

Photoelectrics Diffuse-reflective Type PMD

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- Range: 800 mm
- Modulated, infrared light
- 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 housing, IP 67
- Timer options (adjustable)
- NO and NC output



Product Description

Diffuse-reflective photoelectric switch. Range up to 0.8 m. Adjustable 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 or 1/2" NPT cable gland. Timer options: Delay on operate, delay on release, one shot (triggered on leading or trailing edge).

Ordering Key

PMD8R G T

Type _____
Cable gland _____
Option: Timer function _____

Type Selection

Housing W x H x D	Ordering no. without timer	Ordering no. with timer
25 x 65 x 81 PG 13.5 cable gland 1/2" NPT cable gland	PMD 8R G PMD 8R I	PMD 8R GT PMD 8R IT

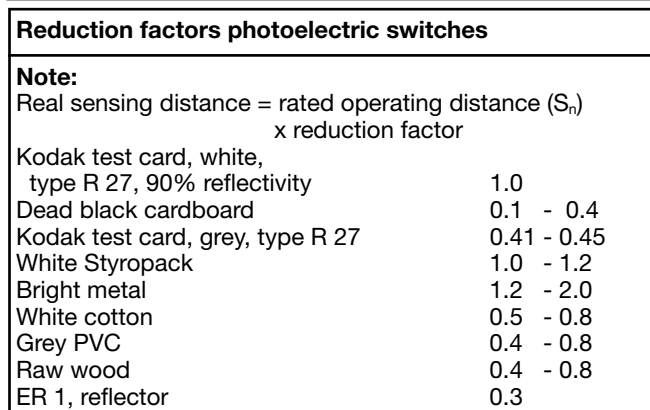
Specifications

Rated operating dist. (S_n) (0 to 5,000 lux)	800 mm Reference target: Kodak test card R27, white, 90% reflectivity, 200 x 200 mm	Optical angle (200 x 200 mm test card)	$\pm 12^\circ$
Rated operational volt. (U_B) AC: 45 to 65 Hz	10.8 to 264 VDC 21.6 to 264 VAC	Operating frequency	20 Hz
Rated operational power (relay ON)	≤ 2 W (2.5 VA)	Response time OFF-ON (t_{ON}) ON-OFF (t_{OFF})	≤ 20 ms ≤ 30 ms
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 $\geq 40 \times 10^6$ operations $\geq 5 \times 10^5$ operations at 220 VAC - 3 A resistive load: 360 impulses/h	Power ON delay (t_v)	≤ 300 ms (typ. 100 ms)
Dielectric voltage	2000 VAC (rms) (cont./supply)	Output function	Switch selectable, make or break switching
Sensing range (S_d)	0.2 - 0.8 m	Indication Target detected	LED, yellow
Light source Light type	GaAlAs, LED, 880 nm Infrared, modulated	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
		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)
		Temperature Operating Storage	-25° to +55°C (-13° to +131°F) -30° to +80°C (-22° to +176°F)

Selection of Function

	Switch 1 2 3	
PMD 8R .		1 Break switching
		2 Make switching
PMD 8R .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

Reduction Factors

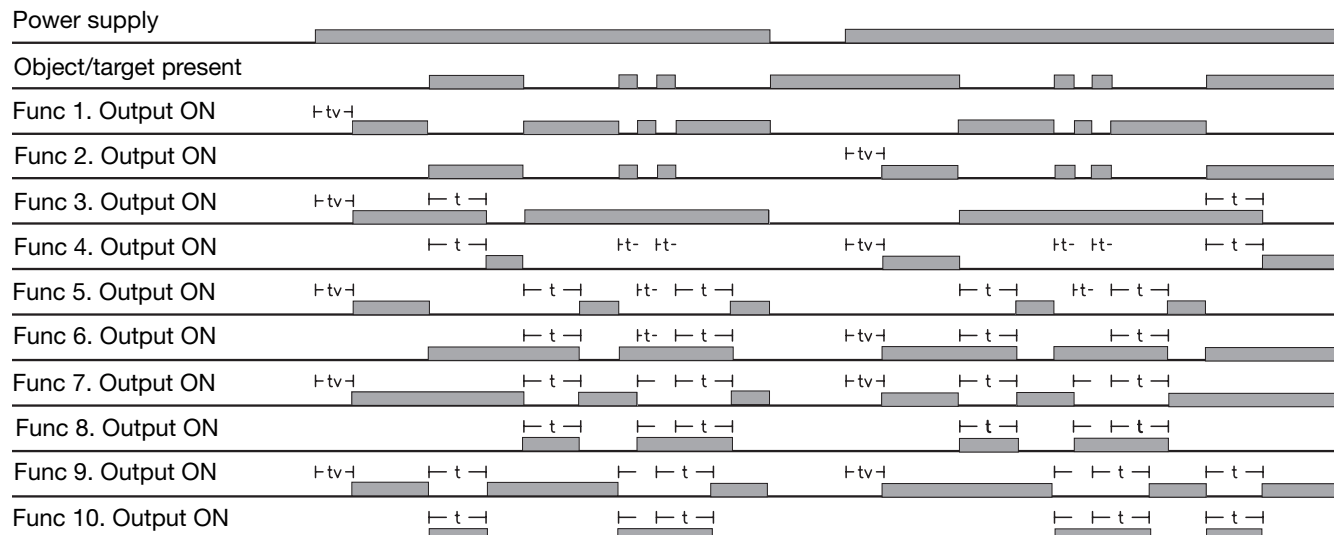


Truth Table

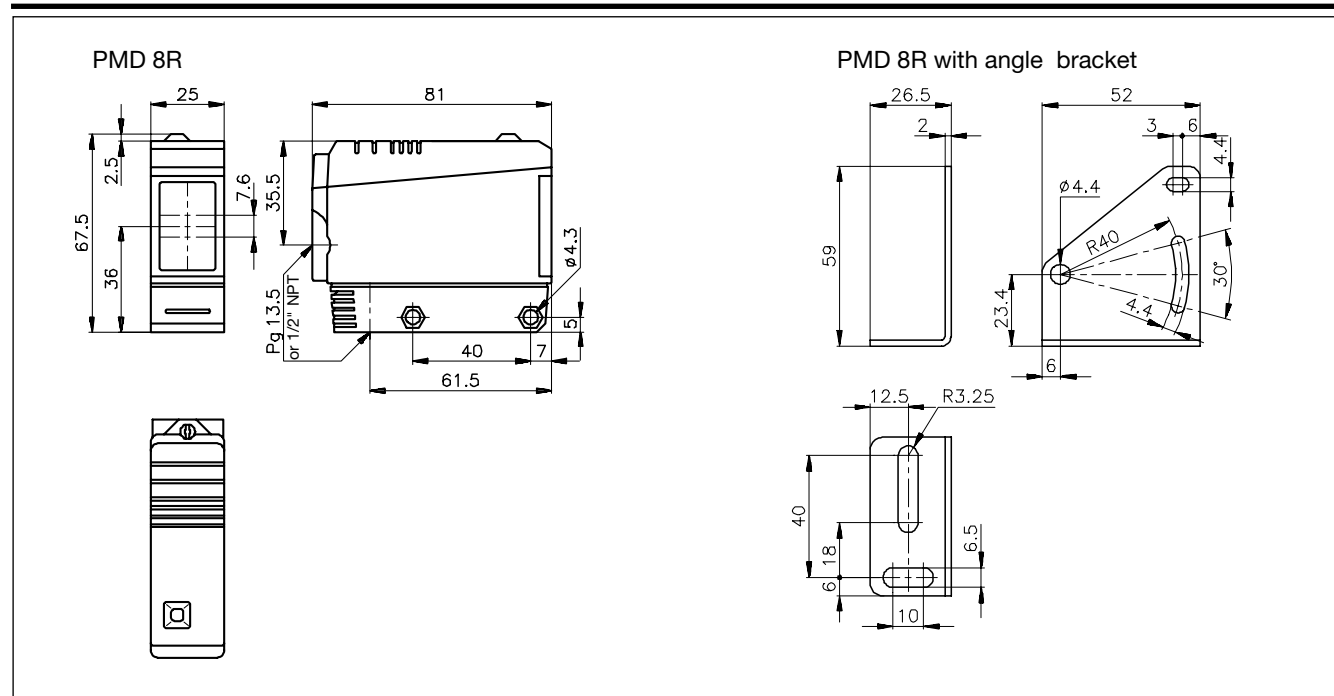
- | | Make switching | | Break switching | |
|----------------|----------------|--------|-----------------|------------|
| Object present | No | Yes | No | Yes |
| LED | OFF | ON | OFF | ON |
| Load | Non-active | Active | Active | Non-active |

Operation Diagram

t = Time delay
tv = Power ON delay



Dimensions



Accessories

- MB02 (longer mounting bracket), please refer to "Accessories"