

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



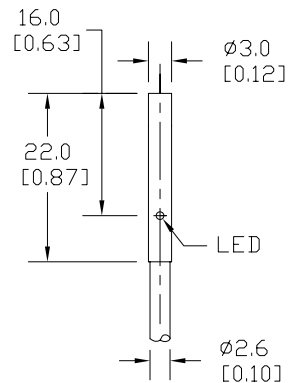
PY Series Ø3 DC Inductive Prox Selection Chart							
Part Number	Price	Sensing Range	Housing	Output State	Logic	Connection	Dimensions
Standard Distance							
PY3-AN-1A	\$72.00	0.6 mm (0.024 in)	Shielded	NO	NPN	2 m (6.5') axial cable	Figure 1
PY3-AP-1A	\$72.00				PNP	2 m (6.5') axial cable	Figure 1
Extended Distance							
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	2 m (6.5') axial cable	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 Material Influence table	
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 Proximity Sensor Terminology	
Tightening Torque	NA	
Weight	23 g (0.81 oz)	22 g (0.78 oz)
Connection	2 meter PVC cable	
Agency Approvals	UL file E328811	

Dimensions

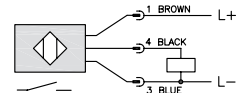
mm [inches]

Figure 1

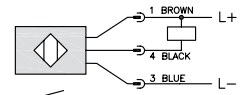


Wiring diagrams

PNP Output



NPN Output



Accessories for 3mm Sensors

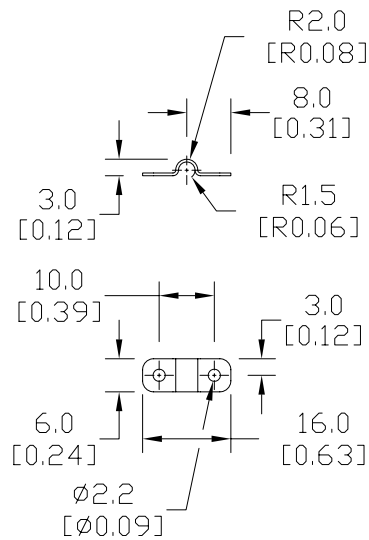
Right-angle Mounting Bracket

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]
OPT2037	\$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 for complete engineering drawings