



Retro Ref. Photoelectric Sensors



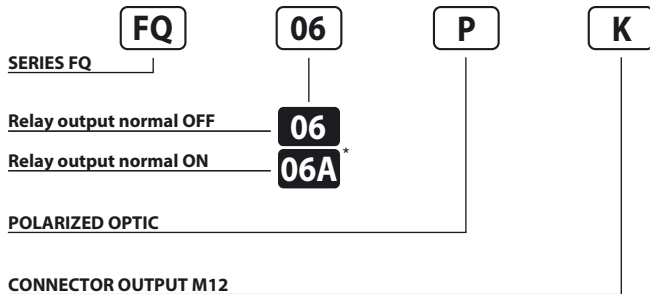
PHOTOELECTRIC SENSORS IN SQUARE HOUSING 14 ÷ 230 V AC/DC RELAY OUTPUT

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

FQ Series



Identification code



* This version is made with NORMALLY ACTIVATED RELAY when the photocell is aligned with the reflector.

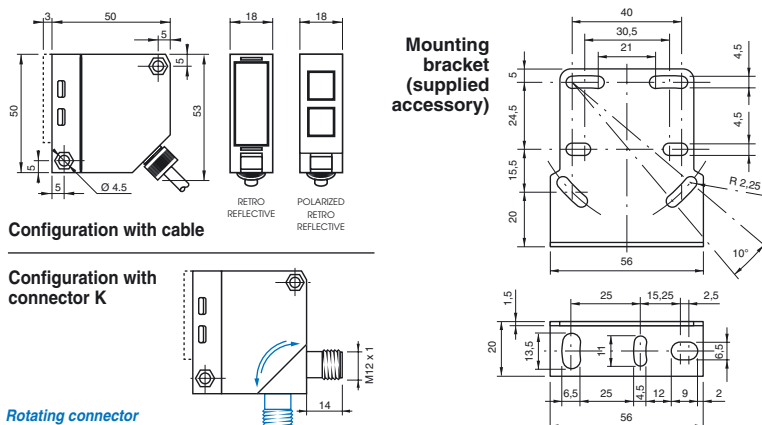
AVAILABLE	POLARIZED	STANDARD
NOMINAL SWITCHING DISTANCE (Sn)	6 m ⁽¹⁾	13 m ⁽¹⁾
TOLERANCE	+10/-10 %Sn	
HYSTERESIS	10%	
EMISSION	Red (660 nm)	Infrared (875 nm)
NOMINAL VOLTAGE	14 ÷ 230V AC - DC (-15 /+10%)	
MAINS FREQUENCY	50 ÷ 60 Hz	
OUTPUT	Relay (10 x 10 ⁶ ops. min.)	
MAX. OUTPUT CURRENT	3A 30 V AC - 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 ⁽²⁾	
PROTECTION DEGREE	IP 65	
CABLE LENGTH	2 m	
CABLE SECTION	5 x 0.30 mm ²	
HOUSING MATERIAL	Housing: ABS - Lenses: methacrylate	
WEIGHT - cable output - (connector output)	- 180 g - (125 g)	

⁽¹⁾ Determined with CT04S reflector.

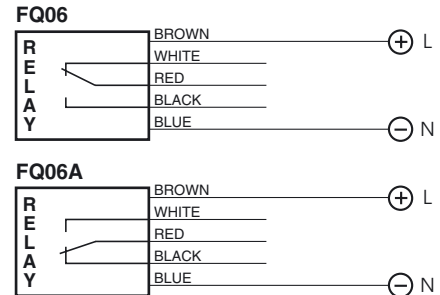
⁽²⁾ Determined with halogen tungsten lamp 3000° K.

Note: for a proper use see norms at pages 12, 13, 14, 15 and 16.

Dimensions (mm)

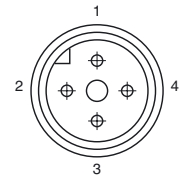


Wiring diagrams



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

Connection with connector M12 (K)



View of quadripole male connector.

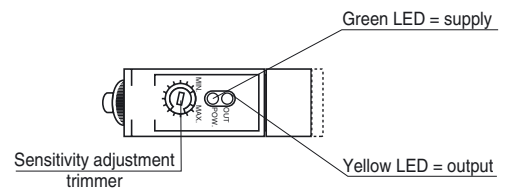
CONTACTS CONFIGURATION

Output	Contacts numbers			
	1	2	3	4
Relay	L	COM	N	NO
Wire colors	brown	white	blue	black

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.

Characteristic curves

