Photoelectrics Retro-reflective, Industrial Door Market Type PMP12.M, Polarized, Relay Output, Mute Input



Product Description

The PMP12.. is a powerfull polarized retro reflective sensor. The sensor is designed to meet the hash requirements in industrial environments. With a sensing distance at 12 m the sensor is usefull in applications where dust and weather conditions will influence on the sensing distance. The sensor is made in a strong glass reinforced PC/ABS housing with two cable glands for easy connection.

With Mute Input on the transmitter the sensor fullfill European and North American regulations for Industrial doors

- Range: 12 m
- Modulated, visible light, polarized
- Make or break switching function (switch selectable)
- Make or break Mute function (switch selectable)
- LED-indication for target detected
 Multi supply voltage:
- 24 VDC and 24 VAC, 50/60 Hz
- 25 x 65 x 81 mm reinforced PC/ABS- housing, IP 67

PMP12RGM

- NO and NC output
- High EMC immunity





Ordering Key

Type family _______ Type ______ Sensing distance (m) ______ Output relay ______ Cable gland type _____ Mute input _____

Type Selection

Housing W x H x D	Range (S _n)	Ordering no. without timer
25 x 65 x 81	_	
PG 13.5 cable gland	12 m	PMP 12 RGM
1/2" NPT cable gland	12 m	PMP 12 RIM

Specifications

Rated operating dist. (S _n) (0 to 5,000 lux)	12 m with reflector type ER 4, ref. target
Blind zone	≤ 0.15 m
Sensitivity	Fixed
Temperature drift	≤ 0.4 %/°C
Differential travel (H) Hysteresis	3 to 20%
Rated operational volt. (U _B) AC: 45 to 65 Hz	24 VDC ± 20% 24 VAC ± 20%
Rated operational power (relay ON)	≤ 1 W (1.2 VA)
Output Contact ratings (AgCdO) Resistive loads AC 1 DC 1 Small inductive loads AC 15 DC 13 Mechanical life (typical) Electrical life (typical)	$ \mu \text{ (micro gap)} 3 A/250 VAC 3 A/30 VDC 2 A/250 VAC 3 A/30 VDC \ge 40 \times 10^6 \text{ operations} \ge 5 \times 10^5 \text{ operations} at 220 VAC - 3 A resistiveload: 360 impulses/h$

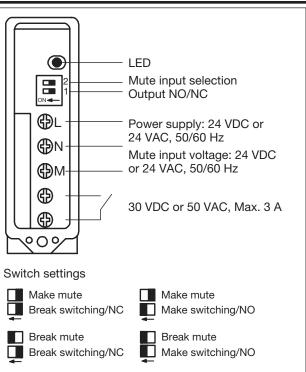
Dielectric voltage	2,000 VAC (rms) (cont./supply)		
Light source	GaAlAs, LED, 660 nm		
Light type	Visible, modulated		
Optical angle	± 1.5°		
Light spot size	280 mm at 4 m		
Ambient light	Max. 5'000 lux		
Operating frequency	20 Hz		
Response time (object related) OFF-ON (t_{ON}) ON-OFF (t_{OFF})	≤ 20 ms ≤ 30 ms		
Power ON delay (t _v)	≤ 300 ms (typ. 100 ms)		
Output function	Switch selectable, make or break switching		
Mute function	Switch selectable		
Make on	≥ 4 VDC/VAC		
Response time output off	< 20 ms		
Make off	< 2 VDC/VAC		
Response time output on	< 45 ms		
Break on	< 2 VDC/VAC		
Response time output off	< 45 ms		
Break off	$\geq 4 \text{ VDC/VAC}$		
Response time output on	< 20 ms		



Specifications (cont.)

Max current	10 mA @ 24 VDC			
		16 mA @ 24 VAC		
Indication				
Target detected		LED, yellow		
Environment				
Overvoltage category		III (IEC 60664/60664A; 60947-1)		
Pollution degree		3 (IEC 60664/60664A; 60947-1)		
Degree of protection		IP 67 (IEC 60529; 60947-1)		
Temperature				
Operating Storage		-25° to +55°C (-13° to +131°F) -30° to +80°C (-22° 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 60068-2-32)		
Rated insulation voltage		250 VAC (rms)		
Housing material				
Body		PC/ABS, grey		
Front		PMMA, red		
Cover		PC, black		
Cable gland		PA, black, reinforced		
Mounting bracket		Steel, galvanized		
Connection				
Screw terminal		5 x 2 x 1 mm ²		
Cable gland		PG 13.5 or 1/2" NPT		
		for cable 6 to 10 mm		
Weight		110 g		
UL-Approval	cURus	UL325, CSA-C22.2 No.247		
	cULus	UL508		
CE-marking		Yes		
-		EN12453, EN12445, EN12978		

Connection Diagram

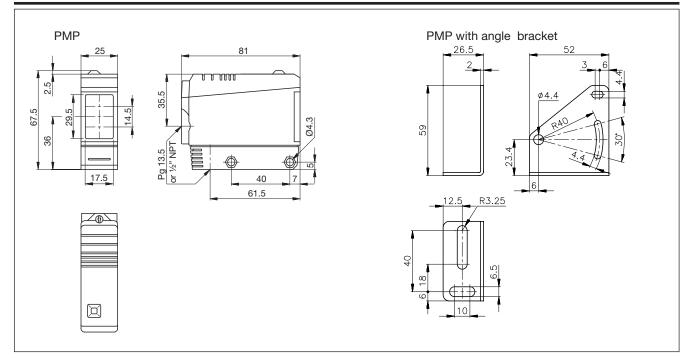


Operation Diagram

tv = Power ON delay				
Power supply				
Target present				
Object present				
Mute (transmitter ON)				
Output NO		t _v	Mute function	
Output NC	tv			



Dimensions



Delivery Contents

- Photoelectric switch: PMP12..
- Cable gland
- Installation instruction
- Mounting bracket
- Packaging: Cardboard box

Accessories

- Reflectors: ER series
- MB02 (longer mounting bracket)