

PT663021

Laser sensors • Distance measurement

Sensor laser, diffuse reflection sensor, 65x50x21mm, Sn:30-130mm, resolution 60µm, triangulation, 12-28V DC, 0-10V/4-20mA, M12 connector 8-pin, IP67, zinc diecast+glass, laser diode, red light, line, teach-in



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 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	0.9 ms
Display	LED display
Resolution	0.06 mm
Type of alarm output	PNP
Type of analog output	0 - 10V 4 - 20mA
Type of electrical connection	Connector M12
Rated switching current	100 mA
Setting procedure	Teach-In
Short-circuit protection	Yes
No-load current	100 mA
Number of pins	8
Relative linearity deviation	0.2 %
Reverse polarity protection	Yes
Decay time	0.9 ms
Absolute linearity deviation	0.2 mm
Measurement principle	triangulation
Operating voltage (DC)	12 - 28 V
Measuring range	30 - 130 mm

Mechanical features

Design	Cuboid
Width	20.6 mm
Height	65 mm
Length	50 mm
Degree of protection (IP)	IP67
Active area material of sensor	glass
Housing material	Zinc die-cast
Ambient temperature	0 - 50 °C

Optical features

Teach-in limits distance	3 mm
Laser class	Class 2
Light source	Laser diode, red light
Light beam form	Line
Wavelength of the sensor	650 nm
Light spot diameter at focal point	1 mm

Other features

Reference medium / object	Material with 90% reflectivity
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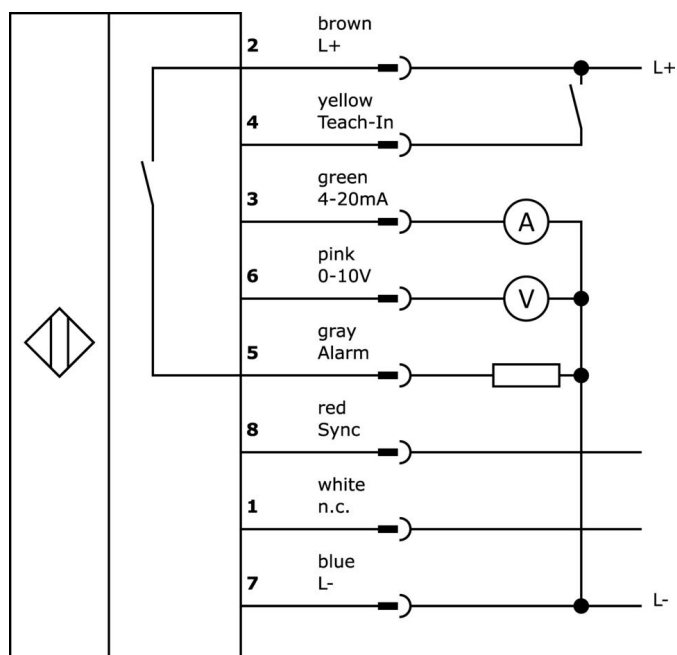
Classification

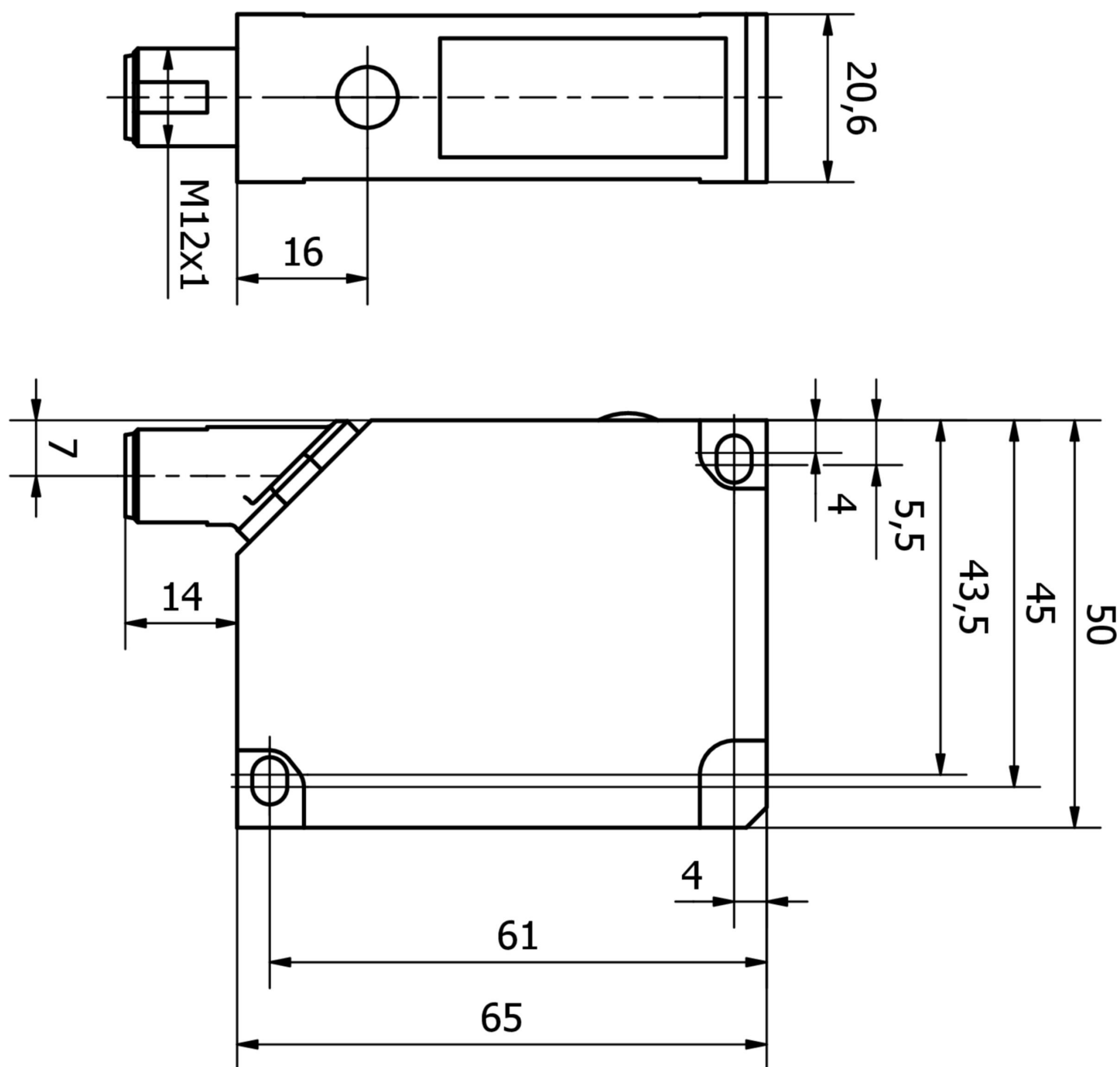
ETIM 8	EC001825 Optical distance sensor
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More

IPF Product Group	169 laser diffuse reflection sensors (analog)
packaging dimensions	160 x 99 x 60 mm
gross weight	210 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection





Extract accessories program

VY000004



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

NG400501



DC power supply, 1-phase,
125x114x40mm, 24-28V, 5A, 90-
264V AC 50Hz, 90-264V AC 60Hz,
127-370V DC, screw connection,
IP20, aluminum, stabilized, pulsed
output voltage

AP98E154



Documentation laser, Test
protocol, Suitable for PT16, PT49,
PT65

VK205A21



Connection cable, 2m, M12
Female (socket) 8pin Angular, Free
conductor end, 8x0.25mm², PUR
(Polyurethane), Ø6.6mm, 30V, -
25-90°C, IP67, Shielded, Suitable
for trailing chain and torsion
resistant, Oil and cooling
lubricants, Welding area, Silicone..

VK205A25



Connection cable, 2m, M12
Female (socket) 8pin Straight, Free
conductor end, 8x0.25mm², PUR
(Polyurethane), Ø6.6mm, 30V, -
25-90°C, IP67, Shielded, Suitable
for trailing chain and torsion
resistant, Oil and cooling
lubricants, Welding area, Silicon...

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.