

Photoelectrics Retro-reflective, Polarized, Relay Output Type PMP12..

CARLO GAVAZZI



- Range: 12 m
- Modulated, visible light, polarized
- Make or break switching function (switch selectable)
- LED-indication for target detected
- Multi supply voltage:
12 to 240 VDC and
24 to 240 VAC, 50/60 Hz
- 25 x 65 x 81 mm reinforced PC/ABS- housing, IP 67
- NO and NC output
- High EMC immunity
- UL, CSA and CE



Product Description

The PMP12.. is a powerful polarized retro reflective sensor. The sensor is designed to meet the harsh requirements in industrial environments. With a sensing distance at 12 m the sensor is useful 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.

Ordering Key

PMP12RG

Type family _____
Type _____
Sensing distance (m) _____
Output relay _____
Cable gland type _____

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 1/2" NPT cable gland	12 m 12 m	PMP 12 RG PMP 12 RI

Specifications

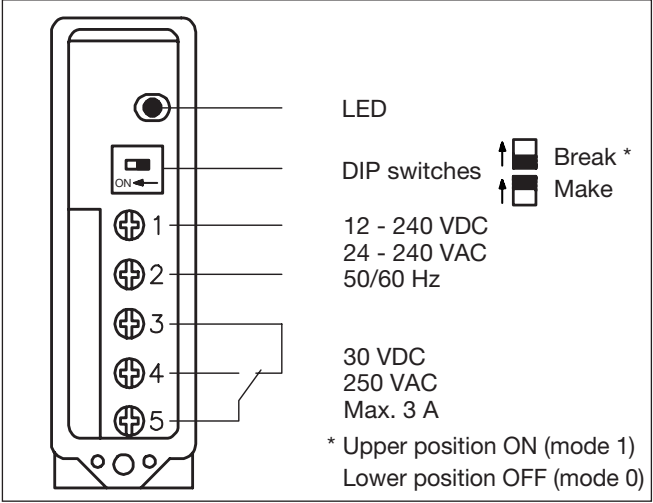
Rated operating dist. (S _n) (0 to 5,000 lux)	12 m with reflector type ER 4, ref. target	Optical angle	± 1.5°
Blind zone	≤ 0.15 m	Light spot size	280 mm at 4 m
Sensitivity	Fixed	Ambient light	Max. 5'000 lux
Temperature drift	≤ 0.4 %/°C	Operating frequency	20 Hz
Differential travel (H) Hysteresis	3 to 20%	Response time OFF-ON (t _{ON}) ON-OFF (t _{OFF})	≤ 20 ms ≤ 30 ms
Rated operational volt. (U _B)	10.8 to 264 VDC 21.6 to 264 VAC, 45 to 65 Hz	Power ON delay (t _v)	≤ 300 ms (typ. 100 ms)
Rated operational power (relay ON)	≤ 2 W (2.5 VA)	Output function	Switch selectable, make or break switching
Output Contact ratings (AgCdO) Resistive loads AC 1 DC 1 Small inductive loads AC 15 DC 13 Mechanical life (typical) Electrical life (typical)	μ (micro gap) 3 A/250 VAC 3 A/30 VDC 2 A/250 VAC 3 A/30 VDC ≥ 40 x 10 ⁶ operations ≥ 5 x 10 ⁵ operations at 220 VAC - 3 A resistive load: 360 impulses/h	Indication Target detected	LED, yellow
Dielectric voltage	2,000 VAC (rms) (cont./supply)	Environment Overvoltage category Pollution degree Degree of protection	III (IEC 60664/60664A; 60947-1) 3 (IEC 60664/60664A; 60947-1) IP 67 (IEC 60529; 60947-1)
Light source	GaAlAs, LED, 660 nm	Temperature Operating Storage	-25° to +55°C (-13° to +131°F) -30° to +80°C (-22° to +176°F)
Light type	Visible, modulated	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)



Specifications (cont.)

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	
Approvals	
UL, CSA	
CE-marking	
Yes	

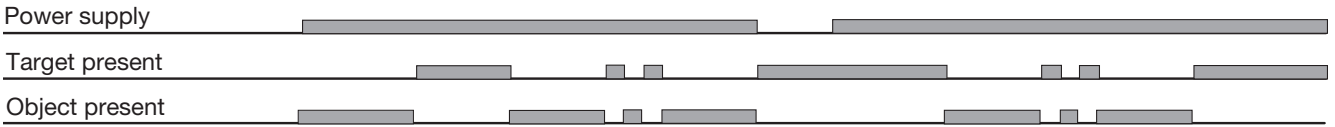
Connection Diagram



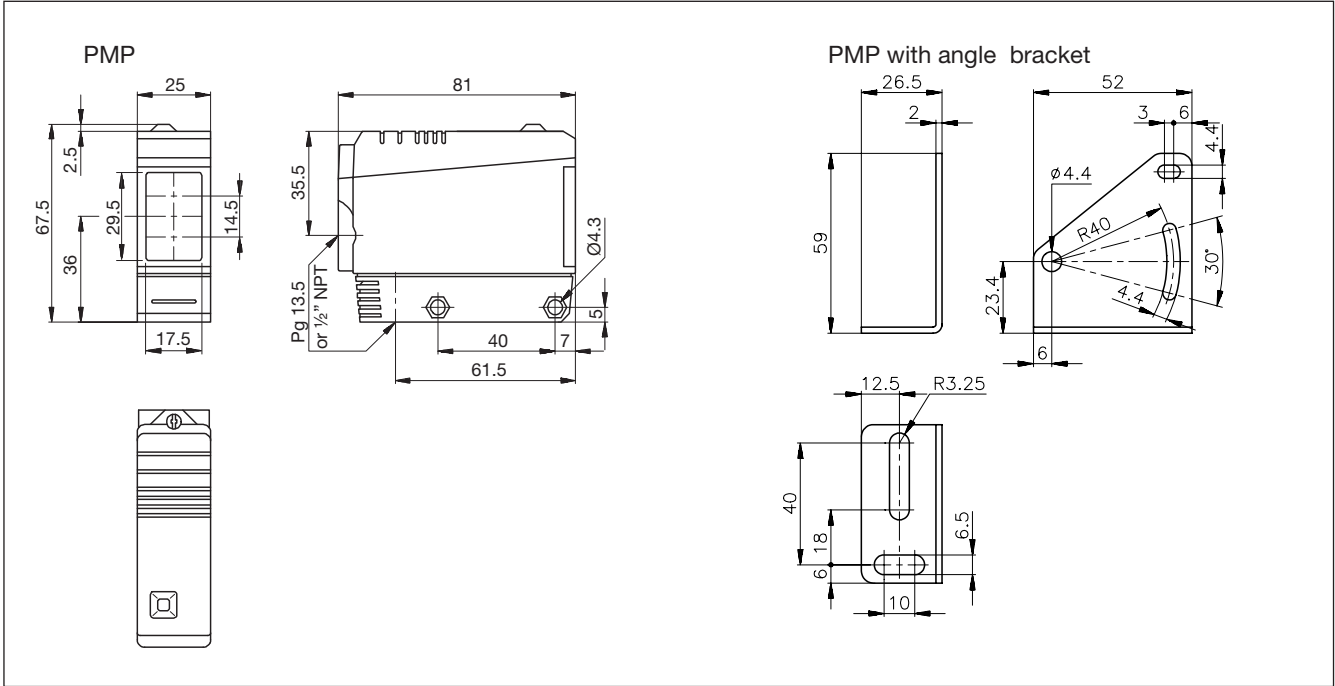
Operation Diagram

t = Time delay

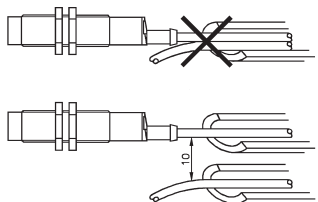
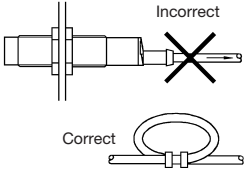
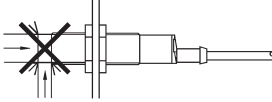
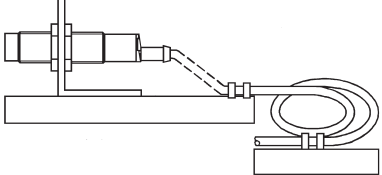
tv = Power ON delay



Dimensions



Installation Hints

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 	Relief of cable strain  The cable should not be pulled	Protection of the sensing face  A proximity switch should not serve as mechanical stop	Switch mounted on mobile carrier  Any repetitive flexing of the cable should be avoided
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Delivery Contents

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

Accessories

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