

Overview

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



Picture similar



Technical data

General data

Type	Measuring mode (M): Height, Line/Angle, Area, Edge, Width/Gap, Intensity Edge, Circle, Caliper Z, Caliper X, Caliper Distance, Angle Gauge, Profile in x-z
Measurement range MR	50 mm
Clearance distance	100 mm
Working range (Sdc ... Sde)	100 ... 150 mm
Reference distance	125 mm
Field of view (@Sdc ... Sde)	48 mm ... 72 mm
Resolution X (@Sdc ... Sde)	80 ... 120 µm
Profiles per second	200 ... 800 Hz
Profile points	600 pixel
Resolution Z (@Sdc ... Sde)	8 ... 15 µm
Repeat accuracy Z	4 µm
Linearity deviation Z	± 0.1 % MR
Temperature drift	± 0.04 %Sde/K

Light Source

Laser class	2
Laser wavelength	Red (660 nm)
Light point shape (at reference distance)	Line Length (x) 72 mm Line Width (z) < 100 µm

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), Ethernet/IP, Modbus TCP, OPC UA, UDP, IO-Link

Electrical data

Voltage supply range +Vs	18 ... 30 VDC
Analog output signal	4-20mA, 2-10mA, 0-10V, 0-5V

Electrical data

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 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 Max. Frequency 30kHz
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)	IP65
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

Technical data

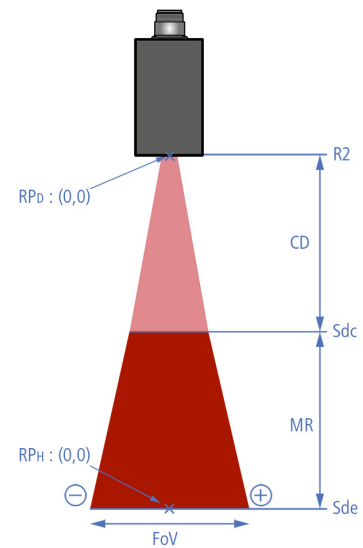
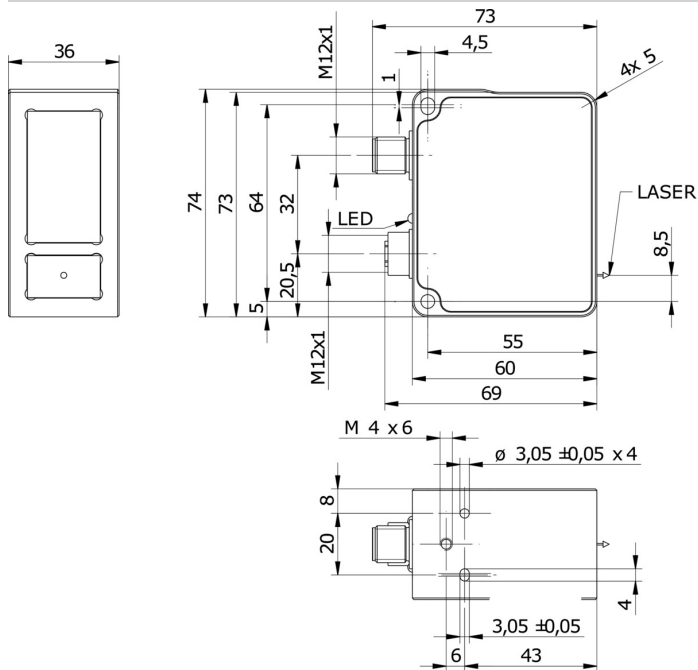
Environmental conditions

Ambient light immunity < 25 kLux

Conformity

Conformity	CE
	UL

Technical drawings



Pin assignment

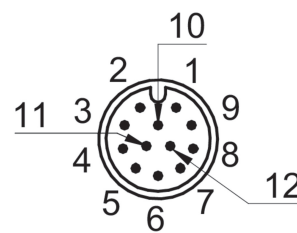
Electrical connection

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-

Pin assignment

Electrical connection



Ethernet connection

M12 8-pol, X-coded, female

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

Pin assignment

Ethernet connection

