

# PD Series Inductive Proximity Sensors



## Miniature M5 (5mm) stainless steel – DC

- Stainless steel construction
- Axial cable or M8 quick-disconnect models
- Complete overload protection
- IP67 rated
- Smallest self-contained inductive proximity sensor available on the U.S. market
- LED status indicator
- Lifetime warranty



## Dimensions

mm [inches]



Figure 1

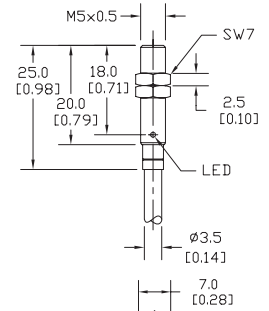
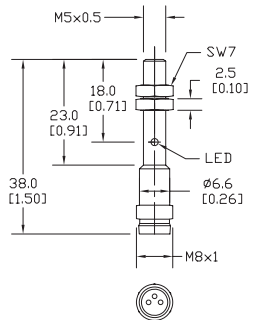
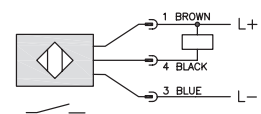


Figure 2

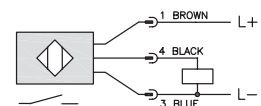


## Wiring Diagrams

### NPN Output

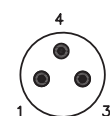


### PNP Output



### Connector

#### M8 connector



PD Series M5 DC Inductive Proximity Selection Chart							
Part Number	Price	Sensing Range mm [in]	Mounting	Output State	Logic	Connection	Dimensions
<b>Standard Distance</b>							
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
<b>Extended Distance</b>							
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		
Mounting Type	Standard Distance	Extended Distance
		Flush
Nominal Sensing Distance	0.8 mm [0.03 in]	1.5 mm [0.06 in]
Operating Distance	NA	
Material Correction Factors	See the <a href="#">Material influence table</a>	
Output Type	NPN or PNP/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 <a href="#">Proximity Sensor Terminology</a>	
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]
<a href="#">OPT2100</a>	\$8.00	Wenglor mounting bracket, right-angle, plastic. For use with 5mm sensors.	<a href="#">PDF</a>	0.02



[OPT2100](#)