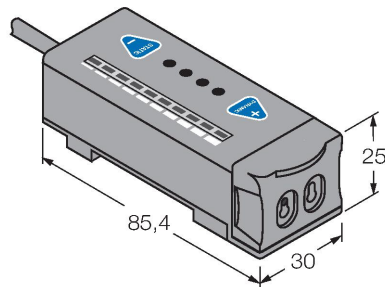


R55F

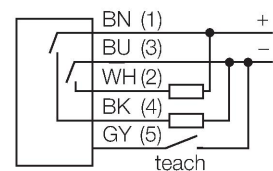
Photoelectric Sensor – Photoelectric Sensor for Glass Fibers



Features

- Cable, PVC, 2 m, 5-wire
- Protection class IP67
- Teach button
- 10-segment bargraph
- Switch-off delay (no delay, 20 ms, 40 ms)
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light or dark operation

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	R55F
ID no.	3066379
Optical data	
Function	Photoelectric sensor for glass fibers
Fiber-optic type	glass
Light type	IR
Wavelength	880 nm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
No-load current	≤ 70 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	10 kHz
Readiness delay	≤ 100 ms
Response time typical	< 0.05 ms
Setting option	Push Button Remote Teach
Mechanical data	
Design	Rectangular, R55F
Dimensions	85.4 x 30 x 25 mm
Housing material	Plastic, Thermoplastic material, Black
Electrical connection	Cable, 2 m, PVC
Number of cores	5
Core cross-section	0.34 mm ²
Ambient temperature	-10...+55 °C

Technical data

Relative humidity	0...90 %
Protection class	IP67
Special features	keep/defer Wash down
Power-on indication	LED, Green
Switching state	LED, Green
Excess gain indication	Bargraph, green
Tests/approvals	
MTTF	178 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE

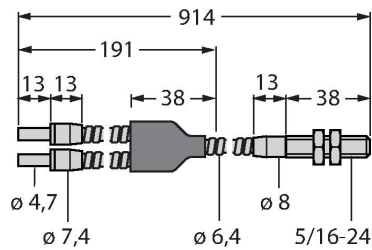
Accessories

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.	
	BT23S	3017276	

Glass fiber, sensing mode: Diffuse mode, threaded sleeve (brass), bundle diameter 3.2 mm, flexible stainless steel jacket, ambient temperatures -140...+250 °C



Dimension drawing	Type	ID no.	
	IT23S	3017355	Glass fiber, sensing mode: Opposed mode, threaded sleeve (brass), bundle diameter 3.2 mm, flexible stainless steel jacket, ambient temperatures -140...+250 °C

