

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	50 mm
Clearance distance	100 mm
Working range	100 ... 150 mm
Reference distance	125 mm
Field of view	48 mm ... 72 mm
Resolution X	80 ... 120 µm
Profiles per second	200 ... 800 Hz
Profile points	600 pixel
Resolution Z	8 ... 15 µm
Repeat accuracy Z	4 µm
Linearity deviation Z	± 0,1 %
temperature drift	± 0,04 %Sde/K

light source

Laser class	2
Laser wavelength	Red (660 nm)
Laserpower	4.5 mW
Laser maximum total power	50 mW
Light point shape (at reference distance)	72 mm Line Length (x) 100 µm Line Width (z)

interfaces and connectors

Software / parametrisation	Integrated Webserver for parametrisation
Interfaces / output circuit	Fast-Ethernet 100-MBit/s, 2 x Switching Output, Analog Output
Protocols	Profinet (CC-A), Modbus TCP, OPC UA, UDP, IO-Link Port Class B

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	typ. 2.4W (100 mA max at 24 V) IEEE 802.3af Power over Ethernet (PoE)

electrical data

Electrical connection	M12 12-pol, A-coded, male
Ethernet connection	M12 8-pol, X-coded, female
Encoder input specifications	4 Inputs Differential: A/B HTL / TTL available High Level: 2.5 V ... +Ub / PoE 2.5 ... 24 V Low Level: < 1.5 V
Trigger input specification	High Level: 8 V ... +Ub / PoE 8 ... 24 V 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

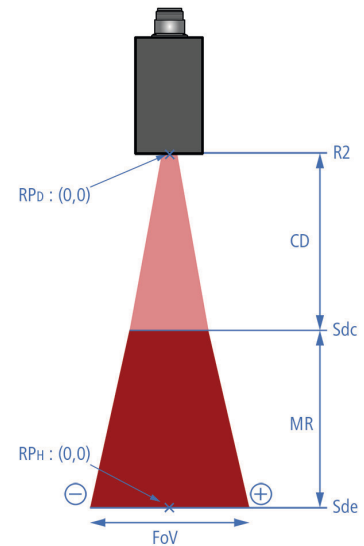
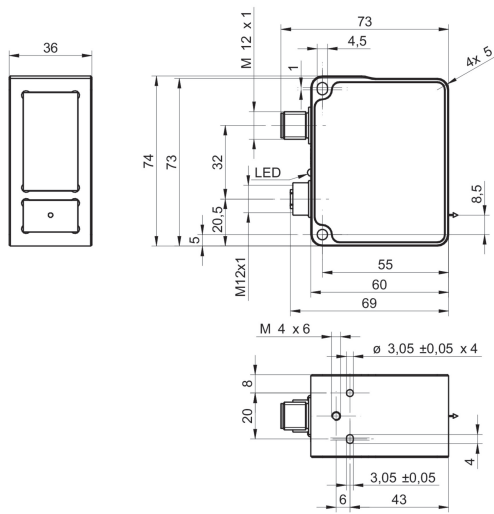
Ambient temperature	0 ... + 45 °C
Storage temperature	- 10 ... + 60 °C
Ambient humidity	20 ... 85 %
Protection class (IEC 60529)	IP67
Vibration (sinusoidal)	1 mm p-p at f = 10 - 55 Hz, duration 5 min per axis 30 min endurance at f = 55 Hz per axis IEC 60068-2-6:2008
Shock (semi-sinusoidal)	30 g / 11 ms, 6 jolts per axis and direction IEC 60068-2-27:2009
Ambient light immunity	< 25 kLux

conformity

Conformity	CE
------------	----

Preliminary

technical drawings



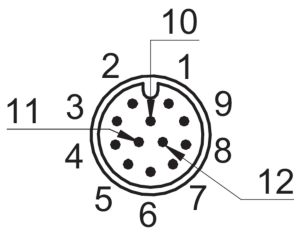
Preliminary

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
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

