

# VFT Series IP69K-rated Proximity Sensors



**VFT1-A0-1M**  
**VFT1-A0-2M**

## 30mm Stainless Steel - AC

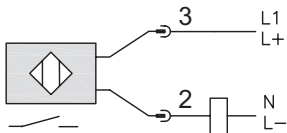
- 30mm diameter
- 316L stainless steel housing
- 1/2" micro AC quick-disconnect plug with gold-plated pins (purchase cable separately)
- Complete overload protection
- IP69K rated for food and beverage applications
- M30 mounting hex nuts included
- Lifetime warranty



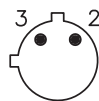
| VFT Series Food and Beverage AC Inductive Proximity Selection Chart |         |                               |           |              |                                     |           |            |
|---|---------|-------------------------------|-----------|--------------|-------------------------------------|-----------|------------|
| Part Number   | Price   | Sensing Range                 | Mounting  | Output State | Connection                          | Wiring    | Dimensions |
| <b>VFT1-A0-1M</b>   | \$71.00 | 0 to 14 mm<br>[0 to 0.551 in] | Flush     | N.O.         | 1/2" micro AC quick-disconnect plug | Diagram 1 | Figure 1   |
| <b>VFT1-A0-2M</b>   | \$71.00 | 0 to 22 mm<br>[0 to 0.866 in] | Non-flush |              | 1/2" micro AC quick-disconnect plug | Diagram 1 | Figure 1   |

## Wiring Diagram

Diagram 1



Connector



Note: Class 2 power supply required

# VFT Series IP69K-rated Proximity Sensors

## VFT Series Food and Beverage AC Inductive Proximity Specifications

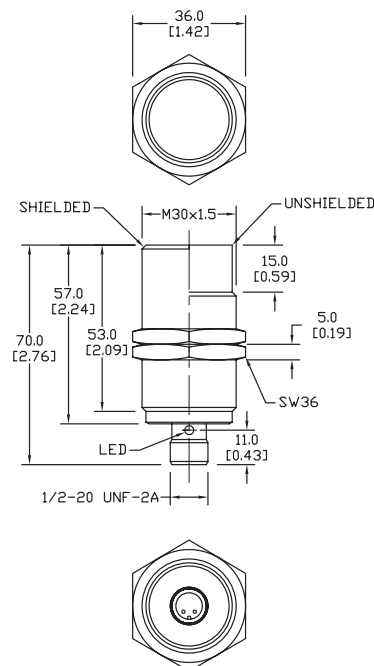
| Mounting Type                               | Flush  | Non-flush                  |
|---|--|----------------------------|
| Nominal Sensing Distance                    | 0 to 14 mm [0 to 0.551 in]                       | 0 to 22 mm [0 to 0.866 in] |
| Operating Distance                          | NA   | NA                         |
| Material Correction Factors                 | See the <a href="#">Material influence table</a> |                            |
| Output Type                                 | N.O. only  |                            |
| Operating Voltage                           | 20 to 140 VAC/VDC                                |                            |
| No-load Supply Current                      | NA   |                            |
| Operating (Load) Current                    | 5 - 200mA  |                            |
| Off-state (Leakage) Current                 | < 1mA  |                            |
| Voltage Drop                                | < 5.5 V  |                            |
| Switching Frequency                         | 25Hz VAC/100Hz VDC                               |                            |
| Differential Travel (% of Nominal Distance) | 2 - 15%  | 3 - 15%                    |
| Repeat Accuracy                             | 10%  |                            |
| Ripple                                      | NA   |                            |
| Time Delay Before Availability (tv)         | 1s   |                            |
| Reverse Polarity Protection                 | yes  |                            |
| Short-Circuit Protection                    | yes (non latching)                               |                            |
| Operating Temperature                       | 0 to 100°C [32 to 212°F]                         |                            |
| Protection Degree (DIN 40050)               | IEC IP68/IP69K, II                               |                            |
| Indication/Switch Status                    | Normally Open output energized - Yellow          |                            |
| Housing Material                            | 316L stainless steel                             |                            |
| Sensing Face Material                       | PEEK (Polyether Ether Ketone)                    |                            |
| Shock/Vibration                             | See <a href="#">Proximity Sensor Terminology</a> |                            |
| Tightening Torque                           | 80 Nm [59 lb-ft]                                 |                            |
| Weight                                      | 149g [5.25 oz]                                   | 142g [5.01 oz]             |
| Connection                                  | 1/2" micro AC connector                          |                            |
| Agency Approvals                            | UL E328811, CE, ECOLAB, RoHS                     |                            |

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

## Dimensions

mm [inches]

Figure 1



# Accessories for 30mm Sensors

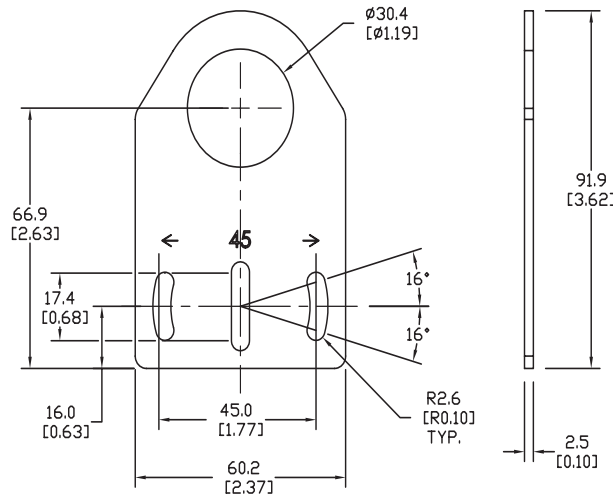
## Axial Mounting Bracket

Mounting bracket, axial, zinc-plated steel. For use with 30mm sensors. Has two mounting holes (use 5mm screws) and allows the rotation of an optical axis for right-beam-angle-adaptor sensors. Hexagonal nuts not included.

| Accessories for 30mm Sensors |        |  |               |
|------------------------------|--------|--|---------------|
| Part Number                  | Price  | Description  | Weight lb [g] |
| <b>ST30A</b>                 | \$2.25 | Micro Detectors mounting bracket, axial, zinc plated steel. For use with 30mm sensors. | 0.18 [81.7]   |

### Dimensions

mm [inches]



**ST30A**

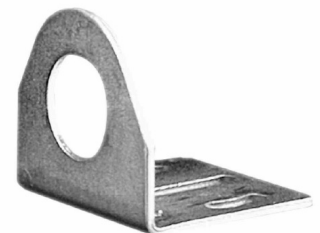
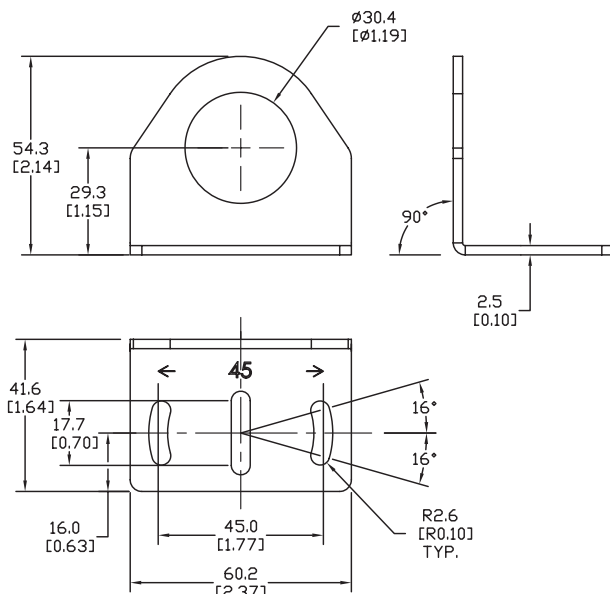
## Right-angle Mounting Bracket

Mounting bracket, right-angle, zinc-plated steel. For use with 30mm sensors. Has two mounting holes (use 5mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal nuts not included.

| Accessories for 30mm Sensors |        |  |               |
|------------------------------|--------|--|---------------|
| Part Number                  | Price  | Description  | Weight lb [g] |
| <b>ST30C</b>                 | \$2.25 | Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 30mm sensors. | 0.18 [81.7]   |

### Dimensions

mm [inches]



**ST30C**

# Accessories for 30mm Sensors

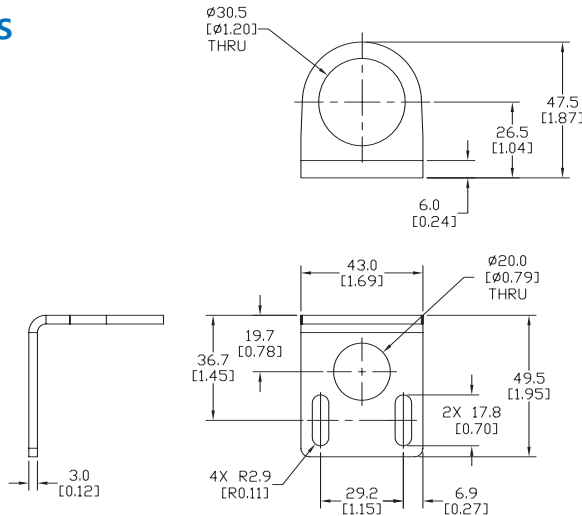
## Right-angle Mounting Bracket

Mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors.

| Accessories for FW Series Sensors |        |   |               |
|-----------------------------------|--------|---|---------------|
| Part Number                       | Price  | Description   | Weight lb [g] |
| <a href="#">ST30C6W</a>           | \$4.00 | AutomationDirect mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors. | 0.15 [68.0]   |

### Dimensions

mm [inches]



[ST30C6W](#)

## Right-angle Swivel Mounting Systems

Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with 30mm sensors. Available in all 304 stainless steel or with an aluminum head with a 304 stainless steel mounting plate.

| Accessories for 30mm Sensors |         |  |                     |                     |                     |               |
|------------------------------|---------|--|---------------------|---------------------|---------------------|---------------|
| Part Number                  | Price   | Description  | Mounting Head       | Mounting Plate      | Drawing Link        | Weight lb [g] |
| <a href="#">OPT2118</a>      | \$11.50 | Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 30mm sensors.            | Aluminum            | 304 Stainless steel | <a href="#">PDF</a> | 0.18 [81.7]   |
| <a href="#">OPT2119</a>      | \$21.00 | Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 30mm sensors. | 304 Stainless Steel | 304 Stainless steel | <a href="#">PDF</a> | 0.18 [81.7]   |

Note: 304 Stainless steel mounting rods sold separately: [OPT2109](#) (200mm [7.87 in] length), [OPT2110](#) (300mm [11.81 in] length), and [OPT2111](#) (500mm [19.69 in] length).



[OPT2118](#), [OPT2119](#)

# Mounting Rods and Brackets

## Mounting Rods

304 Stainless steel rods for mounting swivel brackets [OPT2112](#) - [OPT2127](#). Available in three lengths: 200mm, 300mm, and 500mm. 12mm diameter.

| Mounting Rods for OPT2112-2127 Swivel Mounting Brackets |         |   |                     |                  |
|---|---------|---|---------------------|------------------|
| Part Number   | Price   | Description   | Drawing Link        | Weight lb (g)    |
| <a href="#">OPT2109</a>                                 | \$13.00 | Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel. | <a href="#">PDF</a> | 0.41<br>[185.97] |
| <a href="#">OPT2110</a>                                 | \$16.00 | Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel. | <a href="#">PDF</a> | 0.60<br>[272.16] |
| <a href="#">OPT2111</a>                                 | \$21.00 | Wenglor mounting rod, 12mm diameter, 500mm length, 304 stainless steel. | <a href="#">PDF</a> | 0.98<br>[444.52] |



## Right-angle Mounting Bracket

Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods [OPT2109](#), [OPT2110](#) & [OPT2111](#).

| Right-angle Mounting Brackets for 12mm Sensors |         |   |                     |                |
|--|---------|---|---------------------|----------------|
| Part Number                                    | Price   | Description   | Drawing Link        | Weight lb [g]  |
| <a href="#">OPT2108</a>                        | \$16.00 | Wenglor mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods <a href="#">OPT2109</a> , <a href="#">OPT2110</a> & <a href="#">OPT2111</a> . | <a href="#">PDF</a> | 0.07<br>[31.8] |

