

Photoelectrics, ATEX Through-beam for Separate Amplifier Types MOFT..AX, MOFR..AX

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- Built-in lens: 2°, 5° or 8°
- Range: 20 m
- Modulated infrared light
- High immunity to ambient light
- For amplifier series S142. and S143.
- Degree of protection IP 66/IP 67
- ATEX II 3 DX T50°C
- High penetration power
- 15 m shielded PVC cable
- Ø 10 mm polycarbonate housing or M12 or M14 stainless steel



Product Description

ATEX approved small through beam photoelectric switch. Range up to 20 m. 3 beam angles. Waterproof, for dirty environment, i.e. water, dust, steam etc. To be used

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

Ordering Key

MOFT20-M12-2AX

Type _____
 Emitter _____
 Range _____
 Housing diameter _____
 Optical angle _____
 ATEX _____

Type Selection

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

Specifications Emitter

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

Specifications Receiver

Rated operational volt. (U _e)	8 VDC supplied by amplifier R _{source} 470Ω
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

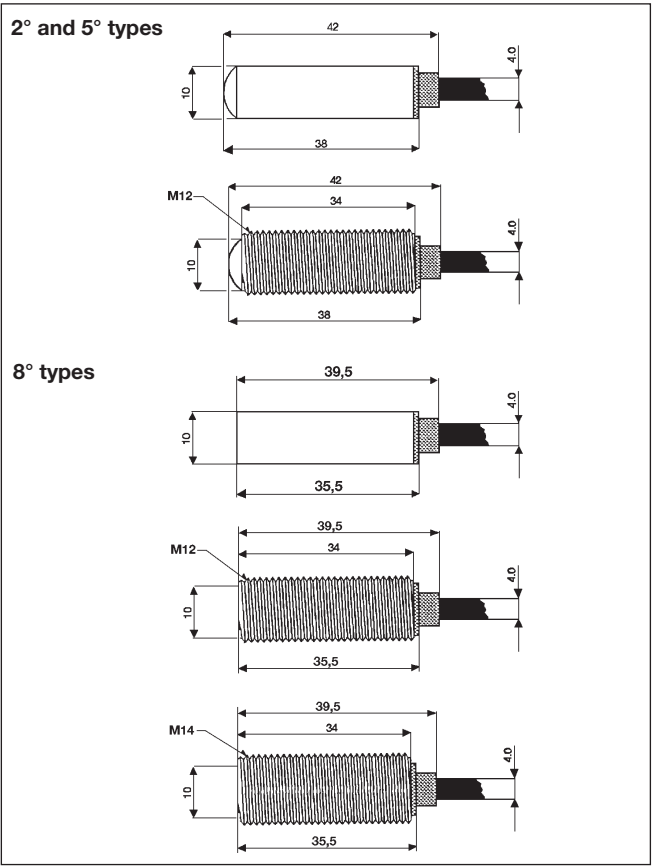


General Specifications

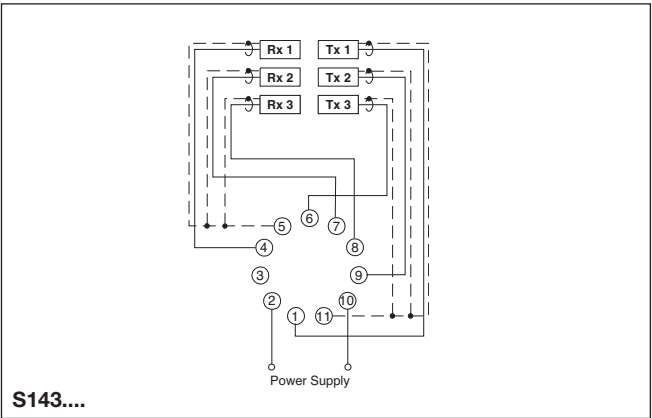
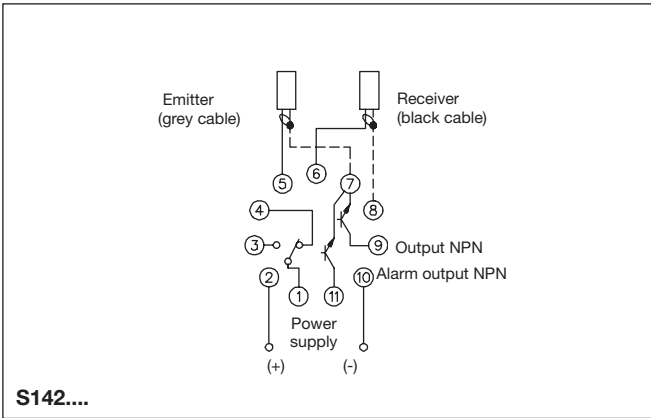
Environment	
Overvoltage category	III (IEC 60664/60664A; 60947-1)
Pollution degree	3 (IEC 60664/60664A; 60947-1)
Degree of protection	IP 66/IP 67 (IEC 60529; 60947-1)
Temperature	
Operating	-20° to +60°C (-4° to +140°F)
Storage	-40° to +80°C (-40° to +176°F)
Vibration	
10 to 150 Hz, 0.5 mm/7.5 g (IEC 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	Grey, 15 m oilproof PVC, Ø 4 mm, 1 x 0.25 mm², shielded
Receiver	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	
Aprovals*	
ATEX zone 22 dust II 3 DX T50°C IP67	

- * • The cable must not be exposed to a pulling force.
• Only the sensor must be installed in ATEX area.
• The amplifier system must be installed in a safe area.

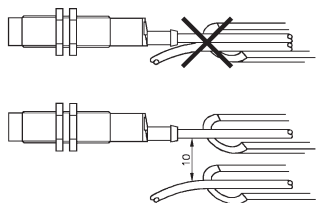
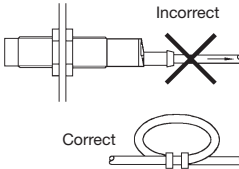
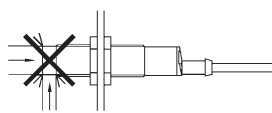
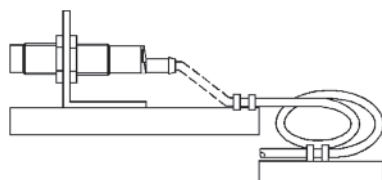
Dimensions



Wiring Diagrams



Installation Hints

<p><i>To avoid interference from inductive voltage/ current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables</i></p> 	<p><i>Relief of cable strain</i></p>  <p>The cable should not be pulled</p>	<p><i>Protection of the sensing face</i></p>  <p>A proximity switch should not serve as mechanical stop</p>	<p><i>Switch mounted on mobile carrier</i></p>  <p>Any repetitive flexing of the cable should be avoided</p>
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Delivery Contents

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

Accessories

- Mounting bracket MB-M01