ORQ80571

Optical sensors ● Retro-reflective sensors

sensor optical, reflective, 25x16x8mm, Polarized red light, Point, Teach-In, Sn: 3000, 10-30V DC, PNP/NPN NC/NO, IO-Link, Cable connector M8 4pin 0.2m PVC, IP67, Plastic ASA+PMMA, With polarizing filter

Optical sensors function contactlessly. They detect objects independent of their characteristics (e.g., shape, color, surface structure, material). The basic operating principle is based on the transmission and reception of light. There are three different versions: 1. The through-beam sensor consists of two separate devices, a transmitter and a receiver that are aligned with one another. If the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status. 2. With the retro-reflective sensor, the transmitter and receiver are located in one device. The emitted light beam is reflected back to the receiver by a reflector that is to be mounted opposite the device. As soon as the light beam is interrupted, the switching output integrated in the device changes its status. 3. With the diffuse reflection sensor, the transmitter and receiver are in one device. The emitted light beam is reflected by the object that is to be detected. As soon as the receiver detects the reflected light, the switching output integrated in the device changes its status.

Electrical features

Response/decay time	0.25ms
Display	LED display
Type of switching function	Normally closed contact/normally open contact
Type of electrical connection	Cable connector M8
Type of switching output	PNP/NPN
Rated switching current	50mA
Setting procedure	Teach-In
Short-circuit protection	Yes
No-load current	40mA
Number of pins	4
Switching distance	0 - 3000mm
Switching frequency	2000Hz
Voltage drop	2V
Scanning function	Light-/dark-on mode
Reverse polarity protection	Yes
Decay time	0.25ms
Operating voltage (DC)	10 - 30V
With polarizing filter	Yes
Interference suppression	Yes

Mechanical features

Conductor cross-section	0.08mm²
Design	Cuboid
Width	8mm
Height	25.1mm
Cable length	0.2m
Storage temperature	-25 - 50°C
Length	15.8mm
Degree of protection (IP)	IP67
Volume	Small
Active area material of sensor	Plastic (PMMA)
Housing material	Plastic ASA
Material of cable sheath	Plastic (PVC)
Ambient temperature	-25 - 50°C

Optical features

Light source	Polarized red light
Light beam form	Point
Wavelength of the sensor	644nm

Other features

IO-Link version	V1.1
Reference medium / object	AO000007
Ambient temperature	-25 - 50°C

Classification

ETIM 8	EC002717 Retro-reflective sensor

More

IPF Product Group	100 optical sensors
packaging dimensions	95 x 75 x 17 mm
gross weight	24 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection

Pin	Color	Function
1	brown	L+
2	white	Teach-In
4	black	Push-pull NO / NC switchable
3	blue	L-
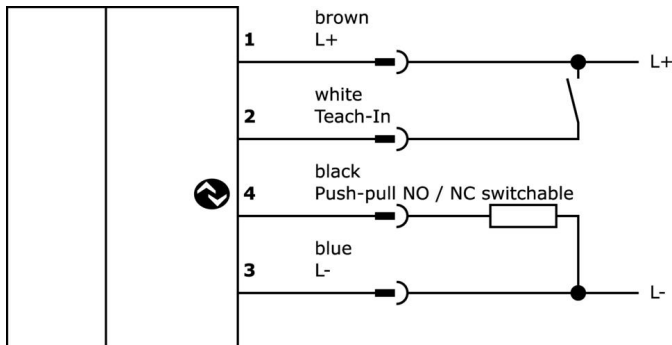
Installation

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.

For suitable connection and mounting accessories, please refer to our website www.ipf-electronic.com.

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

Dimensional drawing

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