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



- 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 degree.

Ordering Key

PMP12RGM

	_	H
Type family ————		
Type —		
Sensing distance (m)		
Output relay		
Cable gland type ———		
Mute input ————		

Type Selection

Housing	Range	Ordering no.				
W x H x D	(S _n)	without timer				
25 x 65 x 81 PG 13.5 cable gland 1/2" NPT cable gland	12 m 12 m	PMP 12 RGM 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) 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 \geq 40 x 10 ⁶ operations \geq 5 x 10 ⁵ operations at 220 VAC - 3 A resistive load: 360 impulses/h						

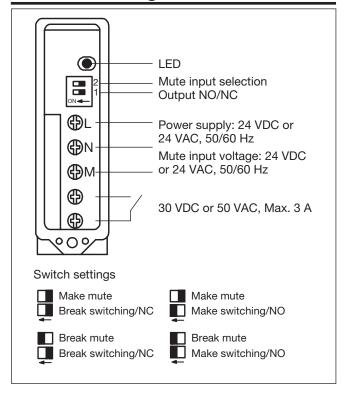
Dielectric voltage	2,000 VAC (rms) (cont./supply)						
Light source	GaAlAs, LED, 660 nm						
Light type	Visible, modulated						
Optical angle	± 1.5°						
Light spot size	280 mm at 4 m						
Ambient light	Max. 5'000 lux						
Operating frequency	20 Hz						
Response time (object related) OFF-ON (t _{ON}) ON-OFF (t _{OFF})	≤ 20 ms ≤ 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						



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 Storage	-25° to +55°C (-13° to +131°F) -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 cU	Rus UL325, CSA-C22.2 No.247
	Lus UL508
CE-marking	Yes
Ü	EN12453, EN12445, EN12978

Connection Diagram



Operation Diagram

tv = Power ON delay								
Power supply								
Target present			1					
Object present								
Mute (transmitter ON)								
Output NO			1		t _v	Mute function active		
Output NC	t _v	1						