

PFT Series IP69K-rated Proximity Sensors



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

30 mm stainless steel - DC

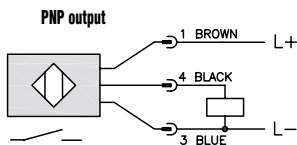
- 4 models available:
PFT1 series – short-body length,
PFT2 series – regular body length
- 30 mm diameter
- 316 L stainless steel housing
- M12 quick-disconnect plug with gold-plated pins
(purchase cable separately)
- Complete overload protection
- IP69K rated for food and beverage applications
- M30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



PFT Series Food and Beverage DC Inductive Prox Selection Chart								
Part Number	Price	Sensing Range	Housing	Output State	Logic	Connection	Wiring	Dimensions
PFT1-AP-3H	\$46.00	0 to 14 mm (0 to 0.551 in)	Shielded	NO	PNP	M12 (12 mm) connector	Diagram1	Figure 1
PFT2-AP-3H	\$46.00	0 to 15 mm (0 to 0.590 in)			PNP	M12 (12 mm) connector	Diagram1	Figure 2
PFT1-AP-4H	\$46.00	0 to 22 mm (0 to 0.866 in)	Unshielded	NO	PNP	M12 (12 mm) connector	Diagram1	Figure 1
PFT2-AP-4H	\$46.00				PNP	M12 (12 mm) connector	Diagram1	Figure 2

Wiring diagram

Diagram 1



Connector



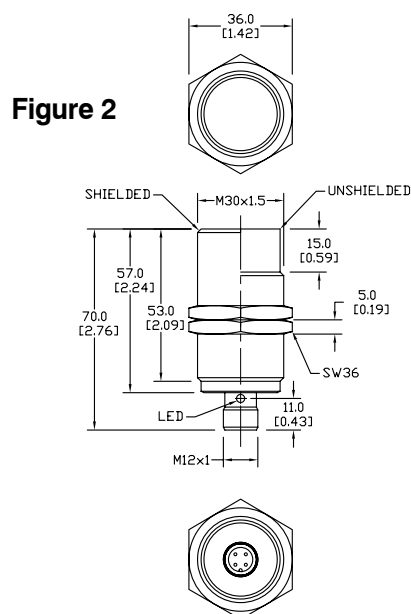
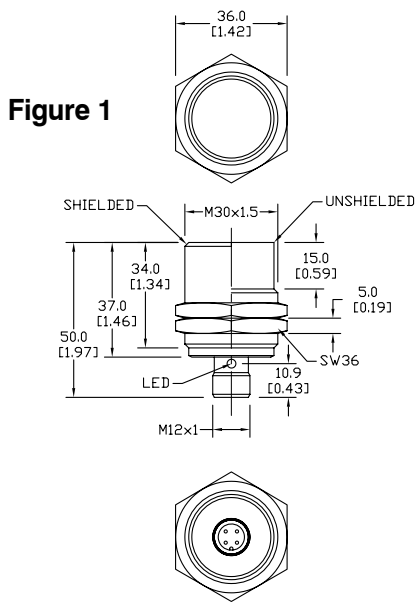
NOTE: CLASS 2 POWER SUPPLY REQUIRED

PFT Series IP69K-rated Proximity Sensors

PFT Series Specifications				
Mounting Type	Shielded		Unshielded	
	PFT1	PFT2	PFT1	PFT2
Nominal Sensing Distance	14 mm (0.551 in)	15 mm (0.590 in)	22 mm (0.866 in)	
Operating Distance	NA			
Material Correction Factors	See the Material influence table			
Output Type	PNP, NO only			
Operating Voltage	10 - 36 VDC			
No-load Supply Current	≤10 mA			
Operating (Load) Current	≤100 mA			
Off-state (Leakage) Current	NA			
Voltage Drop	≤2.5 V			
Switching Frequency	50 Hz		100 Hz	
Differential Travel (% of Nominal Distance)	3 - 15%			
Repeat Accuracy	10%			
Ripple	NA			
Time Delay Before Availability (tv)	30 ms			
Reverse Polarity Protection	Yes			
Short-Circuit Protection	Yes (switch auto-resets after overload is removed)			
Operating Temperature	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 stainless steel			
Sensing Face Material	PEEK (Polyether Ether Ketone)			
Shock/Vibration	See Proximity Sensor Terminology			
Tightening Torque	80 Nm (59 lb-ft)			
Weight	110 g (3.88 oz)	130 g (4.58 oz)	107 g (3.77 oz)	124 g (4.37 oz)
Connection	M12 plug with gold-plated pins			
Agency Approvals	UL file E328811, CE ECOLAB, RoHS			

Dimensions

mm [inches]



Accessories for 30mm Sensors

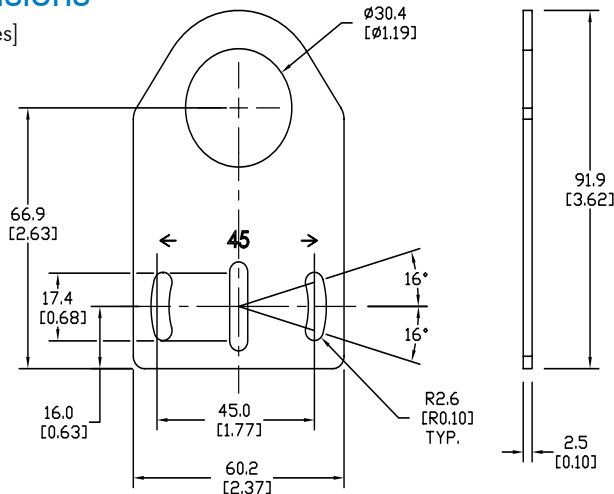
Axial Mounting Bracket

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-adaptor sensors. Hexagonal nuts not included.

Accessories for 30mm Sensors			
Part Number	Price	Description	Weight [lb]
ST30A	\$2.00	Mounting bracket, axial, zinc-plated steel. For use with 30mm sensors. 1/pk.	0.18

Dimensions

mm [inches]



ST30A

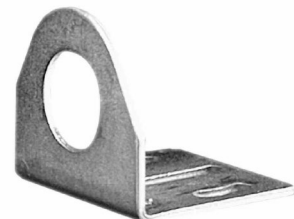
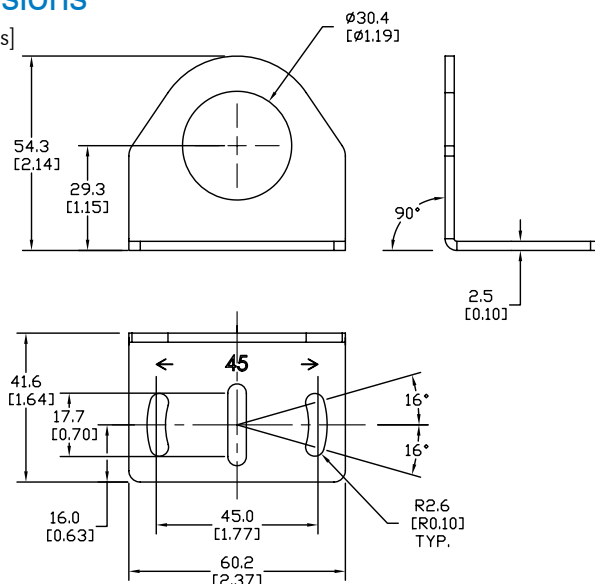
Right-angle Mounting Bracket

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]
ST30C	\$2.00	Mounting bracket, right angle, zinc-plated steel. For use with 30mm sensors. 1/pk.	0.18

Dimensions

mm [inches]



ST30C

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

Accessories for 30mm Sensors

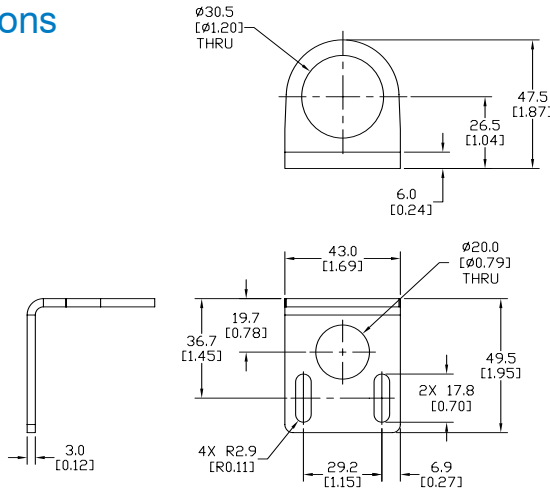
Right-angle Mounting Bracket

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

Accessories for FW Series Sensors			
Part Number	Price	Description	Weight [lb]
ST30C6W	\$2.50	Mounting bracket, right angle, 304 stainless steel. For use with 30mm sensors.	0.15

Dimensions

mm [inches]



ST30C6W

Right-angle Swivel Mounting Systems

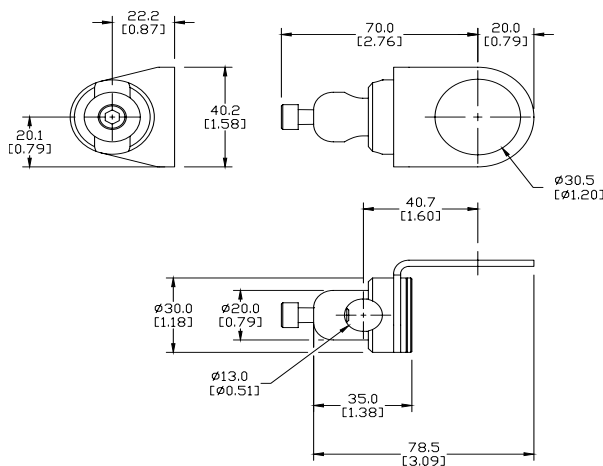
Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with 30mm sensors. Available in all 304 stainless steel or with an aluminum head with a 304 stainless steel mounting plate.

Accessories for 30mm Sensors					
Part Number	Price	Description	Mounting Head	Mounting Plate	Weight [lb]
OPT2118	\$9.25	Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 30mm sensors.	Aluminum	304 Stainless Steel	0.18
OPT2119	\$16.50	Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 30mm sensors.	304 Stainless Steel	304 Stainless Steel	0.30

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

Dimensions

mm [inches]



OPT2118, OPT2119

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.

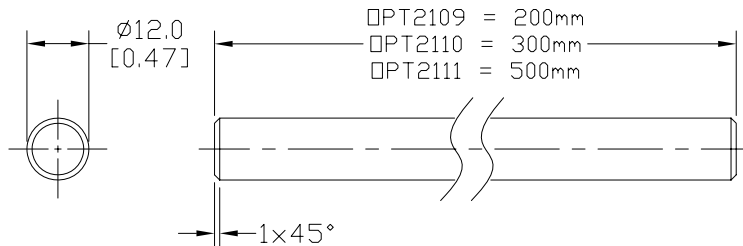
Mounting Rods for OPT2112-2127 Swivel Mounting Brackets			
Part Number	Price	Description	Weight [lb]
OPT2109	\$10.50	Mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	0.41
OPT2110	\$12.50	Mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	0.60
OPT2111	\$16.50	Mounting rod, 12mm diameter, 500mm length, 304 stainless steel.	0.98



OPT2109, OPT2110, OPT2111

Dimensions

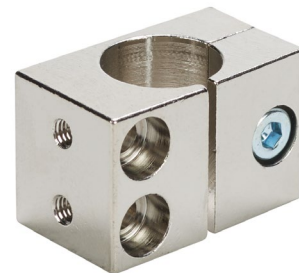
mm [inches]



Right-angle Mounting Bracket

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

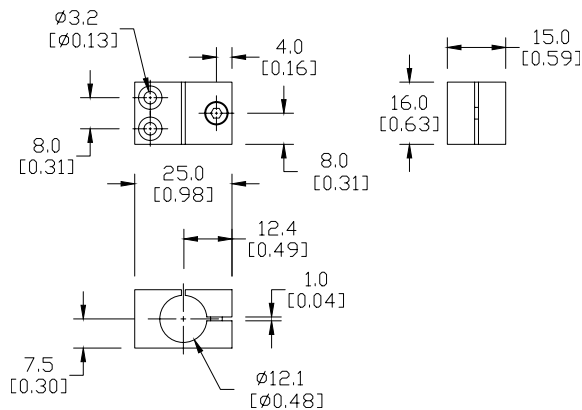
Accessories for 12mm Sensors			
Part Number	Price	Description	Weight [lb]
OPT2108	\$12.50	Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	0.07



OPT2108

Dimensions

mm [inches]



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