

PT330070

Laser sensors • Distance measurement

Sensor laser, diffuse reflection sensor, 39x23x13mm, Sn:20-250mm, triangulation, 12-30V DC, 1xPNP/NPN NC/NO, 0-10V, IO-Link, M8 plug-in connector 4-pin, IP67, PMMA, laser diode, red light, dot, teach-in

- / plastic housing
- / LED display with alignment-aid
- / IO-Link interface
- / M8 plug connection



Analog output 0 ... 10V

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	4.5 ms
Number of switching outputs	1
Display	LED display
Type of switching function	Normally closed contact/normally open contact
Type of analog output	0 - 10V
Type of electrical connection	Connector M8
Type of switching output	Push-pull
Rated switching current	100 mA
Setting procedure	Teach-In
No-load current	30 mA
Linearity deviation	7,5 mm
Number of pins	4
Reaction time	4.5 ms
Switching distance	20 - 250 mm
Voltage drop	2 V
Scanning function	Light-/dark-on mode
Decay time	4.5 ms
Absolute repeat accuracy	1.5 mm
Measurement principle	triangulation
Supported communication interface	IO-Link
Operating voltage (DC)	12 - 30 V
Measuring range	20 - 250 mm
Electrical connection	M8 4-pin plug connector
Operating voltage	12-30VDC
ardTEEL_Schutzfunktionen	Short circuit protection Reverse polarity protection

Mechanical features

Design	Cuboid
Width	12.9 mm
Height	39.1 mm
Storage temperature	-40 - 70 °C
Length	23 mm
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PMMA)
Housing material	PMMA
Ambient temperature	-10 - 60 °C
dimensions	23x12.9x39.1mm

Optical features

Laser class	Class 1
Light source	Laser diode, red light
Light beam form	Point
Wavelength of the sensor	656 nm
focus	400 mm
Light spot diameter at focal point	0.7 mm

Other features

IO-Link version	V1.1.3
Reference medium / object	Material with 90% reflectivity

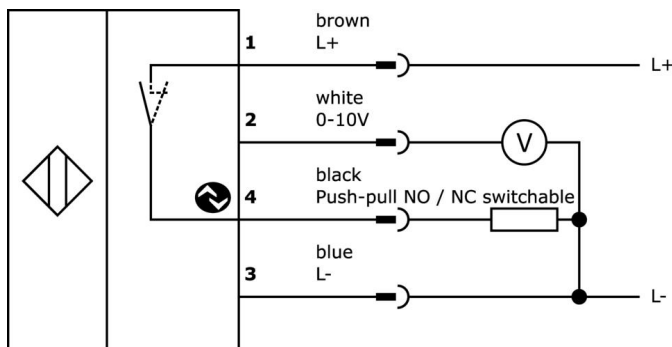
Classification

ETIM 8

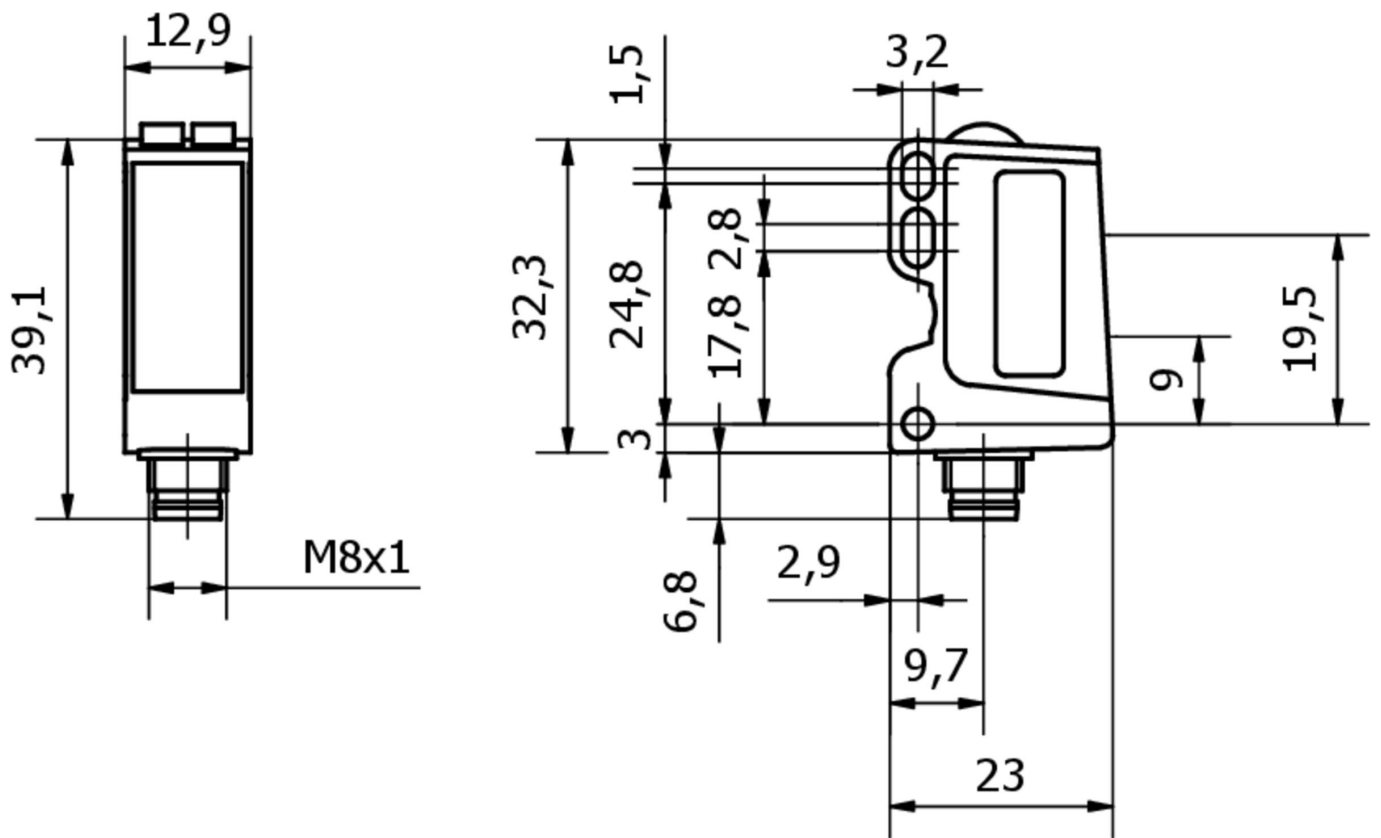
More

IPF Product Group	169 laser diffuse reflection sensors (analog)
packaging dimensions	123 x 77 x 25 mm
gross weight	32 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

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

AY000118



accessories sensor, Fixture kit, Metal, ball joint

VY000005



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

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

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

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