

Preliminary

Overview

- High precision up to 1 µm
- Sensing heads integrated in RS485 via Modbus RTU
- Controller box (OE60C) with EtherCat optionally available
- Displayed degree of soiling as secondary data
- Appropriate for battery production (zinc, copper, nickel content <5 %)
- T-connector for sensor head connection included in the delivery



Picture similar

Technical data

General data

Type	Measuring mode: edges
Version	High performance
Measuring range Mr	10 mm
Distance between sensor heads (max.)	300 mm
Adjustment	RS485
Power on indication	LED green
Output indicator	LED red
Repeat accuracy	1 µm
Linearity error	± 0.28 % Mr
Temperature drift	± 0.02 % Sde/K

Light Source

Light source	Pulsed red laser diode
Laser class	1
Wave length	660 nm
Beam width	15 x 3 mm
Maximum pulse power	1.4 mW
Pulse duration	0.05 ms
Pulse period	0.4 ms

Electrical data

Measuring frequency	2000 Hz
Voltage supply range +Vs	15 ... 30 VDC
Current consumption max. (no load)	100 mA (@ 24 VDC)
Load resistance	> 100 kOhm
Short circuit protection	Yes
Reverse polarity protection	Yes, Vs to GND

Communication interface

Interface	RS485
Protocol	Modbus RTU
Baud rate	115200, adjustable

Mechanical data

Width / diameter	9.6 mm
Height / length	66 mm
Depth	21 mm
Design	Rectangular, side view
Material	Housing: PPS Cover: PMMA
Front (optics)	Glass
Connection types	Flylead connector M12 5 pin, L=300 mm
Weight	62 g 33 g (Receiver) 29 g (Emitter)

Ambient conditions

Ambient light immunity	< 5 kLux (lamp)
Protection class	IP 65
Operating temperature	0 ... +55 °C
Storage temperature	-20 ... +60 °C
Vibration (sinusoidal)	IEC 60068-2-6:2008 1.5 mm p-p at f = 10 - 57 Hz, 10 cycles per axis, 10 g at 58 - 2000 Hz, 10 cycles per axis
Shock (semi-sinusoidal)	IEC 60068-2-27:2009 30 g / 11 ms, 6 jolts per axis and direction

Cable

AWG	24
Wire cross section	0.2 mm²

2024-02-23 The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.

OE60.S10-TXF

High performance sensor

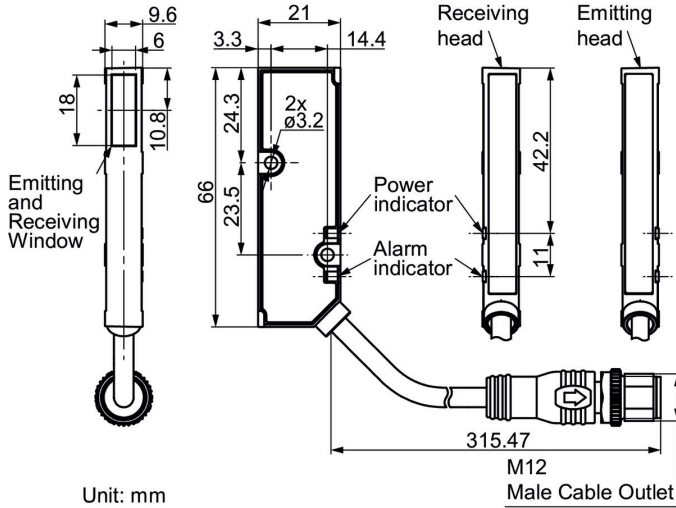
Article number: 11722571

Preliminary

Remarks

- Specifications are based on the following circumstances: measurement target: opaque knife edge, average filter: 16, median filter: 64, distance between sensor heads: 100 mm, position measurement target: half shading in the middle of the distance between the sensor heads.

Dimension drawing

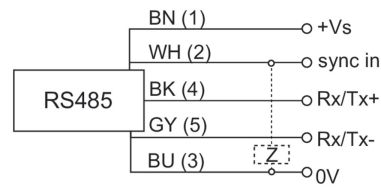


Laser warning

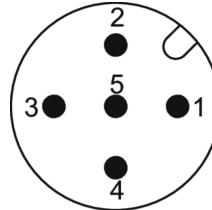
CLASS 1 LASER PRODUCT

IEC 60825-1/2014
Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019

Connection diagram



Pin assignment



Variants of integration

