

Photoelectrics Retro-reflective, Polarized Type PMP

CARLO GAVAZZI



- Range: 6 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
- Timer options (adjustable)
- NO and NC output

Product Description

Retro-reflective photoelectric switch with polarized light. Range up to 6 m. Fixed sensitivity. Immune to ambient light. Output function switch selectable. Protection degree IP 67. Screw terminal connection.

25 x 65 x 81 mm plastic housing. PG 13.5 or 1/2" NPT cable gland. Timer options: Delay on operate, delay on release, one shot (triggered on leading or trailing edge).

Ordering Key

PMP6R G T

Type

PG 13.5 cable gland

Option: Timer function

Type Selection

Housing W x H x D	Range (S _n)	Ordering no. without timer	Ordering no. with timer
25 x 65 x 81 PG 13.5 cable gland 1/2" NPT cable gland	6 m 6 m	PMP 6R G PMP 6R I	PMP 6R GT PMP 6R IT

Specifications

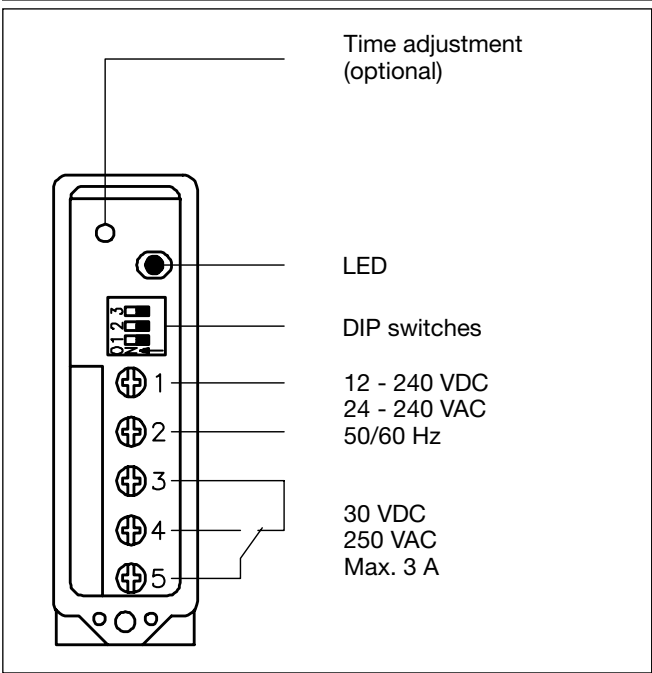
Rated operating dist. (S_n) (0 to 5,000 lux)	PMP6.. 6 m with reflector type ER 4, ref. target	Operating frequency	20 Hz
Blind zone	≤ 0.15 m	Response time OFF-ON (t _{ON}) ON-OFF (t _{OFF})	≤ 20 ms ≤ 30 ms
Rated operational volt. (U_B) AC: 45 to 65 Hz	10.8 to 264 VDC 21.6 to 264 VAC	Power ON delay (t_v)	≤ 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)	Optional timer Delay on operate Delay on release One shot	0.1 to 7 s ± 2 s 0.1 to 7 s ± 2 s 0.1 to 7 s ± 2 s
Sensitivity	Fixed	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 Light type Optical angle Light spot size	GaAlAs, LED, 660 nm Visible, modulated ±2° 280 mm at 4 m	Temperature Operating Storage	-25° to +55°C (-13° to +131°F) -30° to +80°C (-22° to +176°F)



Specifications (cont.)

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	PA, red
Cover	PC, black
Cable gland	PA, black, reinforced
Mounting bracket	Steel, black
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



Accessories

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

For further information refer to "Accessories".

Selection of Function

	Switch 1 2 3	
PMP 6R .		1 Break switching
		2 Make switching
PMP 6R .T		3 Delay on operate - Break switching
		4 Delay on operate - Make switching
		5 Delay on release - Break switching
		6 Delay on release - Make switching
		7 One shot, trailing edge - Break switching
		8 One shot, trailing edge - Make switching
		9 One shot, leading edge - Break switching
		10 One shot, leading edge - Make switching
		Don't care
		Upper position ON (Mode 1) Lower position OFF (Mode 0)

Truth Table

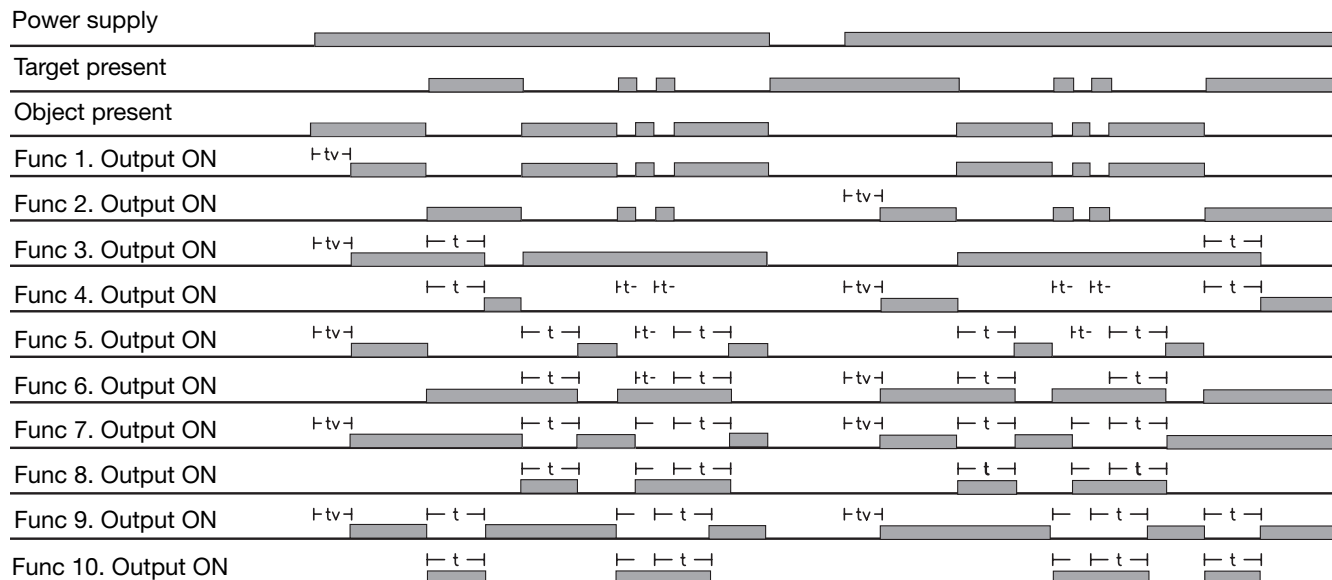
	Make switching		Break switching	
Object present	Yes	No	Yes	No
LED	OFF	ON	OFF	ON
Load	Non-active	Active	Active	Non-active

Delivery Contents

- Photoelectric switch: PMP
- Cable gland
- Installation instruction
- Mounting bracket
- **Packaging:** Corrugated cardboard (environmentally friendly recycling material)

Operation Diagram

t = Time delay
tv = Power ON delay



Dimensions

