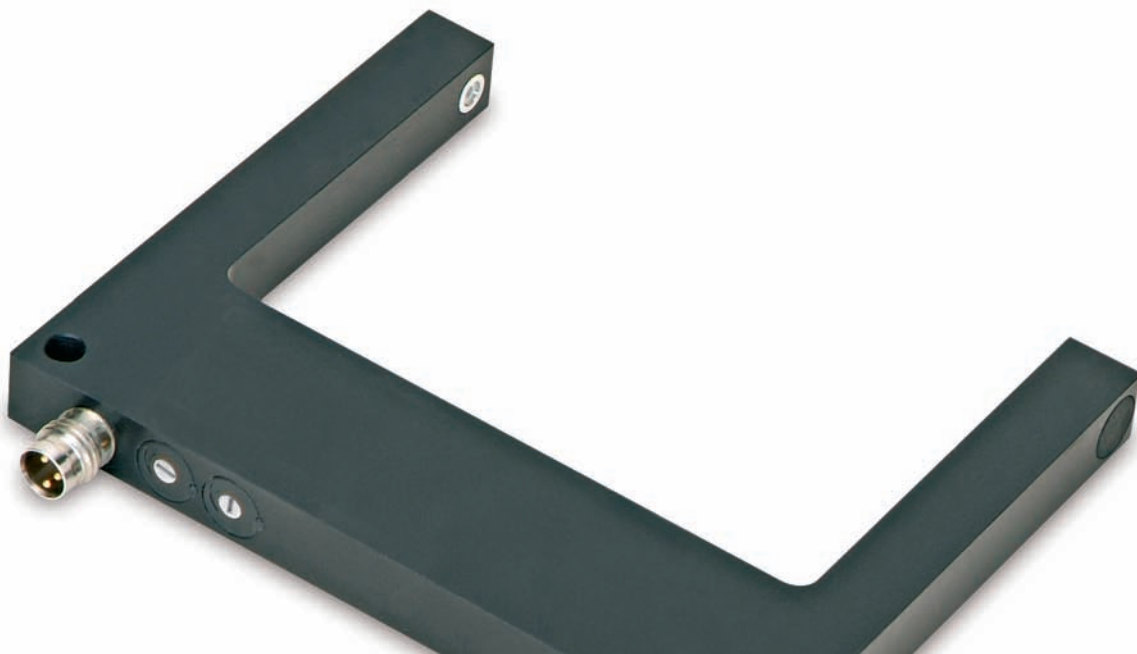
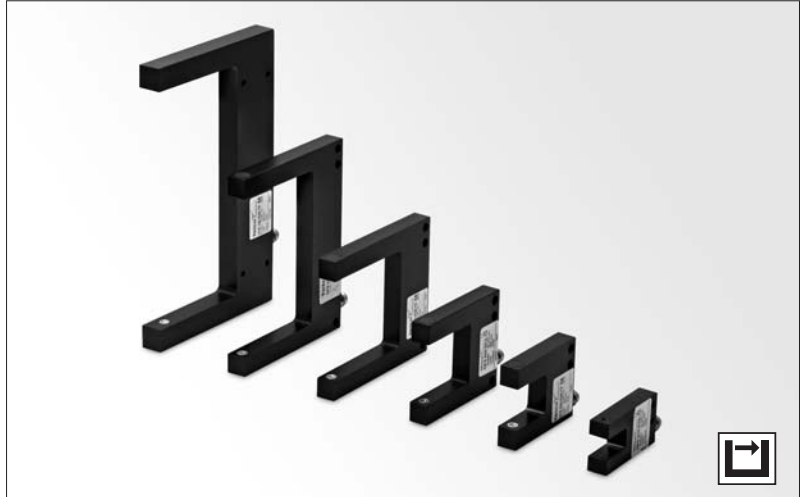


Optical Fork Sensor Series



Description

- 2 mm to 220 mm fork width
- Aluminium housing
- Plug connection
- Infrared light source
- Sensitivity adjustment via potentiometer
- Switch selectable light or dark function
- Output indicators
- High tolerance to hostile environments
- 10-35 V dc supply voltage
- 3 wire, NPN or PNP output
- Fast response time



The OFS series consists of self-contained optical fork sensors that are housed in a durable, U-shaped aluminium housing which operates in thru beam mode. The series is available with a wide variety of fork opening widths, ranging from 2 mm to 220 mm.

The complete series is available as a 3 wire, NPN or PNP transistor output with a 10-35 V dc supply voltage. All models offer sensitivity

adjustment via integral potentiometer and are available with switch selectable light or dark function. The complete series offers a high switching frequency of 2500 Hz.

The series is protected against reverse polarity of power supplies and output signals. The output is protected against short circuit and inductive loads.

Technical Data

Supply voltage	10-35 V dc
Voltage ripple	
Reverse polarity	Yes
Short circuit protected	Yes
Current consumption	Max. 45 mA
Maximum output load	200 mA
Light source	Infrared (880 nm)
Resolution	0.4 mm
Operation frequency	2500 Hz
Response time t_{on} / t_{off}	0,1 ms / 0,1 ms
Output indicator	Yellow LED
Hysteresis	< 0,2 mm
Housing material	Black anodized aluminium

Environmental Data

Vibration	
Shock	10 g
Light immunity, @ 5 ° incidence	> 30 000 lux
Temperature, operation	- 20 to +60 °C
Temperature, storage	- 40 to +80 °C
Sealing Class	IP 67
Approvals	CE

Available Types

Type	Fork opening size		Control Feature	Connection		3 pin, M8 plug		
	Width	Depth		Output		Order Reference		
OFS 002	2 mm	40 mm	Sensitivity potentiometer and light / dark switch	NPN	NO/NC	OFS 002 N3S T3		
				PNP	NO/NC	OFS 002 P3S T3		
OFS 005	5 mm	17 mm	Sensitivity potentiometer	NPN	NC	OFS 005 N1S T3		
				NPN	NO	OFS 005 N2S T3		
				PNP	NC	OFS 005 P1S T3		
				PNP	NO	OFS 005 P2S T3		
OFS010	10 mm			NPN	NC	OFS 010 N1S T3		
						NPN	NO	OFS 010 N2S T3
						PNP	NC	OFS 010 P1S T3
						PNP	NO	OFS 010 P2S T3
OFS 020	20 mm	25 mm	Sensitivity potentiometer and light / dark switch	NPN	NC	OFS 020 N1S T3		
				NPN	NO	OFS 020 N2S T3		
				PNP	NC	OFS 020 P1S T3		
				PNP	NO	OFS 020 P2S T3		
OFS 030	30 mm	35 mm	Sensitivity potentiometer and light / dark switch	NPN	NO/NC	OFS 030 N3S T3		
OFS 050	50 mm	55 mm		PNP	NO/NC	OFS 030 P3S T3		
				NPN	NO/NC	OFS 050 N3S T3		
OFS 080	80 mm	55 mm		PNP	NO/NC	OFS 050 P3S T3		
				NPN	NO/NC	OFS 080 N3S T3		
OFS 120	120 mm	60 mm		PNP	NO/NC	OFS 080 P3S T3		
				NPN	NO/NC	OFS 120 N3S T3		
OFS 220	220 mm	110 mm		PNP	NO/NC	OFS 120 P3S T3		
			NPN	NO/NC	OFS 220 N3S T3			
				PNP	NO/NC	OFS 220 P3S T3		

Connections

	M8 Plug/Cable
Supply +	Pin 1/Brown
Supply -	Pin 3/Blue
Output	Pin 4/Black

3 pin, M8

Sensor Plug (Male)

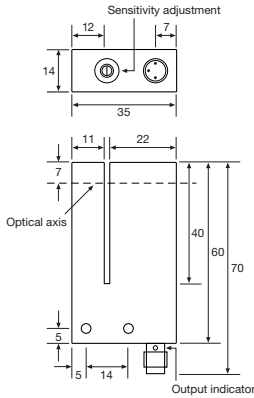
Cable Plug (Female)

Wiring Diagrams

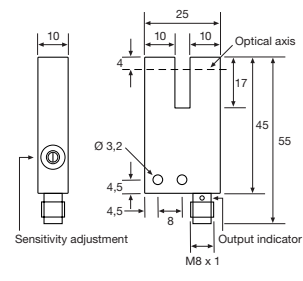
OFS xxx NxS

OFS xxx PxS

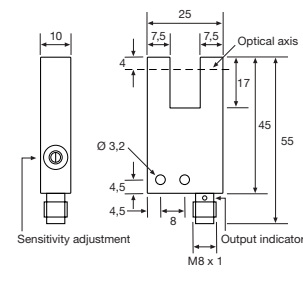
Dimensions and Descriptions



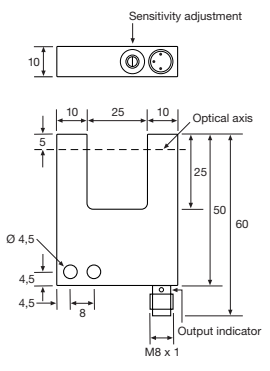
OFS 002



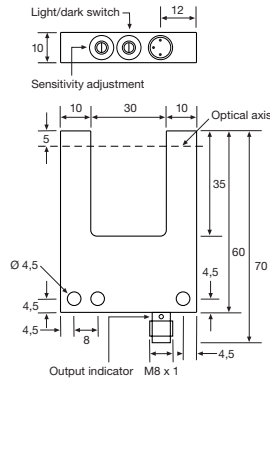
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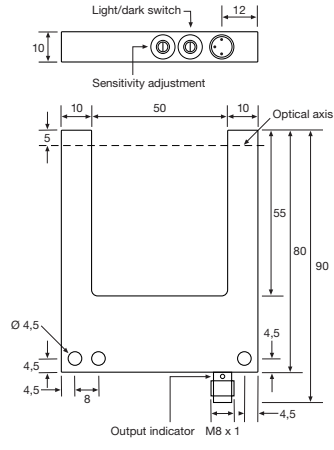
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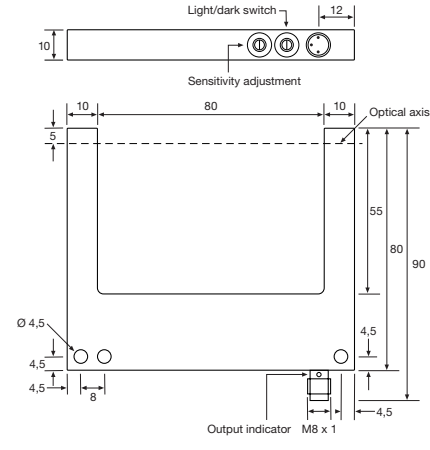
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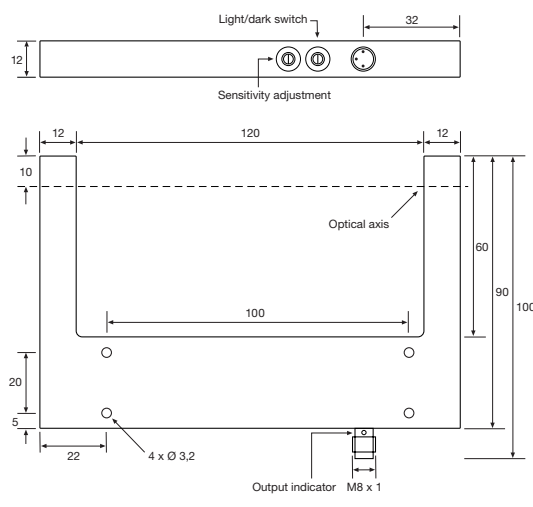
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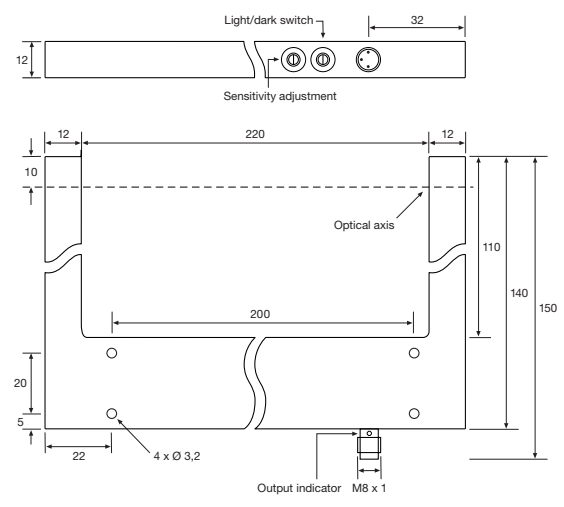
OFS 050



OFS 080



OFS 120



OFS 220

(Units in mm)