

PS Series Fork Sensors

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 Selection Chart - Visible Red Light							
Part Number	Price	Sensing Range	Output State	Logic	Connection	Wiring	Dimensions
PSWR-0N-4F	\$146.00	60mm [2.36 in]	Light-on/Dark-on Selectable	NPN	M8 connector	Diagram 1	Figure 1
PSWR-0P-4F	\$146.00			PNP		Diagram 2	
PSWR-0N-5F	\$163.00	80mm [3.15 in]		NPN		Diagram 1	Figure 2
PSWR-0P-5F	\$163.00			PNP		Diagram 2	
PSWR-0N-6F	\$178.00	100mm [3.94 in]		NPN		Diagram 1	Figure 3
PSWR-0P-6F	\$178.00			PNP		Diagram 2	
PSWR-0N-7F	\$190.00	130mm [5.12 in]		NPN		Diagram 1	Figure 4
PSWR-0P-7F	\$190.00			PNP		Diagram 2	
PSWR-0N-8F	\$211.00	160mm [6.30 in]		NPN		Diagram 1	Figure 5
PSWR-0P-8F	\$211.00			PNP		Diagram 2	

Wiring Diagrams

Diagram 1

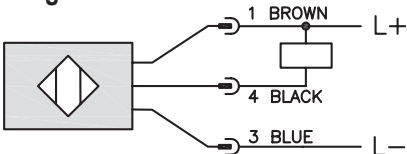
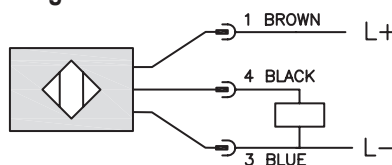
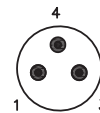


Diagram 2



Connectors

M8 connector



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Specifications		
	L-frame Visible Red Light	L-frame Infrared
Mounting Type	Angle	
Sensing Distance	60 mm [2.36 in.] to 160mm [6.23 in.]	
Smallest Detectable Object	PSWR 4F 0.3 mm [0.012 in] PSWR 5F-6F 0.4 mm [0.016 in] PSWR 7F 0.5 mm [0.020 in] PSWR 8F 0.6 mm [0.024 in]	PSWI 4F 1.0 mm [0.039 in] PSWI 5F 1.2 mm [0.047 in] PSWI 6F-7F-8F 1.5 mm [0.059 in]
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	≤ 35mA	
Operating (Load) Current	200mA	
Off-state (Leakage) Current	N/A	
Voltage Drop	≤ 3.0V [PNP]; ≤2.5 [NPN]	
Switching Frequency	PSWRx 1.5kHz	PSWI 4F-6F, 8F 2kHz; PSWI7F 1kHz
Differential Travel	N/A	
Repeat Accuracy	PSWR4F < 0.04mm; PSWR5F < 0.06mm;	PSWI4F < 0.12 mm; PSWI5F < 0.15 mm; PSWI4 6F-7F-8F < 0.2 mm
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 [3.32 oz] PSWx5F 125g [4.41 oz] PSWx6F 150g [5.29 oz] PSWx7F 233g [8.22 oz] PSWx8F 334g [11.78 oz]	
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.

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Dimensions

mm [inches]

Figure 1

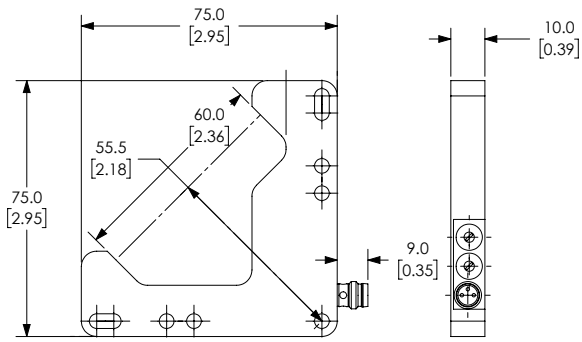


Figure 2

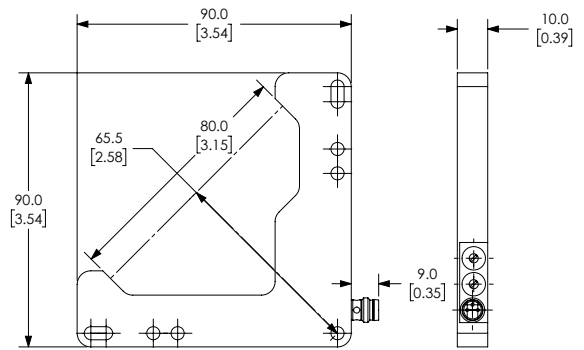


Figure 3

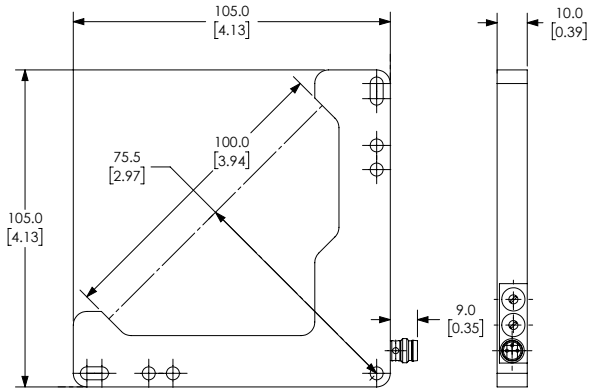
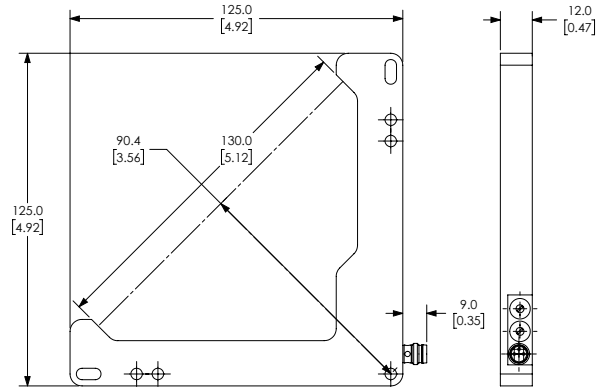


Figure 4



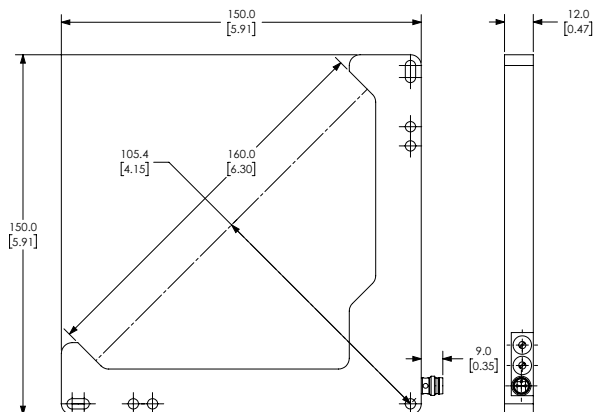
See our website: www.AutomationDirect.com for complete Engineering drawings.

PS Series Fork Sensors

Dimensions

mm [inches]

Figure 5



See our website: www.AutomationDirect.com for complete Engineering drawings.