

# 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

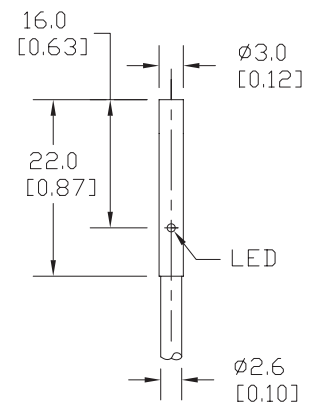
### PY Series Ø3 DC Inductive Prox Selection Chart

Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Dimensions
<b>Standard Distance</b>							
PY3-AN-1A		0.6 mm (0.024 in)	Flush	N.O.	NPN	2m (6.5 ft) axial cable	Figure 1
PY3-AP-1A		0.6 mm (0.024 in)	Flush	N.O.	PNP	2m (6.5 ft) axial cable	Figure 1
<b>Extended Distance</b>							
PY3-AN-3A		1mm (0.039 in)	Flush	N.O.	NPN	2m (6.5 ft) axial cable	Figure 1
PY3-AP-3A		1mm (0.039 in)	Flush	N.O.	PNP	2m (6.5 ft) axial cable	Figure 1

## Dimensions

mm [inches]

Figure 1

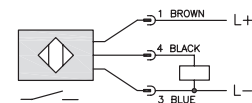


### PY Series Specifications

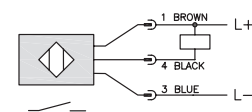
	Standard Distance	Extended Distance
<b>Mounting Type</b>	Flush	
<b>Nominal Sensing Distance</b>	0.6 mm (0.024 in)	1mm (0.039 in)
<b>Operating Distance</b>	NA	NA
<b>Material Correction Factors</b>	See the <a href="#">Material Influence table</a>	
<b>Output Type</b>	NPN or PNP, N.O. only, 3-wire	
<b>Operating 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>	5kHz	3kHz
<b>Differential Travel (% of Nominal Distance)</b>	≤ 10%	
<b>Repeat Accuracy</b>	≤ 5%	
<b>Ripple</b>	≤ 20%	
<b>Time Delay Before Availability (tv)</b>	10ms	
<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>	NA	
<b>Weight</b>	23g (0.81 oz)	22g (0.78 oz)
<b>Connection</b>	2 meter PVC cable	
<b>Agency Approvals</b>	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	Drawing Link	Weight [lb]
<a href="#">OPT2037</a>		Wenglor mounting bracket, right-angle, 316L stainless steel. Package of 2. For use with 3mm sensors.	<a href="#">PDF</a>	0.02



OPT2037