1-800-633-0405 **PD Series Inductive Proximity Sensors**



PD Series M

_ . Sensin

Miniature M5 (5mm) Stainless Steel – DC

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

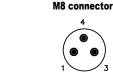
- Smallest self-contained inductive proximity sensor available on the U.S. market
- · LED status indicator
- · Lifetime warranty



2.5 [0.10]

Dimensions

						Dimensio	ons
5 DC I	nducti	ve Proxi	mity S	election Char	t	mm [inches]	7.0 [0.28]
ng Range n [in]	Mountin	g Output State	Logic	Connection	Dimensions	Figure 1	Ô
				1		M5×0).5
[0.03]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1	+ +	
[0.03]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1		B.0).71]
[0.03]	Flush	N.O.	NPN	M8 [8mm] connector	Figure 2	20.0 [0.79]	
[0.03]	Flush	N.O.	PNP	M8 [8mm] connector	Figure 2	<u> </u>	
						_!	
[0.06]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1		L.
[0.06]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1		
[0.06]	Flush	N.O.	NPN	M8 [8mm] connector	Figure 2		. 7.0
[0.06]	Flush	N.O.	PNP	M8 [8mm] connector	Figure 2		[0.28]
						Figure 2	Q
PD S	Series	Specifica	ations			M5×0.5	
		Standard			d Distance		
		Otaridara	Distance	Flush		18	
		0.8 mm	[0 03 in]		[0.06 in]	23.0 LC [0.91]	
		0.0 mm	[0.00 III]	NA			
			See the	Material influence table	2	38.0 [1.50]	¢6.6
		NPN or PNP/N.O. only/3-wire					
		10 to 30 VDC					M8×1
		<10mA					
				≤ 200mA			Ű
		≤ 1(0µA		.1mA	Wiring D	iagrams
			•	≤ 2.0 V		NPN C	Jutput
		5kHz 3kHz					
nal Distance)		≤ 10%				Ĩ Ļ '	
		≤ 1.5%					
				≤ 20%		<u> </u>	- - -
/ (tv)		10ms					
				Yes			
		Yes (switch auto-resets after overload is removed)				PNP (Dutput
		-25° to +70°C [-13° to 158°F]					- L+
)		IEC IP67				$ \oplus \vdash$	
		Yellow (output energized)					
		Stainless steel					
		Polybutylene [PE]	3T] [`]	Polyester		-	
				kimity Sensor Terminolog	<u>ay</u>	Cor	nnector
		1.5 Nm (13.3 lb./in.)		MO	onnootor		



Part Number	Price	Sensing Range mm [in]	Mounting	Output State	Logic	Connection	Dimensions		
Standard Distance									
PD1-AN-1A	\$09pa:	0.8 [0.03]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1		
<u>PD1-AP-1A</u>	\$09pe:	0.8 [0.03]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1		
<u>PD1-AN-1F</u>	\$09pb:	0.8 [0.03]	Flush	N.O.	NPN	M8 [8mm] connector	Figure 2		
PD1-AP-1F	\$;09pf:	0.8 [0.03]	Flush	N.O.	PNP	M8 [8mm] connector	Figure 2		
Extended Distance									
PD1-AN-3A	\$09pc:	1.5 [0.06]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Figure 1		
PD1-AP-3A	\$09pg:	1.5 [0.06]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Figure 1		
PD1-AN-3F	\$09pd:	1.5 [0.06]	Flush	N.O.	NPN	M8 [8mm] connector	Figure 2		
PD1-AP-3F	\$09ph:	1.5 [0.06]	Flush	N.O.	PNP	M8 [8mm] connector	Figure 2		

PD Series Specifications						
Mounting Tuno	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/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>	\$-1nlo:	Wenglor mounting bracket, right-angle, plastic. For use with 5mm sensors.	PDF	0.02				



<u>OPT2100</u>