

PY4 Series Inductive Proximity Sensors

Miniature M4 (4mm) stainless steel – DC



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

PY Series M4 DC Inductive Prox Selection Chart

Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Dimensions
Standard Distance							
PY4-AN-1A		0.6 mm (0.024 in)	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1
PY4-AP-1A		0.6 mm (0.024 in)	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1
Extended Distance							
PY4-AN-3A		1mm (0.039 in)	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1
PY4-AP-3A		1mm (0.039 in)	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1

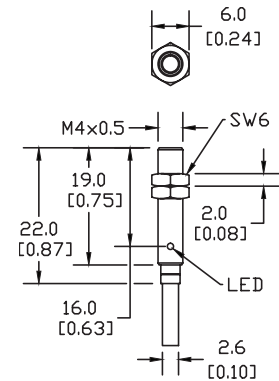
PY Series Specifications

	Standard Distance	Extended Distance
Mounting Type	Flush	
Nominal Sensing Distance	0.6 mm [0.02 in]	1mm [0.04 in]
Operating Distance	NA	
Material Correction Factors	See the Material influence table	
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	5kHz	3kHz
Differential Travel (% of Nominal Distance)	≤ 10%	
Repeat Accuracy	≤ 5%	
Ripple	≤ 20%	
Time Delay Before Availability (tv)	10ms	
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	0.8 N•m [7.08 lb•in]	
Weight	23g [0.81 oz]	26g [0.92 oz]
Connection	2m [6.5 ft] PVC cable	
Agency Approvals	UL file E328811	

Dimensions

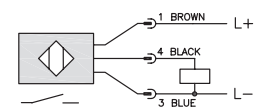
mm [inches]

Figure 1

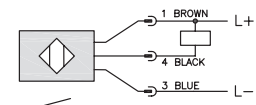


Wiring diagrams

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	Drawing Link	Weight [lb]
OPT2106		Wenglor mounting bracket, right-angle, plastic. For use with 4mm sensors.	PDF	0.02



OPT2106