



# More Precision

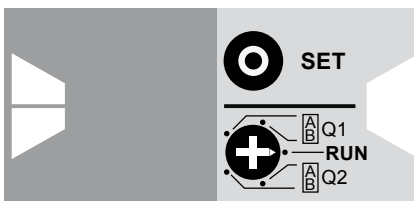
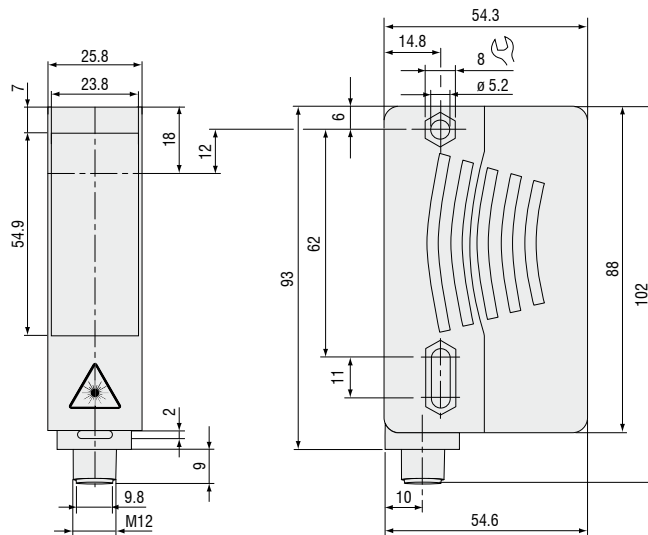
optoNCDT ILR // Laser distance sensors





- 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: Analog 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 <sup>1)</sup>	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 <sup>2)</sup>				±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 <sup>3)</sup>				-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		
Analog 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		

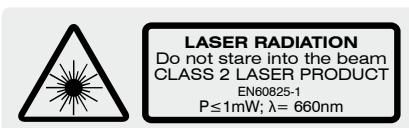
<sup>1)</sup> depending on target reflectivity, stray light effects and atmospheric conditions

<sup>2)</sup> with statistical spread of 95%

<sup>3)</sup> when crossing 0°C an additional heating may be required

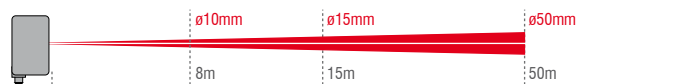


optoNCDT ILR 103x-LC1 use a semiconductor class 1 laser. With this laser class no protection is needed.



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



Color recognition sensors, LED analyzers and color online spectrometer



Measurement and inspection systems