

## PY98E158

### Laser sensors • Feed sensor

sensor laser, feed, 16x60x35mm, Sn: 20-40, 10-30V DC, PNP/NPN NC/NO, Connector M8 3pin, IP67, Aluminum Anodised+Plastic, Laser diode, infrared light, Point, Manual adjustment



Optical sensors function contactlessly. They detect objects independent of their characteristics (e.g., shape, color, surface structure, material). The basic operating principle is based on the transmission and reception of light. There are three different versions: 1. The through-beam sensor consists of two separate devices, a transmitter and a receiver that are aligned with one another. If the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status. 2. With the retro-reflective sensor, the transmitter and receiver are located in one device. The emitted light beam is reflected back to the receiver by a reflector that is to be mounted opposite the device. As soon as the light beam is interrupted, the switching output integrated in the device changes its status. 3. With the diffuse reflection sensor, the transmitter and receiver are in one device. The emitted light beam is reflected by the object that is to be detected. As soon as the receiver detects the reflected light, the switching output integrated in the device changes its status.

#### Electrical features

Display	LED display
Type of switching function	Normally closed contact/normally open contact
Type of electrical connection	Connector M8
Type of switching output	PNP/NPN
Rated switching current	150 mA
Setting procedure	Manual adjustment
No-load current	30 mA
Power consumption	0.9 VA
Number of pins	3
Reaction time	10 ms
Switching distance	20 - 40 mm
Protection class	III
Voltage drop	2.5 V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 30 V
Time function	Yes

**Mechanical features**

Design	Cuboid
Width	35 mm
Height	16 mm
Length	60 mm
Surface	teflon coated
Degree of protection (IP)	IP67
Active area material of sensor	Plastic
Housing material	Aluminum
Ambient temperature	5 - 45 °C

**Optical features**

Laser class	Class 1M
Light source	Laser diode, infrared light
Light exit	axial
Light beam form	Point
Min. object size	2 mm
Wavelength of the sensor	850 nm

**Other features**

Feeding technology	Yes
--------------------	-----

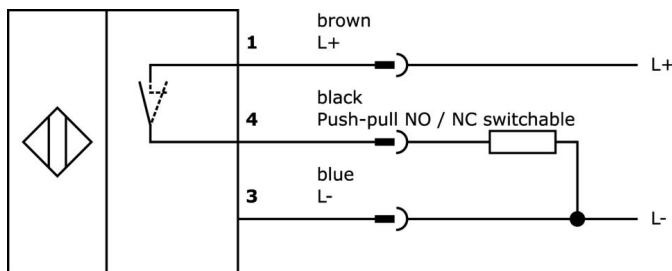
**Classification**

ETIM 8	EC001821 Light sensor energetic
--------	---------------------------------

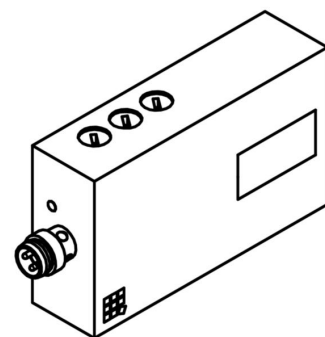
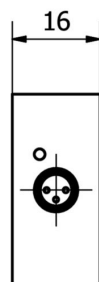
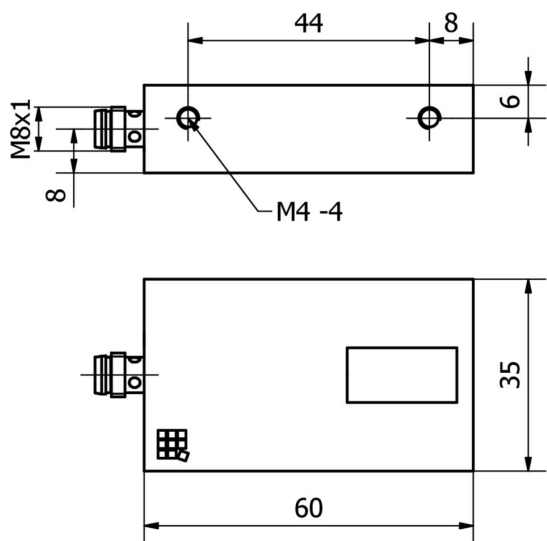
**More**

IPF Product Group	163 Laser (various)
packaging dimensions	123 x 77 x 25 mm
gross weight	76 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**




**Dimensional drawing**




**Extract accessories program**

**VK030F80**




Connection cable, 0.3m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0.34mm<sup>2</sup>, PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK030F84**




Connection cable, 0.3m, M8 socket 3-pin straight, M12 connector 3-pin straight, 3x0.34mm<sup>2</sup>, PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK003076**




Cable connector, Angular, Suitable for self-assembly, Soldering connection, 4A, 60V, -40-85°C, M8 Male (connector) 3pin, IP67, Brass

**VK003078**



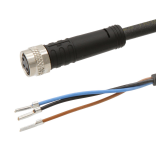
Cable connector, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Male (connector) 3pin, IP67, Brass

**VK200071**



Connection cable, 2m, M8 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, 60V, -40-90°C, IP67, TPU, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

**VK200075**




Connection cable, 2m, M8 female (socket) 3pin Straight, free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, 60V, -30-90°C, IP67, suitable for trailing chain and torsion resistant, oil and cooling lubricants, welding area, Silicone-free

**VK200271**




Connection cable, 2m, M8 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silico...

**VK500271**



Connection cable, 5m, M8 Female (socket) 3pin Angular, Free conductor end 3pin, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, S...

**VK030F82**



Connection cable, 0.3m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0.34mm<sup>2</sup>, PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

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.