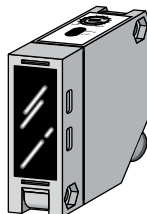


SENSORS

FQ SERIES

In Square Housing 14-230 VAC/DC. Relay Output

Approved to cULus and CE



TYPE	REFLEX		PROXIMITY		BARRIER	
Principle of Operation	Retro-Reflective		Diffuse Reflective		Through Beam	
Available Versions	Polarized	Standard	D3	D4	Receiver	Emitter
Switching Distance	6 m ⁽¹⁾	13 m ⁽¹⁾	35-180 cm ⁽²⁾	40-200 cm ⁽²⁾	20 m	
Hysteresis	10 %					
Emission	Red	Infrared				
Supply Voltage	14 - 230 VAC-DC (-15/+10 %)					
Output	50 - 60Hz					
Contact	Relay (10 x 106 mechanical operations minimum)					-
Max. Output Current	3A 30 VDC 1 A 220 VAC (90 W, 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	50 mS					
Start Reset	300 mS					
Temperature Limits	-10 - +60 °C					
Light Immunity	> 10,000 Lux ⁽³⁾					
Protection Grade	IP 65					
Cable Length	2 m					
Cable Section	5 x 0.3 mm2 (pre-cabled version only)					2 x 0.25 mm²
Housing Material	Housing: ABS - Lenses: methacrylate					
Weight (approximate)	180 g					

⁽¹⁾ Determined with CT04 reflector.

⁽²⁾ Determined with a white matt paper (10 x 10 cm). On request special versions up to 150 cm are available.

⁽³⁾ Determined with halogen tungsten lamp 3000° K.

Other versions available, please contact the sales office for further information

CONFIGURATION	REFLEX	PROXIMITY	BARRIER	
RELAY output normal OFF	FQ - 06	FQ - 05	FQ - 07	FQ - 08

Product Code Example

	FQ	05	D3	K	
FQ SERIES	FQ			K	CONNECTOR OUTPUT M12
MODEL IDENTIFICATION		05	D3 ⁽¹⁾		SWITCHING DISTANCE = 35 - 180 cm
			D4 ⁽¹⁾		SWITCHING DISTANCE = 40 - 200 cm
			P ⁽²⁾		POLARIZED OPTIC

⁽¹⁾ Specify switching distance only for proximity type*

⁽²⁾ Specify only for reflex type.

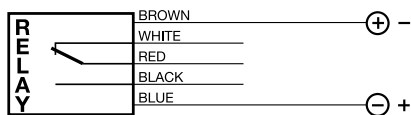
* On request special versions up to 150 cm are available.

SENSORS

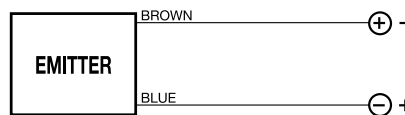
FQ SERIES

Wiring Diagrams

Relay Output Models 14 - 230 VAC-DC

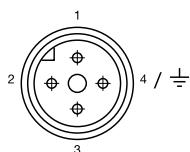


Emitter 14 - 230 VAC-DC



Note: For inductive loads it is necessary to protect the sensor by connecting a diode or an RC network across the load.

Connection with TYPE K Connector (M12)



View of
quadripole
male
connector

CONTACTS CONFIGURATION

Output	Contacts numbers			
	1	2	3	4
Relay	+ / L	COM	- / N	NO
Emitter	+ / L	-	- / N	-

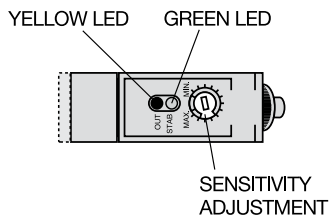
For isolation purposes the "K" version is a 4 pin device only, having a SNPO relay instead of the SPCO.

Sensitivity Adjustment

1. Sensitivity Increase
Screw trimmer clockwise
2. Sensitivity Decrease
Screw trimmer anti-clockwise

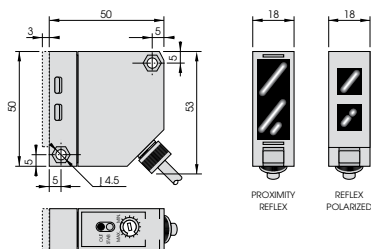
Note: The trimmer needs just one turn

Stability Signal LED



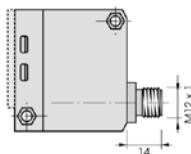
Dimensions (mm)

Configuration with cable



NOTE: The dotted area refers to the polarized retro reflective model.

With connector K



Mounting Bracket (included with sensor)

