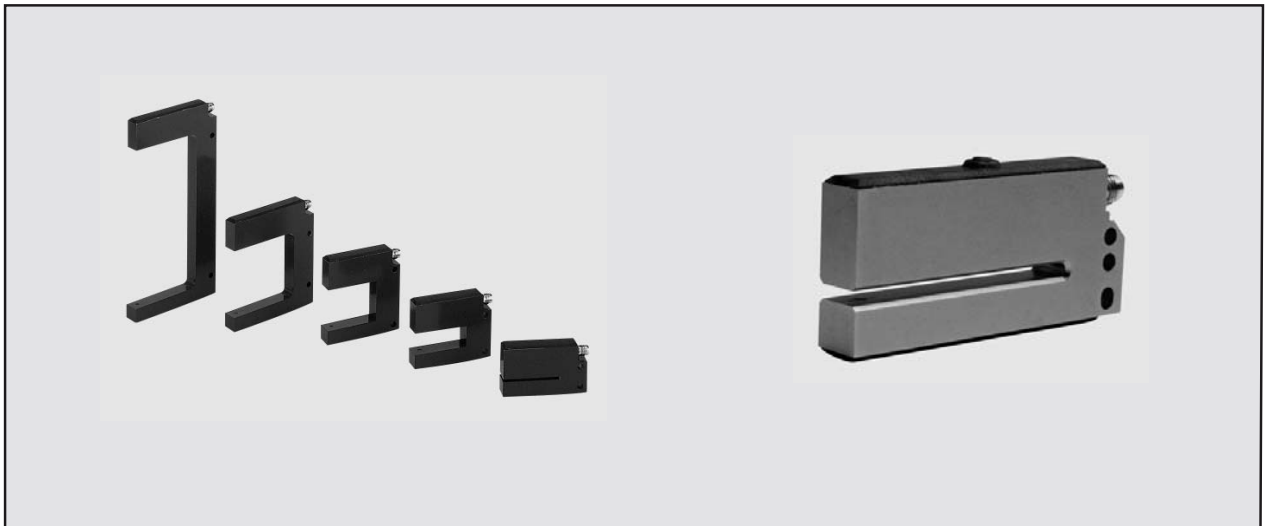


FORK SENSOR

FRK Series

Fixed Range Fork and Label Sensor



2 to 225 mm opening widths

The FRK series is offered in sizes that range from 2 x 40 mm thru 225 x 60 mm.

NPN and PNP outputs

Both NPN and PNP outputs are standard on all sensors.

High speed models

The FRK-002-C-Q8 has a 30 microsecond response time (non-modulated). The FRK-003/005-C-Q8 have a 50 microsecond response time (non-modulated), the standard models have a 1 millisecond response time (modulated).

Automatic teach

The FRK-003/005-C-Q8 sensors have an automatic teach function. Setup can be made while the product is running. This can also be done remotely with the remote teach input. All other models have a potentiometer adjustment.

Selectable output operation

The output operation of the sensor can be selected to operate as either Light-On or Dark-On by changing the wiring.

Aluminum housing

The sensors have an aluminum housing. This provides a high degree of mechanical protection.

Label detection

The FRK-003/005-C-Q8 sensors can be used to detect the presence of labels. Two sensing modes are available, Standard mode for opaque materials and Sensitive mode for translucent materials.

Quick connect standard

An 8mm connector is standard with the sensor.

CE/UL approval

Conforms to Europe's EMC Directive and has UL recognition for use in the U.S.



Specifications

FORK SENSORS	Normal Sensing				Fine Sensing / Label Detection	
	Model Number	Fork Gap	Model Number	Fork Gap	Model Number	Fork Gap
	FRK-002-M-Q8	2 mm	FRK-080-M-Q8	80 mm	FRK-002-C-Q8	2 mm
	FRK-015-M-Q8	15 mm	FRK-120-M-Q8	120 mm	FRK-003-C-Q8 *	3 mm
	FRK-030-M-Q8	30 mm	FRK-225-M-Q8	225 mm	FRK-005-C-Q8 *	5 mm
	FRK-050-M-Q8	50 mm				
Supply Voltage	10 ~ 30 VDC					
Current Consumption	30 mA				40 mA	
Sensing Outputs	Both NPN and PNP open collector transistor operating simultaneously					
Output Rating	100 mA					
Output Operation	Light On / Dark On operation selectable by wiring					
Short Circuit Protection	Incorporated					
Response time	1 millisecond - 500 Hz				30 μsec. (002) - 50 μsec. (003/005)	
Timer	None					
Operation Indicator	Signal (red) and Power (green)					
Emitting Element	Infra-red LED - modulated 7.7 kHz				Infra-red LED - non-modulated	
Protection	IP 65					
Ambient Temperature	0 to 60° C					
Housing	Aluminum housing					
Ratings	CE/UL					

Note: The connecting cable is not included with the sensor, please order separately.

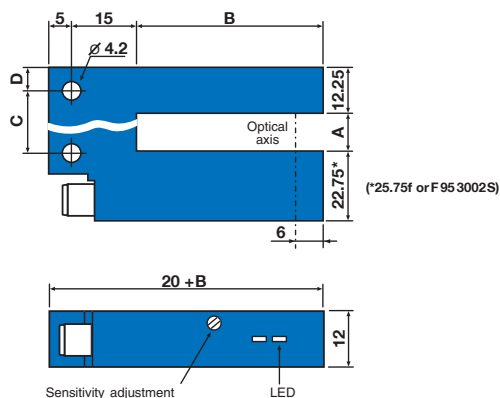
* These models have pushbutton setting and remote teach.

Type	Cable Part Number	Length
Q8	M8-FS4-PUR-2M	2 Meter
	M8-FS4-PUR-5M	5 Meter

DIMENSIONS (Unit: mm)

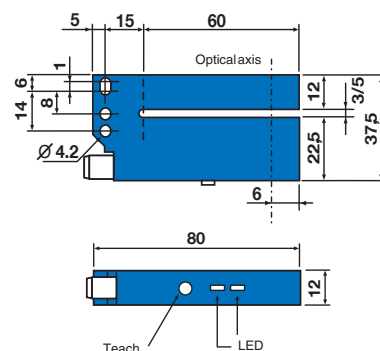
FRK-□□□-□-Q8

Sensor



FRK-003/005-C-Q8

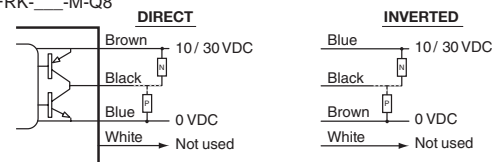
Sensor



Fork	A (mm)	B (mm)	C (mm)	D (mm)
FRK-002-C-Q8 (Continuous emission)	2	40	14	6.25
FRK-002-M-Q8 (Modulated emission)	2	40	14	6.25
FRK-015-M-Q8 (Modulated emission)	15	40	27	6.25
FRK-030-M-Q8 (Modulated emission)	30	40	42	6.25
FRK-050-M-Q8 (Modulated emission)	50	57	40	17.25
FRK-080-M-Q8 (Modulated emission)	80	57	70	17.25
FRK-120-M-Q8 (Modulated emission)	120	57	110	17.25
FRK-225-M-Q8 (Modulated emission)	225	60	-----	-----

Wiring Connection Diagram

FRK-___-M-Q8



FRK-003/005-C-Q8 *

