

Non-contact level measurement sensor

InoxLaser NL-02

Product overview

The NEWCO Instruments InoxLaser is a non-contact laser sensor used to measure the distance to a solid surface. This surface could be anything from a flat metal plate on the side of an overhead crane, to the top of material stored in a silo. With an easy to use menu system, the InoxLaser can be configured for either distance or level measurement and the high accuracy, long range and fast update rate make this the ideal sensor for many different applications.

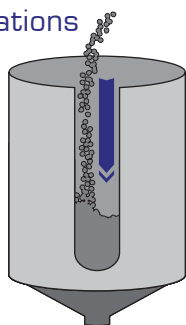
Features

- o Non-contact measurement with laser technology
- o 303 Stainless steel housing
- o Measurement range up to 100 meters (328 feet)
- o Continuous measurement with a resolution of 10 mm
- o NAMUR compliant 4...20 mA output
- o 2 Normally open relay outputs
- o Easy configuration via USB
- o 220 / 110 V ac or 24 V dc power supply
- o Visible aiming pointer

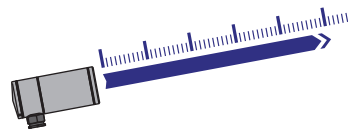


Level, distance & position measurement of solids

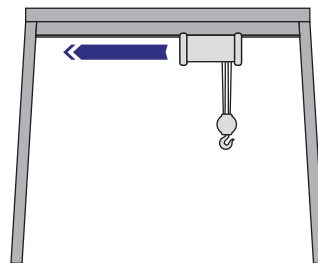
Applications



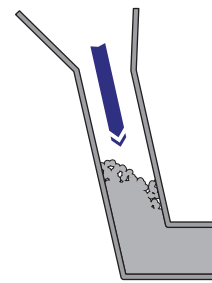
Level control



Distance measurement



Positioning



Blockage detection

Technical specifications

Performance data

Sensing range	0.3...100 m (0.98'...328')
Resolution	1 cm (0.39")
Accuracy	< 0.1% of full range at 20°C
Update rate	5 readings per second

Technical data

Power supply	220 / 110 V ac or 24 V dc nominal (12...28 V dc)
Current consumption	100 mA nominal

Output

Analogue	4...20 mA NAMUR compliant self-powered & non-isolated. 2 x Relays (N/O), 250 V at 3 A.
Communication	USB at 115200 baud 8-N-1

Mechanical data

Diameter	NL-02: 88.9 cm (3.5")	NL-02/DT: 140 cm (5.51")
Length	NL-02: 180 cm (7.09")	NL-02/DT: 110 cm (4.33")
Weight	NL-02: 2 kg (4.41 lb)	NL-02/DT: 1.5 kg (3.31 lb)
Connection	Flange accessory (NL-02/DT) with with 4 Ø 0.85 cm holes on 120 PCD	
Housing material	303 Stainless steel	

Optical data

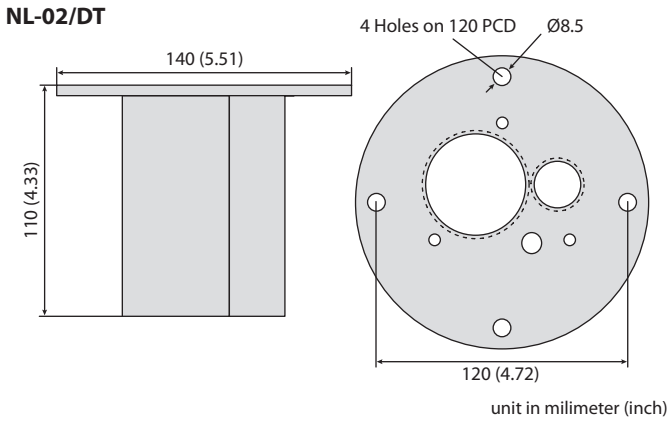
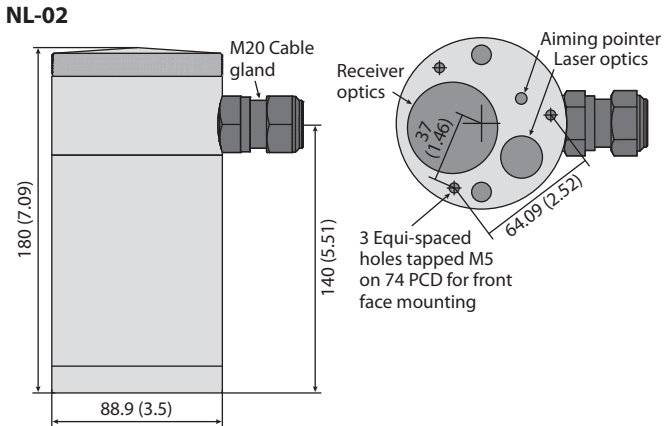
Optical aperture	75 cm (2.95")
Beam divergence	< 1° to half power points
Aiming pointer	< 5 mW red
Lens material	Impact resistant acrylic
Laser safety classification	Class 2 CAUTION: Do not view laser directly with optical instruments

Environmental data

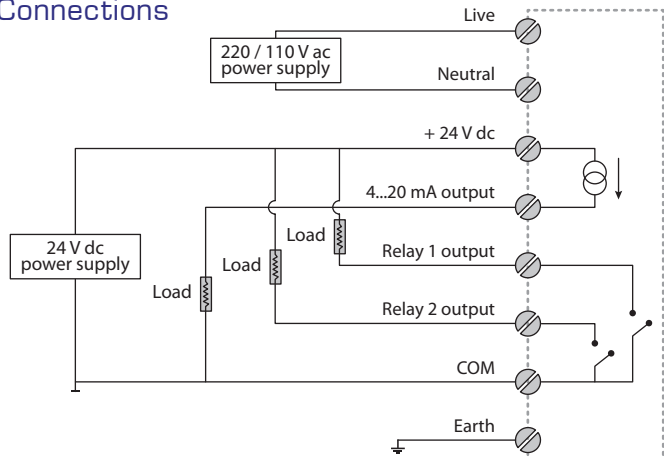
Operating temperature	-20°C...+60°C
Pressure	Atmospheric
Enclosure rating	IP66

Simple solid level measurement

Dimension drawings



Connections



Warranty and liability statement

This product is subject to the normal terms, conditions, warranties and disclaimers of NEWCO Instruments, its distributors and representatives.

Product order codes

Non-contact level measurement sensor NL-02
 Dust tube accessory NL-02/DT

Software menus

- Home General information regarding the NL-01.
- Set 4 mA 0.50m Enter the distance that corresponds to the 4 mA output value.
- Set 20 mA 35.0m Enter the distance that corresponds to the 20 mA output value.
- Set Relay 1 3.0m Change the distance at which Relay 1 activates.
- Set Relay 2 0.5m Change the distance at which Relay 2 activates.
- Update 0.1 sec Change the update rate to suit the application.
- Filtering ON Select between normal operation and filtered output.
- Failsafe 3.6 mA Set the failsafe condition of the 4...20mA range for alarm indications.

AGENT DETAILS



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