

PS Series Fork Sensors L-Frame

Fork Sensor L-Frame- Visible Red Light



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



PS Series Fork Sensor L-Frame - Visible Red Light Selection Chart

Part Number	Price	Sensing Range	Output State	Logic	Connection	Wiring	Dimensions
<u>PSWR-0N-4F</u>		60mm [2.36in]	Light-on/Dark-on Selectable	NPN	M8 connector	Diagram 1	Figure 1
<u>PSWR-0P-4F</u>				PNP		Diagram 2	
<u>PSWR-0N-5F</u>		80mm [3.15in]		NPN		Diagram 1	Figure 2
<u>PSWR-0P-5F</u>				PNP		Diagram 2	
<u>PSWR-0N-6F</u>		100mm [3.94in]		NPN		Diagram 1	Figure 3
<u>PSWR-0P-6F</u>				PNP		Diagram 2	
<u>PSWR-0N-7F</u>		130mm [5.12in]		NPN		Diagram 1	Figure 4
<u>PSWR-0P-7F</u>				PNP		Diagram 2	
<u>PSWR-0N-8F</u>		160mm [6.30in]		NPN		Diagram 1	Figure 5
<u>PSWR-0P-8F</u>				PNP		Diagram 2	

Wiring Diagrams

Diagram 1

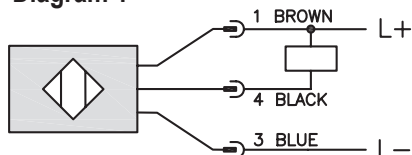
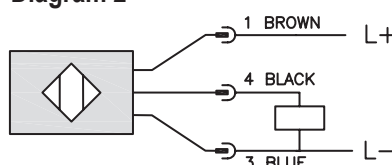
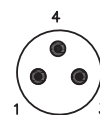


Diagram 2



Connectors

M8 connector



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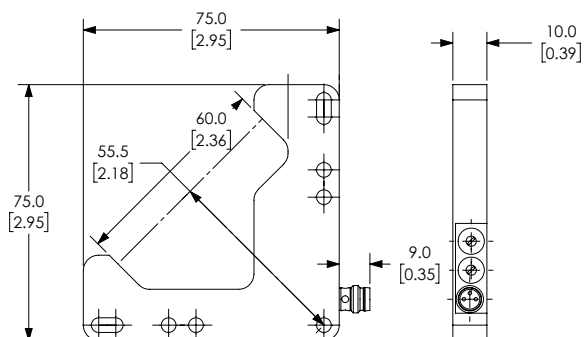
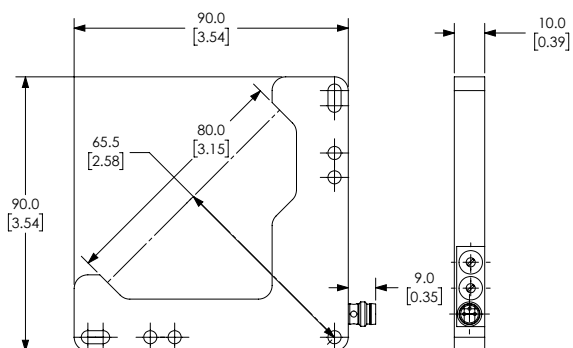
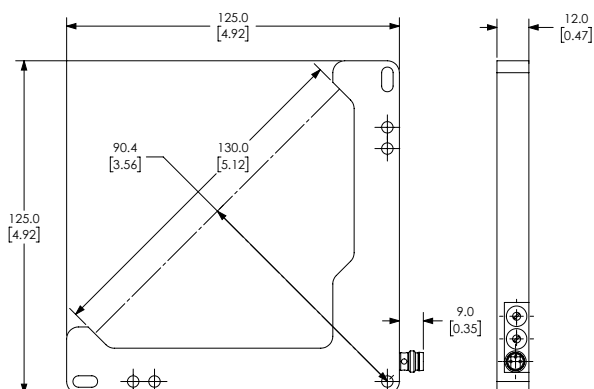
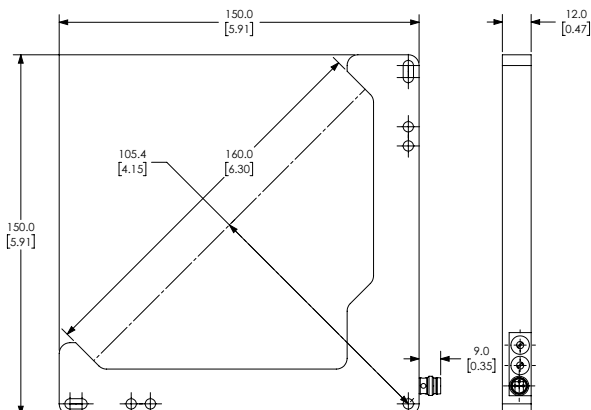
Specifications		
	L-Frame Visible Red Light	L-Frame Infrared
Mounting Type	Angle	
Sensing Distance	60mm [2.36in] to 160mm [6.23in]	
Smallest Detectable Object	PSWR 4F 0.3mm [0.012in] PSWR 5F 0.4mm [0.016in] PSWR 7F 0.5mm [0.020in] PSWR 8F 0.6mm [0.024in]	PSWI 4F 1.0mm [0.039in] PSWI 5F 1.2mm [0.047in] PSWI 7F-8F 1.5mm [0.059in]
Emission	Visible Red Light	Infrared Light
Sensitivity	Adjustable Potentiometer [0 to 270°]	
Output Type	NPN or PNP/ Light on/Dark on/ 3-wire	
Operating Voltage	10 to 30 VDC	
No-load Supply Current	≤35 mA	
Operating (Load) Current	200 mA	
Off-state (Leakage) Current	N/A	
Voltage Drop	≤3.0V [PNP]; ≤2.5 [NPN]	
Switching Frequency	PSWRx 1.5 kHz	PSWI 4F, 8F 2 kHz; PSWI7F 1 kHz
Differential Travel	N/A	
Repeat Accuracy	PSWR4F < 0.04mm; PSWR5F < 0.06mm;	PSWI4F < 0.12mm; PSWI5F < 0.15mm; PSWI4 7F-8F < 0.2mm
Ripple	N/A	
Time Delay Before Availability (tv)	N/A	
Reverse Polarity Protection	Yes	
Short-Circuit Protection	Yes	
Operating Temperature	-10 to +60 °C [+14 to +140 °F]	
Protection Degree (DIN 40050)	IP67	
Indication/Switch Status	On Yellow LED	
Housing Material	GD Zn [Gadolinium-Zinc]	
Sensing Face Material	Glass	
Shock	Meets IEC 68-2-27 [See Photoelectric Sensor at the end of this section for more details]	
Vibration	Meets IEC 68-2-6 [See Photoelectric Sensor at the end of this section for more details]	
Tightening Torque	N/A	
Weight	PSWx4F 94g [3.32oz] PSWx5F 125g [4.41oz] PSWx7F 233g [8.22oz] PSWx8F 334g [11.78oz]	
Connection	M8 connector	
Agency Approvals	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.

Fork Sensors PS Series

Dimensions

mm [inches]

Figure 1**Figure 2****Figure 4****Figure 5**See our website: www.AutomationDirect.com for complete Engineering drawings.