

# PY4 Series Inductive Proximity Sensors

## Miniature M4 (4 mm) stainless steel – DC



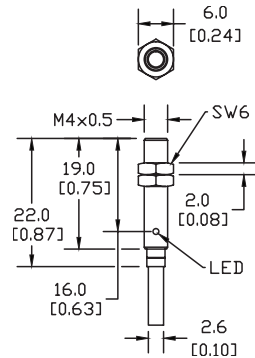
- Four models available
- Complete overload protection
- IP67 rated
- Stainless steel construction
- LED status indicator
- Lifetime warranty



## Dimensions

mm [inches]

Figure 1

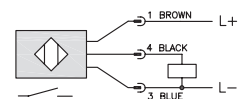


PY Series M4 DC Inductive Prox Selection Chart							
Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Dimensions
<b>Standard Distance</b>							
PY4-AN-1A	\$77.00	0.6 mm (0.024 in)	Flush	NO	NPN	2m [6.5 ft] axial cable	Figure 1
PY4-AP-1A	\$77.00	0.6 mm (0.024 in)	Flush	NO	PNP	2m [6.5 ft] axial cable	Figure 1
<b>Extended Distance</b>							
PY4-AN-3A	\$84.00	1mm (0.039 in)	Flush	NO	NPN	2m [6.5 ft] axial cable	Figure 1
PY4-AP-3A	\$84.00	1mm (0.039 in)	Flush	NO	PNP	2m [6.5 ft] axial cable	Figure 1

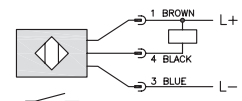
PY Series Specifications		
	Standard Distance	Extended Distance
<b>Mounting Type</b>	Flush	
<b>Nominal Sensing Distance</b>	0.6 mm [0.02 in]	1 mm [0.04 in]
<b>Operating Distance</b>	NA	
<b>Material Correction Factors</b>	See the <a href="#">Material influence table</a>	
<b>Output Type</b>	NPN or PNP/NO only/3-wire	
<b>Operating Voltage</b>	10 to 30 VDC	
<b>No-load Supply Current</b>	≤10mA	
<b>Operating (Load) Current</b>	≤100mA	
<b>Off-state (Leakage) Current</b>	≤10µA	≤0.1mA
<b>Voltage Drop</b>	≤2.0 V	
<b>Switching Frequency</b>	5 kHz	3 kHz
<b>Differential Travel (% of Nominal Distance)</b>	≤10%	
<b>Repeat Accuracy</b>	≤5%	
<b>Ripple</b>	≤20%	
<b>Time Delay Before Availability (tv)</b>	10 ms	
<b>Reverse Polarity Protection</b>	Yes	
<b>Short-Circuit Protection</b>	Yes (switch auto-resets after overload is removed)	
<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>	Stainless steel	
<b>Sensing Face Material</b>	Polyester	
<b>Shock/Vibration</b>	See <a href="#">Proximity Sensor Terminology</a>	
<b>Tightening Torque</b>	0.8 N•m [7.08 lb•in]	
<b>Weight</b>	23 g [0.81 oz]	26g [0.92 oz]
<b>Connection</b>	2m [6.5 ft] PVC cable	
<b>Agency Approvals</b>	UL file E328811	

## Wiring diagrams

PNP Output



NPN Output



# Accessories for 4mm Sensors

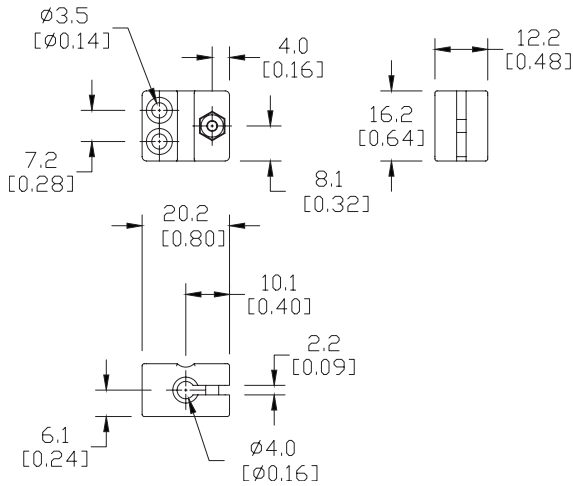
## Right-angle Mounting Bracket

Mounting bracket, right-angle, plastic. For use with 4mm sensors.

Accessories for 4mm Sensors			
Part Number	Price	Description	Weight [lb]
OPT2106	\$6.50	Mounting bracket, right-angle, plastic. For use with 4mm sensors.	0.02

## Dimensions

mm [inches]



**OPT2106**

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