Fork Sensors PS Series

Fork Sensor U-frame - Liquid Detection

Features

- Rugged metal one-piece housing - always in alignment
- Slot sensor
- Infrared
- Liquid Detection
- Easy installation

- High resolution
- Light-on/Dark-on Selectable
- Adjustable sensitivity
- High switching frequency
- M8 connector with 360° LED

NEED CABLES?

PS Series Fork Sensor U-frame Selection Chart - Liquid Detection							
Part Number	*Price*	*Sensing Range*	*Output State*	*Logic*	*Connection*	*Wiring*	*Dimensions*
PSTI-0P-4F	$205.00	30mm [1.18 in]	Light-on/Dark-on Selectable	PNP	M8 connector	Diagram 2	Figure 1
PSTI-0N-4F	$205.00	30mm [1.18 in]	Light-on/Dark-on Selectable	NPN	M8 connector	Diagram 1	
PSTI-0P-6F	$236.00	80mm [3.15 in]	Light-on/Dark-on Selectable	PNP	M8 connector	Diagram 2	Figure 2
PSTI-0N-6F	$236.00	80mm [3.15 in]	Light-on/Dark-on Selectable	NPN	M8 connector	Diagram 1	

Wiring Diagrams

Diagram 1

| 1 BROWN — L+ |
| 4 BLACK |
| 3 BLUE — L− |

Diagram 2

| 1 BROWN — L+ |
| 4 BLACK |
| 3 BLUE — L− |
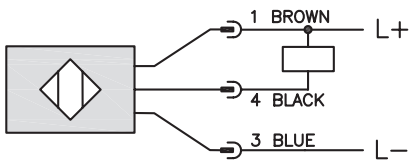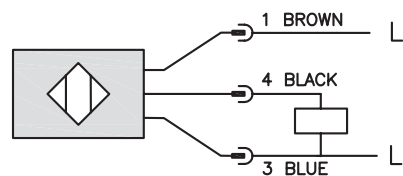
Connectors

M8 connector
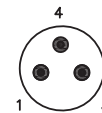
Note: Class 2 power supply required

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Specifications	
	Liquid Detection
Mounting Type	Slot
Sensing Distance	30mm [1.18 in] or 80mm [3.15 in]
Smallest Detectable Object*	PSTI 4F 0.6 mm [0.003 in] PSTI 6F 0.8 mm [0.031 in]
Emission	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	2kHz
Differential Travel	N/A
Repeat Accuracy*	0.1 mm (0.0039 in)
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	PSTI 4F 66g [2.33 oz] PSTI 6F 135g [4.76 oz]
Connection	M8 connector
Agency Approvals	CE

Note: To obtain the most current agency approval information– see the Agency Approval Checklist section on the specific part number's web page.
* Data applies to solid targets.

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Dimensions

mm [inches]

Figure 1

50.0
[1.97]

30.0
[1.18]

4.0
[0.16]

34.0
[1.34]

59.0
[2.32]

M8X1.0

9.0
[0.35]

10.0
[0.39]

Figure 2

100.0
[3.94]

80.0
[3.15]

4.0
[0.16]

54.0
[2.13]

79.0
[3.11]

M8X1.0

9.0
[0.35]

10.0
[0.39]

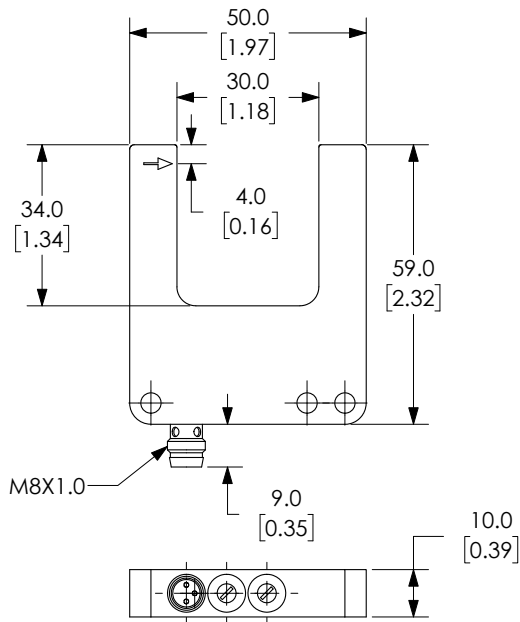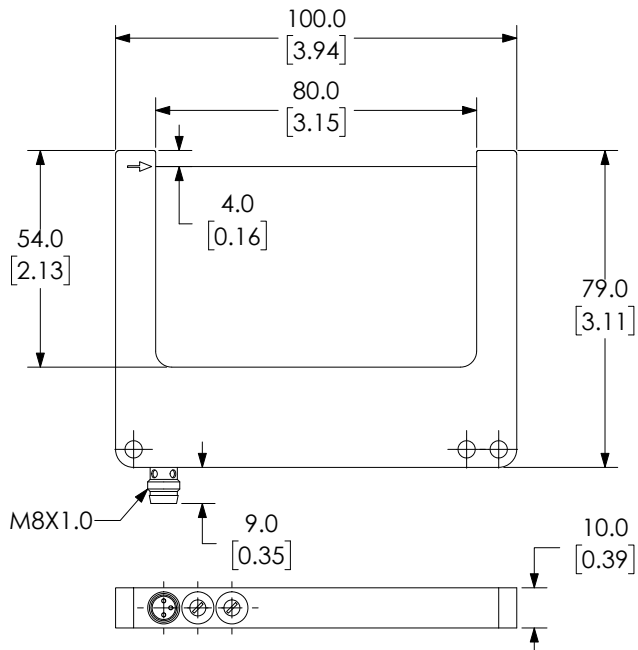*See our website: www.AutomationDirect.com for complete Engineering drawings.*