PFT Series IP69K-rated Proximity Sensors



PFT1-AP-3H PFT1-AP-4H

30 mm Stainless Steel - DC

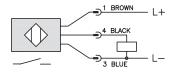
- PFT1 series short-body length, PFT2 series – regular body length
- 30 mm diameter
- 316L stainless steel housing
- M12 quick-disconnect plug with gold-plated pins (purchase cable separately)
- Complete overload protection
- IP69K rated for food and beverage applications
- M30 mounting hex nuts included
- Lifetime warranty



PFT Series Food and Beverage DC Inductive Proximity Selection Chart								
Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Dimensions
PFT1-AP-3H	\$55.00	0 to 14 mm [0 to 0.551 in]	Flush	N.O.	PNP	M12 [12mm] connector	Diagram 1	Figure 1
PFT2-AP-3H	Retired	0 to 15 mm [0 to 0.590 in]			PNP	M12 [12mm] connector	Diagram 1	Figure 2
PFT1-AP-4H	Retired	0 to 22 mm [0 to 0.866 in]	Non-fluid	N.O.	PNP	M12 [12mm] connector	Diagram 1	Figure 1
PFT2-AP-4H	\$55.00		Non-flush	N.O.	PNP	M12 [12mm] connector	Diagram 1	Figure 2

Wiring Diagram

Diagram 1 PNP output



Connector

M12 connector



Note: Class 2 power supply required

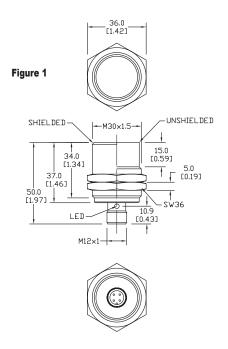
PFT Series IP69K-rated Proximity Sensors

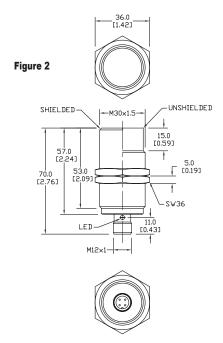
PFT Series Food and Beverage DC Inductive Proximity Specifications							
Mounting Type	Flu		Non-flush				
Series	PFT1	PFT2	PFT1	PFT2			
Nominal Sensing Distance	14mm [0.551 in]	15mm [0.590 in]	22mm [0	0.866 in]			
Operating Distance		N	A				
Material Correction Factors		See the Materia	l influence table				
Output Type		PNP, N	.O. only				
Operating Voltage		10 - 30	6 VDC				
No-load Supply Current		≤ 10)mA				
Operating (Load) Current		≤ 10	0mA				
Off-state (Leakage) Current NA							
Voltage Drop	≤ 2.5 V						
Switching Frequency	50Hz 100Hz)Hz			
Differential Travel (% of Nominal Distance)		3 - 1	15%				
Repeat Accuracy		10	1%				
Ripple		N	A				
Time Delay Before Availability (tv)		30	ms				
Reverse Polarity Protection		Yes					
Short-Circuit Protection		Yes (switch auto-resets a	fter overload is removed)				
Operating Temperature		0 to 100°C [0 to 100°C [32 to 212°F]				
Protection Degree (DIN 40050)	IEC IP68, IP69K						
Indication/Switch Status		Normally Open output energized - Yellow					
Housing Material		316 L stair	nless steel				
Sensing Face Material		PEEK (Polyethe	er Ether Ketone)				
Shock/Vibration	See Proximity Sensor Terminology						
Tightening Torque	80 Nm [59 lb-ft]						
Weight	110g [3.88 oz]	130g [4.58 oz]	107g [3.77 oz]	124g [4.37 oz]			
Connection	M12 plug with gold-plated pins						
Agency Approvals		UL file E328811, C	E 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]





Accessories for 30mm Sensors

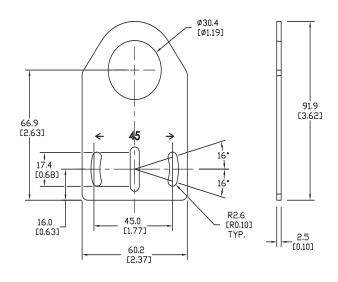
Axial Mounting Bracket

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]		
<u>ST30A</u>	\$2.25	Micro Detectors mounting bracket, axial, zinc plated steel. For use with 30mm sensors.	0.18 [81.7]		

Dimensions

mm [inches]





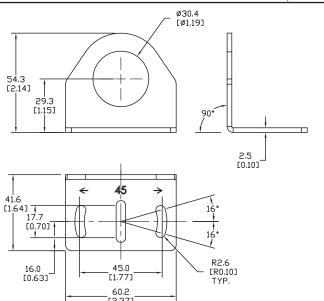
Right-angle Mounting Bracket

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	Part Number Price Description					
ST30C	\$2.25	Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 30mm sensors.	0.18 [81.7]			

Dimensions

mm [inches]



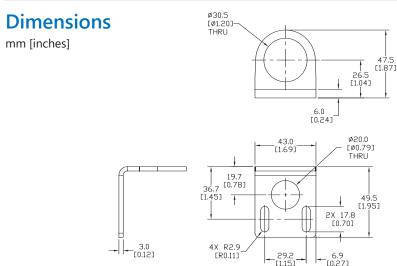


Accessories for 30mm Sensors

Right-angle Mounting Bracket

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

Accessories for FW Series Sensors						
Part Number	Part Number Price Description					
<u>ST30C6W</u>	\$5.50	AutomationDirect mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors.	0.15 (68.0)			





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 Ib [g]				
<u>OPT2118</u>	\$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	<u>PDF</u>	0.18 [81.7]				
<u>OPT2119</u>	\$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	<u>PDF</u>	0.18 [81.7]				

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



OPT2118, OPT2119

Mounting Rods and Brackets

Mounting Rods

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

M	Mounting Rods for OPT2112-2127 Swivel Mounting Brackets							
Part Number	Price	Description	Drawing Link	Weight Ib (g)				
<u>OPT2109</u>	\$13.00	Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	PDF	0.41 [185.97]				
<u>OPT2110</u>	\$16.00	Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	PDF	0.60 [272.16]				
<u>OPT2111</u>	\$21.00	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 Ib [g]				
<u>OPT2108</u>	\$16.00	Wenglor mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	<u>PDF</u>	0.07 [31.8]			



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