

# PS Series Fork Sensors

## Fork Sensor L-frame- Infrared Light



- Rugged metal one-piece housing - always in alignment
- Easy installation
- Infrared light - easy setup
- Glass optics
- High resolution
- Light / Dark operation selectable
- Adjustable sensitivity
- High switching frequency
- M8 connector with 360° LED

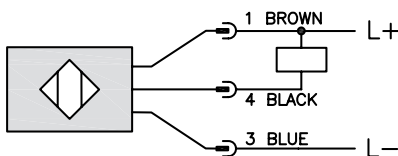


**PS Series Fork Sensor L-frame Selection Chart - Infrared Light**

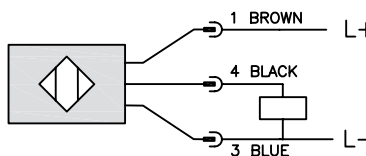
Part Number	Price	Sensing Range	Output State	Logic	Connection	Wiring	Dimensions
<b>PSWI-0N-4F</b>	\$125.00	60mm (2.36 in)	Light On/Dark On Selectable	NPN	M8 connector	Diagram 1	Figure 1
<b>PSWI-0P-4F</b>	\$125.00			PNP		Diagram 2	
<b>PSWI-0N-5F</b>	\$128.00	80mm (3.15 in)		NPN		Diagram 1	Figure 2
<b>PSWI-0P-5F</b>	\$128.00			PNP		Diagram 2	
<b>PSWI-0N-6F</b>	\$131.00	100mm (3.94 in)		NPN		Diagram 1	Figure 3
<b>PSWI-0P-6F</b>	\$131.00			PNP		Diagram 2	
<b>PSWI-0N-7F</b>	\$157.00	130mm (5.12 in)		NPN		Diagram 1	Figure 4
<b>PSWI-0P-7F</b>	\$157.00			PNP		Diagram 2	
<b>PSWI-0N-8F</b>	\$169.00	160mm (6.30 in)		NPN		Diagram 1	Figure 5
<b>PSWI-0P-8F</b>	\$169.00			PNP		Diagram 2	

## Wiring diagrams

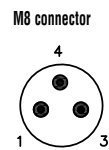
**Diagram 1**



**Diagram 2**



**Connectors**



# PS Series Fork Sensors

Specifications		
	<i>L-frame Visible Red Light</i>	<i>L-frame Infrared</i>
<b>Mounting Type</b>	Angle	
<b>Sensing Distance</b>	60 mm (2.36 in ) to 160mm (6.23 in)	
<b>Smallest Detectable Object</b>	PSWR 4F 0.3 mm (0.12 in) PSWR 5F-6F 0.4 mm (0.16 in) PSWR 7F 0.5 mm (0.02 in) PSWR 8F 0.6 mm (0.24 in)	PSWI 4F 1.0 mm (0.04 in) PSWI 5F 1.2 mm (0.05 in) PSWI 6F-7F-8F 1.5 mm (0.06 in)
<b>Emission</b>	Visible Red Light	Infrared Light
<b>Sensitivity</b>	Adjustable Potentiometer (0 to 270°)	
<b>Output Type</b>	NPN or PNP/ Light on/Dark on/ 3-wire	
<b>Operating Voltage</b>	10 to 30 VDC	
<b>No-load Supply Current</b>	≤ 35 mA	
<b>Operating (Load) Current</b>	200 mA	
<b>Off-state (Leakage) Current</b>	N/A	
<b>Voltage Drop</b>	≤ 3.0V (PNP); ≤2.5 (NPN)	
<b>Switching Frequency</b>	PSWRx 1.5kHz	PSWI 4F-6F, 8F 2kHz; PSWI7F 1kHz
<b>Differential Travel</b>	N/A	
<b>Repeat Accuracy</b>	PSWR4F < 0.04mm; PSWR5F < 0.06mm;	PSWI4F < 0.12 mm; PSWI5F < 0.15 mm; PSWI4 6F-7F-8F < 0.2 mm
<b>Ripple</b>	N/A	
<b>Time Delay Before Availability (tv)</b>	N/A	
<b>Reverse Polarity Protection</b>	Yes	
<b>Short-Circuit Protection</b>	Yes	
<b>Operating Temperature</b>	-10°C to +60°C (14°F to +140°F)	
<b>Protection Degree (DIN 40050)</b>	IP67	
<b>Indication/Switch Status</b>	On Yellow LED	
<b>Housing Material</b>	GD Zn (Gadolinium-Zinc)	
<b>Sensing Face Material</b>	Glass	
<b>Shock</b>	Meets IEC 68-2-27 (See Photoelectric Sensor Terminology at the end of this section for more details)	
<b>Vibration</b>	Meets IEC 68-2-6 (See Photoelectric Sensor Terminology at the end of this section for more details)	
<b>Tightening Torque</b>	N/A	
<b>Weight</b>	PSWx4F 94 g (3.32 oz) PSWx5F 125 g (4.41 oz) PSWx6F 150 g (5.29 oz) PSWx7F 233 g (8.22oz) PSWx8F 334 g (11.78 oz)	
<b>Connection</b>	M8 connector	
<b>Agency Approvals</b>	UL E328811- CE	

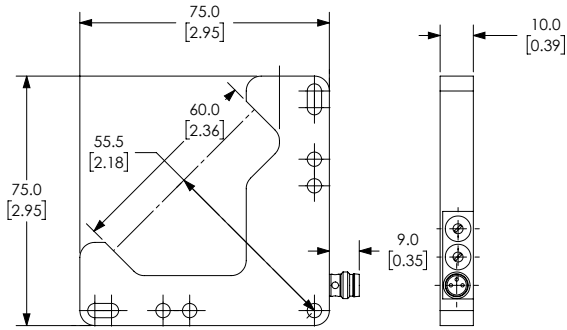
Note: To obtain the most current agency approval information— see the Agency Approval Checklist section on the specific part number's web page.

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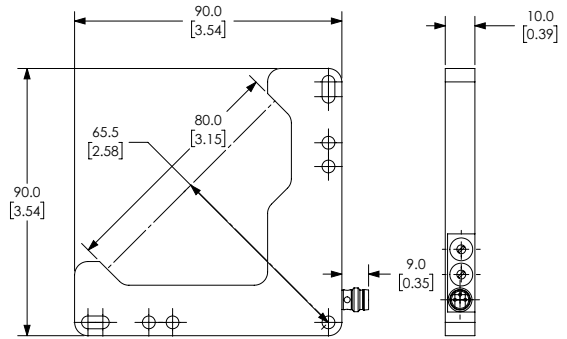
## Dimensions

mm  
[inch]

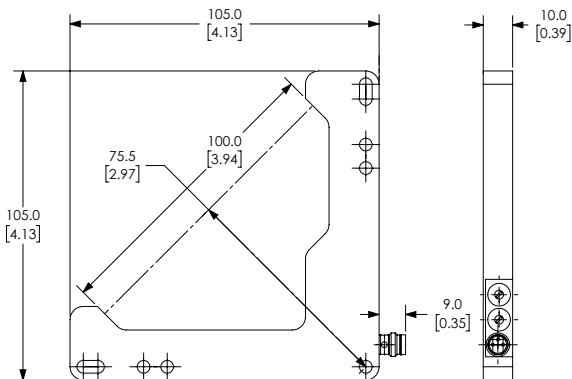
**Figure 1**



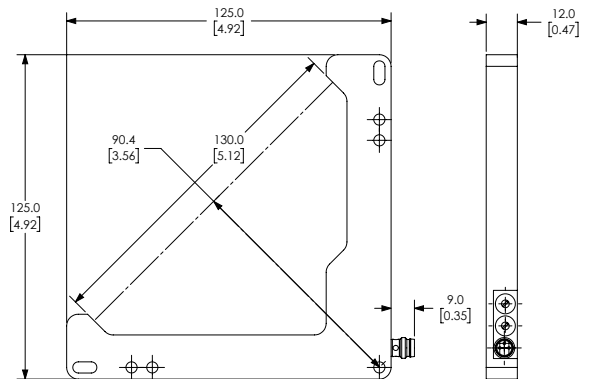
**Figure 2**



**Figure 3**



**Figure 4**



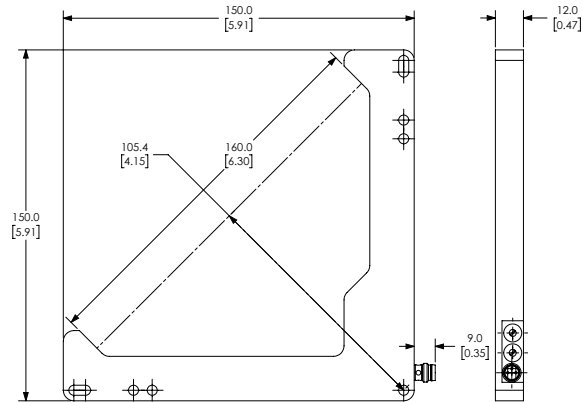
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# PS Series Fork Sensors

## Dimensions

mm  
[inch]

Figure 5



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