

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

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

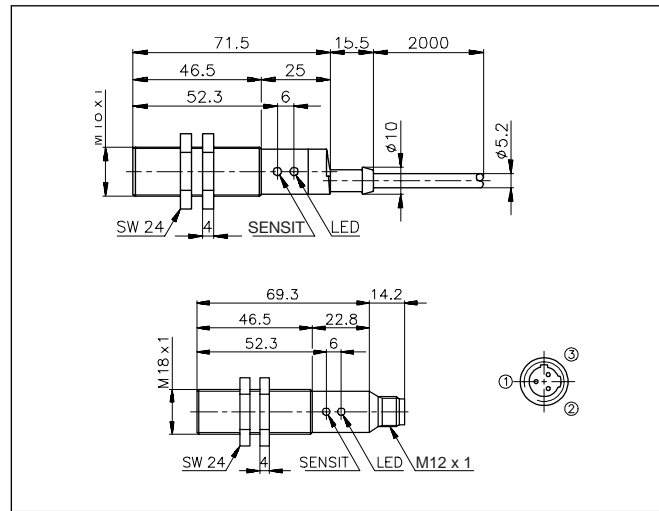
Rated operating dist. (S_n) Adjustable	Up to 400 mm, Ref. target Kodac test card 227, white, 90° reflectivity, 200 x 200 mm	Sensing angle	±25° at 1/2 range Max 10'000 lux
Sensitivity	270° single-turn pot. meter	Ambient light	
Temperature drift	0.4%/K	Operating frequency (f)	20 Hz, light/dark ratio 1:2
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)



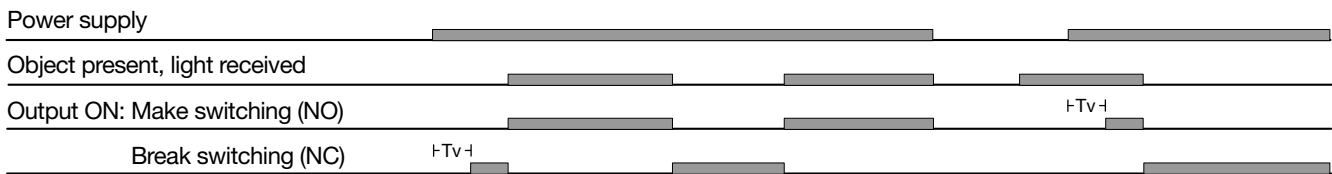
Specifications (cont.)

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	M12 x 1
Cables for plug (-6)	CON.6A-... series
Weight	
Cable version	150 g
Plug version	65 g
Approvals	UL
CE-marking	Yes

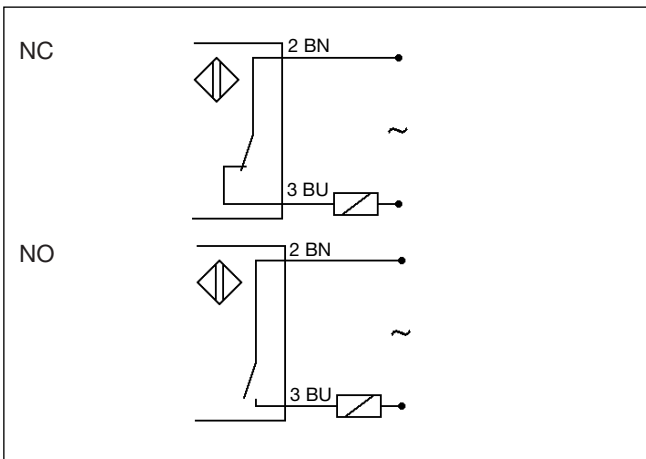
Dimensions



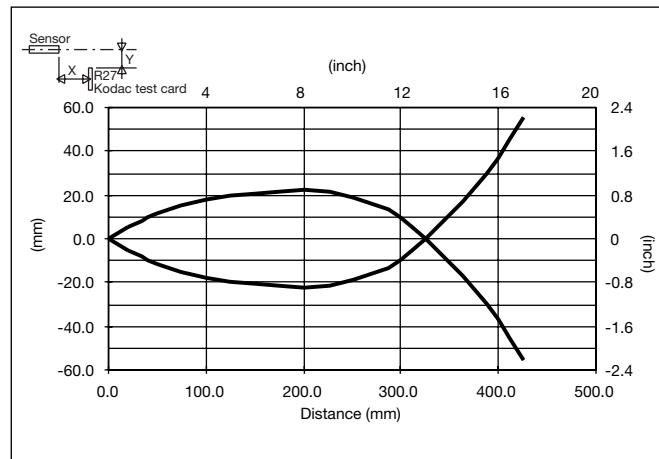
Operation Diagram



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"