

VFK Series IP69K-rated Proximity Sensors



VFK1-A0-1M
VFK1-A0-2M

18 mm stainless steel - AC

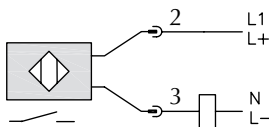
- 2 models available
- 18 mm diameter
- 316 L stainless steel housing
- 1/2" micro AC quick-disconnect plug with gold-plated pins (purchase cable separately)
- Complete overload protection
- IP69K rated for food and beverage applications
- M18 mounting hex nuts included
- Lifetime warranty



VFK Series Food and Beverage AC Inductive Prox Selection Chart							
Part Number	Price	Sensing Range	Housing	Output State	Connection	Wiring	Dimensions
VFK1-A0-1M	\$55.00	0 to 5 mm (0 to 0.197 in)	Shielded	NO	1/2" micro AC quick-disconnect plug	Diagram 1	Figure 1
VFK1-A0-2M	\$55.00	0 to 12 mm (0 to 0.472 in)	Unshielded		1/2" micro AC quick-disconnect plug	Diagram 1	Figure 1

Wiring diagram

Diagram 1



Connector



NOTE: CLASS 2 POWER SUPPLY REQUIRED

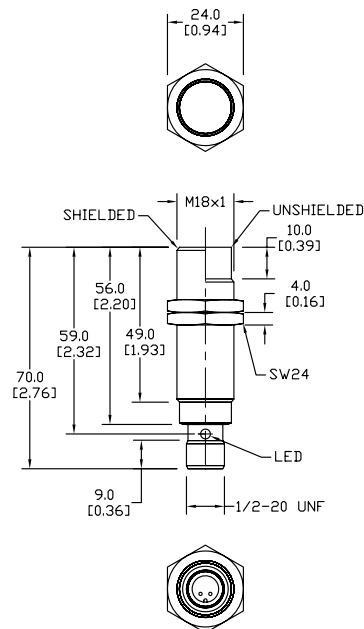
VFK Series IP69K-rated Proximity Sensors

VFK Series Specifications		
Mounting Type	Shielded	Unshielded
Nominal Sensing Distance	0 to 5 mm (0 to 0.197 in)	0 to 12 mm (0 to 0.472 in)
Operating Distance	NA	
Material Correction Factors	See the Material influence table	
Output Type	NO 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	25 Hz VAC/400 Hz VDC	25 Hz VAC/300 Hz VDC
Differential Travel (% of Nominal Distance)	1 - 20%	
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	316 L stainless steel	
Sensing Face Material	PEEK (Polyether Ether Ketone)	
Shock/Vibration	See Proximity Sensor Terminology	
Tightening Torque	50 Nm (37 lb-ft)	
Weight	68 g (2.39 oz)	59 g (2.08 oz)
Connection	1/2" micro AC connector	
Agency Approvals	UL E328811, CE, ECOLAB, RoHS	

Dimensions

mm [inches]

Figure 1



Accessories for 18mm Sensors

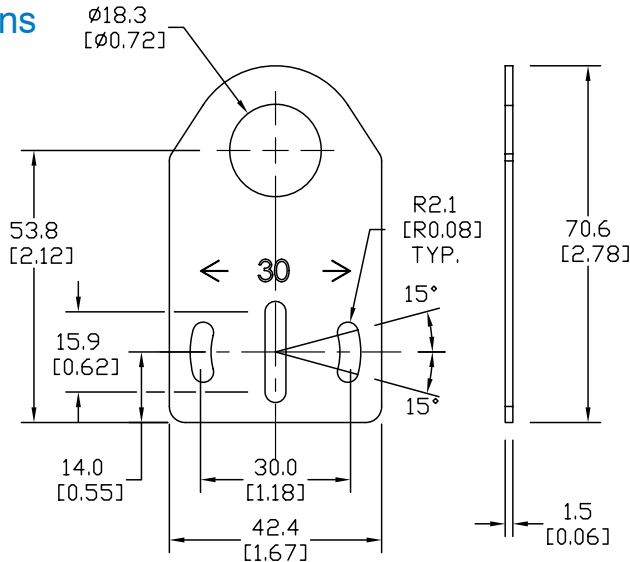
Axial Mounting Bracket

Axial mounting bracket for use with 18mm sensors. Has two mounting holes (use 4mm screws) and allows for rotation of an optical axis for right-beam-angle-adaptor sensors. Hexagonal nuts not included.

Accessories for 18mm Sensors			
Part Number	Price	Description	Weight [lb]
ST18A	\$1.25	Mounting bracket, axial, zinc-plated steel. For use with 18mm sensors. 1/pk.	0.06
ST18A7W	\$6.00	Mounting bracket, axial, 316L stainless steel. For use with 18mm sensors. 1/pk.	0.06

Dimensions

mm [inches]



ST18A

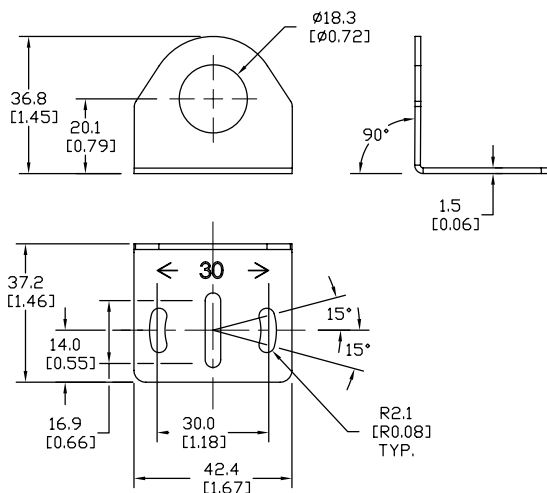
Right-angle Mounting Bracket

Right-angle mounting bracket for use with 18mm sensors. Has two mounting holes (use 4mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal nuts not included.

Accessories for 18mm Sensors			
Part Number	Price	Description	Weight [lb]
ST18C	\$1.25	Mounting bracket, right angle, zinc-plated steel. For use with 18mm sensors. 1/pk.	0.06
ST18C7W	\$6.00	Mounting bracket, right angle, 316L stainless steel. For use with 18mm sensors. 1/pk.	0.06

Dimensions

mm [inches]



ST18C

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

Accessories for 18mm Sensors

Right-angle Mounting Brackets

Mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 18mm sensors. Available with or without fixed insertion stop.

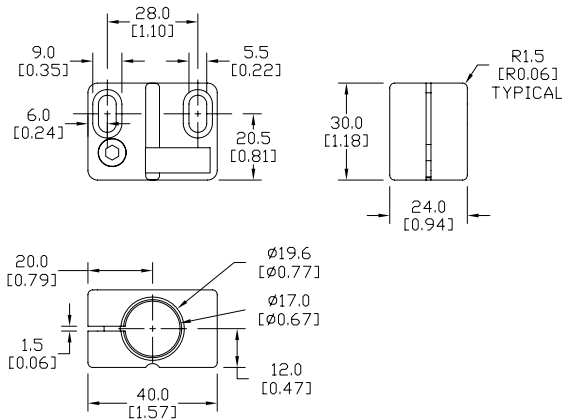
Accessories for 18mm Sensors				
Part Number	Price	Description	Weight [lb]	
OPT2104	\$8.00	Mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 18mm sensors.	0.06	
OPT2105	\$8.00	Mounting bracket, right-angle, plastic. For use with 18mm sensors.	0.06	



OPT2104, OPT2105

Dimensions

mm [inches]



Right-angle Swivel Mounting Systems

Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with 18mm sensors. Available in all 304 stainless steel or with an aluminum head and a stainless steel mounting plate.

Accessories for 18mm Sensors					
Part Number	Price	Description	Mounting Head	Mounting Plate	Weight [lb]
OPT2116	\$9.00	Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 18mm sensors.	Aluminum	304 Stainless Steel	0.15
OPT2117	\$16.00	Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 18mm sensors.	304 Stainless Steel	304 Stainless Steel	0.28

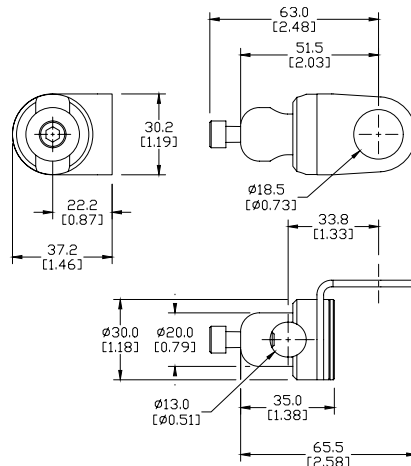


OPT2116, OPT2117

Note: 304 Stainless steel mounting rods sold separately: OPT2109 (200mm length), OPT2110 (300mm length), and OPT2111 (500mm length).

Dimensions

mm [inches]



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

Mounting Rods

Mounting Rods

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

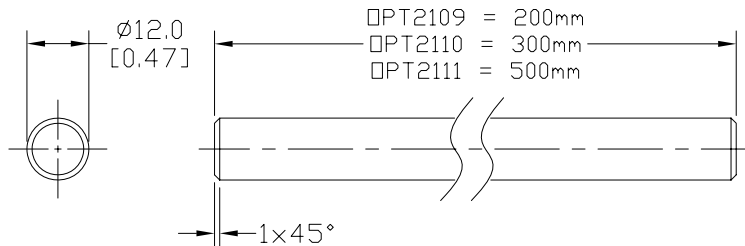
Mounting Rods for OPT2112-2127 Swivel Mounting Brackets			
Part Number	Price	Description	Weight [lb]
OPT2109	\$10.00	Mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	0.41
OPT2110	\$12.00	Mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	0.60
OPT2111	\$16.00	Mounting rod, 12mm diameter, 500mm length, 304 stainless steel.	0.98



OPT2109, OPT2110, OPT2111

Dimensions

mm [inches]



Right-angle Mounting Bracket

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

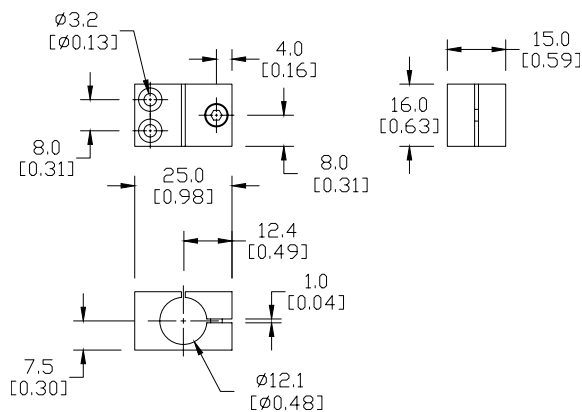
Accessories for 12mm Sensors			
Part Number	Price	Description	Weight [lb]
OPT2108	\$12.00	Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	0.07



OPT2108

Dimensions

mm [inches]



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