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

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- **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**
- **NO and NC output**
- **High EMC immunity**
- **CE, UL325 and UL508 approved**

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

Ordering Key

PMP12RGM

- **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)	µ (micro gap)
Resistive loads AC 1	3 A/250 VAC
DC 1	3 A/30 VDC
Small inductive loads AC 15	2 A/250 VAC
DC 13	3 A/30 VDC
Mechanical life (typical)	≥ 40 x 10^6 operations
Electrical life (typical)	≥ 5 x 10^5 operations at 220 VAC - 3 A resistive load: 360 impulses/h

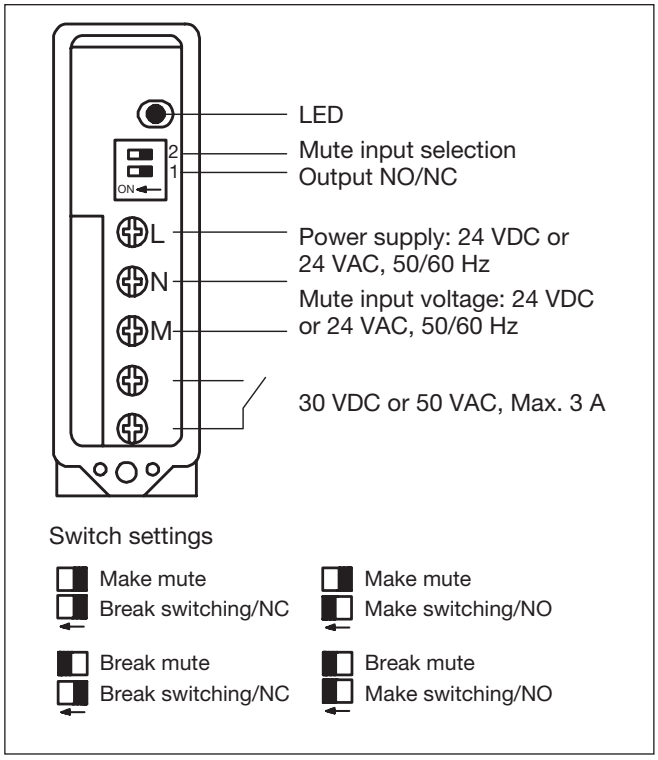
Dielectric voltage	2,000 VAC (rms) (cont./supply)
Light source	GaAlAs, LED, 660 nm
Light type	Visible, modulated
Optical angle	± 1.5°
Light spot size	280 mm at 4 m
Ambient light	Max. 5’000 lux
Operating frequency	20 Hz
Response time (object related)	
OFF-ON (t_{ON})	≤ 20 ms
ON-OFF (t_{OFF})	≤ 30 ms
Power 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	≥ 4 VDC/VAC
Response time output on	< 20 ms

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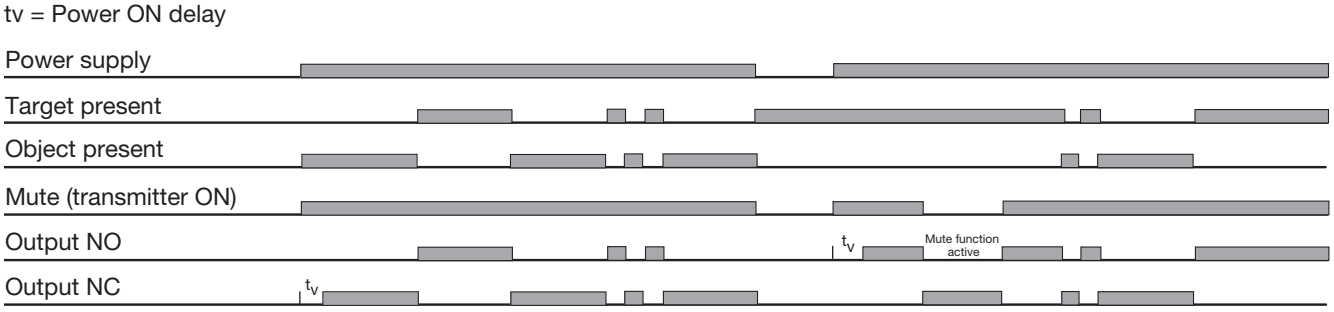
Specifications (cont.)

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		-25° to +55°C (-13° to +131°F)
Storage		-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

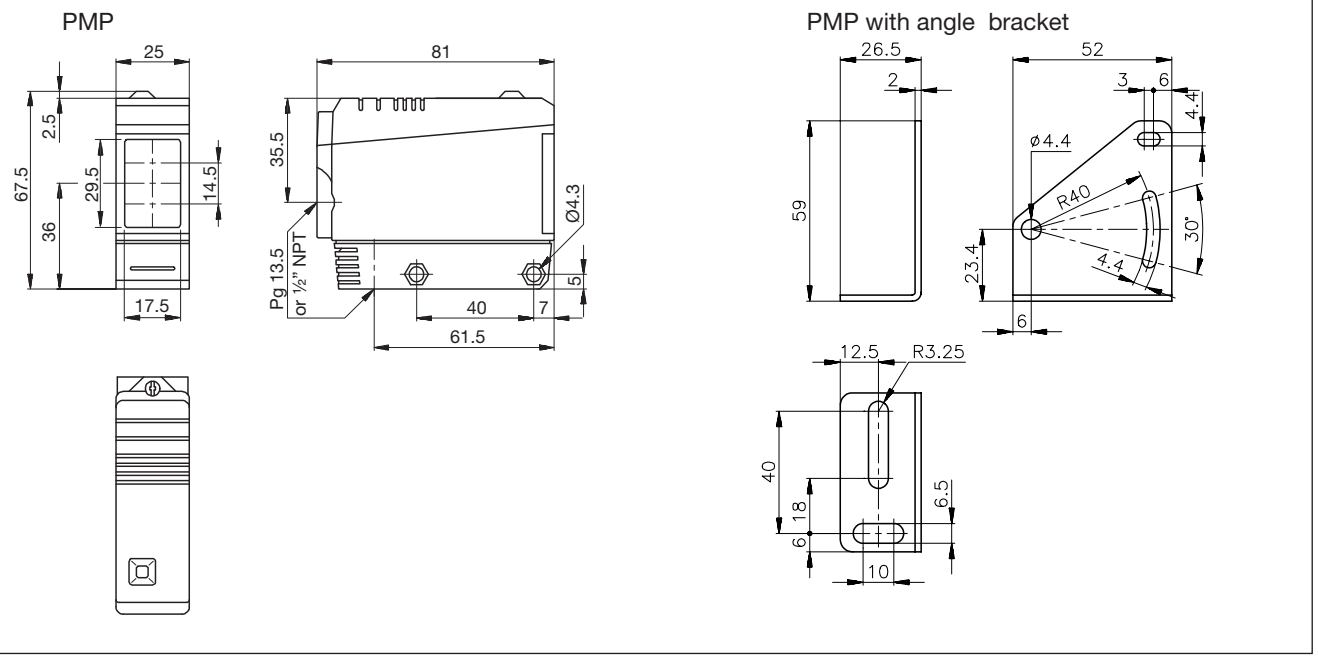


Operation Diagram



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Dimensions



Delivery Contents

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

Accessories

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

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