

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 applica-

tions 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

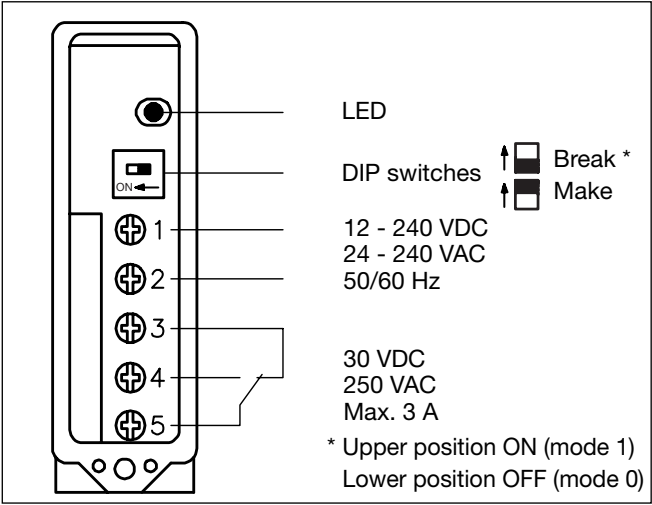
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| Rated operating dist. (S _n) (0 to 5,000 lux) | 12 m with reflector type ER 4, ref. target | Optical angle Light spot size Ambient light | ± 1.5° 280 mm at 4 m Max. 5'000 lux |
| Blind zone | ≤ 0.15 m | Operating frequency | 20 Hz |
| Sensitivity | Fixed | Response time OFF-ON (t _{ON}) ON-OFF (t _{OFF}) | ≤ 20 ms ≤ 30 ms |
| Temperature drift | ≤ 0.4 %/°C | Power ON delay (t _v) | ≤ 300 ms (typ. 100 ms) |
| Differential travel (H) Hysteresis | 3 to 20% | Output function | Switch selectable, make or break switching |
| Rated operational volt. (U _B) | 10.8 to 264 VDC 21.6 to 264 VAC, 45 to 65 Hz | Indication Target detected | LED, yellow |
| Rated operational power (relay ON) | ≤ 2 W (2.5 VA) | 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) |
| 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 | Temperature Operating Storage Vibration Shock | -25° to +55°C (-13° to +131°F) -30° to +80°C (-22° to +176°F) 10 to 150 Hz, 0.5 mm/7.5 g (IEC 60068-2-6) 2 x 1 m & 100 x 0.5 m (IEC 60068-2-32) |
| Dielectric voltage | 2,000 VAC (rms) (cont./supply) | Rated insulation voltage | 250 VAC (rms) |
| Light source Light type | GaAlAs, LED, 660 nm Visible, modulated | | |



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 | |

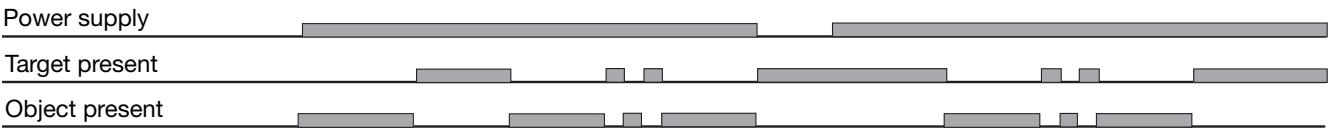
Connection Diagram



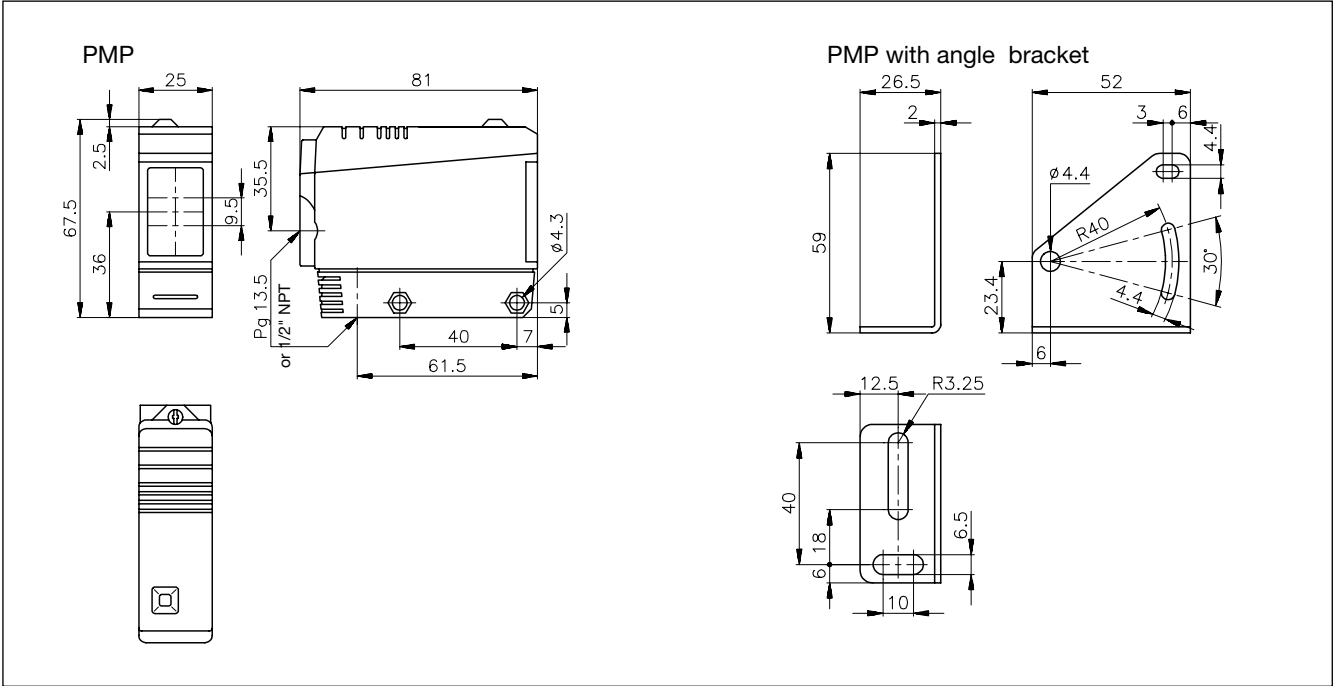
Operation Diagram

t = Time delay

tv = Power ON delay



Dimensions



Delivery Contents

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

Accessories

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

For further information refer to "Accessories".