

PY4 Series Inductive Proximity Sensors

Miniature M4 (4mm) Stainless Steel – DC



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

PY Series M4 DC Inductive Proximity Selection Chart

Part Number	Price	Sensing Range mm [in]	Mounting	Output State	Logic	Connection	Dimensions
Standard Distance							
PY4-AN-1A	\$09pn:	0.6 [0.024]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1
PY4-AP-1A	\$09pp:	0.6 [0.024]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1
Extended Distance							
PY4-AN-3A	\$009po:	1 [0.039]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1
PY4-AP-3A	\$009pq:	1 [0.039]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1

PY Series Specifications

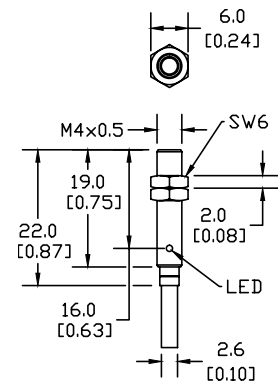
Specification	Standard Distance	Extended Distance
Mounting Type	Flush	
Nominal Sensing Distance	0.6 mm [0.024 in]	1mm [0.039 in]
Operating Distance	NA	
Material Correction Factors	See the Material influence table	
Output Type	NPN or PNP/N.O. only/3-wire	
Operating Voltage	10 to 30 VDC	
No-load Supply 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	

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

Dimensions

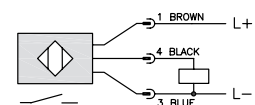
mm [inches]

Figure 1

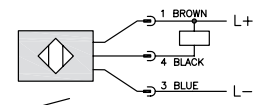


Wiring Diagrams

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	\$-1nlv:	Wenglor mounting bracket, right-angle, plastic. For use with 4mm sensors.	PDF	0.02



[OPT2106](#)