# OK630181

## Optical sensors ● Contrast sensor

sensor optical, contrast, 38x65x65mm, Other, Sn: 1-500, 24V DC, 2x PNP/NPN, 0-10V/ 4-20mA, Connector M9 8pin, IP64, 60kHz, Parameterization, With time function, With fiber optics connection, RS232, Programmable via software

## Detection of fluorescent objects

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

| | |
|---|---|
| Number of switching outputs | 2 |
| Display | LED display |
| Type of analog output | 0 - 10V \| 4 - 20mA |
| Type of electrical connection | Connector M9 |
| Type of switching output | PNP/NPN |
| Rated switching current | 100mA |
| Setting procedure | Application software \| Parameterization |
| Short-circuit protection | Yes |
| No-load current | 160mA |
| Number of pins | 8 |
| Switching frequency | 60000Hz |
| Reverse polarity protection | Yes |
| Type of plug-in connection, communication interface | Connector M5 |
| Supported communication interface | RS232 |
| Operating voltage (DC) | 24V |
| Measuring range | 1 - 500mm |
| Time function | Yes |

### Mechanical features

| | |
|---|---|
| Design | Cuboid |
| Width | 65mm |
| Height | 38mm |
| Storage temperature | -20 - 85°C |
| Length | 65mm |
| Degree of protection (IP) | IP64 |
| With fiber optics connection | Yes |
| Ambient temperature | -20 - 55°C |

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## Optical features

| | |
|---|---|
| Light source | other |
| Light beam form | Point |
| Transmitted light applications | Yes |
| Turbidity inspection | Yes |

## Other features

| | |
|---|---|
| Ambient temperature | -20 - 55°C |

## Classification

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

## More

| | |
|---|---|
| IPF Product Group | 108 contrast readers |
| packaging dimensions | 160 x 99 x 60 mm |
| gross weight | 189 g |
| Customs tariff number | 85365019 |
| WEEE number | 40951076 |
| POP-compliant | Yes |
| Reach-compliant | Yes |
| RoHS-compliant | Yes |

## Connection

**Supply / Signals**

| | | |
|---|---|---|
| 2 | brown | L+ |
| | L+ | |
| 3 | green | |
| | IN 0 Trigger | |
| 4 | yellow | |
| | IN 1 Teach-In / Reset | |
| 5 | gray | |
| | OUT 0 | |
| 6 | pink | |
| | OUT 1 | |
| 8 | red | A/V |
| | 4-20mA / 0-10V | |
| 7 | blue | |
| | n.c. | |
| 1 | white | L- |
| | L- | |

**Programming connection**

| | | |
|---|---|---|
| 1 | L+ | L+ |
| 3 | RxD | |
| 4 | TxD | |
| 2 | L- | L- |
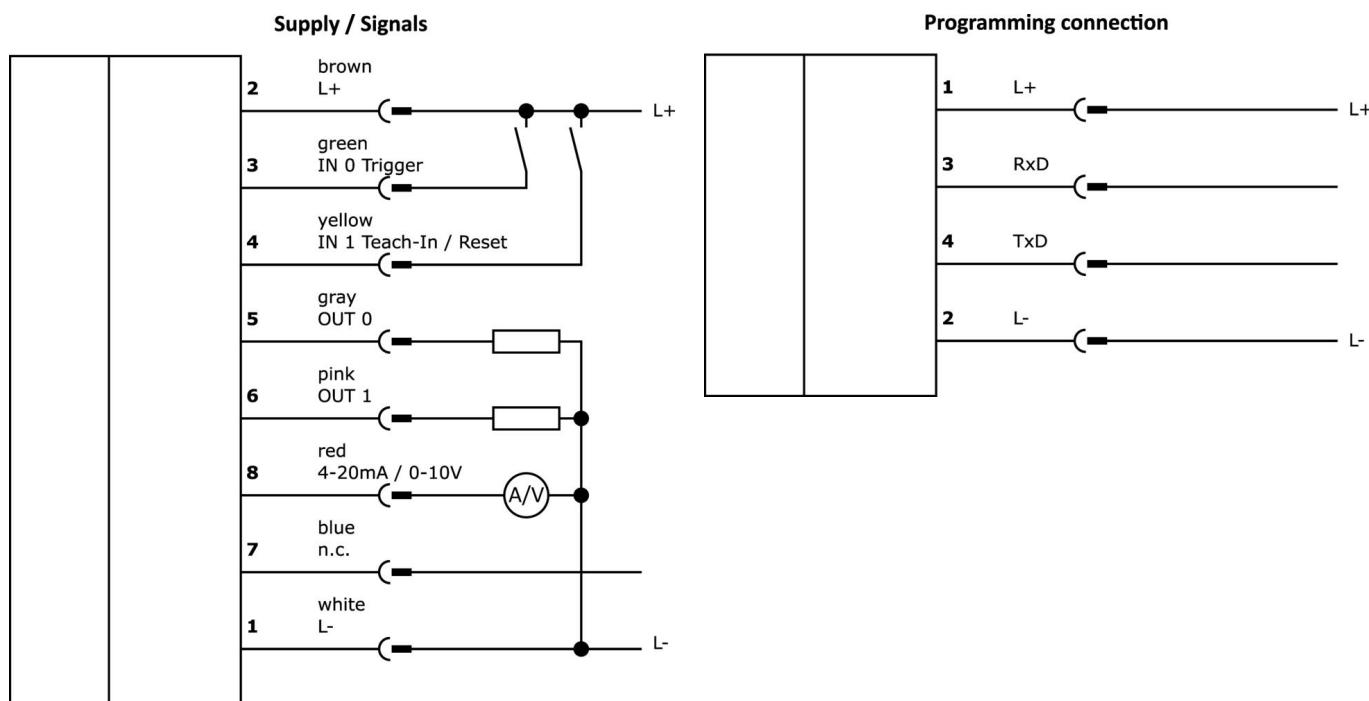
## Installation

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.

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

**Dimensional drawing**

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