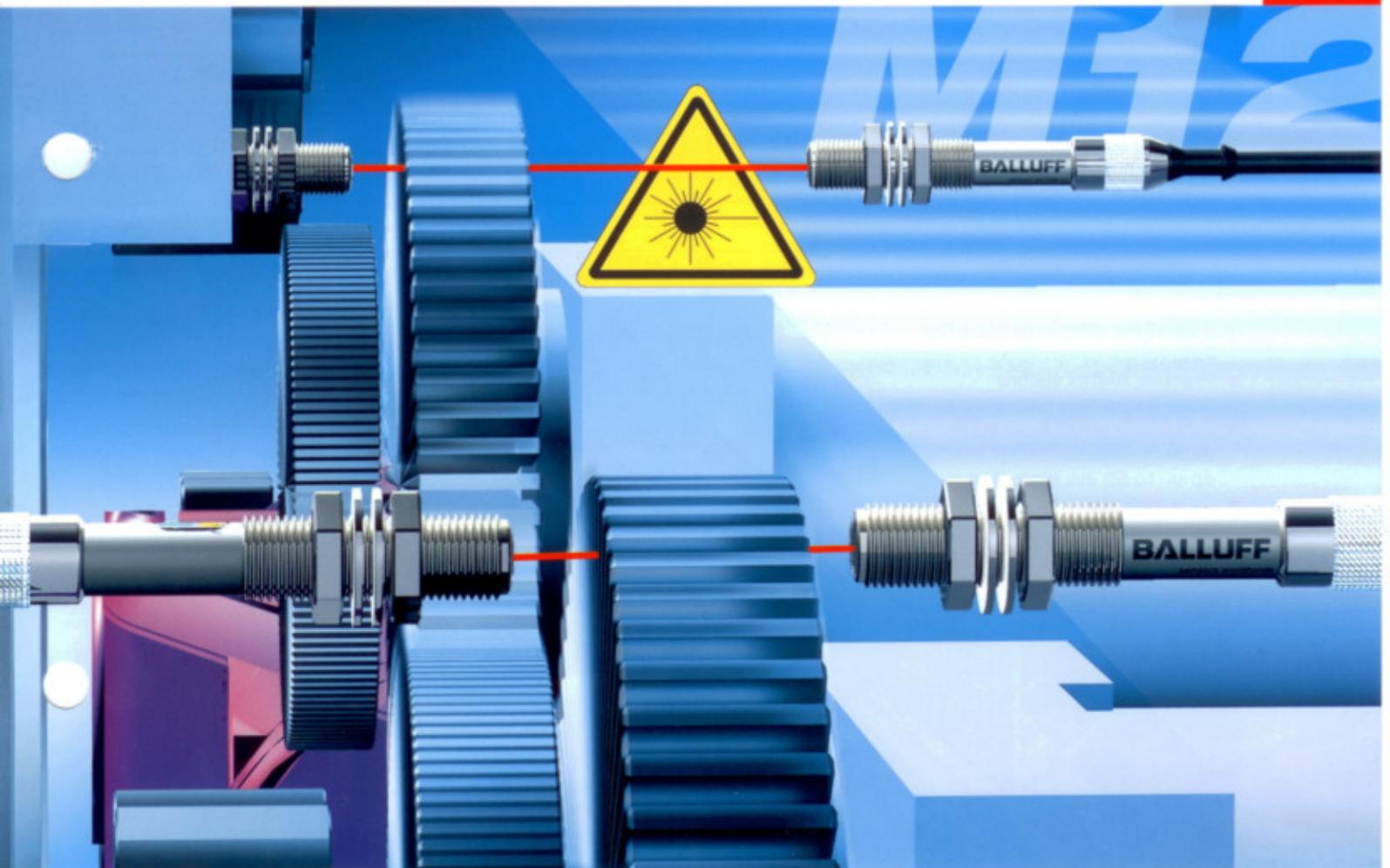


BALLUFF

sensors worldwide

Laser Through-beam BOS 12M

... economical and precision small parts detection



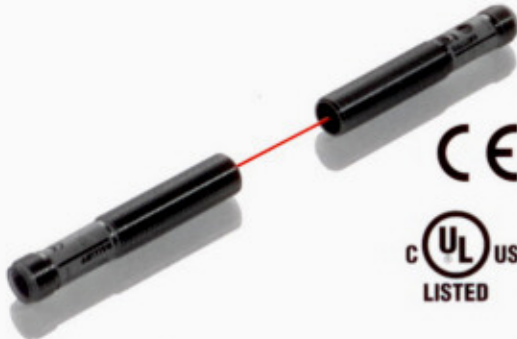
Laser Through-beam BOS 12M

... economical and precision small parts detection



Laser Protection
Class 1

Type	Emitter	Receiver	Receiver
Application	Small parts detection	High Distance	
Through-beam	3 m	30 m	
	50 cm	n.a.	



Through-beam

Emitter	Small parts detection	BOS 12M-XT-LS11-S4	
	High Distance		BOS 12M-XT-LS12-S4
Receiver	PNP		BOS 12M-PA-LE10-S4
	NPN		BOS 12M-NA-LE10-S4

Electrical data

Supply voltage U_B	10...30 V DC	10...30 V DC	10...30 V DC
Output current			≤ 200 mA
Switching output			PNP or NPN transistor
Output circuit			Light-on and dark-on
Settings			Potentiometer 270°
Frequency of operating cycles f			1 kHz

Optical data

Emitter, light type	Laser, red light	Laser, red light	
Wavelength	655 nm	655 nm	

Indicator

Output function indicator			LED yellow
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Mechanical data

Connection	M12 connector, 4-pin	M12 connector, 4-pin	M12 connector, 4-pin
Housing material	Nickel plated brass	Nickel plated brass	Nickel plated brass
Optical surface	Glass	Glass	PMMA

Ambient data

Degree of protection per IEC 60529	IP 67	IP 67	IP 67
Polarity reversal protected/short circuit protected	yes/yes	yes/yes	yes/yes
Ambient temperature range T_a	-10...+50 °C	-10...+50 °C	-10...+50 °C

- 2 versions offer solutions for long range or small parts detection
- Precise, highly visible laser beam for ranges up to 30 m
- Extremely small light spot, detects objects down to 50 μ m diameter
- Safe laser technology, Protection Class 1

Wiring diagrams

