



More Precision

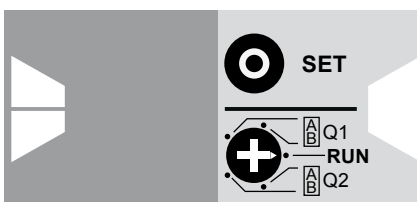
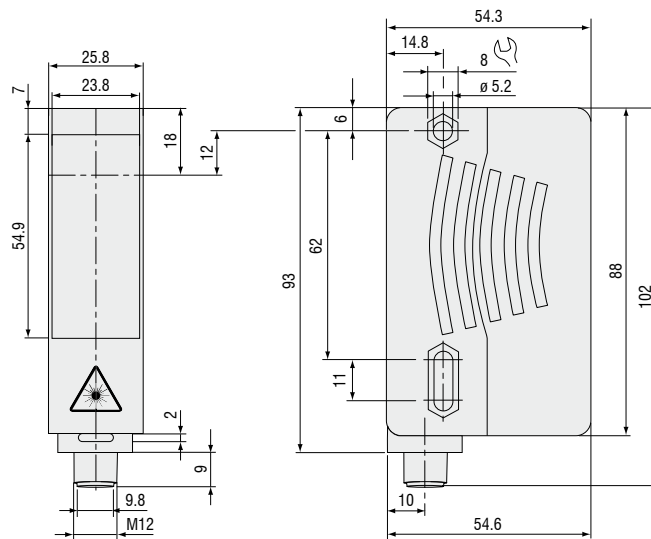
opto**NCDT** ILR // Laser distance sensors





- Measuring range up to 15m on diffuse reflecting targets / 50m on reflector
- Very short response time
- Small size
- Excellent price-performance ratio

The laser distance sensors ILR1030/1031 operate according to the time-of-flight technology. Thanks to this technology the sensors permanently offer – independent of environmental conditions such as surface characteristics, dark colour or present external light – accurate, reliable and clear as well as reproducible measurement results.



ILR103x: Analogue output and limit output programming via touch keys

Model		ILR1030-8	ILR 1030-8/LC1	ILR 1030-15	ILR1031-50	ILR1031-50/LC1
Measuring range ¹⁾	black 10%	0.2 ... 2.5m	0.2 ... 2.5m	0.2 ... 5m	-	-
	grey 18%	0.2 ... 3.5m	0.2 ... 3.5m	0.2 ... 6m	-	-
	white 90%	0.2 ... 8m	0.2 ... 8m	0.2 ... 15m	-	-
	reflector	-	-	-	0.2 ... 50m (ILR-RF250/ILR-RF70)	
Linearity ²⁾		±20mm				
Resolution		1mm				
Repeat accuracy		<5mm				
Response time		10ms				
Laser class	meas. laser red 660nm	class 2	class 1	class 2	class 2	class 1
Permissible ambient light		50,000lx				
Operation temperature ³⁾		-30° ... +50°C (humidity 5 - 95%, no condensation)				
Storage temperature		-30° ... +70°C				
Limit outputs		Q1 / Q2 push-pull outputs				
Switching voltage		max. 30VDC				
Switching current		max. 100mA				
Analogue output		4 ... 20mA, short-circuit/overload protected				
Temperature stability		≤0.25mm/°C				
Supply		10 - 30VDC, class 2				
Connection		connector M12x1, 4-pin				
Protection class		IP 65				
Material	housing	Plastic ABS				
	window	Plastic pane				
Weight		90g				
Accessoires		page 14 - 15				

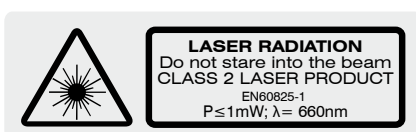
¹⁾ depending on target reflectivity, stray light effects and atmospheric conditions

²⁾ with statistical spread of 95%

³⁾ when crossing 0°C an additional heating may be required

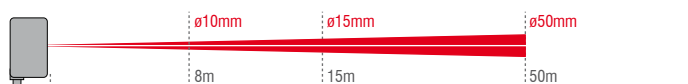


optoNCDT ILR 103x-LC1 use a semiconductor class 1 laser. With this laser class no protection is needed.



optoNCDT ILR 1030/1031 operate with a wavelength of 660nm (visible, red). The maximum optical output is ≤ 1 mW. The sensors are classified in Laser Class 2. Class 2 lasers are not notifiable and a laser protection officer is not required either.

Spot diameter ILR 1030 / 1031



High performance sensors made by Micro-Epsilon



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