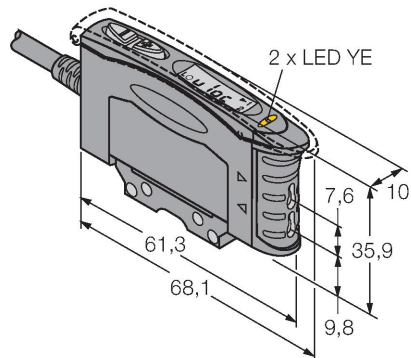


# D10UNFP W/30

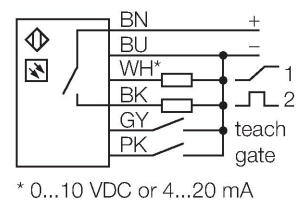
## Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



### Features

- Cable 9 m
- Teaching function
- Response time, adjustable
- Red visible light
- Operating voltage 15...24 VDC
- Optical sensitivity, adjustable
- Switch-off delay (0...100 ms)

### Wiring diagram



### Functional principle

Glass or fibre optic sensors are the optimum choice for high temperature or space restricted applications. Fibre optics transfer the light from the sensor to a remote object. Individual fibre optics are used for opposed mode sensing, whereas bifurcated fibre optics are suited for diffuse mode operation.

### Technical data

|                             |                                         |
|-----------------------------|-----------------------------------------|
| Type                        | D10UNFP W/30                            |
| ID no.                      | 3063994                                 |
| <b>Optical data</b>         |                                         |
| Function                    | Photoelectric sensor for plastic fibers |
| Fiber-optic type            | plastic                                 |
| Light type                  | Red                                     |
| Wavelength                  | 680 nm                                  |
| <b>Electrical data</b>      |                                         |
| Operating voltage           | 15...24 VDC                             |
| Residual ripple             | < 10 % U <sub>ss</sub>                  |
| No-load current             | ≤ 65 mA                                 |
| Short-circuit protection    | yes                                     |
| Reverse polarity protection | yes                                     |
| Output function             | NO contact, NPN                         |
| Output 2                    | Analog voltage                          |
| Type of analog output       | 0...10 V                                |
| Voltage output              | 0...10 V                                |
| Switching frequency         | 10 kHz                                  |
| Readiness delay             | ≤ 1000 ms                               |
| Response time typical       | < 0.05 ms                               |
| Setting option              | Push Button<br>Remote Teach             |
| <b>Mechanical data</b>      |                                         |
| Design                      | Rectangular, D10                        |
| Dimensions                  | 68.1 x 10.5 x 35.9 mm                   |
| Housing material            | Plastic, Thermoplastic material         |
| Electrical connection       | Cable, 9 m, PVC                         |

Technical data

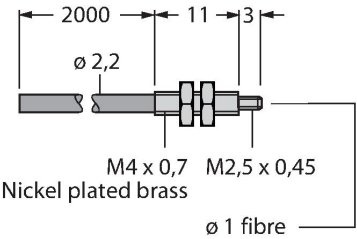
|                        |                                    |
|------------------------|------------------------------------|
| Number of cores        | 6                                  |
| Core cross-section     | 0.34 mm <sup>2</sup>               |
| Ambient temperature    | -10...+55 °C                       |
| Relative humidity      | 0...90 %                           |
| Protection class       | IP50                               |
| Special features       | keep/defer<br>Crosstalk protection |
| Power-on indication    | LED, Green                         |
| Switching state        | LED, Yellow                        |
| Excess gain indication | Single Digital Display             |
| Tests/approvals        |                                    |
| Approvals              | CE, cURus                          |

Accessories

|                                                            |         |                                                                                                 |         |
|------------------------------------------------------------|---------|-------------------------------------------------------------------------------------------------|---------|
| SMBR55F01                                                  | 3067104 | SMBR55FRA                                                                                       | 3058809 |
| Mounting panel, PBT, black, for R55F series, wall mounting |         | Mounting bracket, 19-ga. stainless steel, for D10, DF-G1 and R55F series, lateral wall mounting |         |
| DIN-35-70                                                  | 3026604 | DIN-35-105                                                                                      | 3030470 |
| DIN rail, width 35 mm, length 70 mm                        |         | DIN rail, width 35 mm, length 105 mm                                                            |         |
| DIN-35-140                                                 | 3026605 |                                                                                                 |         |
| DIN rail, width 35 mm, length 140 mm                       |         |                                                                                                 |         |

Accessories

| Dimension drawing | Type   | ID no.  |                                                                                                                                                                                       |
|-------------------|--------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | PIT46U | 3026034 | Plastic fiber-optic sensor, operating mode: Opposed mode, threaded sleeve M3 x 0.5 mm, field wireable wire without end tip, polyethylene sheath, ambient temperatures -30 °C...+70 °C |



| Dimension drawing | Type   | ID no.  |                                                                                                                                                                                        |
|-------------------|--------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | PBT46U | 3025967 | Plastic fiber-optic sensor, operating mode: Diffuse mode, threaded sleeve M3 x 0.75 mm, field wireable wire without end tip, polyethylene sheath, ambient temperatures -30 °C...+70 °C |

