

Photoelectrics

Diffuse-reflective

Type EO1804TB..., 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

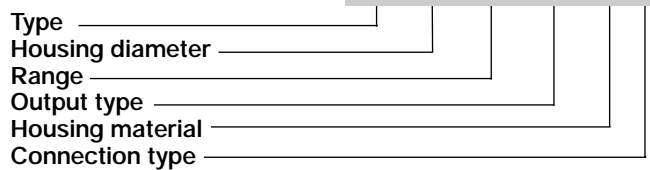
Product Description

Diffuse-reflective photoelectric switch with extended range up to 400 mm. Easily adjustable sensitivity with 270° potentiometer. LED output indication. Short M 18

metal housing for heavy duty applications. IP 67. Easy mounting. DC and AC types, fully protected. Cable and plug versions. Option: fibre optics.

Ordering Key

EO 18 04 TBOS-3



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	EO 1804 TBOS	EO 1804 TBOS-3	EO 1804 TBOS	EO 1804 TBOS-3

Note: Plugs to be ordered separately

Specifications

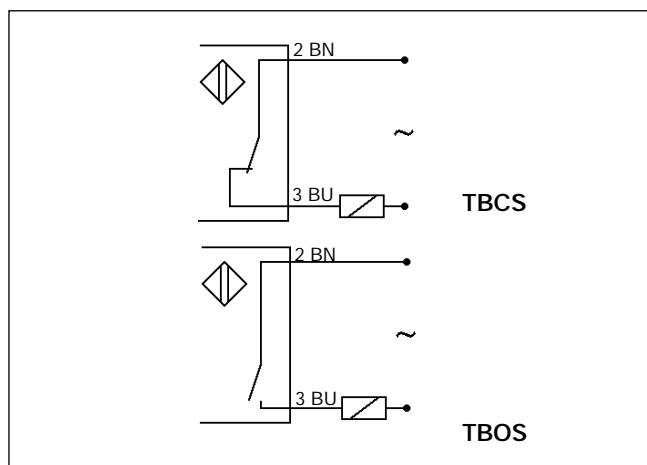
Rated operating dist. (S_n) Adjustable	Up to 400 mm 200 x 200 mm	Response time OFF-ON (t _{ON}) ON-OFF (t _{OFF})	≤ 20 ms ≤ 30 ms
Sensitivity	270° single turn pot. meter	Power ON delay (t_v)	Typ. 100 ms
Temperature drift	0.4%/K	Indication function Output ON	Dark (NC) or light (NO) switching LED, yellow
Hysteresis (H) (Differential travel)	3 to 20%,	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)
Rated operational volt. (U_B)	20 to 250 VAC, 45 to 65 Hz	Temperature Operating Storage	-20° to +60°C (-4° to 140°F) -30° to +70°C (-22° to 158°F)
Output current (AC12, AC140) Continuous (I _e) Short-time (I)	≤ 500 mA ≤ 3A, max. 20 ms	Vibration	10 to 150 Hz, 0.5 mm/- 7.5 g (IEC 60068-2-6)
Min. operational current (I_m)	10 mA	Shock	2 x 1 m 100 x 0.5 m (IEC 60068-2-32)
OFF-state current (I_r)	Max < 5 mA, typ. 2.6 mA	Dielectric voltage	1600 VAC (IEC 60364-4-41)
Voltage drop (U_d)	Max ≤ 10 V, typ. 7 VAC	Housing material Body Front Cable end Nuts	Nickel plated brass Luran®, black Polyester, black Nickel plated brass
Protection	Transients		
Transient voltage	Max 1 kV/0,5 J		
Light source Light type Sensing angle Ambient light	GaAlAs LED, 880 nm Infrared, modulated synchronized ±25° at 1/2 range Max 10'000 lux		
Operating frequency (f)	20 Hz, light/dark ratio 1:2		



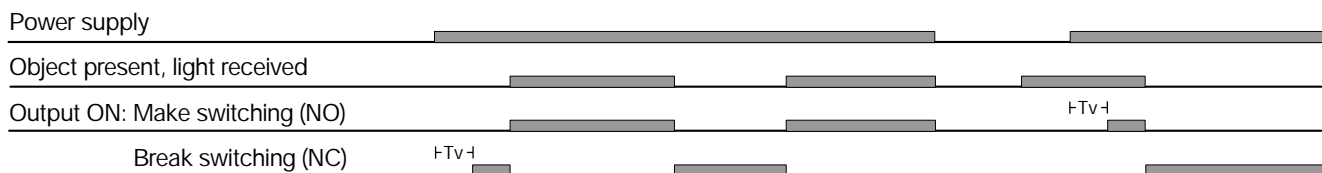
Specifications (cont.)

Connection Cable	Grey, 2 m, 2 x 0.5 mm ² , oilproof PVC,
Plug Cables for plug (-6)	M12 x 1 CON.3A-... series
Weight Cable version	150 g
Plug version	65 g
Approvals CE-marking	UL, CSA Yes

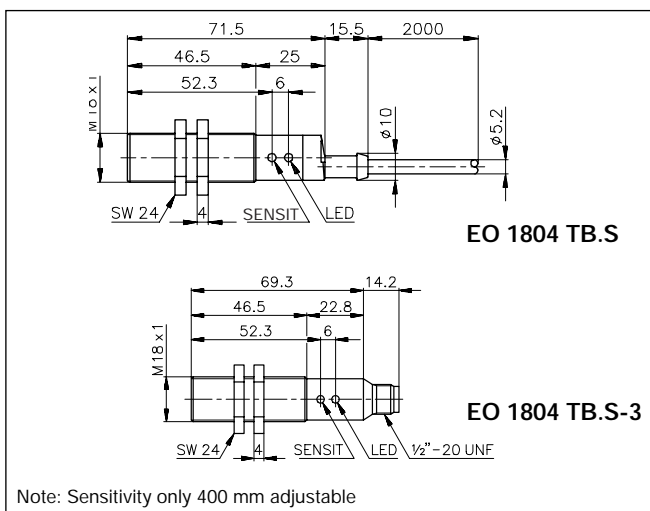
Wiring Diagrams



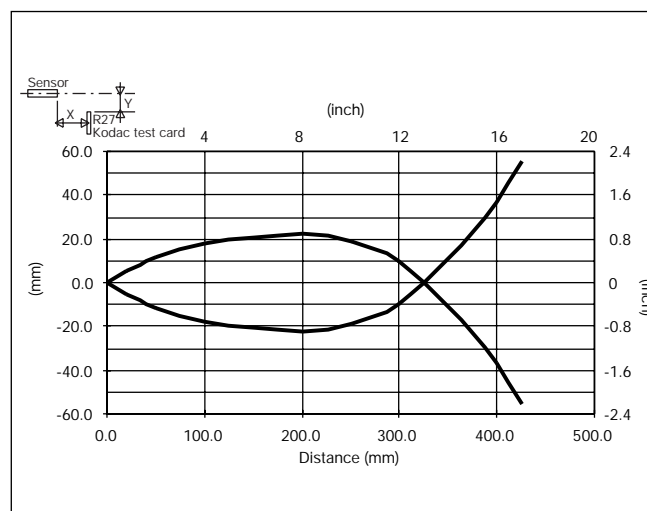
Operation Diagram



Dimensions



Detection Diagram



Delivery Contents

- Photoelectric switch: EO1804TB..
- 2 nuts
- **Packaging:** plastic bag

Accessories

- Plugs CON.3A-.. series.
- Screw driver for adjustments: 77-000
- MB18A
- APA18-RAR

For further informations refer to "Accessories"