

PY3 Series Inductive Proximity Sensors

Miniature Ø3 (3mm) Stainless Steel – DC



- Smooth barrel (no threads)
- Complete overload protection
- IP67 rated
- Stainless steel construction
- LED status indicator
- Lifetime warranty

PY Series Ø3 DC Inductive Proximity Selection Chart

Part Number	Price	Sensing Range mm [in]	Mounting	Output State	Logic	Connection	Dimensions
Standard Distance							
PY3-AN-1A	\$-09pi:	0.6 [0.024]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1
PY3-AP-1A	\$09pk:	0.6 [0.024]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1
Extended Distance							
PY3-AN-3A	\$-009pj:	1 [0.039]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1
PY3-AP-3A	\$-009pl:	1 [0.039]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1

PY Series Specifications

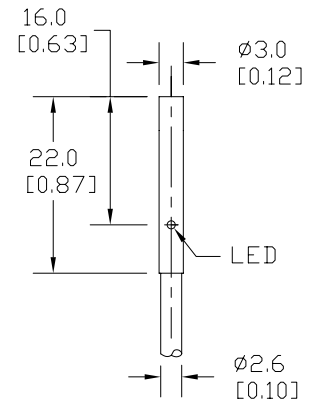
Specification	Standard Distance	Extended Distance
Mounting Type	Flush	
Nominal Sensing Distance	0.6 mm [0.024 in]	1mm [0.039 in]
Operating Distance	NA	NA
Material Correction Factors	See the Material Influence table	
Output Type	NPN or PNP, N.O. only, 3-wire	
Operating Voltage	10 to 30 VDC	
No-load Supply 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	NA	
Weight	23g [0.81 oz]	22g [0.78 oz]
Connection	2 [6.5 ft] meter 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

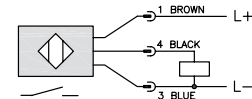
mm [inches]

Figure 1

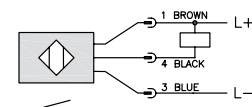


Wiring Diagrams

PNP Output



NPN Output



Accessories for 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]
OPT2037	\$--1nll:	Wenglor mounting bracket, right-angle, 316L stainless steel. Package of 2. For use with 3mm sensors.	PDF	0.02



[OPT2037](#)