IPF ELECTRONIC

Data sheet OTR49176 • Subject to alteration! Version: 03.12.2020

OTR49176

OPTICAL SENSORS • DIFFUSE REFLECTION SENSORS WITH INTENSITY DIFFERENTIATION

sensor optical, diffuse-reflection sensor, Ø4mm 36long, Sn: 30-100, 10-30V DC, 1x PNP NO (NO), IO-Link, Cable connector M8 4pin 0.3m PUR (Polyurethane), IP67, V2A+PMMA, 1kHz, Polarity free red light, Point

MECHANICAL FEATURES

Ambient temperature	-25 °C ... 65 °C
Cable length	0.3 m
Degree of protection (IP)	IP67
Design	Cylinder plain
Housing material	Stainless steel (V2A)
Material of cable sheath	PUR (Polyurethane)
Material of optical surface	PMMA
Max. tightening torque	1 Nm
Number of cores	4
Reflector included in the scope of delivery	-
Sensor diameter	4 mm
Sensor length	36 mm
Wire cross section	0.14 mm²
With interchangeable lens	-

ELECTRICAL FEATURES

Alarm output	-
Decay time	0.5 ms
Equipment protection class	Protection class 3
High repeat accuracy	-
Interference suppression	-
IO-Link compatible	+
Max. switching distance	120 mm
No-load current	12 mA
Number of pins	4
Number of switching outputs	1
Operating voltage	10 V ... 30 V
Pre-failure message	-
Rated switching current	100 mA
Residual ripple	10 %
Response time	0.5 ms
Reverse polarity protection	+
Scanning function	Light switching

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ELECTRICAL FEATURES

Sensing range	30 mm ... 100 mm
Short-circuit protection	+
Suitable for safety functions	-
Switching frequency	1000 Hz
Type of electrical connection	Cable connector M8
Type of switching function	Normally open contact (NO)
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With communication interface, RS-232	-
With LED display	+
With monitoring function of downstream devices	-
With other analog output	-
With restart lock	-
With time function	-

OPTICAL FEATURES

Light source	Polarity free red light
Wavelength of the sensor	630 nm
Light exit	Axial
Light beam form	Point
Small light beam diameter	-
Line scanner	-

OTHER FEATURES

Feeding technology	+
For gloss queries	-
Is line scan camera	-

Other

Packaging dimensions	180mm x 10mm x 210mm
Shipping weight	0.02kg
Tariff code	85365019

Classification

ipf product group	100
eClass 8.0	27270903
eClass 9.0	27270903
eClass 9.1	27270903
ETIM-5.0	EC001821
ETIM-6.0	EC001821
ETIM-7.0	EC001821

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Connection

1	brown	L+
2	white	teach-in
4	black	PNP NO
3	blue	L-
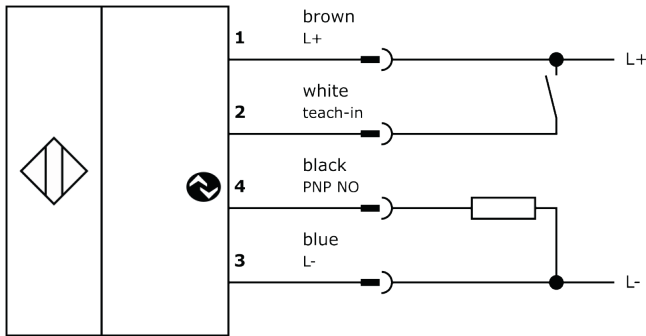
Dimensional drawing

M8x1

41

8,5

Ø4

0,5

300

35,5
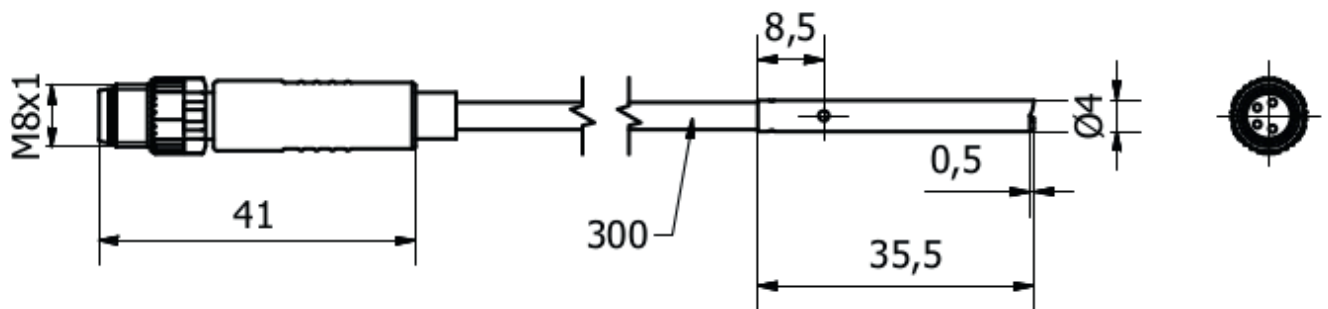
Installation

Mounting / installation may only be carried out by a qualified electrician!

Disposal

Software

Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: www.ipf-electronic.com

Safety warnings

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.
Never use these devices in applications where the safety of a person depends on their functionality.
LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.

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