

PD Series Inductive Proximity Sensors



Miniature M5 (5 mm) stainless steel – DC

- Eight models available
- 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

PLC Overview

DL05/06 PLC

DL105 PLC

DL205 PLC

DL305 PLC

DL405 PLC

Field I/O

Software

C-more HMIs

Other HMI

AC Drives

Motors

Steppers/Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Pushbuttons/Lights

Process

Relays/Timers

Comm.

TB's & Wiring

Power

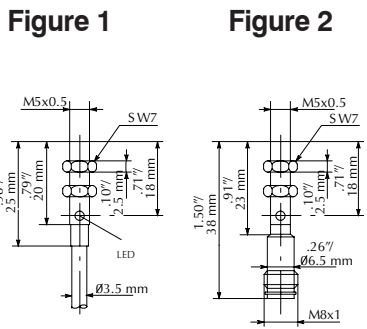
Enclosures

Appendix

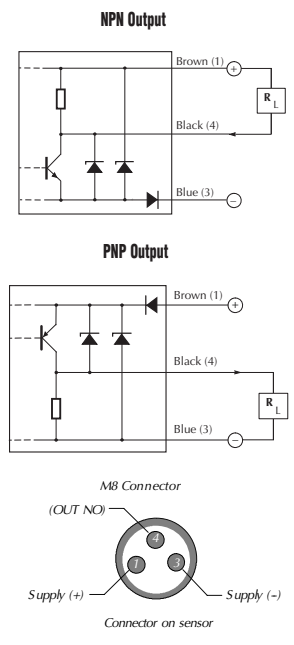
Part Index

PD Series M5 DC Inductive Prox Selection Chart							
Part Number	Sensing Range	Housing	Output State	Logic	Connection	Dimensions	
Standard Distance							
PD1-AN-1A	0.8mm (0.03in)	Shielded	N.O.	NPN	2m (6.5') axial cable	Figure 1	
PD1-AP-1A				PNP	2m (6.5') axial cable	Figure 1	
PD1-AN-1F				NPN	M8 (8mm) connector	Figure 2	
PD1-AP-1F				PNP	M8 (8mm) connector	Figure 2	
Extended Distance							
PD1-AN-3A	1.5mm (0.059in)	Shielded	N.O.	NPN	2m (6.5') axial cable	Figure 1	
PD1-AP-3A				PNP	2m (6.5') axial cable	Figure 1	
PD1-AN-3F				NPN	M8 (8mm) connector	Figure 2	
PD1-AP-3F				PNP	M8 (8mm) connector	Figure 2	

Dimensions



Wiring diagrams



Specifications		
Specifications	Standard Distance Models	Extended Distance Models
Type	Shielded	
Operating Distance	0.8mm (0.03in)	1.5mm (0.059in)
Material Correction Factors	*See Material Influence table #1	
Differential Travel	≤10%	
Repeat Accuracy	≤1.5%	
Operating Voltage	10-30VDC	
Ripple	≤20%	
No-load Supply Current	≤10mA	
Load Current	≤200mA	
Leakage Current	≤10µA	≤0.1mA
Voltage Drop	≤2.0 V	
Output Type	NPN or PNP/N.O. only/three wire	
Switching Frequency	5kHz	3kHz
(tv) Time Delay Before Availability	10ms	
Input Voltage Transient Protection	Up to 30VDC	
Input Power Polarity Reversal Protection	Yes	
Output Power Short-Circuit Protection	Yes (switch auto-resets after overload is removed)	
Temperature Range	-25° to +70° C (-13° to 158° F)	
Temperature Drift	10% Sr	
Protection Degree (DIN 40050)	IEC IP67	
LED Indicators	Yellow (output energized)	
Housing Material	Stainless steel	
Sensing Face Material	PBT	Polyester
Tightening Torque	1.5Nm (13.3lb./in.)	
Weight (cable/M8 connector)	43g (1.52oz)/10g (0.36oz)	34g (1.20)/4g (0.14oz)

*See Material Influence table #1 on page 17-53

Cables and Accessories
Cables and accessories can be found starting on page 17-48.