

PHOTOELECTRIC SENSORS

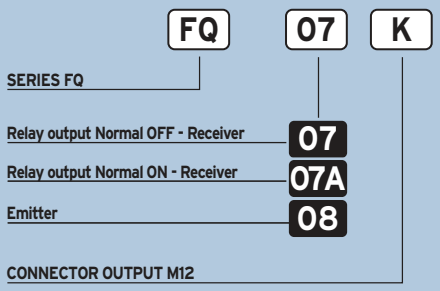
THRU BEAM

14÷230 V AC/DC - RELAY OUTPUT

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

FQ Series

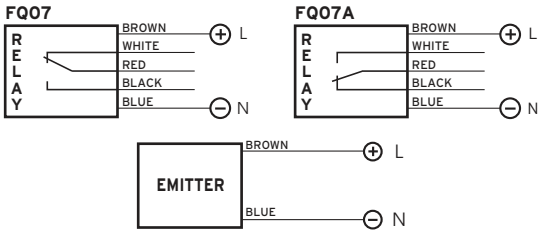
IDENTIFICATION CODE



AVAILABLE	RECEIVER	EMITTER
NOMINAL SWITCHING DISTANCE (Sn)	**20 m**	
TOLERANCE	+10/-10 %Sn	
HYSTERESIS	10%	
EMISSION	-	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 VAC - 1A 220 VAC (90W, 360 VA)	-
ABSORPTION	2.5 VA	
YELLOW LED	Output indicator	-
GREEN LED	Supply indicator	
SENSITIVITY ADJUSTEMENT	Trimmer 1 turn	-
SWITCHING FREQUENCY	10 Hz	
RESPONSE TIME	50 ms	
START UP DELAY	300 ms	
TEMPERATURE LIMITS	-10 ÷ +60 °C	
LIGHT IMMUNITY	> 10.000 Lux (1)	
PROTECTION DEGREE	IP 65	
CABLE LENGTH	2 m	
CABLE SECTION	5 x 0.30 mm^2	2 x 0.25 mm^2
HOUSING MATERIAL	Housing: ABS - Lenses: methacrylate	
WEIGHT - cable output - (connector output)	- 180 g - (125 g)	

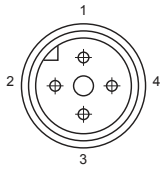
(1) Determined with halogen tungsten lamp 3000 °K.
Note: for a proper use see norms at pages 18, 19, 20, 21 and 22.

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

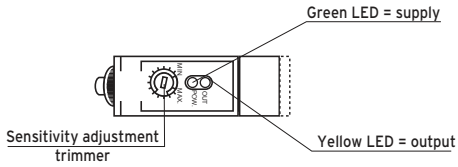
Output	Contacts numbers			
	1	2	3	4
Relay	L	COM	N	NO
Emitter	L (+)	—	N (-)	—
Wire colors	brown	white	blue	black

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

SENSITIVITY ADJUSTMENT

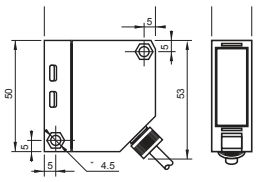
1) SENSITIVITY INCREASE
Screw the trimmer towards right towards position "+"

2) SENSITIVITY DECREASE
Screw the trimmer towards left towards position "-"



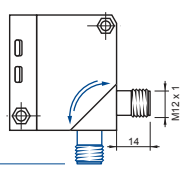
Note: the trimmer just needs one turn.

DIMENSIONS (mm)



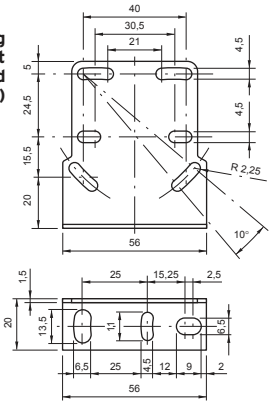
Configuration with cable

Configuration with connector K



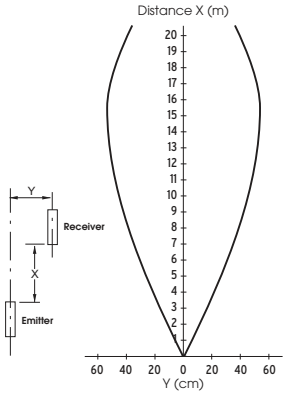
Rotating connector

Mounting bracket (supplied accessory)



CHARACTERISTIC CURVES

EMITTER RECEIVER THRU BEAM



PHOTOELECTRIC

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