

## OE080270

### Optical sensors • Through-beam sensors receivers

sensor optical, Through-beam sensor receiver, M8x0.75 75long, Sn: 2.5m, 10-30V DC, PNP NC (NC), Connector M8, IP65, Brass Nickel-plated+Plastic PC, Infrared light

including Nut



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

|                               |                              |
|-------------------------------|------------------------------|
| Response/decay time           | 2.5 ms                       |
| Display                       | LED display                  |
| Type of switching function    | Normally closed contact (NC) |
| Type of electrical connection | Connector M8                 |
| Type of switching output      | PNP                          |
| Rated switching current       | 100 mA                       |
| Short-circuit protection      | Yes                          |
| No-load current               | 24 mA                        |
| No-load current, receiver     | 24 mA                        |
| Switching distance            | 0 - 2500 mm                  |
| Switching frequency           | 200 Hz                       |
| Voltage drop                  | 2 V                          |
| Scanning function             | Light switching              |
| Reverse polarity protection   | Yes                          |
| Decay time                    | 2.5 ms                       |
| Operating voltage (DC)        | 10 - 30 V                    |

**Mechanical features**

|                                |                        |
|--------------------------------|------------------------|
| Design                         | Cylinder, screw-thread |
| Thread length                  | 55 mm                  |
| Thread pitch                   | 0.75 mm                |
| Length                         | 75 mm                  |
| Surface                        | nickel-plated          |
| Degree of protection (IP)      | IP65                   |
| Active area material of sensor | Plastic (PC)           |
| Housing material               | Brass                  |
| Thread dimension               | M8                     |
| Ambient temperature            | -25 - 65 °C            |

**Optical features**

|                          |                |
|--------------------------|----------------|
| Light source             | Infrared light |
| Light beam form          | Point          |
| Wavelength of the sensor | 880 nm         |

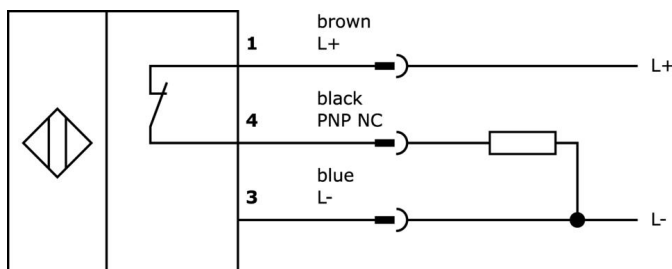
**Classification**

|        |  |
|--------|--|
| ETIM 8 | EC002716 Through-beam photoelectric sensor |
|--------|--|

**More**

|                       |                     |
|-----------------------|---------------------|
| IPF Product Group     | 100 optical sensors |
| packaging dimensions  | 95 x 75 x 17 mm     |
| gross weight          | 23 g                |
| Customs tariff number | 85365019            |
| WEEE number           | 40951076            |
| OzDS-compliant        | Yes                 |
| POP-compliant         | Yes                 |
| Reach-compliant       | Yes                 |
| RoHS-compliant        | Yes                 |

**Connection**



**Extract accessories program**

**VK000036**



Adaption, M8 Female (socket) 3pin Straight, M12 Male (connector) 3pin Straight, 24V, -25-85°C, IP67, Oil and cooling lubricants, Welding area

**VK030F80**



Connection cable, 0.3m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0. 34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK030F84**



Connection cable, 0.3m, M8 socket 3-pin straight, M12 connector 3-pin straight, 3x0. 34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK030F82**



Connection cable, 0.3m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0. 34mm², PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK060F82**



Connection cable, 0.6m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0. 34mm², PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK003070**



Cable socket, Angular, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Female (socket) 3pin, IP67, Brass

**VK003074**



Cable socket, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Female (socket) 3pin, IP67, Brass

**VK030F72**



Connection cable, 0.3m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0. 34mm², PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK060F72**



Connection cable, 0.6m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0. 34mm², PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

You can find further accessories on our homepage



**Installation**

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



**Disposal**

WEEE number according to § 6 para. 3 ElektroG: 40951076

**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.