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 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.

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	12 m	**PMP 12 RG**
1/2” NPT cable gland	12 m	**PMP 12 RI**

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)	10.8 to 264 VDC 21.6 to 264 VAC, 45 to 65 Hz
Rated operational power (relay ON)	 ≤ 2 W (2.5 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

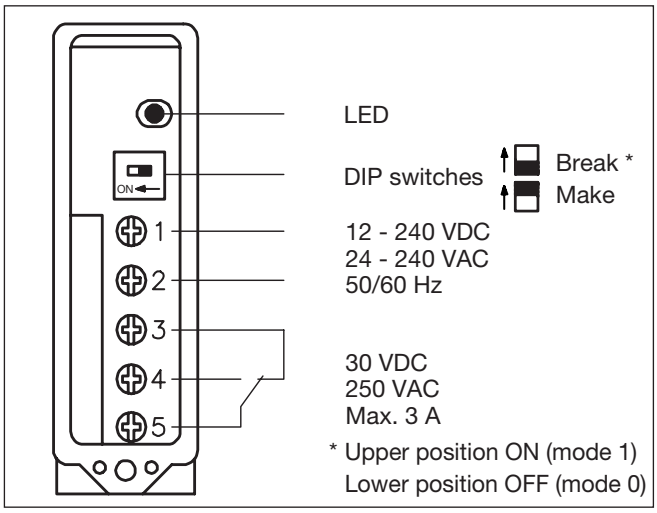
Optical angle	± 1.5°
Light spot size	280 mm at 4 m
Ambient light	Max. 5’000 lux
Operating frequency	20 Hz
Response time	
OFF-ON (t_{ON})	≤ 20 ms
ON-OFF (t_{OFF})	≤ 30 ms
Power ON delay (t_v)	≤ 300 ms (typ. 100 ms)
Output function	Switch selectable, make or break switching
Indication	
Target detected	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)

ООО «Сенсорен Электро» +7(495)150-48-00 info@sensoren.ru
Sensoren

Specifications (cont.)

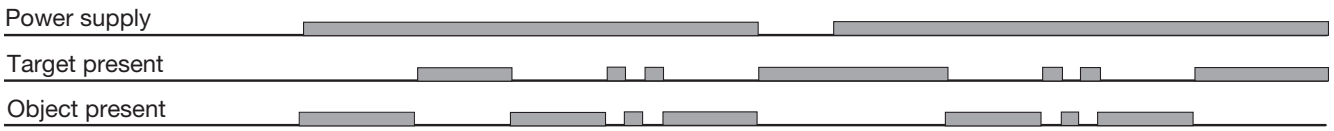
Housing material	
Body	PC/ABS, grey
Front	PMMA, red
Cover	PC, black
Cable gland	PA, black, reinforced
Mounting bracket	Steel, galvanized
Connection	
Screw terminal	5 x 2 x 1 mm^2
Cable gland	PG 13.5 or 1/2" NPT for cable 6 to 10 mm
Weight	110 g
Approvals	UL, CSA
CE-marking	Yes

Connection Diagram

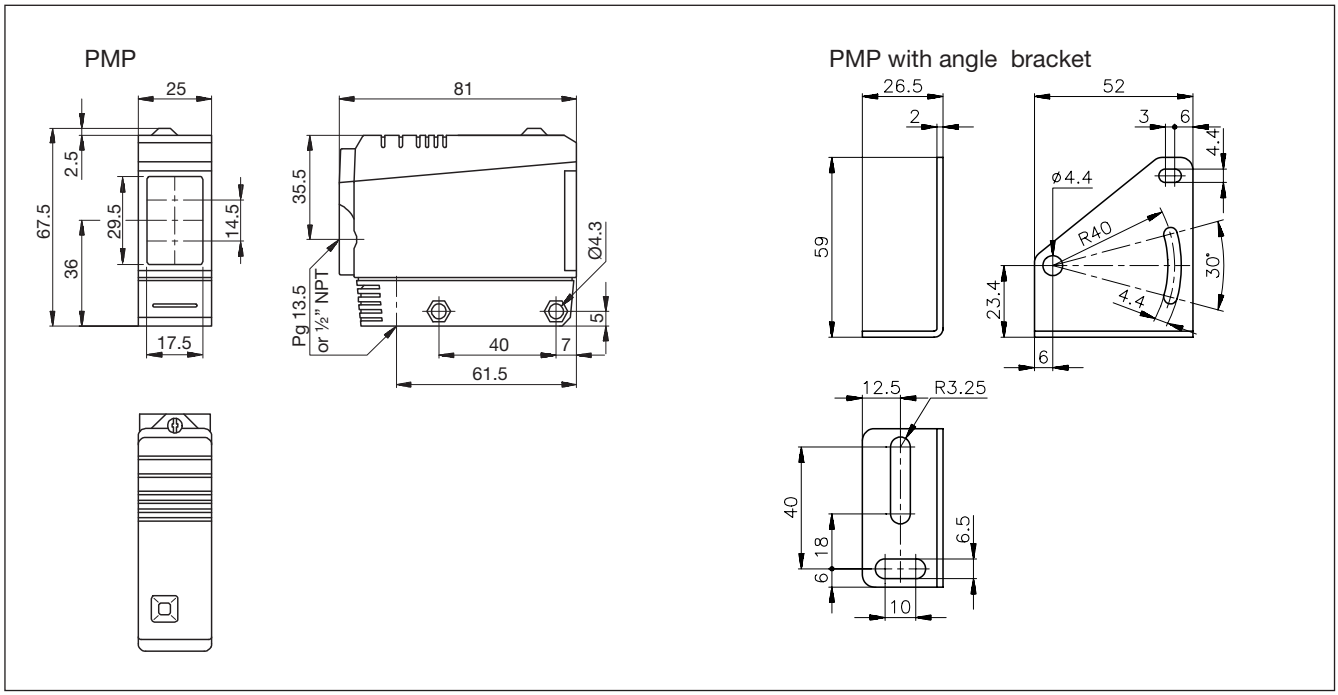


Operation Diagram

t = Time delay
tv = Power ON delay



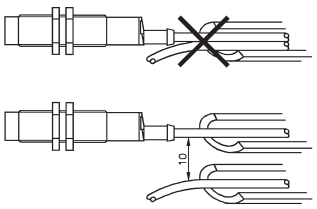
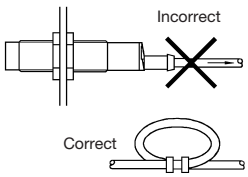
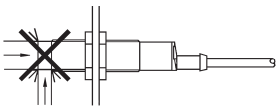
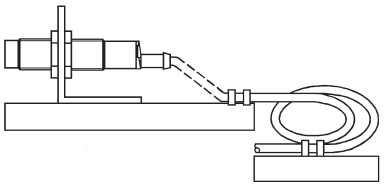
Dimensions



ООО «Сенсорен Электро» +7(495)150-48-00 info@sensoren.ru
Sensoren

CARLO GAVAZZI

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

Delivery Contents

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

Accessories

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

ООО «Сенсорен Электро» +7(495)150-48-00 info@sensoren.ru

Sensoren