

# Retro Ref. Photoelectric Sensors



PHOTOELECTRIC SENSORS IN SQUARE HOUSING 18 ÷ 230 V AC - DC RELAY OUTPUT

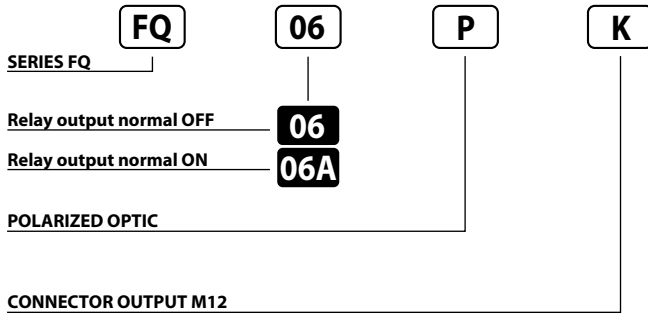
- Wide input voltage
- 3A relay SPDT
- Cable or M12 quick connect models
- Output and Supply indicators

FQ Series

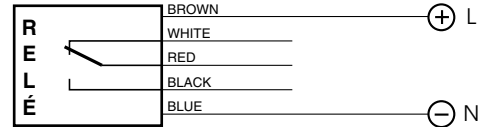
New



## Identification code



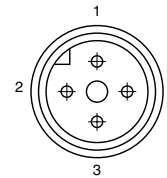
## Wiring diagrams



**Note:** in case of inductive loads it is necessary to connect one diode in antiparallel at the edges of the load.

AVAILABLE	POLARIZED	STANDARD
SWITCHING DISTANCE	4 m <sup>(1)</sup>	9 m <sup>(1)</sup>
HYSTERESIS	10%	
EMISSION	Red (660 nm)	Infrared (875 nm)
NOMINAL VOLTAGE	18 ÷ 230V AC - DC (-15 / +10%)	
MAINS FREQUENCY	50 ÷ 60 Hz	
OUTPUT	Relay (10 x 10 <sup>6</sup> ops. min.)	
MAX. OUTPUT CURRENT	3A 30 V AC - 1A 220 V AC (90W, 360 VA)	
ABSORPTION	2.5 VA	
YELLOW LED	Output indicator	
GREEN LED	Supply indicator	
SENSITIVITY ADJUSTMENT	Trimmer 1 turn	
SWITCHING FREQUENCY	10 Hz	
RESPONSE TIME	100 mS	
START UP DELAY	≤ 300 mS	
TEMPERATURE LIMITS	-10 ÷ +60° C	
LIGHT IMMUNITY	> 10.000 Lux <sup>(2)</sup>	
PROTECTION DEGREE	IP 65	
CABLE LENGTH	2 m	
CABLE SECTION	5 x 0,30 mm <sup>2</sup>	
HOUSING MATERIAL	Housing: ABS - Lenses: methacrylate	
WEIGHT - cable output - (connector output)	- 180 g - (125 g)	

## Connection with connector M12 (K)



View of quadrupole male connector.

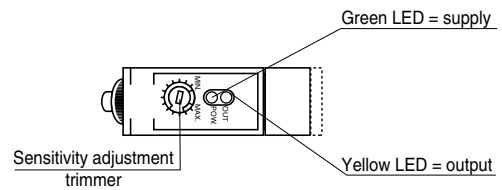
### CONTACTS CONFIGURATION

Output	Contacts numbers			
	1	2	3	4
Relay	L	COM	N	NO

**Note:** Photoelectric sensor not suitable for use with 90° connectors.

## Sensitivity adjustment

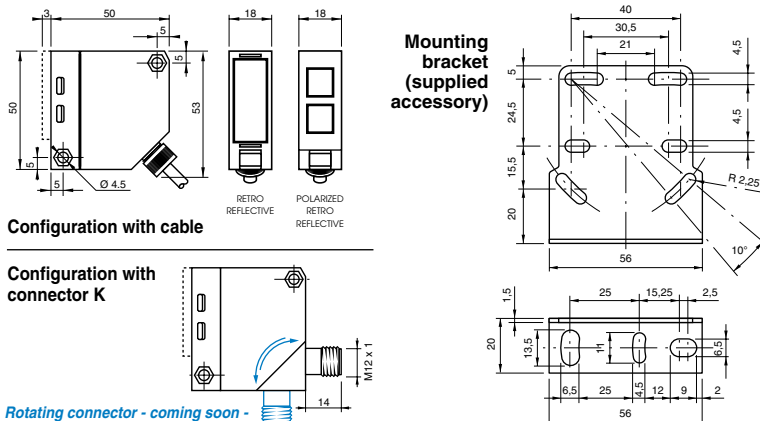
- 1) SENSITIVITY INCREASE**  
Screw the trimmer towards right towards position "+"
- 2) SENSITIVITY DECREASE**  
Screw the trimmer towards left towards position "-"



**Note:** the trimmer just needs one turn.

<sup>(1)</sup> Determined with CT04S reflector.  
<sup>(2)</sup> Determined with halogen tungsten lamp 3000° K.  
Note: for a proper use see norms at pages 7, 8, 9 and 10.

## Dimensions (mm)



## Characteristic curves

