

# OXM200-R10A.002

Smart Profil Sensor with integrated measurement tools

Article number: 11218602

Preliminary

## overview

- Easy-to-use Smart Profile Sensor with powerful measurement tools
- ROI tracking and combination of measurement values
- Visualisation and parametrisation with in-built webserver
- Compact One-Box-Design
- Multiple interfaces and protocols included



## Technical data

### general data

Measurement range MR	100 mm
Clearance distance	150 mm
Working range	150 ... 250 mm
Reference distance	200 mm
Field of view	75 mm ... 125 mm
Resolution X	125 ... 210 µm
Profiles per second	200 ... 800 Hz
Profile points	600 pixel
Resolution Z	12 ... 18 µm
Repeat accuracy Z	10 µm
Repeat accuracy X	µm
Linearity deviation Z	± 0,1 %
temperature drift	± 0,04 %Sde/K

### light source

Laser class	1, 2
Laser wavelength	Red (660 nm)
Laserpower	4.5 mW
Laser maximum total power	50 mW
Light point shape (at reference distance)	Laser line Length (x) 125 mm Laser line Width (z) < 400 µm

### interfaces and connectors

Software / parametrisation	Integrated Webserver for parametrisation
Interfaces / output circuit	Fast-Ethernet 100-MBit/s, 2 x Switching Output, Analog Output

### interfaces and connectors

Protocols	Profinet (CC-A), Modbus TCP, OPC UA, UDP, IO-Link Port Class B
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### electrical data

Voltage supply range +Vs	18 ... 30 VDC
Analog output signal	4-20mA, 2-10mA, 0-10V, 0-5V
Switching outputs	2 x Outputs (Push-Pull)
Power supply	typical 2.4W (100 mA max at 24 V) IEEE 802.3af Power over Ethernet (PoE)
Electrical connection	M12 12-pol, A-coded, male
Ethernet connection	M12 8-pol, X-coded, female
Encoder input specifications	4 Inputs Differential: A/B High Level: 2.5V ... +Ub / PoE 2.5 ... 24V HTL / TTL Low Level: 0 ... 1.5 V
Trigger input specification	High Level: 8V ... +Ub / PoE 8 ... 24V Low Level: < 2.5 V

### mechanical data

Material	Case: Aluminium, Front Cover: Glass
Dimensions (W x H x D)	36 mm x 74 mm x 60 mm
Width	36 mm
Height	74 mm
Depth	60 mm
Weight	270 g

### environmental conditions

Ambient temperature	0... + 45 °C
Storage temperature	- 10 ... + 60 °C
Ambient humidity	20 ... 85 %

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### environmental conditions

Protection class (IEC 60529)	IP67
Vibration (sinusoidal)	1 mm p-p at f = 10 - 55 Hz, duration 5 min per axis 30 min endurance at f = 55 Hz per axis IEC 60068-2-6:2008
Shock (semi-sinusoidal)	30 g / 11 ms, 6 jolts per axis and direction IEC 60068-2-27:2009

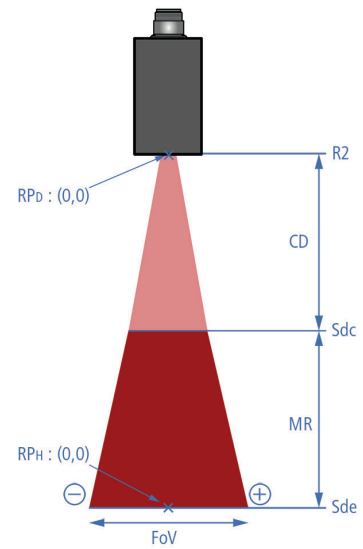
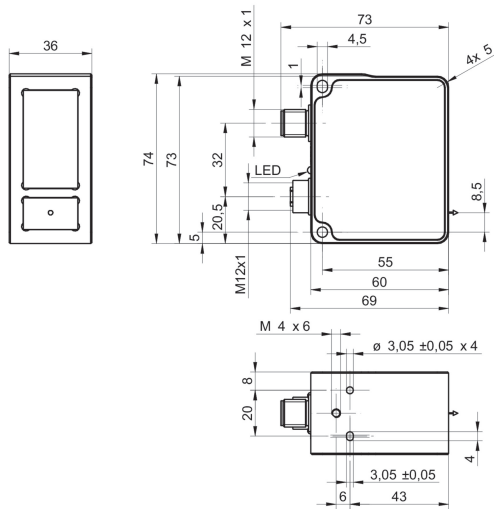
### environmental conditions

Ambient light immunity < 25 kLux

### conformity

Conformity CE  
RoHS

## technical drawings



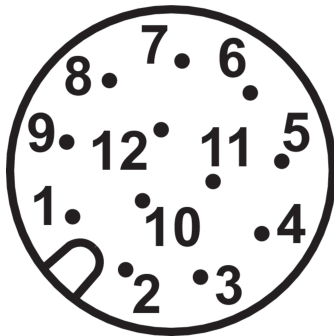
Preliminary

**pin assignment**

**Electrical connection**

M12 12-pol, A-coded, male

1	Power(18..30VDC)/2L+
2	GND/2M
3	Encoder A
4	Analog Out
5	Encoder A neg.
6	OUT1/IO-LinkC/Q
7	Encoder B
8	OUT2 (Alarm)
9	IN1 (sync in)
10	Encoder B neg.
11	IO-Link L+
12	IO-Link L-



**Ethernet connection**

M12 8-pol, X-coded, female

1	RX +
2	RX -
3	TX +
4	TX -
5	- VDC
6	- VDC
7	+ VDC
8	+ VDC

