

OR189420

Optical sensors • Retro-reflective sensors

Sensor Optical, reflex, M18x1 37long, red light polarized, point, Sn: 30-5500, 10-30V diagnostic coverage, PNP exclusive-OR, M12-connector 4-pin, IP67, stainless steel+PMMA, With polarizing filter

including 2x Nut, 2x Toothed washer

- / Stainless steel housing
- / Polarizing filter
- / IO-Link
- / Suppression of mutual interference



short design large detection range

Optical sensors operate without contact. They detect objects, regardless of their nature (e.g. shape, color, surface structure, material). The basic mode of operation is based on the transmission and reception of light. Three variants are distinguished:

1. the through-beam sensor consists of two separate devices, a transmitter and a receiver, which are aligned with each other. When the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status.
2. in the case of the reflex light barrier, the transmitter and receiver are located in one device. The transmitted light beam is reflected onto the receiver by a reflector to be mounted opposite. As soon as the light beam is interrupted, the switching output integrated in the device changes its status.

With the diffuse reflection sensor, the transmitter and receiver are located in one device. The transmitted light beam is reflected by the object 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	0.34ms
Display	LED display
Type of switching function	Exclusive-OR
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	200mA
No-load current	15mA
Number of pins	4
Reaction time	0.34ms
Residual ripple	10%
Switching distance	30 - 5500mm
Switching frequency	1450Hz
Voltage drop	2V
Scanning function	Light-/dark-on mode
Reverse polarity protection	Yes
Decay time	0.34ms
Operating voltage (DC)	10 - 30V
With polarizing filter	Yes

Mechanical features

Design	Cylinder, screw-thread
Thread length	24mm
Thread pitch	1mm
Length	37mm
Maximum tightening torque	20Nm
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PMMA)
Housing material	Stainless steel 1.4301
Thread dimension	M18
Ambient temperature	-25 - 65°C

Optical features

Light source	Polarized red light
Light beam form	Point
Wavelength of the sensor	630nm
Light spot diameter at the start of the measuring range	0mm
Light spot diameter at the end of the measuring range	110mm

Other features

IO-Link version	V1.0.1
Reference medium / object	AO000007
Ambient temperature	-25 - 65°C

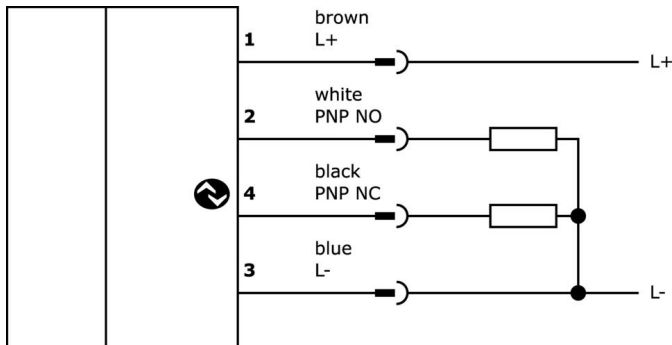
Classification

ETIM 8

More

IPF Product Group	100 optical sensors
packaging dimensions	210 x 185 x 20 mm
gross weight	43 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes
MTTF value	652 year(s)

Connection



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