

# PB Series Inductive Proximity Sensors

## Nickel-plated Brass - DC



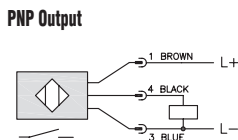
- Low cost/high performance
- IP67 rated
- LED status indicators
- M12 quick-disconnect; purchase cable separately
- Lifetime warranty



Basic Series Inductive Prox Selection Chart								
Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Dimensions
<b>M30 Models</b>								
<b>PBT-AP-1H</b>	\$18.00	10 mm (0.394 in)	Flush	N.O.	PNP	M12 (12mm) connector	Diagram 1	Figure 1

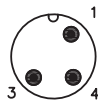
## Wiring diagrams

Diagram 1



## Connector

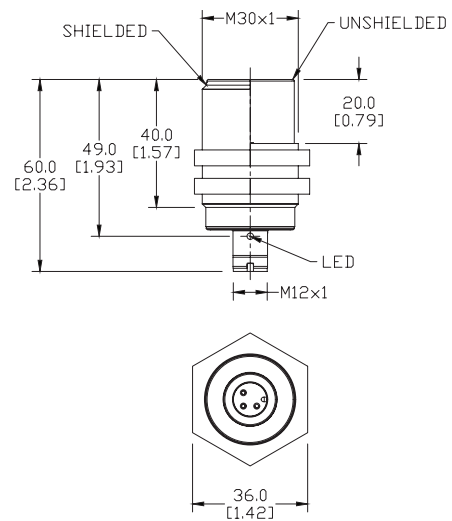
M12 connector



## Dimensions

mm [inches]

Figure 1



# PB Series Inductive Proximity Sensors

PB Series Specifications	M30 Models	
<b>Mounting Type</b>	Flush	Non-flush
<b>Nominal Sensing Distance</b>	10mm (0.394 in)	15mm (0.590 in)
<b>Operating Distance</b>	NA	
<b>Material Correction Factors</b>	See the <a href="#">Material influence table</a>	
<b>Output Type</b>	NPN or PNP, N.O. only	
<b>Operating Voltage</b>	15 to 30 VDC	
<b>No-load Supply Current</b>	< 15 mA	
<b>Operating (Load) Current</b>	100mA	
<b>Off-state (Leakage) Current</b>	< 0.1 mA	
<b>Voltage Drop</b>	< 2.5 V	
<b>Switching Frequency</b>	200Hz	
<b>Differential Travel (% of Nominal Distance)</b>	NA	
<b>Repeat Accuracy</b>	NA	
<b>Ripple</b>	NA	
<b>Time Delay Before Availability (tv)</b>	NA	
<b>Reverse Polarity Protection</b>	Yes	
<b>Short-circuit Protection</b>	Yes, pulsed	
<b>Operating Temperature</b>	-25° to 70°C (-13° to 158°F)	
<b>Protection Degree (DIN 40050)</b>	IEC IP67	
<b>Indication/Switch Status</b>	Yellow (output energized)	
<b>Housing Material</b>	Housing: brass, nickel-plated; Lock nuts: brass	
<b>Sensing Face Material</b>	Polybutylene Terephthalate (PBT)	
<b>Shock/Vibration</b>	See <a href="#">Proximity Sensor Terminology</a>	
<b>Tightening Torque</b>	50.0 Nm (36.8 lb-ft)	
<b>Weight</b>	8.50 g (0.30 oz)	5.70 g (0.20 oz)
<b>Connectors</b>	M12 connector. 2 lock nuts included	
<b>Agency Approvals</b>	cULus file E328811, CE, RoHS	

# Accessories for 30mm Sensors

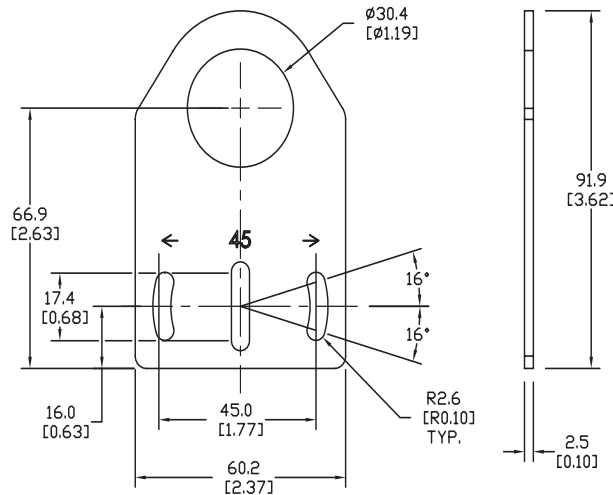
## Axial Mounting Bracket

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
<b>ST30A</b>	\$2.25	Mounting bracket, axial, zinc plated steel. For use with 30mm sensors.	0.18 (81.7 g)

### Dimensions

mm [inches]



**ST30A**

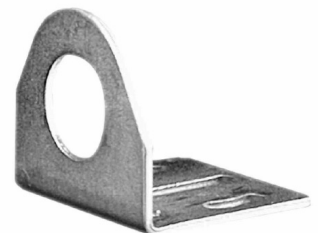
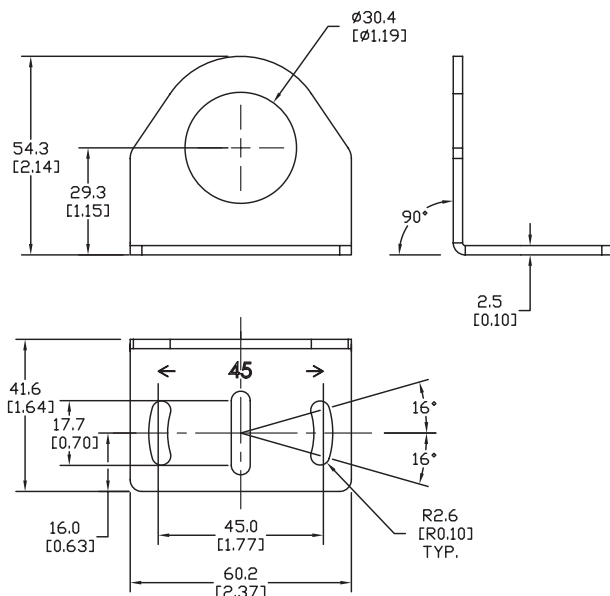
## Right-angle Mounting Bracket

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
<b>ST30C</b>	\$2.25	Mounting bracket, right-angle, zinc plated steel. For use with 30mm sensors.	0.18lb (81.7 g)

### Dimensions

mm [inches]



**ST30C**

See our website: [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete engineering drawings

# Accessories for 30mm Sensors

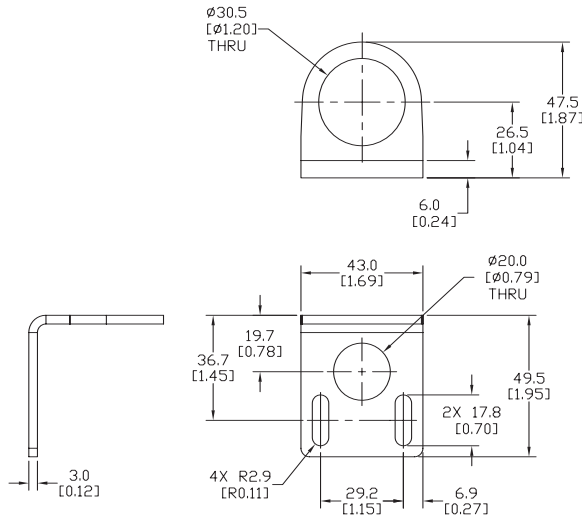
## Right-angle Mounting Bracket

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

Accessories for FW Series Sensors			
Part Number	Price	Description	Weight
<b>ST30C6W</b>	\$3.50	Mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors.	0.15 lb (68.0 g)

### 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
<b>OPT2118</b>	\$10.50	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 lb (81.7 g)
<b>OPT2119</b>	\$18.50	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 lb (81.7 g)

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)
<b>OPT2109</b>	\$11.50	Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	<a href="#">PDF</a>	0.41 (185.97)
<b>OPT2110</b>	\$14.50	Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	<a href="#">PDF</a>	0.60 (272.16)
<b>OPT2111</b>	\$18.50	Wenglor mounting rod, 12mm diameter, 500mm length, 304 stainless steel.	<a href="#">PDF</a>	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)
<b>OPT2108</b>	\$14.50	Wenglor mounting bracket, right-angle, nickel plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	<a href="#">PDF</a>	0.07 (31.8)

