

PT3A0576

Laser sensors • Diffuse reflection sensors with background suppression

Sensor laser, diffuse reflection sensor, 38x21x11mm, Sn: 2500, 10-30V DC, 1x PNP+NPN NC/NO, IO-Link, M8 plug-in connector 4-pin, IP67, plastic ASA+PMMA, 10Hz, laser diode infrared, dot, teach-in

- / Large scanning range due to time of flight measurement**
- / Setting via teach-in**
- / IO-Link interface**
- / M8 plug connection**



Infrared laser with alignment aid Laser class 1

Optical sensors work contactless. They detect objects, regardless of their properties (e.g. shape, color, surface structure, material). The basic mode of operation is based on the transmitter and receiver of light. There are three different versions: 1. the through-beam sensor consists of two separate devices, a transmitter and a receiver, which are aligned with each other. If the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status. 2. in 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. 3. the diffuse reflection sensor has a transmitter and receiver 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	50 ms
Number of switching outputs	1
Display	LED display
Type of switching function	Normally closed (n.o. for PNP) Normally closed (n.c. for NPN) - Adjustable
Type of electrical connection	Connector M8
Type of switching output	Push-pull
Rated switching current	100 mA
Setting procedure	Teach-In
No-load current	55 mA
Number of pins	4
Reaction time	0.5 ms
Switching distance	0 - 2500 mm
Switching frequency	10 Hz
Voltage drop	2.5 V
Scanning function	Light-/dark-on mode
Decay time	50 ms
Absolute repeat accuracy	2 mm
Supported communication interface	IO-Link
Operating voltage (DC)	10 - 30 V
ardSOCA_ElektrischerAnschluss	
ardSOCA_Betriebsspannung	
ardTEEL_Schutzfunktionen	Short circuit protection Reverse polarity protection

Mechanical features

Design	Cuboid
Width	11 mm
Height	38.2 mm
Storage temperature	-40 - 70 °C
Length	21 mm
Shock resistance	10 g
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PMMA)
Housing material	Plastic ASA
Ambient temperature	-30 - 55 °C
ardSOCA_Abmessungen	

Optical features

Laser class	Class 1
Light source	Laser diode, infrared light
Light beam form	Point
Wavelength of the sensor	940 nm

Other features

IO-Link version	V1.1
Reference medium / object	Material with 90% reflectivity

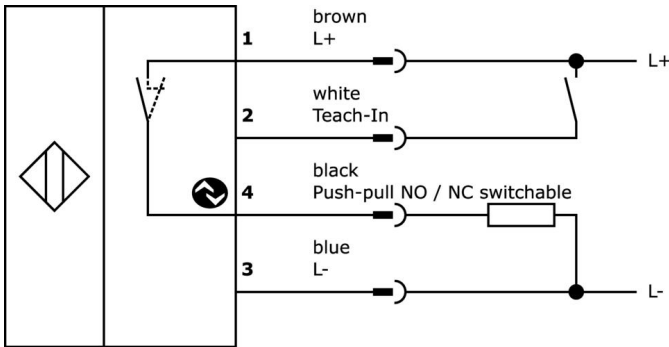
Classification

ETIM 8	
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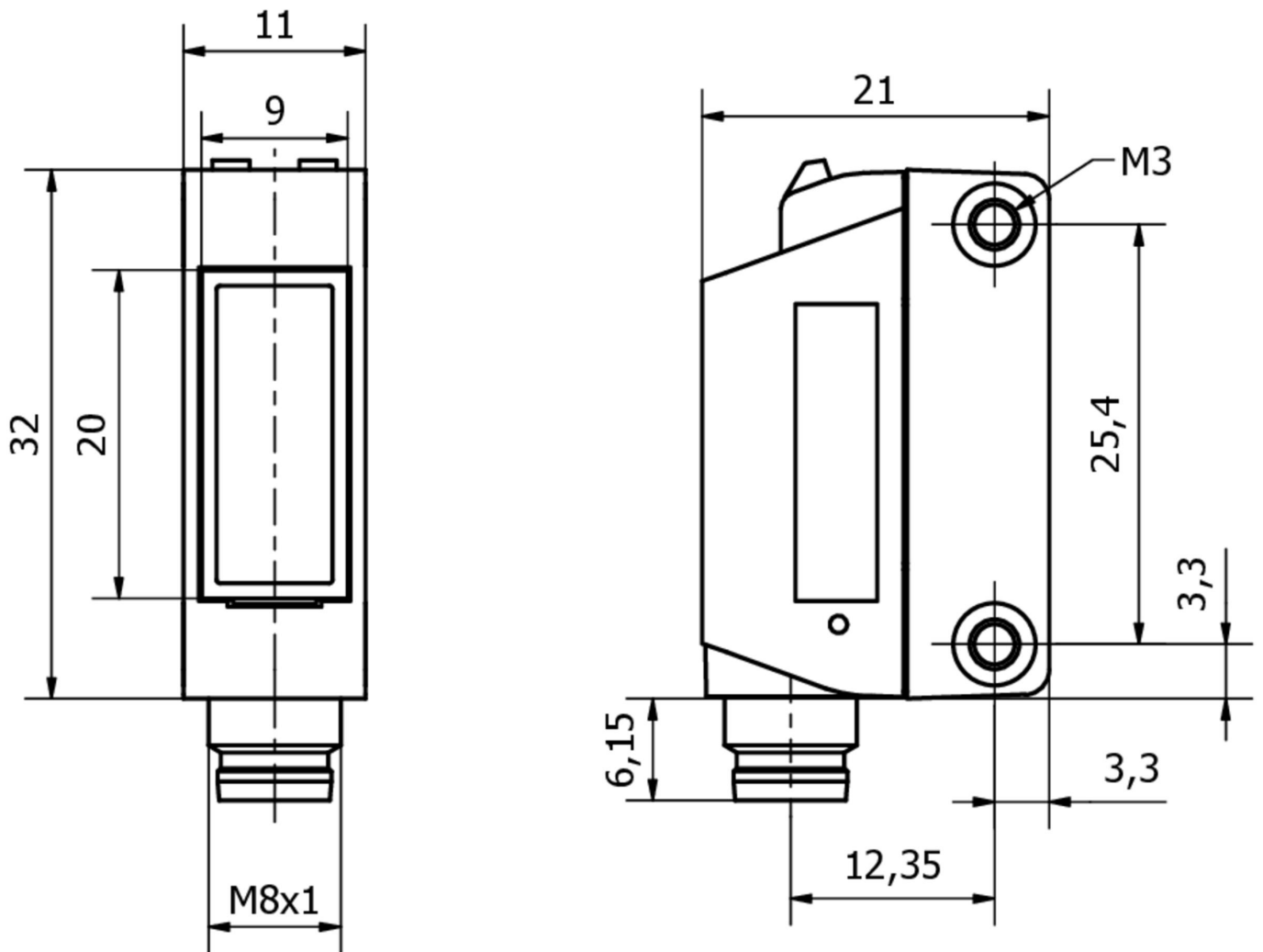
More

IPF Product Group	160 laser sensor
packaging dimensions	123 x 77 x 25 mm
gross weight	31 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

VK030F71



Connection cable, 0.3m, M8 socket 4-pin angular, M8 connector 4-pin straight, 4-core, PUR (polyurethane), suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK030F75



Connection cable, 0.3m, M8 socket 4-pin straight, M8 connector 4-pin straight, 4-core, PUR (polyurethane), suitable for trailing chain and torsion-resistant, oils and cooling lubricants, welding area, silicone-free

VY000004



DC power supply, sensor tester, 120x26x72mm, 18V, 0.04A, Spring clamp connection 4pin, IP20, Plastic

VK200371



Connection cable, 2m, M8 socket 4-pin angular, free cable end, 4x0.34mm², PUR (polyurethane), Ø4.7mm, 30V, -30-90°C, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK200375



Connection cable, 2m, M8 socket 4-pin straight, free cable end, 4x0.34mm², PUR (polyurethane), Ø4.7mm, 30V, -30-90°C, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VY000005



IO-Link master, 41x24x67mm, IO-Link, M12, With USB interface

VK003071



Cable socket, Angular, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 30V, -40-85°C, M8 Female (socket) 4pin, IP67, Brass

VK003075



Cable socket, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 30V, -40-85°C, M8 Female (socket) 4pin, IP67, Brass

VK000040



Adaption, M8 Female (socket) 4pin Straight, M12 Male (connector) 4pin Straight, 24V, -25-85°C, IP67, Oil and cooling lubricants, Welding area

You can find further accessories on our homepage



Installation

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



Disposal

WEEE number according to § 6 para. 3 ElektroG: 40951076

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.

/ 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