VFT Series IP69K-rated Proximity Sensors

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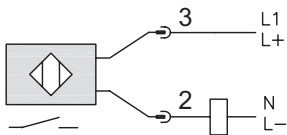**VFT1-A0-2M**

30 mm stainless steel - AC

- 2 models available
- 30 mm 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
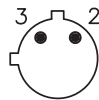- M30 mounting hex nuts included
- Lifetime warranty

VFT Series Food and Beverage AC Inductive Prox Selection Chart							
Part Number	Price	Sensing Range	Mounting	Output State	Connection	Wiring	Dimensions
VFT1-A0-1M		0 to 14 mm (0 to 0.551 in)	Flush	N.O.	1/2" micro AC quick-disconnect plug	Diagram 1	Figure 1
VFT1-A0-2M		0 to 22 mm (0 to 0.866 in)	Non-flush		1/2" micro AC quick-disconnect plug	Diagram 1	Figure 1

Wiring diagram

Diagram 1
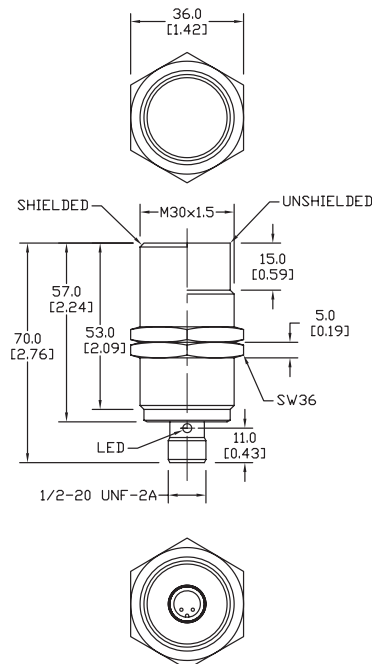

Connector

NOTE: CLASS 2 POWER SUPPLY REQUIRED

VFT Series IP69K-rated Proximity Sensors

VFT Series 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 Material influence table	
Output Type	N.O. only	
Operating Voltage	20 to 140 VAC/VDC	
No-load Supply Current	NA	
Operating (Load) Current	5 - 200 mA	
Off-state (Leakage) Current	< 1 mA	
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)	1 s	
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 Proximity Sensor Terminology	
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	

Dimensions

mm [inches]]

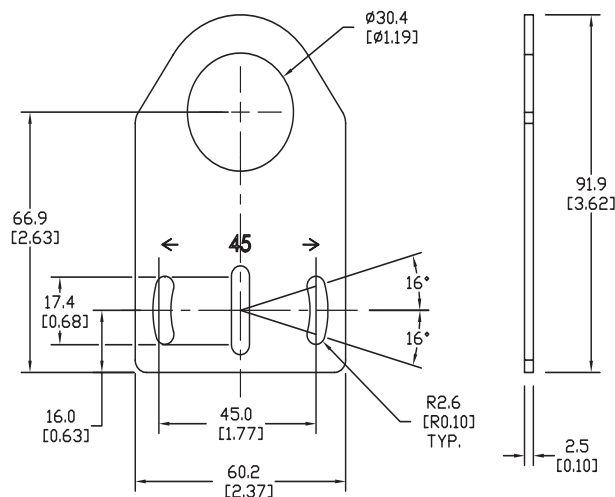**Figure 1**

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-adapter sensors. Hexagonal nuts not included.

Accessories for 30mm Sensors			
Part Number	Price	Description	Weight lb [g]
ST30A		Mounting bracket, axial, zinc plated steel. For use with 30mm sensors.	0.18 (81.7)

Dimensions
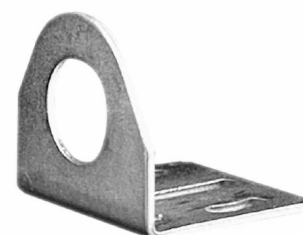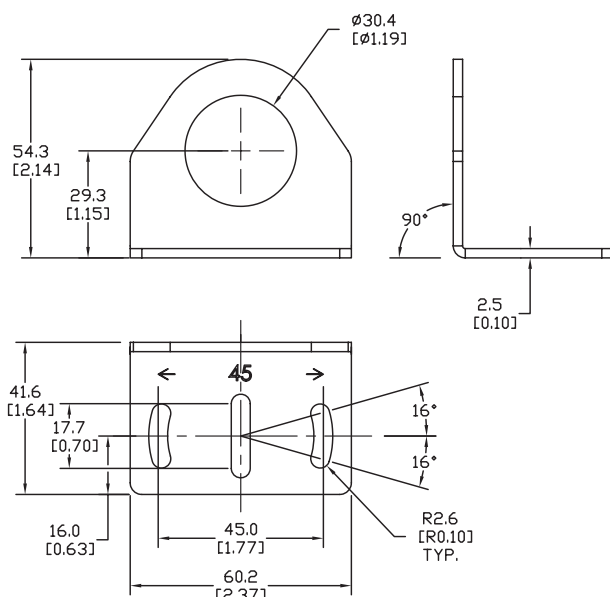
mm [inches]

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]
ST30C		Mounting bracket, right-angle, zinc plated steel. For use with 30mm sensors.	0.18 (81.7)

Dimensions
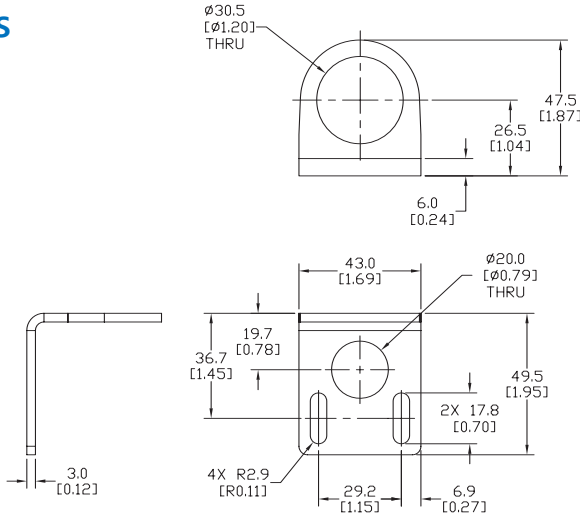
mm [inches]

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]
ST30C6W		Mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors.		0.15 (68.0)

Dimensions

mm [inches]

ø30.5 [ø1.20] THRU
47.5 [1.87]
26.5 [1.04]
6.0 [0.24]

43.0 [1.69]
ø20.0 [ø0.79] THRU
19.7 [0.78]
36.7 [1.45]
49.5 [1.95]
2X 17.8 [0.70]
3.0 [0.12]
4X R2.9 [R0.11]
29.2 [1.15]
6.9 [0.27]

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]
OPT2118		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	PDF	0.18 (81.7)
OPT2119		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	PDF	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)**
OPT2109		Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	PDF	0.41 (185.97)
OPT2110		Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	PDF	0.60 (272.16)
OPT2111		Wenglor mounting rod, 12mm diameter, 500mm length, 304 stainless steel.	PDF	0.98 (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)**
OPT2108		Wenglor mounting bracket, right-angle, nickel plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	PDF	0.07 (31.8)