

## PS18F001

### Laser sensors • Through-beam sensors transmitters

Sensor laser, through-beam sensor transmitter, M18x1 122lang, aperture 18x10mm, 24V diagnostic coverage, M12 plug-in connector 4-pin, IP67, nickel-plated (n-pltd) brass+glass, laser diode, red light

including 2x Nut



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. With the retro-reflective sensor, 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

Type of electrical connection	Connector M12
Laser power	0.4mW
No-load current	50mA
No-load current, transmitter	50mA
Number of pins	4
Reverse polarity protection	Yes
Operating voltage (DC)	21,6 - 26,4V

#### Mechanical features

Design	Cylinder, screw-thread
Thread length	60mm
Thread pitch	1mm
Storage temperature	-20 - 85°C
Length	122mm
Degree of protection (IP)	IP67
Active area material of sensor	glass
Housing material	Nickel-plated brass
Thread dimension	M18
Ambient temperature	-20 - 50°C

**Optical features**

Aperture width	10mm
Aperture length	18mm
Filter	Interference filter
Laser class	Class 1
Light source	Laser diode, red light
Wavelength of the sensor	670nm

**Other features**

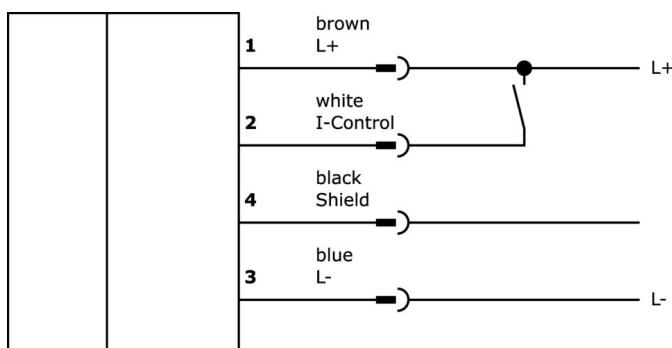
Features	with test input
Ambient temperature	-20 - 50°C
Version	Through-beam sensor transmitter

**Classification**

ETIM 8
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**More**

IPF Product Group	160 laser sensor
packaging dimensions	125 x 70 x 40 mm
gross weight	107 g
Customs tariff number	85365019
WEEE number	40951076
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection****Installation**

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

**Disposal**

**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.

For suitable connection and mounting accessories, please refer to our website [www.ipf-electronic.com](http://www.ipf-electronic.com).

**Dimensional drawing**