

# FC3 Series - Special photoelectric sensors

- Dual beams photoelectric slot sensor
- TRIAC output
- Light on / Dark on selectable by polarity inversion
- CE Approved



## Ordering Codes

**FC3** Dual beams photoelectric slot sensor for edge detection, Triac output, Output state Light ON / Dark ON selectable by polarity inversion

**FC3/A** Dual beams photoelectric slot sensor for edge detection, Triac output, Output state Light ON/Dark ON 24VDC/AC

## Specifications

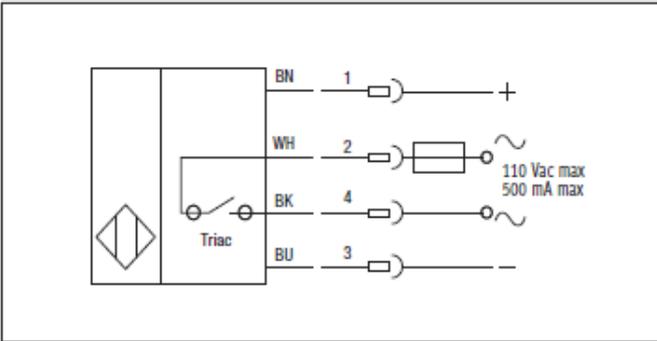
According to IEC EN 60947-5-2

Model	FC3	FC3/A
Optical axial distance	6.8mm	
Optics diameter	3mm	
Operating voltage	10 .. 30 VDC	
Ripple	≤10 %	
No load supply current	≤30 mA	
Load current	max 500 mA (V = 110 VAC)	max 500 mA (V = 30 VDC / 24 VAC)
Leakage current	250 μA (V = 250 V max)	250 μA (V = 30 V max)
Inrush current	5 A (T = 10 μsec)	
Output voltage drop	1,2 V max (500 mA)	
Output type	TRIAC, LO/DO selectable	MOSFET LO/DO selectable
Blocking voltage / operating voltage	± 400 V / 110 VAC eff.	±40 / 30 VDC - 24 VAC eff
Zero-Voltage switching	Yes	No
Emission	Infrared (880 nm)	
Sampling frequency	3.7 kHz	
Switching frequency	25 Hz	
Supply electrical protection	Transient	
Protection degree	IP64 (EN 60529) <sup>(1)</sup>	
LED indications	Green (supply) - Red (output)	
Housing material	PCB	
Weight (approx.)	120g	

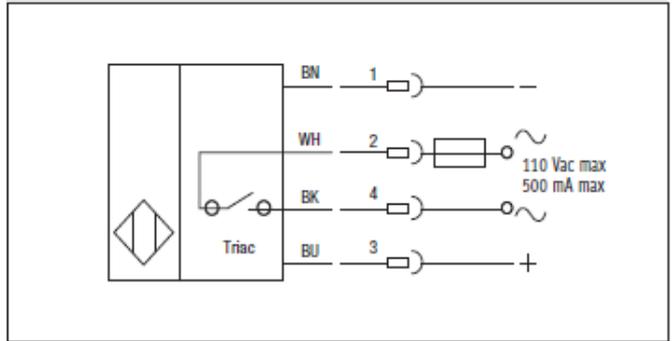
Protection guaranteed only with plug cable well mounted.

Electrical Diagrams of the Connections

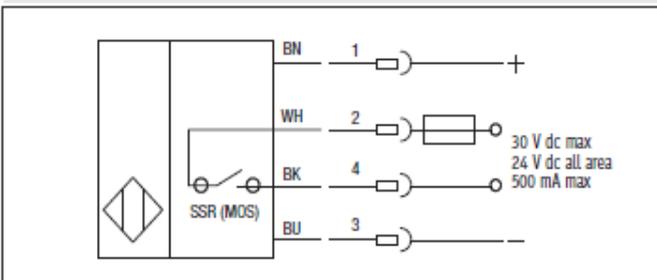
FC3 Dark-On Pulse



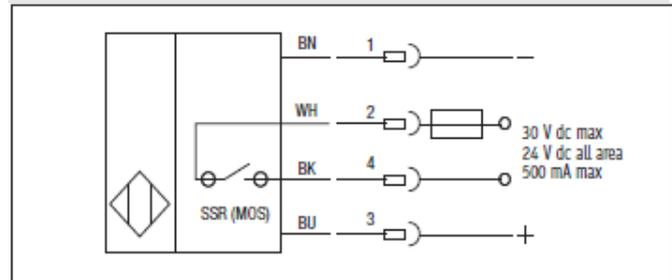
FC3 Light-On Pulse



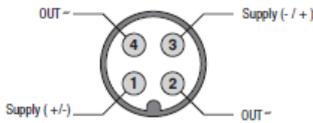
FC3/A Dark-On Pulse



FC3/A Light-On Pulse



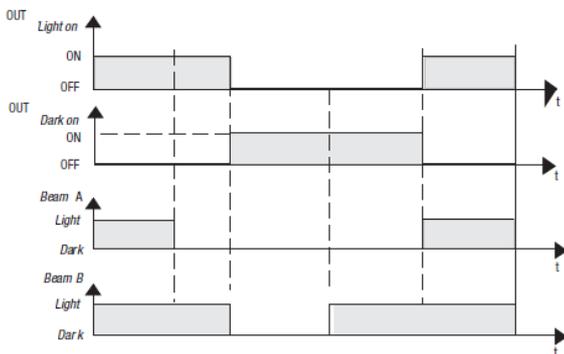
Plug



Key

- BN - Brown
- BK - Black
- PK - Pink
- BU - Blue
- WH - White
- GY - Grey

Logic Diagram



Considering A as the outer ray and B as the inner ray referring to the fork input and the DARK ON operation mode, the output is activated when both A and B are intercepted by the edge and is deactivated when both A and B are free. The histeresis is so equal to the optical interaxes 6 mm.

A: outer ray referring to the fork input

B: inner ray referring to the fork input

Dimensions

