IPF ELECTRONIC

Data sheet **OTQ80170** • Subject to alteration! Version: 03.12.2020

OTQ80170

OPTICAL SENSORS • DIFFUSE REFLECTION SENSORS WITH INTENSITY DIFFERENTIATION

sensor optical, diffuse-reflection sensor, 25x12x8,2mm, Sn: 6-14, 12-24V DC, 1x PNP NO (NO), Cable connector M8 3pin 0.3m PUR (Polyurethane), IP67, Plastic ABS+Plastic, 1kHz, Polarity free red light, Point, Manual adjustment

MECHANICAL FEATURES

Ambient temperature	-25 °C ... 55 °C
Cable length	0.3 m
Degree of protection (IP)	IP67
Design	Cuboid
Housing material	Plastic ABS
Material of cable sheath	PUR (Polyurethane)
Material of optical surface	Plastic
Number of cores	3
Reflector included in the scope of delivery	-
Sensor height	25 mm
Sensor length	12.3 mm
Sensor width	8.2 mm
Shock resistance	50 g
Storage temperature	-30 °C ... 70 °C
Vibration resistance	500 Hz
Volume	Small
Wire cross section	0.1 mm²
With interchangeable lens	-

ELECTRICAL FEATURES

Alarm output	-
Decay time	0.5 ms
Equipment protection class	Protection class 3
High repeat accuracy	-
Hysteresis	15 %
Interference suppression	-
Max. switching distance	14 mm
No-load current	20 mA
Number of pins	3
Number of switching outputs	1
Operating voltage	12 V ... 24 V
Pre-failure message	-
Rated switching current	50 mA

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ELECTRICAL FEATURES

Residual ripple	10 %
Response time	0.5 ms
Reverse polarity protection	+
Scanning function	Light switching
Sensing range	6 mm ... 14 mm
Setting procedure	Manual adjustment
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	1 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	680 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	77.0mm x 25.0mm x 123.0mm
Shipping weight	0.04kg
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+
4	black	PNP NO
3	blue	L-
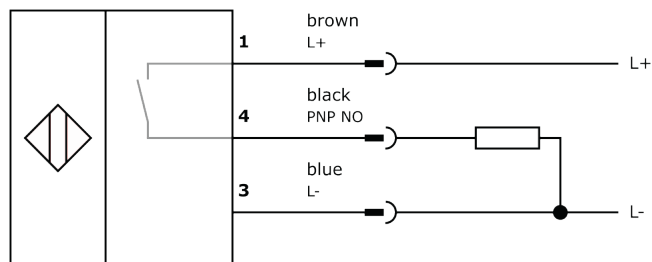
Dimensional drawing
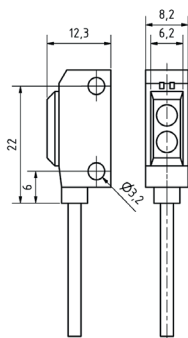
Installation

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

Disposal

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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