# PS Series Fork Sensors

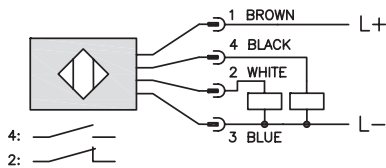## Fork Sensor U-Frame - Food Applications

- Rugged metal one-piece housing - always in alignment
- Easy installation
- Stainless steel slot sensor
- Visible red light

- Food applications
- Complementary light /dark operation
- High switching frequency
- M12 connector with cable

**NEED CABLES?**

| PS Series Fork Sensor U-frame Selection Chart - Food Applications | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Part Number* | *Price* | *Sensing Range* | *Output State* | *Logic* | *Connection* | *Wiring* | *Dimensions* |
| **PSUFR-0P-5F** | | 50mm  (1.18 in) | Complementary Light On/Dark On | PNP | M12 connector | Diagram 1 | Figure 1 |
| **PSUFR-0P-6F** | | 80mm  (3.15 in) | | | | Diagram 1 | Figure 2 |

## Wiring diagrams

**Diagram 1**



```
1  BROWN    L+
4  BLACK
2  WHITE
3  BLUE     L−

4:
2:
```

**Connectors**

**M12 connector**



```
2      1

3      4
```
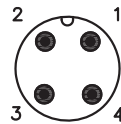
# PS Series Fork Sensors

| Specifications | |
|---|---|
| | **Food Applications** |
| **Mounting Type** | Slot |
| **Sensing Distance** | 50mm (1.97 in) to 80mm (3.15 in) |
| **Smallest Detectable Object** | PSUFR 5F 0.8 mm (0.003 in)<br>PSUFR 6F 1.0 mm (0.04 in) |
| **Emission** | Visible Red Light |
| **Output Type** | PNP/ Light on/Dark on/ 4-wire |
| **Operating Voltage** | 10 to 30VDC |
| **No-load Supply Current** | ≤ 35mA |
| **Operating (Load) Current** | 200mA |
| **Off-state (Leakage) Current** | N/A |
| **Voltage Drop** | ≤ 3.0V (PNP) |
| **Switching Frequency** | 3kHz |
| **Differential Travel** | N/A |
| **Repeat Accuracy** | 25µ |
| **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/IP69k |
| **Indication/Switch Status** | On Yellow LED |
| **Housing Material** | 316 L Stainless Steel |
| **Sensing Face Material** | PMMA |
| **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** | PSUFx5F 285g (10.05 oz)<br>PSUFx6F 340g (11.99 oz) |
| **Connection** | 0.25m PUR cable with 4-pin M12 quick-disconnect |
| **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.**

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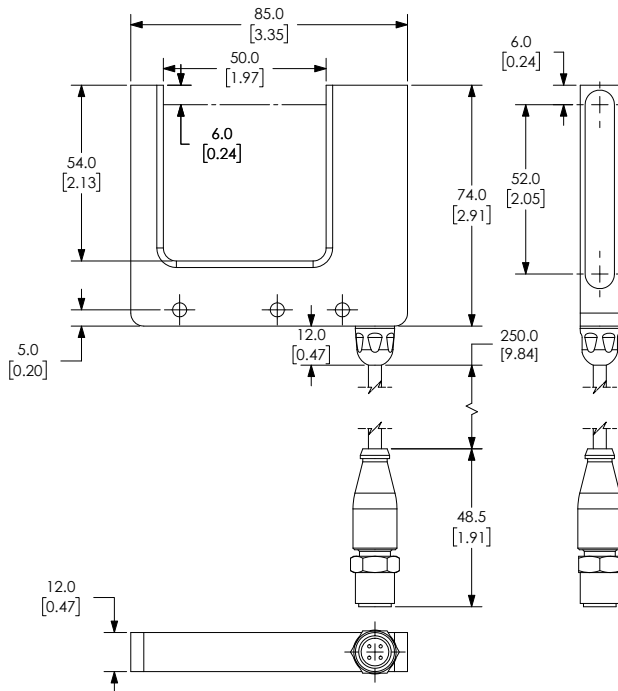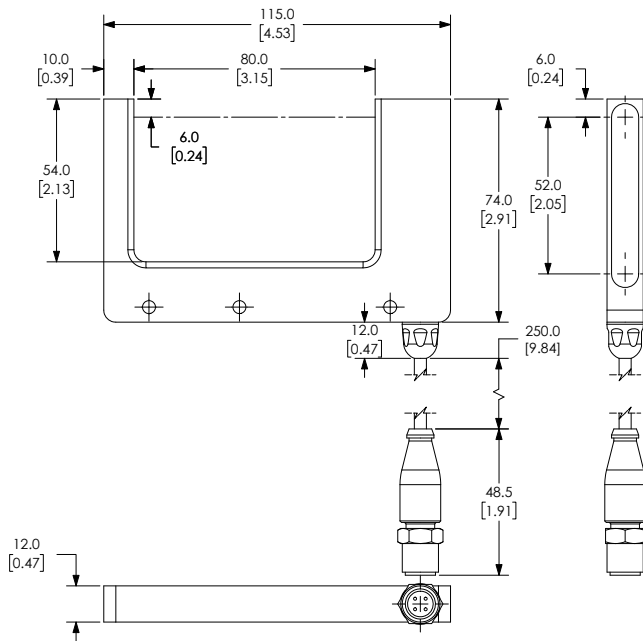
## Dimensions

mm [inch]

**Figure 1**



**Figure 2**



*See our website:  for complete Engineering drawings.*