

PT49C070

Laser sensors • Distance measurement

Sensor laser, diffuse reflection sensor, 49x40x14mm, Sn:50-350mm, triangulation, 12-28V DC, 4-20mA, M8 plug connector 4-pin, IP67, zinc diecast+glass, laser diode, red light, line, teach-in

- / Setting via teach-in
- / Analog output 4 ... 20mA
- / Automatic adjustment of the exposure time
- / M8 plug connection



very narrow laser line Laser class 2

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	0.4 ms
Display	LED display
Type of alarm output	PNP/NPN
Type of analog output	4 - 20mA
Type of electrical connection	Connector M8
Rated switching current	100 mA
Setting procedure	Teach-In
Short-circuit protection	Yes
Laser power	2 mW
No-load current	50 mA
Linearity deviation	1,1 mm
Number of pins	4
Relative linearity deviation	0.15 %
Reverse polarity protection	Yes
Absolute linearity deviation	1.1 mm
Absolute repeat accuracy	0.03 mm
Measurement principle	triangulation
Operating voltage (DC)	12 - 28 V
Measuring range	50 - 350 mm

Mechanical features

Design	Cuboid
Width	13.6 mm
Height	49 mm
Storage temperature	-20 - 60 °C
Length	40.3 mm
Maximum tightening torque	1 Nm
Degree of protection (IP)	IP67
Active area material of sensor	glass
Housing material	Zinc die-cast
Ambient temperature	-10 - 50 °C

Optical features

Teach-in limits distance	5 mm
Laser class	Class 2
Light source	red light
Light beam form	Line
Wavelength of the sensor	660 nm

Other features

Reference medium / object	Material with 90% reflectivity
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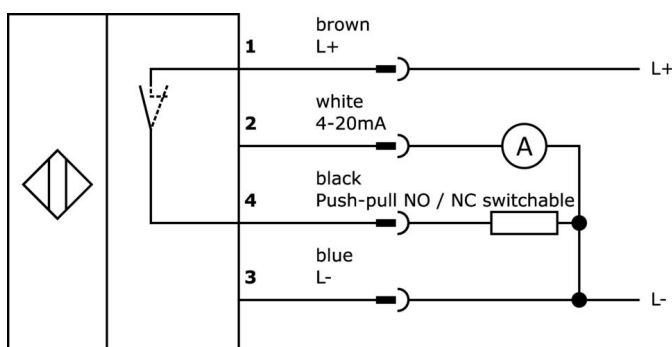
Classification

ETIM 8

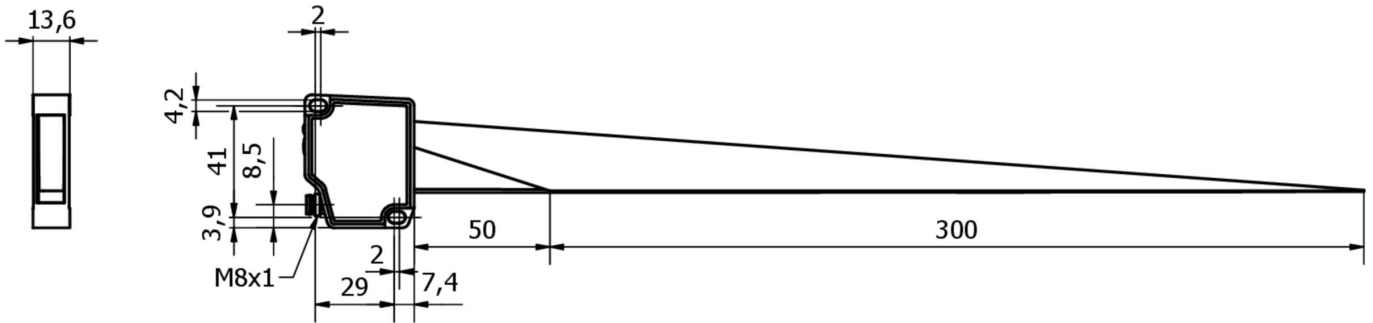
More

IPF Product Group	169 laser diffuse reflection sensors (analog)
packaging dimensions	123 x 77 x 25 mm
gross weight	94 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


VK205375

 Connection cable, 2m, M8 Female (socket) 4pin Straight, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø5.5mm, 60V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone..


VK505371

 Connection cable, 5m, M8 Female (socket) 4pin Angular, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø5.5mm, 60V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone..

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


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


VK200371

 Connection cable, 2m, M8 Female (socket) 4pin Angular, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø4.7mm, 30V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

VK200375

 Connection cable, 2m, M8 Female (socket) 4pin Straight, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø4.7mm, 30V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

AY000096

 Accessories Sensor, mounting kit, metal, ball joint

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.