

Photoelectrics

Diffuse-reflective

Type EO 3002

CARLO GAVAZZI



- Range: 200 mm
- Adjustable sensing range
- Modulated, infrared light
- Rated operational voltage: 24 VAC/DC, 115 VAC, 230 VAC
- Output: 2 A/250 V SPDT relay
- Make and break switching function
- LED output indication
- M 30 x 80 mm Luran® housing
- Degree of protection IP 67
- 2 m PVC cable
- High immunity to ambient light

Product Description

Diffuse-reflective photoelectric switch. Range 200 mm. Adjustable sensing range (sensitivity). LED output indi-

cation. Easy mounting. M 30 Luran® housing with PVC cable.

Ordering Key

EO3002RNAP924

Type _____
Housing diameter _____
Range _____
Output type _____
Power supply _____

Type Selection

Housing diameter	Rated operating dist. (S _n)	Ordering no. Supply: 24 VAC/VDC	Ordering no. Supply: 115 VAC	Ordering no. Supply: 230 VAC
M 30	200 mm	EO 3002 RNAP924	EO 3002 RNAP115	EO 3002 RNAP230

Specifications

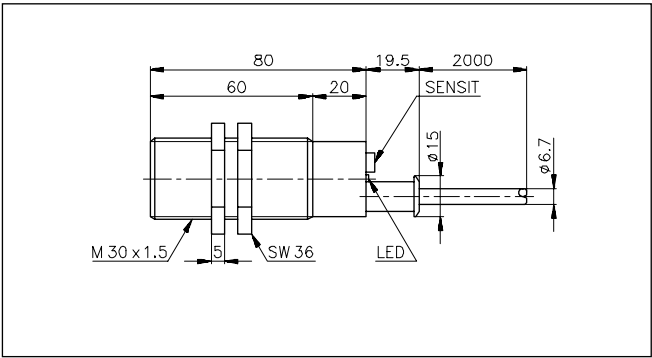
Rated operating dist. (S_n)	200 mm Reference target: Kodak test card R27, white, 90% reflectivity, 100 x 100 mm	Light source	GaAs LED 880nm
Temperature drift	0.3%/K	Light type	Infrared, modulated, synchronized
Hysteresis (H) (Differential travel)	Max. 20%	Ambient light	Max. 10,000 lux
Rated operational volt. (U_B)		Operating frequency (f)	10 Hz light/dark ratio 1:1
924 - (40 to 65 Hz)	21.60 to 26.40 VAC/DC	Response time	
115 - (40 to 65 Hz)	97.75 to 132.25 VAC	OFF-ON (t _{ON})	≤ 25 ms
230 - (40 to 65 Hz)	195.50 to 264.50 VAC	ON-OFF (t _{OFF})	≤ 25 ms
Output current		Power ON delay (t_v)	≤ 1s
Continuous AC (I _e)	2 A/250 VAC (500 VA)	Indication	
Continuous DC (I _e)	0.6 A/250 VDC (150 W)	Output ON	LED, yellow
Short-time AC (I)	10 A, max. 25 ms	Environment	
Contact life		Overvoltage category	III (IEC 60664/60664A; 60947-1)
Mechanical	5 x 10 ⁷ operations	Pollution degree	3 (IEC 60664/60664A; 60947-1)
Electrical	10 ⁵ operations	Degree of protection	IP 67 (IEC 60529; 60947-1) Note: IP 65 if cover screw is removed
No load supply current (I₀)		Temperature	
924: AC-45 mA/DC-22 mA		Operating	-20° to +60°C (-4° to 140°F)
115: 26 mA		Storage	-30° to + 80°C (-22° to 176°F)
230: 26 mA		Vibration	10 to 150 Hz, 0.5 mm/7.5 g (IEC 60068-2-6)
Sensitivity	Adjustable, 270° turn	Shock	2 x 1m & 100 x 0.5 m (IEC 60068-2-32)
		Dielectric voltage	1500 VAC (rms)



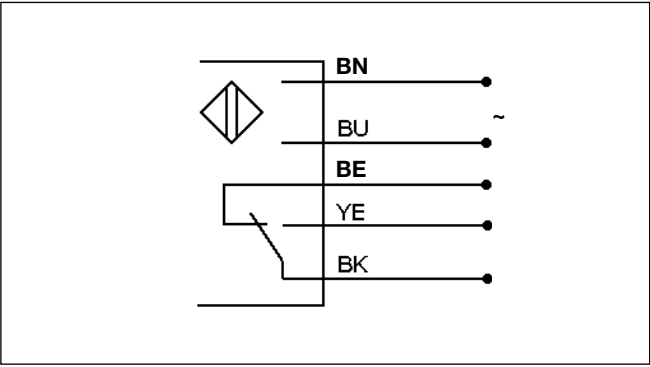
Specifications (cont.)

Housing material	Body	Luran®, black
	Front	Luran®, black
	Cable end	Polyester, black
	Nuts	Polyamide, black
Connection	Cable	Grey, 2 m, oilproof PVC, 5 x 0.5 mm ² Note: Other cable lengths on request
Weight (cable incl.)		150 g

Dimensions



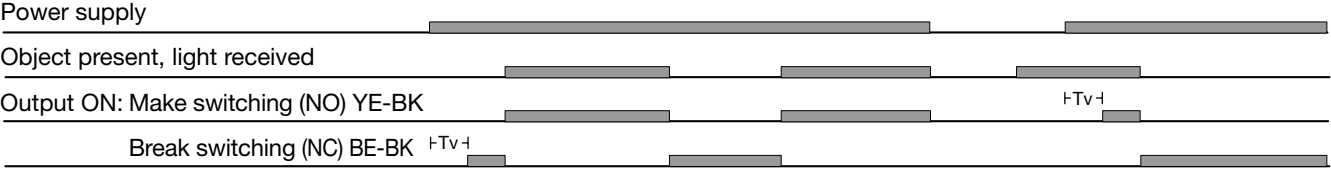
Wiring Diagram



Truth Table

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

Operation Diagram



Accessories

- Screw driver for adjustments: 77-000

Delivery Contents

- Photoelectric switch: EO3002 RNAP...
- 2 SW 36 nuts
- **Packaging:** carton box