

# PY3 Series Inductive Proximity Sensors

## Miniature Ø3 (3 mm) stainless steel – DC



- Smooth barrel (no threads)
- Four models available
- Complete overload protection
- IP67 rated
- Stainless steel construction
- LED status indicator
- Lifetime warranty

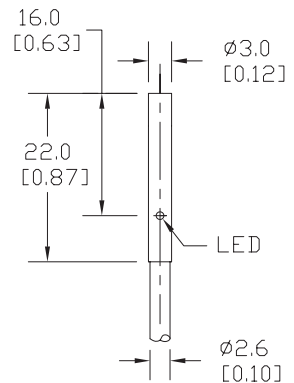


PY Series Ø3 DC Inductive Prox Selection Chart							
Part Number	Price	Sensing Range	Housing	Output State	Logic	Connection	Dimensions
<b>Standard Distance</b>							
PY3-AN-1A	\$72.00	0.6 mm (0.024 in)	Shielded	NO	NPN	2 m (6.5') axial cable	Figure 1
PY3-AP-1A	\$72.00				PNP		Figure 1
<b>Extended Distance</b>							
PY3-AN-3A	\$79.00	1mm (0.039 in)	Shielded	N.O.	NPN	2 m (6.5') axial cable	Figure 1
PY3-AP-3A	\$79.00				PNP		Figure 1

## Dimensions

mm [inches]

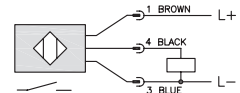
Figure 1



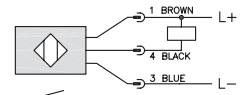
PY Series Specifications		
	Standard Distance	Extended Distance
Mounting Type	Shielded	
Nominal Sensing Distance	0.6 mm (0.024 in)	1mm (0.039 in)
Operating Distance	NA	NA
Material Correction Factors	See the <a href="#">Material Influence table</a>	
Output Type	NPN or PNP, NO only, 3-wire	
Operating Voltage	10 to 30 VDC	
No-load Supply Current	≤10mA	
Operating (Load) Current	≤100mA	
Off-state (Leakage) Current	≤10µA	≤0.1mA
Voltage Drop	≤2.0 V	
Switching Frequency	5kHz	3kHz
Differential Travel (% of Nominal Distance)	≤10%	
Repeat Accuracy	≤5%	
Ripple	≤20%	
Time Delay Before Availability (tv)	10 ms	
Reverse Polarity Protection	Yes	
Short-Circuit Protection	Yes (switch auto-resets after overload is removed)	
Operating Temperature	-25° to +70°C (-13° to 158 F)	
Protection Degree (DIN 40050)	IEC IP67	
Indication/Switch Status	Yellow (output energized)	
Housing Material	Stainless steel	
Sensing Face Material	Polyester	
Shock/Vibration	See <a href="#">Proximity Sensor Terminology</a>	
Tightening Torque	NA	
Weight	23 g (0.81 oz)	22 g (0.78 oz)
Connection	2 meter PVC cable	
Agency Approvals	UL file E328811	

## Wiring diagrams

PNP Output



NPN Output



# Accessories for 3mm Sensors

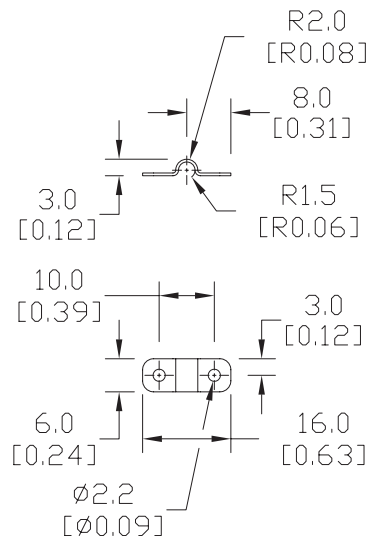
## Right-angle Mounting Bracket

Mounting bracket, right-angle, 316L stainless steel. Package of 2. For use with 3mm sensors.

Accessories for 3mm Sensors			
Part Number	Price	Description	Weight [lb]
<b>OPT2037</b>	\$20.00	Mounting bracket, right-angle, 316L stainless steel. Package of 2. For use with 3mm sensors.	0.02

## Dimensions

[mm] inches



**OPT2037**

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