PD Series Inductive Proximity Sensors



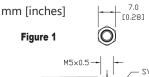
Miniature M5 (5mm) stainless steel - DC

- Stainless steel construction
- Axial cable or M8 quickdisconnect models
- · Complete overload protection
- IP67 rated

- Smallest self-contained inductive proximity sensor available on the U.S. market
- · LED status indicator
- · Lifetime warranty



Dimensions



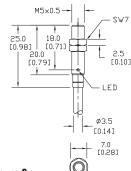
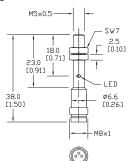
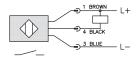


Figure 2

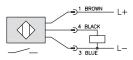


Wiring Diagrams

NPN Output



PNP Output



Connector M8 connector



PD Series M5 DC Inductive Proximity Selection Chart								
Part Number	Price	Sensing Range mm [in]	Mounting	Output State	Logic	Connection	Dimensions	
Standard Distance	е							
PD1-AN-1A	\$54.00	0.8 [0.03]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1	
PD1-AP-1A	\$54.00	0.8 [0.03]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1	
PD1-AN-1F	\$54.00	0.8 [0.03]	Flush	N.O.	NPN	M8 [8mm] connector	Figure 2	
PD1-AP-1F	\$54.00	0.8 [0.03]	Flush	N.O.	PNP	M8 [8mm] connector	Figure 2	
Extended Distance								
PD1-AN-3A	\$64.00	1.5 [0.06]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1	
PD1-AP-3A	\$64.00	1.5 [0.06]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1	
PD1-AN-3F	\$64.00	1.5 [0.06]	Flush	N.O.	NPN	M8 [8mm] connector	Figure 2	
PD1-AP-3F	\$64.00	1.5 [0.06]	Flush	N.O.	PNP	M8 [8mm] connector	Figure 2	

PD Series	Specifications			
Manustina Tara	Standard Distance	Extended Distance		
Mounting Type	Flush			
Nominal Sensing Distance	0.8 mm [0.03 in]	1.5 mm [0.06 in]		
Operating Distance	NA			
Material Correction Factors	See the Material influence table			
Output Type	NPN or PNP	P/N.O. only/3-wire		
Operating Voltage	10 to 30 VDC			
No-load Supply Current	≤10mA			
Operating (Load) Current	≤ 200mA			
Off-state (Leakage) Current	≤ 10µA	≤ 0.1mA		
Voltage Drop	≤	2.0 V		
Switching Frequency	5kHz	3kHz		
Differential Travel (% of Nominal Distance)	≤ 10%			
Repeat Accuracy	≤ 1.5%			
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	Polybutylene Terephthalate [PBT]	Polyester		
Shock/Vibration	See Proximity Sensor Terminology			
Tightening Torque	1.5 Nm (13.3 lb./in.)			
Weight	43g [1.52 oz]/10g [0.36 oz]	34g [1.20 oz]/4g [0.14 oz]		
Connection	2 meter [6.5 ft] PVC axial cable / M8 connector			
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.

Accessories for 5mm Sensors

Right-angle Mounting Bracket

Mounting bracket, right-angle, plastic. For use with 5mm sensors.

Accessories for 5mm Sensors								
Part Number	Price	Description	Drawing Link	Weight [lb]				
<u>OPT2100</u>	\$8.00	Wenglor mounting bracket, right-angle, plastic. For use with 5mm sensors.	<u>PDF</u>	0.02				



OPT2100

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