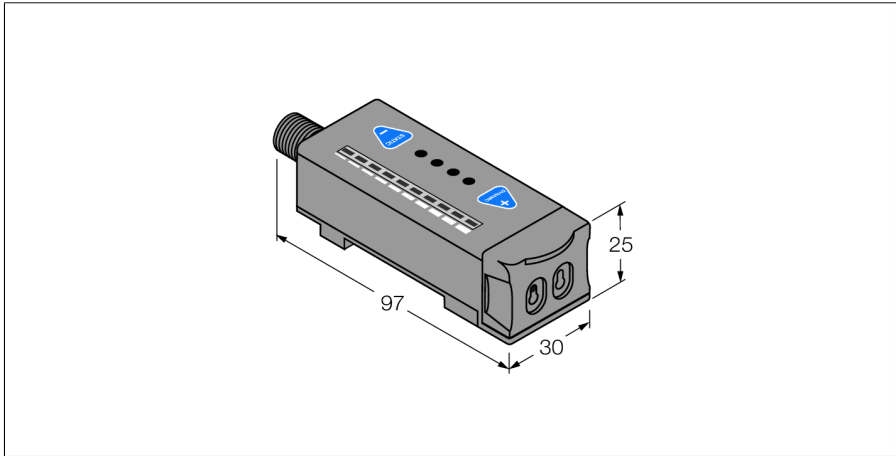
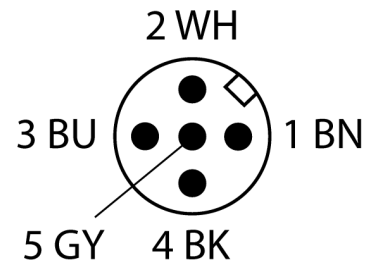
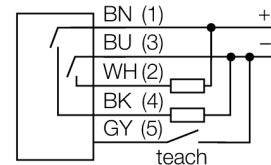


Photoelectric Sensor
Photoelectric Sensor for Glass Fibers
R55FVBQ



- Male M12 × 1, 5-pin
- Protection class IP67
- Teach button
- 10-segment bargraph
- Switch-off delay (no delay, 20 ms, 40 ms)
- Blue emitter LED
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light or dark operation

Wiring Diagram



Type designation	R55FVBQ
Ident no.	3058014
Function	Photoelectric sensor for glass fibers
Light type	Blue
Wavelength	475 nm
Ambient temperature	-10...+55 °C
Relative humidity min.	0 %
Relative humidity max.	90 %
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _s
No-load current I ₀	≤ 70 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	10 kHz
Readiness delay	≤ 100 ms
Readiness delay	≤ 100 ms
Response time typical	< 0.05 ms
Approvals	CE
Design	Rectangular, R55F
Dimensions	97 mm x 30 mm x 25 mm
Housing material	Plastic, Thermoplastic, Black
Electrical connection	Connectors, M12 × 1, PVC
Core cross-section	5 mm ²
Protection class	IP67
MTTF	178 years acc. to SN 29500 (Ed. 99) 40 °C
Special features	keep/defer Wash down
Power-on indication	LED, Green
Switching state	LED, Green
Excess gain indication	Bargraph green

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.

Photoelectric Sensor
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R55FVBQ

Accessories

Type code	Ident no.	Description	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.	Description	Dimension drawing
BT23S	3017276	Glass fiber, sensing mode: Diffuse mode, threaded sleeve (brass), bundle diameter 3.2 mm, flexible stainless steel sheath, ambient temperatures -140 °C ...+250 °C	
IT23S	3017355	Glass fiber, sensing mode: Opposed mode, threaded sleeve (brass), bundle diameter 3.2 mm, flexible stainless steel sheath, ambient temperatures -140 °C ...+250 °C	