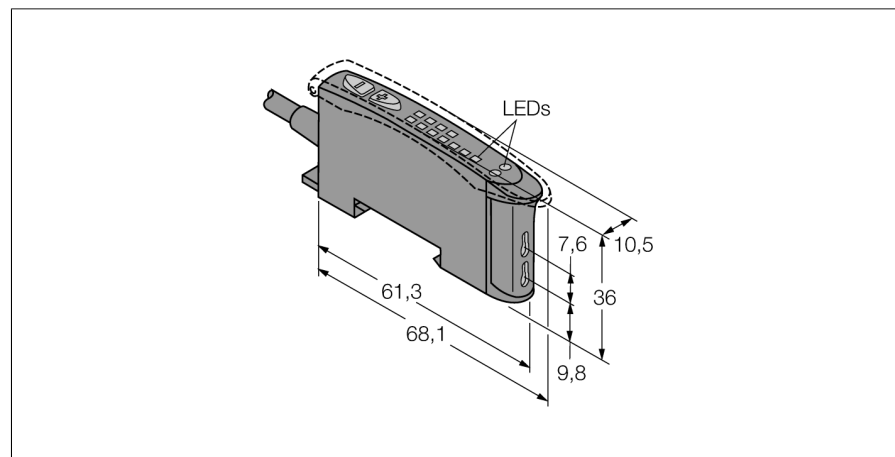


Photoelectric Sensor

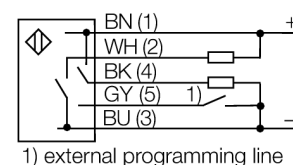
Photoelectric Sensor for Plastic Fibers

D10B5FP



- Cable 2 m
- 8-segment LED display
- Response time, adjustable
- Light/dark operation
- Teach programming
- Visible red light
- Operating voltage 10...30 VDC
- Selectable 30 ms switch-off delay

Wiring Diagram



Type	D10B5FP
ID	3078761

Optical data	
Function	Fiber optic sensor
Operating mode	Plastic fiber
Fiber-optic type	plastic
Light type	Red
Wavelength	660 nm

Electrical data	
Operating voltage U_s	10...30 VDC
Residual ripple	< 10 % U_s
No-load current I_o	≤ 45 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	2.5 kHz
Readiness delay	≤ 850 ms
Response time typical	< 0.2 ms
Setting option	Push Button Remote Teach

Mechanical data	
Design	Rectangular, D10B
Housing material	Plastic, Thermoplastic material
Electrical connection	Cable, 2 m, PVC
Number of cores	5
Core cross-section	0.34 mm ²
Ambient temperature	-20...+55 °C
Relative humidity	0...90%
Protection class	IP50

Special features	
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	Bargraph, red

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.

Tests/approvals

Approvals

CE, cURus

Accessories

Type code	Ident no.		Dimension drawing
SMBR55F01	3067104	Mounting panel, PBT, black, for R55F series, wall mounting	
SMBR55FRA	3058809	Mounting bracket, 19-ga. stainless steel, for D10, DF-G1 and R55F series, lateral wall mounting	
DIN-35-70	3026604	DIN rail, width 35 mm, length 70 mm	
DIN-35-105	3030470	DIN rail, width 35 mm, length 105 mm	
DIN-35-140	3026605	DIN rail, width 35 mm, length 140 mm	

Function accessories

Type code	Ident no.		Dimension drawing
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	
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	

