

## PK170220

### Laser sensors • Contrast sensor

sensor laser, contrast, 50x50x15mm, Laser diode, red light, Sn: 0-250, 12-30V DC, PNP, Connector M8 4pin, IP67, Zinc die-cast, 5kHz, Manual adjustment



Contrast scanners are capable to distinguish the the visual differences (e.g. reflectivity, brightness differences) between adjacent areas. In general, the devices project a light spot on an object's surface and analyze the reflected light. Fiber optic amplifier versions can be used in addition to the incident light mode also in the transmitted light mode. Contrast scanners are versatile. They can be used, among other things, for position control of printing or color marks, distinction of brightness variations or in the intensity control of luminous objects (like LEDs, displays etc.).

#### Electrical features

|                               |                   |
|-------------------------------|-------------------|
| Display                       | LED display       |
| Type of electrical connection | Connector M12     |
| Type of switching output      | PNP               |
| Rated switching current       | 200mA             |
| Setting procedure             | Manual adjustment |
| Short-circuit protection      | Yes               |
| Number of pins                | 4                 |
| Switching distance            | 0 - 250mm         |
| Switching frequency           | 5000Hz            |
| Voltage drop                  | 1.8V              |
| Reverse polarity protection   | Yes               |
| Operating voltage (DC)        | 12 - 30V          |

#### Mechanical features

|                           |               |
|---------------------------|---------------|
| Design                    | Cuboid        |
| Width                     | 15.4mm        |
| Height                    | 50mm          |
| Length                    | 50mm          |
| Degree of protection (IP) | IP67          |
| Housing material          | Zinc die-cast |
| Ambient temperature       | -10 - 50°C    |

#### Optical features

|                            |                        |
|----------------------------|------------------------|
| Laser class                | Class 1                |
| Light source               | Laser diode, red light |
| Light beam form            | Point                  |
| Nominal operating distance | 250mm                  |

## Other features

|                     |            |
|---------------------|------------|
| Ambient temperature | -10 - 50°C |
|---------------------|------------|

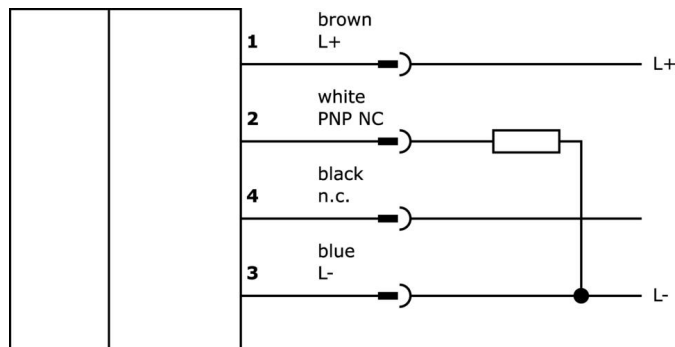
## Classification

|        |                           |
|--------|---------------------------|
| ETIM 8 | EC001820 Contrast scanner |
|--------|---------------------------|

## More

|                       |                            |
|-----------------------|----------------------------|
| IPF Product Group     | 168 laser contrast readers |
| packaging dimensions  | 123 x 77 x 25 mm           |
| gross weight          | 128 g                      |
| Customs tariff number | 85365019                   |
| WEEE number           | 40951076                   |
| OzDS-compliant        | Yes                        |
| 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).