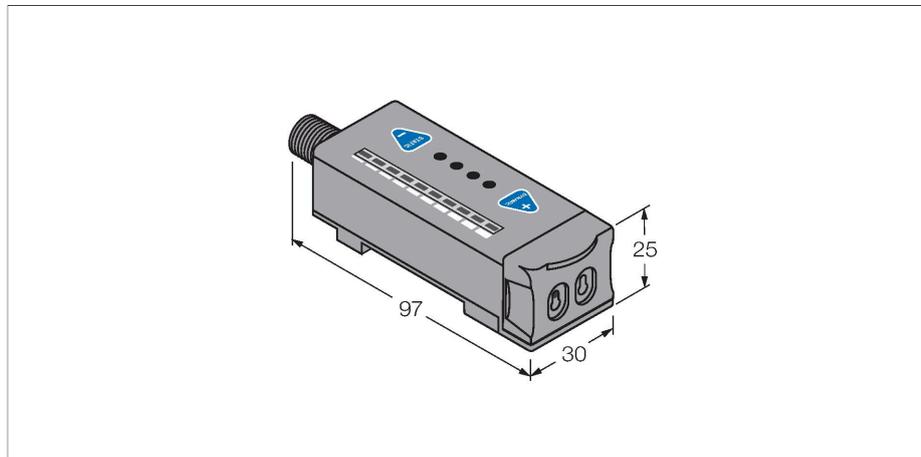


# R55FVBQ

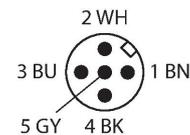
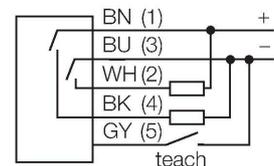
## Photoelectric Sensor – Photoelectric Sensor for Glass Fibers



### Features

- 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



### 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	R55FVBQ
ID no.	3058014
<b>Optical data</b>	
Function	Photoelectric sensor for glass fibers
Fiber-optic type	glass
Light type	Blue
Wavelength	475 nm
<b>Electrical data</b>	
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
<b>Mechanical data</b>	
Design	Rectangular, R55F
Dimensions	97 x 30 x 25 mm
Housing material	Plastic, Thermoplastic material, Black
Electrical connection	Connectors, M12 × 1, PVC
Number of cores	5
Ambient temperature	-10...+55 °C
Relative humidity	0...90 %

## Technical data

Protection class	IP67
Special features	keep/defer Wash down
Power-on indication	LED, Green
Switching state	LED, Green
Excess gain indication	Bargraph, green
<b>Tests/approvals</b>	
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.	
	WKC4.5T-2/TEL	6625028	Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>
	RKC4.5T-2/TEL	6625016	Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>

## 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
	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