

PY Series Inductive Proximity Sensors

Miniature Ø3 (3 mm) and M4 (4 mm) stainless steel – DC



- Smallest self-contained inductive proximity sensor available on the U.S. market
- Eight models available
- Complete overload protection
- IP67 rated
- Stainless steel construction
- LED status indicator
- Lifetime warranty

PY Series Ø3 and M4 DC Inductive Prox Selection Chart								
Part Number	Price	Size	Sensing Range	Housing	Output State	Logic	Connection	Dimensions
Standard Distance								
PY3-AN-1A	\$79.00	Ø3*	0.6 mm (0.024 in)	Shielded	N.O.	NPN	2 m (6.5') axial cable	Figure 1
PY3-AP-1A	\$79.00	Ø3*				PNP	2 m (6.5') axial cable	Figure 1
PY4-AN-1A	\$79.00	4 mm				NPN	2 m (6.5') axial cable	Figure 2
PY4-AP-1A	\$79.00	4 mm				PNP	2 m (6.5') axial cable	Figure 2
Extended Distance								
PY3-AN-3A	\$89.00	Ø3*	1 mm (0.039 in)	Shielded	N.O.	NPN	2 m (6.5') axial cable	Figure 1
PY3-AP-3A	\$89.00	Ø3*				PNP	2 m (6.5') axial cable	Figure 1
PY4-AN-3A	\$89.00	4mm				NPN	2 m (6.5') axial cable	Figure 2
PY4-AP-3A	\$89.00	4mm				PNP	2 m (6.5') axial cable	Figure 2

*smooth barrel (no threads)

PY Series Specifications	Ø3	M4	Ø3	M4
	Standard Distance		Extended Distance	
Mounting Type	Shielded			
Nominal Sensing Distance	0.6 mm (0.024 in)		1 mm (0.039 in)	
Operating Distance	N/A		N/A	
Material Correction Factors	See Material Influence table #1 later in this section.			
Output Type	NPN or PNP/N.O. 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	5 kHz		3 kHz	
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 terminology section.			
Tightening Torque	0.8 Nm (7.08 in./lbs.)			
Weight	23 g (0.81 oz)	22 g (0.78 oz)	26 g (0.92oz)	
Connection	2 meter PVC cable			
Agency Approvals	UL file E328811			

Dimensions

mm [inches]

Figure 1

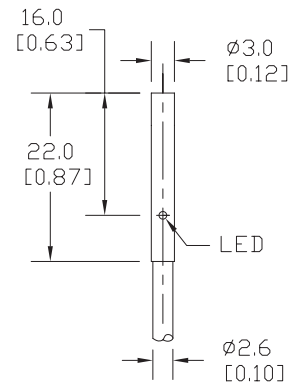
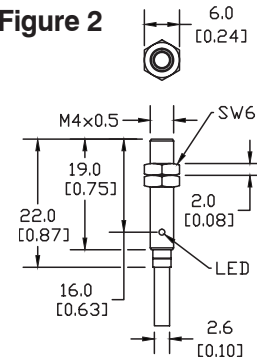
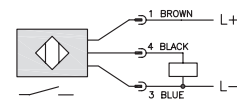


Figure 2



Wiring diagrams

PNP Output



NPN Output

