



More Precision

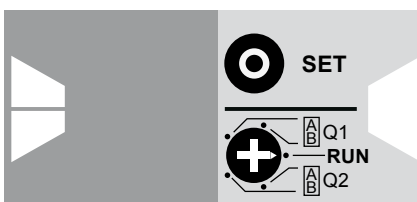
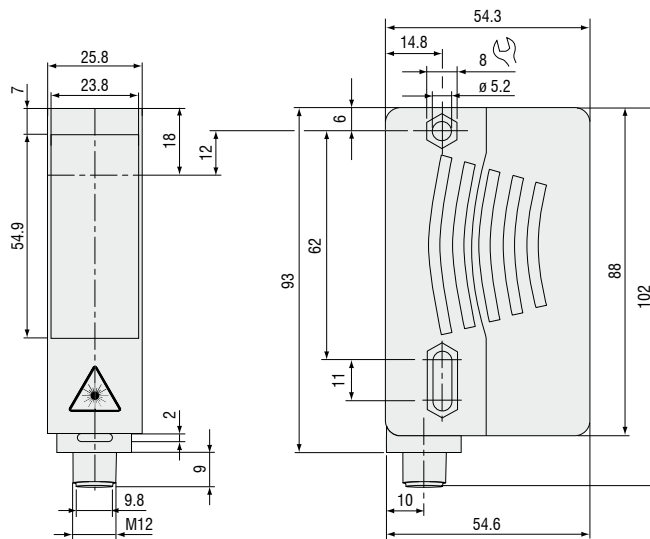
optoNCDT ILR // Laser distance sensors





- 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		

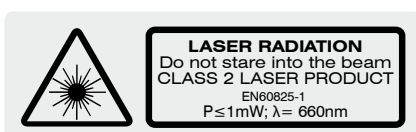
¹⁾ depending on target reflectivity, stray light effects and atmospheric conditions

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



Sensors and systems for displacement and position



Sensors and measurement devices for non-contact temperature measurement



2D/3D profile sensors (laser scanner)



Optical micrometers, fibre optic sensors and fibre optics



Colour recognition sensors, LED analyzers and colour online spectrometer



Measurement and inspection systems



MICRO-EPSILON Headquarters
 Koenigbacher Str. 15 · 94496 Ortenburg / Germany
 Tel. +49 (0) 8542 / 168-0 · Fax +49 (0) 8542 / 168-90
 info@micro-epsilon.com · www.micro-epsilon.com

MICRO-EPSILON UK Ltd.
 No.1 Shorelines Building · Shore Road · Birkenhead · CH41 1AU
 Phone +44 (0) 151 355 6070 · Fax +44 (0) 151 355 6075
 info@micro-epsilon.co.uk · www.micro-epsilon.co.uk