

PT230020

LASER SENSORS • DISTANCE MEASUREMENT

sensor laser, diffuse-reflection sensor, 50x50x23mm, Sn:100-5000mm, Light delay time, 18-30V DC, -40°C, 1x PNP/NPN NC/NO, 4-20mA, IO-Link, Connector M12 5pin, IP67, Plastic ABS+Plastic, 0.25kHz, Laser diode, red light, Point, Parameterization



MECHANICAL FEATURES

| Ambient temperature | -40 °C 60 °C |
|-----------------------------|--------------|
| Degree of protection (IP) | IP67 |
| Design | Cuboid |
| Housing material | Plastic ABS |
| Material of optical surface | Plastic |
| Sensor height | 50 mm |
| Sensor length | 50.08 mm |
| Sensor width | 23 mm |
| Storage temperature | -40 °C 80 °C |
| Volume | Medium |

| ELECTRICAL FEATURES | |
|---|-------------------|
| Absolute linearity deviation | 30 mm |
| Absolute repeat accuracy | 1200 μm |
| Alarm output | + |
| IO-Link compatible | + |
| Laser power | 1 mW |
| Measuring method for optical distance measurement | Light delay time |
| Measuring range length | 100 mm 5000 mm |
| No-load current | 60 mA |
| Number of pins | 5 |
| Number of switching outputs | 1 |
| Operating voltage | 18 30 |
| Output transfer rate | 500 Hz |
| Range | 5000 mm |
| Rated switching current | 100 mA |
| Readiness delay | 5000 ms |
| Relative repeat accuracy | 1 % |
| Residual ripple | 10 % |
| Response time | 2 ms |
| Response/decay time | 4 ms |
| Reverse polarity protection | + |
| Scanning principle | Reflection sensor |
| | |



ELECTRICAL FEATURES

| Setting procedure | Parameterization |
|-------------------------------|---|
| Short-circuit protection | + |
| Supply voltage | 18 V 30 V |
| Switching frequency | 250 Hz |
| Type of analog output | 4 mA 20 mA |
| Type of electrical connection | Connector M12 |
| Type of switching function | Normally closed contact/normally open contact |
| Type of switching output | PNP/NPN |
| Voltage type | DC |
| With LED display | + |
| With time function | - |

OPTICAL FEATURES

| Light source | Laser diode, red light |
|--------------------------|------------------------|
| Wavelength of the sensor | 655 nm |
| Resolution | 5000 μm |
| Light beam form | Point |
| Laser class | Class 1 |

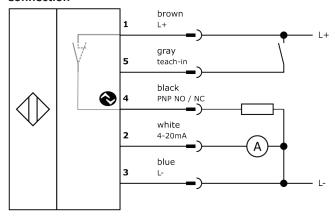
Other

| Packaging dimensions | 60mm x 30mm x 91.0mm |
|----------------------|----------------------|
| Shipping weight | 0.06kg |
| Tariff code | 85365019 |

Classification

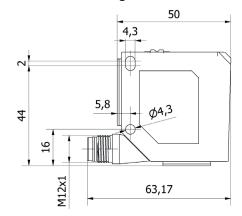
| ipf product group | 169 |
|-------------------|----------|
| eClass 8.0 | 27270801 |
| eClass 9.0 | 27270801 |
| eClass 9.1 | 27270801 |
| ETIM-5.0 | EC001825 |
| ETIM-6.0 | EC001825 |
| ETIM-7.0 | EC001825 |

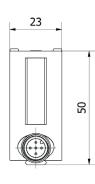
Connection





Dimensional drawing





Installation



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

Disposal



Software

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

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.

LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.