

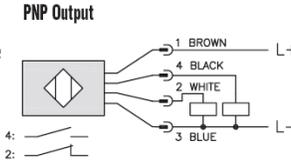
**Recommended Proximity Sensor (PNP, N.C., 10-30 VDC, 200 mA) is a PFK1-BP-3H and LED 90 degree Cable 18mm stainless steel - DC**



**PFK1-BN-1H**

- 10 models available
- 18mm diameter
- 316L stainless steel housing
- M12 quick-disconnect plug with gold-plated pin: (purchase cable separately)
- Complete overload protection
- IP69K rated for food and beverage applications
- M18 mounting hex nuts included
- Lifetime warranty

**Diagram 2**



**Connector**

**M12 connector**



PFK Series Food and Beverage DC Inductive Prox Selection Chart								
Part Number	Price	Sensing Range	Housing	Output State	Logic	Connection	Wiring	Dimensions
<b>Extended</b>								
PFK1-BN-3H	\$49.50	0 to 8mm (0 to 0.315in)	Shielded	N.O./N.C.	NPN	M12 (12mm) connector	Diagram 1	Figure 3
PFK1-BP-3H	\$49.50				PNP	M12 (12mm) connector	Diagram 2	Figure 3
PFK1-AP-3H	\$35.50	0 to 12mm (0 to 0.472in)	Unshielded	N.O./N.C.	N.O.	M12 (12mm) connector	Diagram 3	Figure 1
PFK1-BN-4H	\$55.00				NPN	M12 (12mm) connector	Diagram 1	Figure 3
PFK1-BP-4H	\$55.00				PNP	M12 (12mm) connector	Diagram 2	Figure 3
PFK1-AP-4H	\$35.50				N.O.	M12 (12mm) connector	Diagram 3	Figure 2

PFK Series Specifications	Standard		Extended			
<b>Mounting Type</b>	Shielded	Unshielded	Shielded	Unshielded	Shielded	Unshielded
<b>Nominal Sensing Distance</b>	5mm (0.196in)	8mm (0.315in)	8mm (0.315in)	12mm (0.472in)	8mm (0.315in)	12mm (0.472in)
<b>Operating Distance</b>	N/A					
<b>Material Correction Factors</b>	See Material Influence table #2 later in this section.					
<b>Output Type</b>	NPN or PNP/4-wire, N.O./N.C.				PNP, N.O. only	
<b>Operating Voltage</b>	10 - 30 VDC				10 - 36 VDC	
<b>No-load Supply Current</b>	≤15 mA				≤10 mA	
<b>Operating (Load) Current</b>	≤200mA				≤100mA	
<b>Off-state (Leakage) Current</b>	≤10µA				-	
<b>Voltage Drop</b>	≤2.0 V				≤2.5 V	
<b>Switching Frequency</b>	1500 Hz				600 Hz	300 Hz
<b>Differential Travel (% of Nominal Distance)</b>	1 - 20%				3 - 15%	
<b>Repeat Accuracy</b>	5%				10%	
<b>Ripple</b>	≤10%				-	
<b>Time Delay Before Availability (tv)</b>	50ms				30ms	
<b>Reverse Polarity Protection</b>	Yes					
<b>Short-Circuit Protection</b>	Yes (switch auto-resets after overload is removed)					

**Cables with LED and quick-disconnect plugs**

- Industry standard M12 right angle female plug with open leads
- These cables can be used with patch cables.
- 2m, 5m and 10m cable lengths
- PUR (polyurethane) jacket for oily and direct sunlight applications
- IP67 /IP68 / IP69K, II rated
- LED indication for 10-36 VDC PNP sensors only



M12 Quick-Disconnect Cables with LED Indicator (Euro, Micro DC-Single Key)							
Part Number	Price	Length	Poles	Connector	LED	Jacket	Dimensions
<b>M12 Quick-Disconnects</b>							
EVC178*	\$11.00	2m (6.5 ft)	4	Right-angle female	Yes	PUR	Figure 12
EVC179*	\$11.50	5m (16.4 ft)	4	Right-angle female	Yes	PUR	Figure 12
EVC180*	\$14.00	10m (32.8 ft)	4	Right-angle female	Yes	PUR	Figure 12

\*Note: LED for 10 to 36 VDC PNP devices only.  
Do not use with NPN or analog output devices.  
Do not use when white wire (Pin 2) is used for selection of a sensor function.  
Do not use when emitter has check function.

**LED Models' Wiring**



