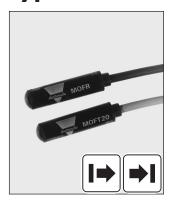
Photoelectrics Through-beam for Separate Amplifier Types MOFT, MOFR







- Built-in lens: 2°, 5° or 8°
- Range: 20 m or 50 m
- Modulated infrared light
- High immunity to ambient light
- For amplifier series \$142. and \$143.
- Degree of protection IP 66/IP 67
- For harsh environment
- High penetration power
- 15 m shielded PVC cable
- Ø 10 mm polycarbonate housing or M12 or M14 stainless steel



Product Description

Small through beam photoelectric switch. Range up to 50 m. 3 beam angles. Waterproof, for dirty environment, i.e. water, dust, steam etc. To be used with ampli-

fiers series S142. - S143. 15 m shielded cable, PVC. Ø 10 x 42 mm polycarbonate or M12 or M14 stainless steel housing. Straight optical axis.

Ordering Key	MOF T 20-M12-2
Type — Emitter — Range — Ender	
Housing diameter ———Optical angle	

Type Selection

Housing diameter	Rated operating dist. (S _n)	Optical angle	Ordering no.: Emitter	Ordering no.: Receiver
Ø 10 mm	20 m 20 m 20 m 20 m 50 m	2° 5° 8° 2° 5° 8° 2°	MOFT 20 MOFT 20-5 MOFT 20-8 MOFT 50	MOFR MOFR-5 MOFR-8
M12		2° 5° 8°		MOFR-M12-2 MOFR-M12-5 MOFR-M12-8
	20 m 20 m 20 m 50 m	2° 5° 8° 2°	MOFT 20-M12-2 MOFT 20-M12-5 MOFT 20-M12-8 MOFT 50-M12-2	
M14	20 m	8° 8°	MOFT 20-M14-8	MOFR-M14-8

Specifications Emitter

Rated operational volt. (U _e)	3 V, (square wave) supplied by amplifier	Light source Light type	GaAlAs LED, 880 nm Infrared, modulated
Supply current (I _O)	y current (I _O) MOFT 20 \leq 15 mA MOFT 20-5 \leq 50 mA MOFT 20-8 \leq 50 mA MOFT 50 \leq 50 mA	Optical angle Indications	± 2°, ± 5°, ± 8° On amplifier
		Protection	Short-circuit, reverse polarity



Specifications Receiver

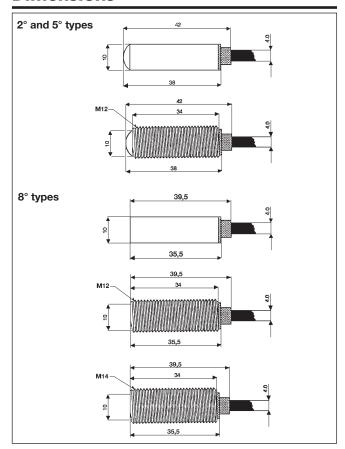
Rated operational volt. (U_e)	8 VDC supplied by amplifier $R_{\text{source}}470\Omega$
Supply current (I _O)	≤ 11 mA
Sensitivity	Adjustable on amplifier
Optical angle	± 2°,± 5°, ± 8°
Ambient light	10,000 lux (sensitivity ±5%) Note: The actual range will be within ±5% of the set range at an ambient light of 10,000 lux

Operating frequency (f)	See amplifier data
Response time (t _{OFF} & t _{ON})	See amplifier data
Power ON delay (t _v)	See amplifier data
Indications	On amplifier
Protection	Short-circuit, reverse polarity

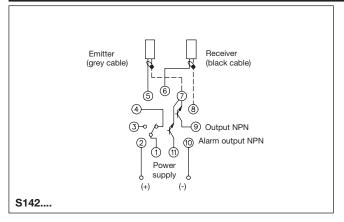
General Specifications

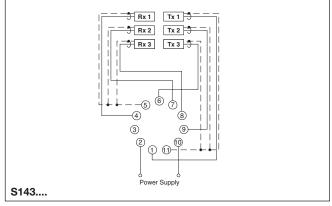
Environment Overvoltage category Pollution degree Degree of protection	III (IEC 60664/60664A; 60947-1) 3 (IEC 60664/60664A; 60947-1) IP 66/IP 67 (IEC 60529; 60947-1)
Temperature Operating Storage Vibration	-20° to +60°C (-4° to +140°F) -40° to +80°C (-40° to +176°F) 10 to 150 Hz, 0.5 mm/7.5 g (IEC 60068-2-6)
Shock	2 x 1 m & 100 x 0.5 m (IEC 60068-2-6)
Dielectric voltage	500 VAC (rms)
Housing material	Polycarbonate, black
Connection cable Emitter Receiver	Grey, 15 m oilproof PVC, Ø 4 mm, 1 x 0.25 mm², shielded Black, 15 m oilproof PVC, Ø 4 mm, 1 x 0.25 mm², shielded
Weight (cable incl.)	347 g emitter 347 g receiver
CE-marking	Yes

Dimensions



Wiring Diagrams





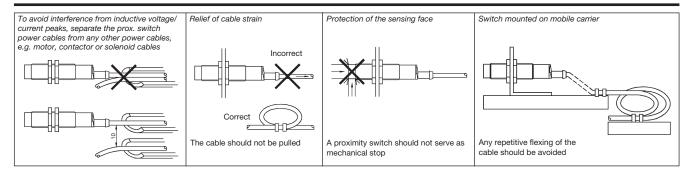


Installation

Mounting

- 1) When installing the sensors, make sure that the maximum range is not exceeded and if two separate systems are mounted close to each other place the sensors so cross-talk is avoided.
- To protect the receiver and the transmitter from damage, proper fittings must be used in the installation.
- **3)** Connect the receiver and the emitter to the dedicated terminals on the S142... system.

Installation Hints



Delivery Contents

- MOFT.. and MOFR
- All M12-types: 2 pcs. M12 nutsAll M14-types: 2 pcs. M14 nuts
- Packaging: Plastic bag, emitter and receiver packed separately

Accessories

Mounting bracket MB-M01