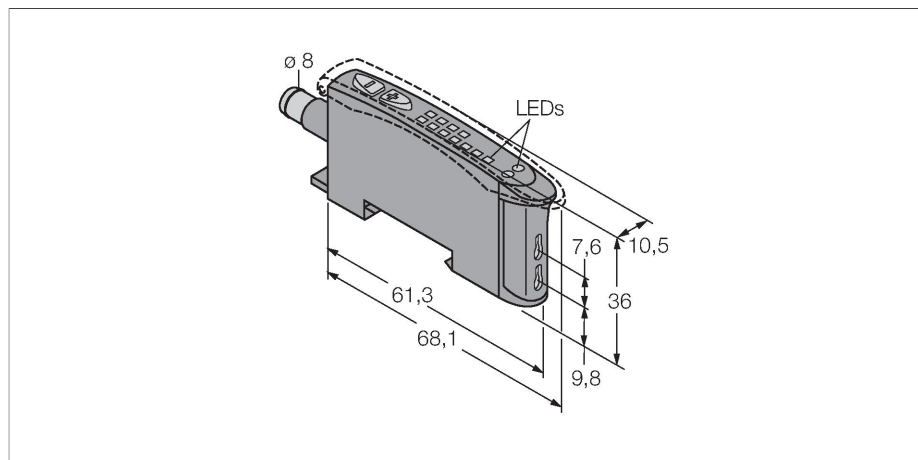


# D10BFPGQ

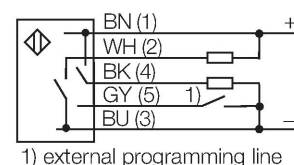
## Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



### Features

- Male 8 mm, 6-pin, snap-lock
- 8-segment LED display
- Response time, adjustable
- Light/dark operation
- Teach programming
- Visible green light
- Operating voltage 10...30 VDC
- Selectable 30 ms switch-off delay

### Wiring diagram



### Technical data

|                             |                                         |
|-----------------------------|-----------------------------------------|
| Type                        | D10BFPGQ                                |
| ID no.                      | 3072617                                 |
| <b>Optical data</b>         |                                         |
| Function                    | Photoelectric sensor for plastic fibers |
| Fiber-optic type            | plastic                                 |
| Light type                  | Green                                   |
| Wavelength                  | 525 nm                                  |
| <b>Electrical data</b>      |                                         |
| Operating voltage           | 10...30 VDC                             |
| Residual ripple             | < 10 % U <sub>ss</sub>                  |
| No-load current             | ≤ 45 mA                                 |
| Short-circuit protection    | yes                                     |
| Reverse polarity protection | yes                                     |
| Output function             | NO contact, PNP/NPN                     |
| Switching frequency         | 2.5 kHz                                 |
| Readiness delay             | ≤ 200 ms                                |
| Response time typical       | < 0.2 ms                                |
| Setting option              | Push Button<br>Remote Teach             |
| <b>Mechanical data</b>      |                                         |
| Design                      | Rectangular, D10B                       |
| Dimensions                  | 84.4 x 10.5 x 35.9 mm                   |
| Housing material            | Plastic, Thermoplastic material         |
| Electrical connection       | Connectors, M8 x 1, PVC                 |
| Number of cores             | 6                                       |
| Ambient temperature         | -20...+55 °C                            |
| Relative humidity           | 0...90 %                                |

### 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

|                        |                                    |
|------------------------|------------------------------------|
| Protection class       | IP50                               |
| Special features       | keep/defer<br>Crosstalk protection |
| Power-on indication    | LED, Green                         |
| Switching state        | LED, Yellow                        |
| Excess gain indication | Bargraph, red                      |
| Tests/approvals        |                                    |
| Approvals              | CE, cURus                          |

Accessories

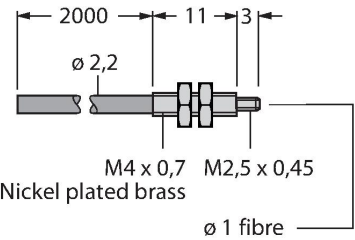
|                                                            |         |                                                                                                 |         |
|------------------------------------------------------------|---------|-------------------------------------------------------------------------------------------------|---------|
| 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.  |                                                                                                                                                                                          |
|-------------------|---------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | PKG6Z-2 | 3062985 | Connection cable, PVC, length 2 m, with female end, M8 x 1, 6-pin, on open end; other cable lengths and variants available, see <a href="http://www.turck.com">www.turck.com</a>         |
|                   | PKW6Z-2 | 3062998 | Connection cable, PVC, length 2 m, with female end, angled, M8 x 1, 6-pin, on open end; other cable lengths and variants available, see <a href="http://www.turck.com">www.turck.com</a> |

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 |

