

Photoelectrics Diffuse-reflective Type PA18ALD04T., AC, Metal-housing

CARLO GAVAZZI



- Range: 400 mm adjustable
- Modulated, infrared light
- Supply voltage: 20 to 250 VAC
- Output: 500 mA SCR
- Make or break switching function, LED indication
- High immunity to ambient light
- Heavy duty M18 metal housing, IP67
- Cable and plug versions

Product Description

The PA18ALD.. is a family of general purpose diffuse-reflective sensors in industrial standard 18 mm cylindrical nickel-plated brass housing for heavy duty applications. They are useful for simple applications where a basic

sensor provides adequate sensing performance. The sensors are easy to adjust with 270° single-turn potentiometer. The output is a 2-wire NO or NC thyristor (SCR) output.

Ordering Key PA18ALD04TOM6SA

Type	PA18ALD04TOM6SA
Housing style	PA18ALD04TOM6SA
Housing size	PA18ALD04TOM6SA
Housing material	PA18ALD04TOM6SA
Housing length	PA18ALD04TOM6SA
Detection principle	PA18ALD04TOM6SA
Sensing distance	PA18ALD04TOM6SA
Output type	PA18ALD04TOM6SA
Output configuration	PA18ALD04TOM6SA
Connection type	PA18ALD04TOM6SA
Adjustable	PA18ALD04TOM6SA

Type Selection

Housing diameter	Rated operating dist. (S _n)	Ordering no. SCR/cable Make switching	Ordering no. SCR/plug Make switching	Ordering no. SCR/cable Break switching	Ordering no. SCR/plug Break switching
M 18	400 mm	PA18ALD04TOSA	PA18ALD04TOM6SA	PA18ALD04TCSA	PA18ALD04TCM6SA

Note: Plugs to be ordered separately

Specifications

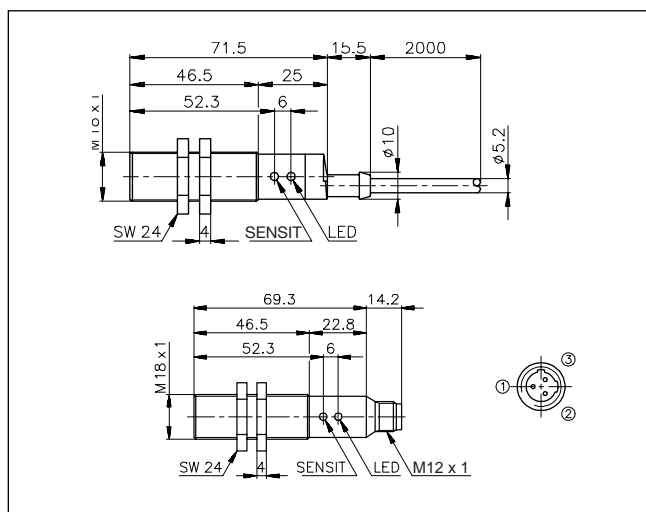
Rated operating dist. (S_n) Adjustable	Up to 400 mm, Ref. target Kodac test card 227, white, 90° reflectivity, 200 x 200 mm	Sensing angle	±25° at 1/2 range Max 10'000 lux
Sensitivity	270° single-turn pot. meter	Ambient light	
Temperature drift	0.4%/K	Operating frequency (f)	20 Hz, light/dark ratio 1:2
Hysteresis (H) (Differential travel)	3 to 20%,	Response time	
Rated operational volt. (U_B)	20 to 250 VAC, 45 to 65 Hz	OFF-ON (t _{ON})	≤ 20 ms
Output current (AC12, AC140)		ON-OFF (t _{OFF})	≤ 30 ms
Continuous (I _e)	≤ 500 mA	Power ON delay (t_v)	Typ. 100 ms
Short-time (I)	≤ 3A, max. 20 ms	Indication function	Dark (NC) or light (NO) switching Output ON LED, yellow
Min. operational current (I_m)	10 mA	Environment	
OFF-state current (I_r)	Max < 5 mA, typ. 2.6 mA	Overvoltage category	II (IEC 60664/60664A; 60947-1)
Voltage drop (U_d)	Max ≤ 10 V, typ. 7 VAC	Pollution degree	3 (IEC 60664/60664A; 60947-1)
Protection	Transients	Degree of protection	IP 67 (IEC 60529; 60947-1)
Transient voltage	Max 1 kV/0,5 J	Temperature	
Light source	GaAlAs LED, 880 nm	Operating	-20° to +60°C (-4° to 140°F)
Light type	Infrared, modulated synchronized	Storage	-30° to +70°C (-22° to 158°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)
		Dielectric voltage	1600 VAC (IEC 60364-4-41)



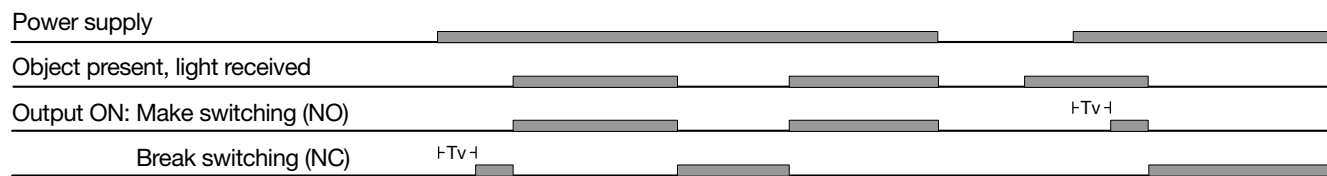
Specifications (cont.)

Housing material	
Body	Nickel-plated brass
Front	Luran®, black
Cable end	Polyester, black
Nuts	Nickel-plated brass
Connection	
Cable	Grey, 2 m, 2 x 0.5 mm ² , oilproof PVC, M12 x 1
Plug	CON.6A-... series
Cables for plug (-6)	
Weight	
Cable version	150 g
Plug version	65 g
Approvals	UL
CE-marking	Yes

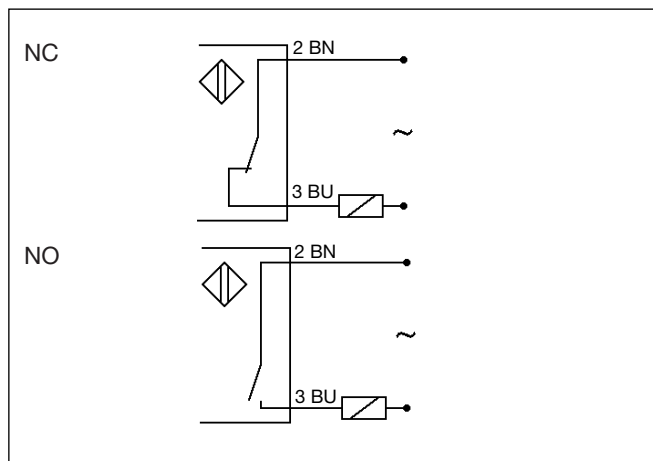
Dimensions



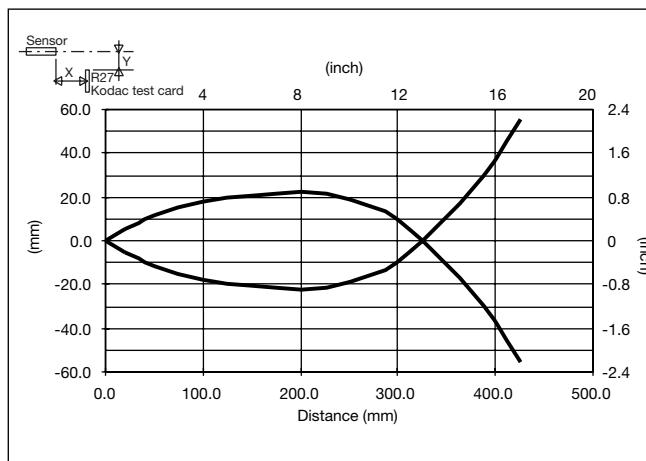
Operation Diagram



Wiring Diagrams



Detection Diagram



Delivery Contents

- Photoelectric switch: PA18ALD04..
- 2 nuts
- **Packaging:** plastic bag

Accessories

- Fibre optics
- Plugs CON.6A-.. series.
- Screw driver for adjustments: 77-000
- MB18A
- APA18-RAR

For further informations refer to "Accessories"