

## PT98A841

### Laser sensors • Diffuse reflection sensors with intensity differentiation

sensor laser, diffuse-reflection sensor, 34x25x11mm, Sn: 30-1000, Anschluss an Verstärker, Cable with connector, IP40, PBT, Laser diode, red light, Line, Manual adjustment, RS232



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 electrical connection     | Cable connector   |
| Setting procedure                 | Manual adjustment |
| Switching distance                | 30 - 1000mm       |
| Protection class                  | III               |
| Supported communication interface | RS232             |
| Connection to amplifier           | Yes               |

#### Mechanical features

|                           |            |
|---------------------------|------------|
| Number of cores           | 2          |
| Design                    | Cuboid     |
| Width                     | 11.2mm     |
| Height                    | 33.5mm     |
| Storage temperature       | -20 - 70°C |
| Length                    | 25mm       |
| Degree of protection (IP) | IP40       |
| Volume                    | Small      |
| Housing material          | PBT        |
| Ambient temperature       | -10 - 55°C |

**Optical features**

|                          |                        |
|--------------------------|------------------------|
| Laser class              | Class 2                |
| Light source             | Laser diode, red light |
| Light exit               | axial                  |
| Light beam form          | Line                   |
| Wavelength of the sensor | 655nm                  |

**Other features**

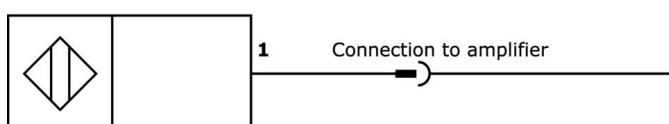
|                           |                                |
|---------------------------|--------------------------------|
| Feeding technology        | Yes                            |
| Reference medium / object | Material with 90% reflectivity |
| Ambient temperature       | -10 - 55°C                     |

**Classification**

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

**More**

|                       |                  |
|-----------------------|------------------|
| IPF Product Group     | 160 laser sensor |
| packaging dimensions  | 123 x 77 x 25 mm |
| gross weight          | 50 g             |
| Customs tariff number | 85365019         |
| WEEE number           | 40951076         |
| OzDS-compliant        | Yes              |
| POP-compliant         | Yes              |
| Reach-compliant       | Yes              |
| RoHS-compliant        | Yes              |

**Connection****Connection to amplifier****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).