

M11LLi

Laser Distance Sensors

for the use in automated manufacturing with Ethernet interface to connect with a PLC

- » compact design with built-in electronics
- » Measuring frequency 30 kHz



- Ethernet Interface
- Ranges up to 100 mm
- low-noise

The sensor adjusts automatically to the current surface. Thus valuable results will be achieved even when measuring on shiny or black objects.

Adjustable parameters (via Software):

- Automatic or defined Laser power
- Surface recognition
- „Top of the peak“ evaluation

... and more



error and technical modification reserved

DB-M11LLi_1-03-E

Breslauer Straße 2
D-85386 Eching
www.MELsensor.de

E-Mail: info@MELsensor.de
Tel. +49 (0) 89 / 327 150-0
Fax +49 (0) 89 / 319 20 23

MEL
Intelligent Sensors & Measuring Systems

Specifications

Sensor M11LLi/		10	20	40	50	100
Range	[mm]	10	20	40	50	100
Range begin	[mm]	25	40	30	55	90
Linearity ±	[μm]	5	10	20	25	50
Resolution ¹	[μm]	7	14	28	35	70
Resolution ²	[μm]	0.5	1	2	2.5	5
Light spot diameter	[mm]	0.8	0.9	0.4	1	1.1
Laser protection class	2 or 3R, laser power adjustable up to 5mW via Software					
Light source	Laser, wave length 658 nm, red visible					
Sample rate	up to 30 kHz (adjustable)					
Impedance	approx. 0 Ohm (10 mA max.)					
frequency	30 kHz (-3 db)					
Temperature drift	0.01% of range / K					
Interface	Ethernet 10/100 Mbit					
Ambient light	20,000 Lux					
Operating time	50,000 h for laser diode					
Isolation voltage	200 VDC, 0 V against casing					
max. Vibration	5 g up to 1 kHz					
Operating temperature	0° ... +40°C					
Storage temperature	-20° ... +70°C					
Humidity	up to 90% RH, non condensing					
Protection class	IP 64					
Supply	+24 VDC / 280 mA (10 ... 30 V)					

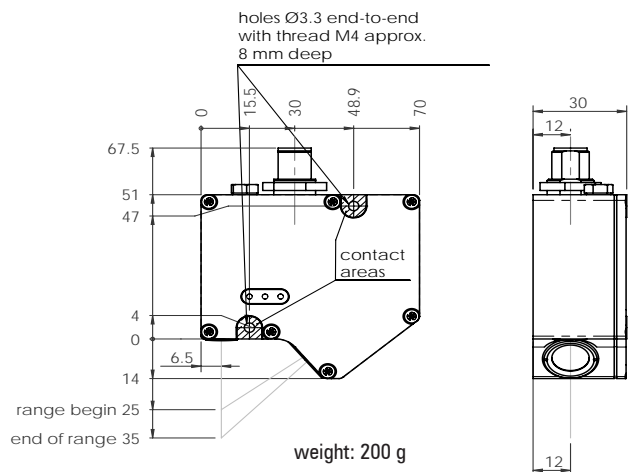
¹ Measurement at 30 kHz, object surface matt white

² Measurement at 10 Hz, object surface matt white

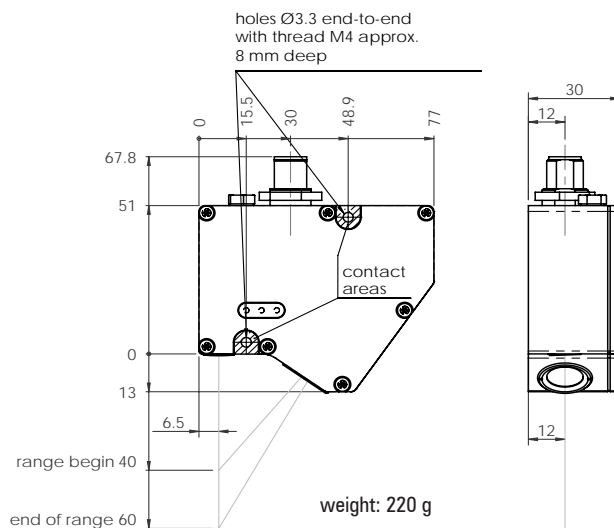
Pin Assignment connector M12 8pin A-coded

Pin	Signal	Bemerkung
1	Power Supply	+24 VDC
2	Input 1	incremental encoder A (I01)
3	Ground	0 V
4	Input 2	incremental encoder B (I02)
5	Tx +	Ethernet
6	Rx +	Ethernet
7	Tx -	Ethernet
8	Rx -	Ethernet

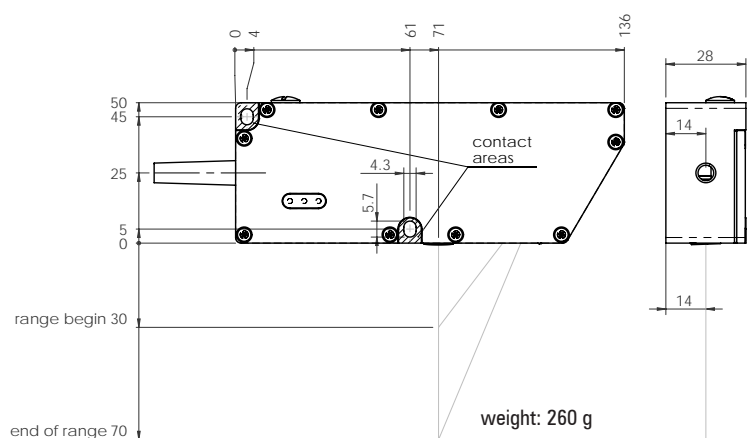
Laser Sensor M11LLi/10



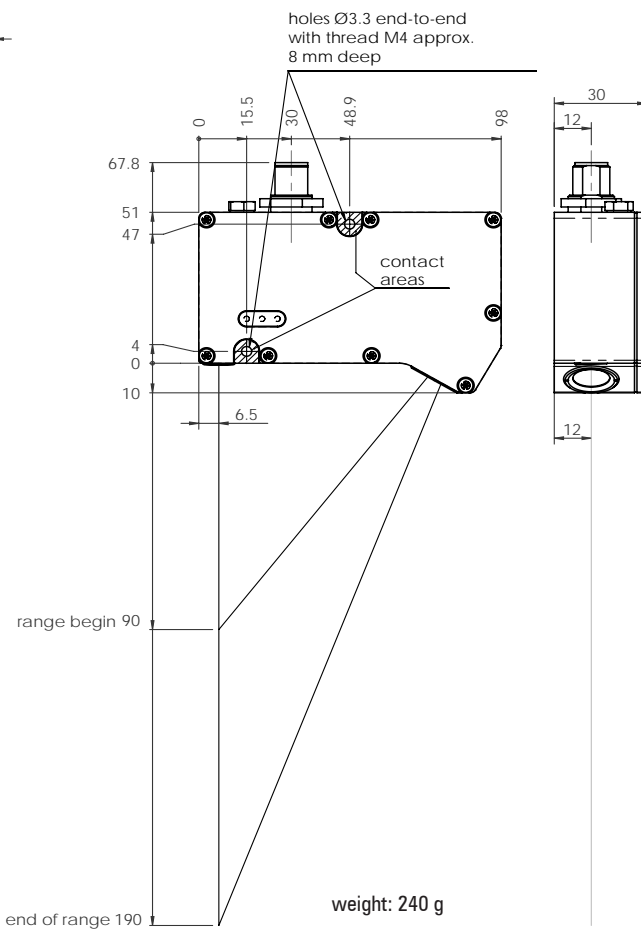
Laser Sensor M11LLi/20



Laser Sensor M11LLi/40



Laser Sensor M11LLi/100



Laser Sensor M11LLi/50

