

# 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 S142. and S143.
- 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



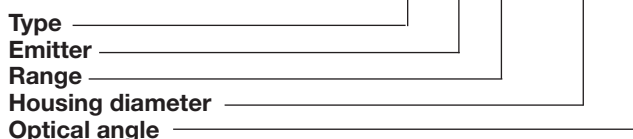
## Product Description

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 Selection

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

## Specifications Emitter

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

For more information, please visit [www.devancocanada.com](http://www.devancocanada.com) or call toll free at 855-931-3334

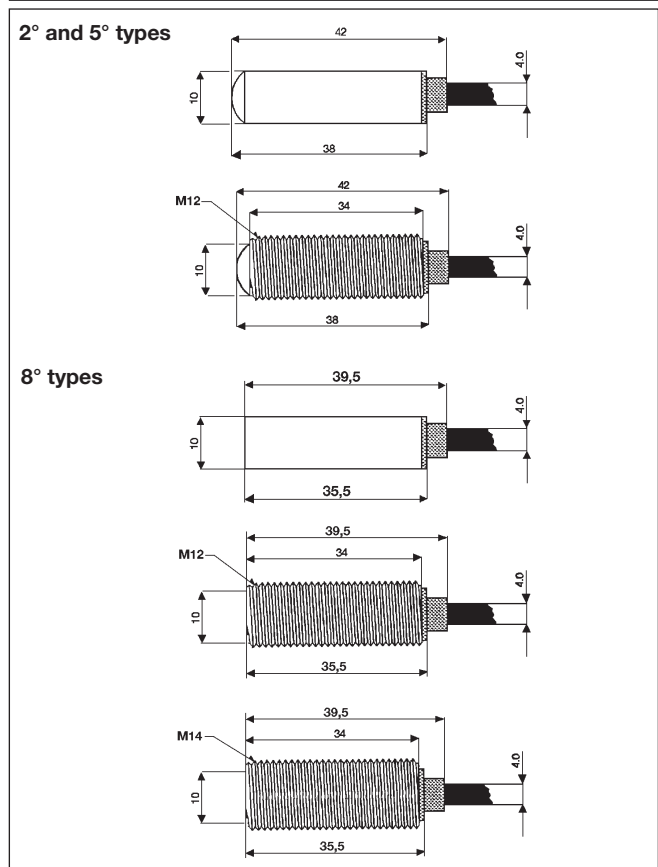
## Specifications Receiver

<b>Rated operational volt. (U<sub>e</sub>)</b>	8 VDC supplied by amplifier R <sub>source</sub> 470Ω	<b>Operating frequency (f)</b>	See amplifier data
<b>Supply current (I<sub>o</sub>)</b>	≤ 11 mA	<b>Response time (t<sub>OFF</sub> &amp; t<sub>ON</sub>)</b>	See amplifier data
<b>Sensitivity</b>	Adjustable on amplifier	<b>Power ON delay (t<sub>v</sub>)</b>	See amplifier data
<b>Optical angle</b>	± 2°, ± 5°, ± 8°	<b>Indications</b>	On amplifier
<b>Ambient light</b>	10,000 lux (sensitivity ±5%) <b>Note:</b> The actual range will be within ±5% of the set range at an ambient light of 10,000 lux	<b>Protection</b>	Short-circuit, reverse polarity

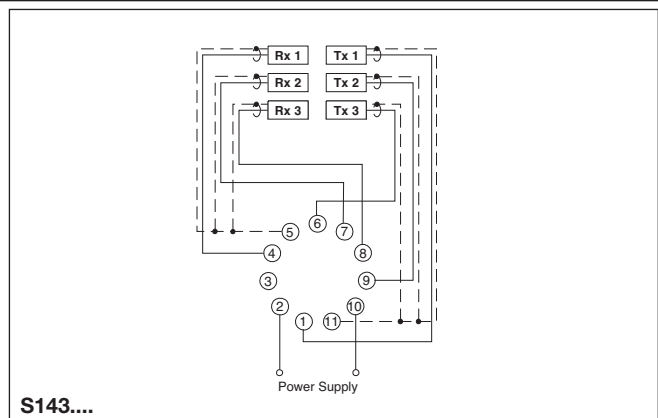
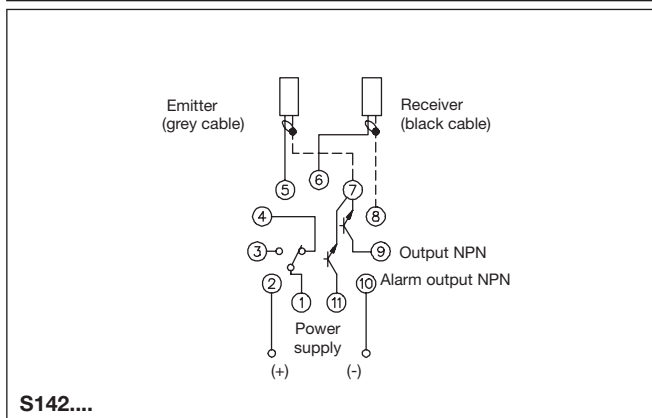
## General Specifications

<b>Environment</b>	
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)
<b>Temperature</b>	
Operating	-20° to +60°C (-4° to +140°F)
Storage	-40° to +80°C (-40° to +176°F)
<b>Vibration</b>	10 to 150 Hz, 0.5 mm/7.5 g (IEC 60068-2-6)
<b>Shock</b>	2 x 1 m & 100 x 0.5 m (IEC 60068-2-6)
<b>Dielectric voltage</b>	500 VAC (rms)
<b>Housing material</b>	Polycarbonate, black
<b>Connection cable</b>	
Emitter	Grey, 15 m oilproof PVC, Ø 4 mm, 1 x 0.25 mm <sup>2</sup> , shielded
Receiver	Black, 15 m oilproof PVC, Ø 4 mm, 1 x 0.25 mm <sup>2</sup> , shielded
<b>Weight (cable incl.)</b>	347 g emitter 347 g receiver
<b>CE-marking</b>	Yes

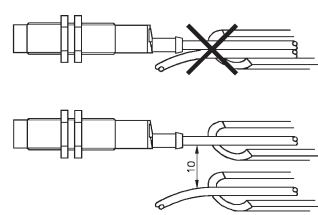
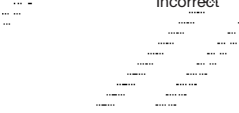
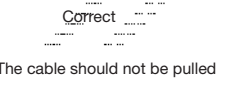
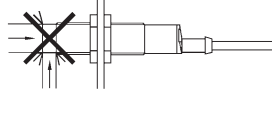
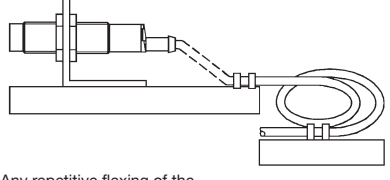
## Dimensions



## 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>Incorrect</p>  <p>Correct</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. and MOFR
- 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

***HOW TO ORDER  
REPAIR PARTS***

**DEVANCO CANADA**

19192 HAY ROAD, UNIT Q  
SUMMERSTOWN, ON K0C 2E0

TOLL FREE: 855-931-3334

[www.devancocanada.com](http://www.devancocanada.com)

**WHEN ORDERING REPAIR PARTS  
PLEASE SUPPLY THE  
FOLLOWING INFORMATION:**

- ✓ PART NUMBER**
- ✓ DESCRIPTION**
- ✓ MODEL NUMBER**