

PKW Series Inductive Proximity Sensors



M18 (18 mm) stainless steel - DC

- Eight models available
- Low cost/high performance
- IP67 rated
- LED status indicators are visible at a wide angle
- Triple distance models (shown) sense all metals at virtually the same distance, have one-piece stainless design, and are fully submersible up to 290 psi. Axial cable models have IP68 protection degree.

PKW Series M18 DC Inductive Prox Selection Chart								
Part Number		Sensing Range	Housing	Output State	Logic	Connection	Wiring	Dimensions
Standard Distance								
PKW-ON-1H	<--->	5mm (0.197in)	Shielded	N.O./N.C	NPN	M12 (12mm) connector	Diagram 1	Figure 1
PKW-OP-1H	<--->				PNP	M12 (12mm) connector	Diagram 1	Figure 1
Extended Distance								
PKW-ON-2H	<--->	8mm (0.315in)	Unshielded	N.O./N.C	NPN	M12 (12mm) connector	Diagram 1	Figure 1
PKW-OP-2H	<--->				PNP	M12 (12mm) connector	Diagram 1	Figure 1
Triple Distance								
PKW-AN-5A	<--->	10mm (0.394in)	Shielded	N.O.	NPN	2m (6.5') axial cable	Diagram 2	Figure 2
PKW-AP-5A	<--->				PNP	2m (6.5') axial cable	Diagram 2	Figure 2
PKW-AN-5H	<--->				NPN	M12 (12mm) connector	Diagram 2	Figure 3
PKW-AP-5H	<--->				PNP	M12 (12mm) connector	Diagram 2	Figure 3

Wiring diagrams

Diagram 1

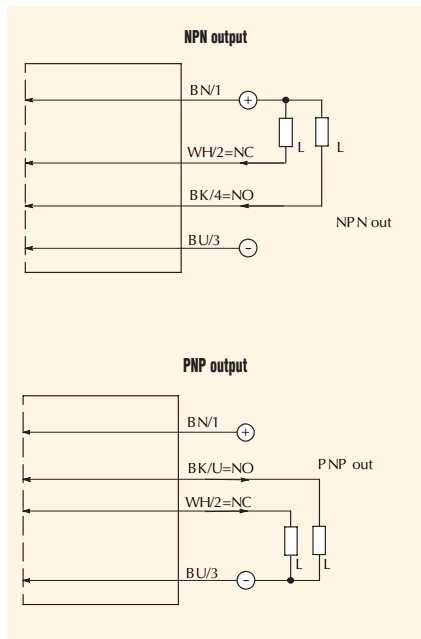
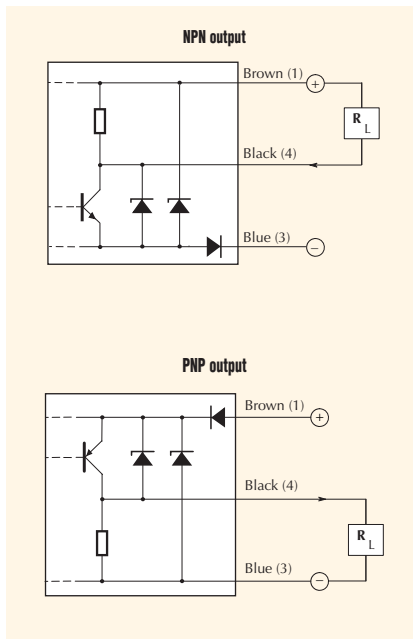
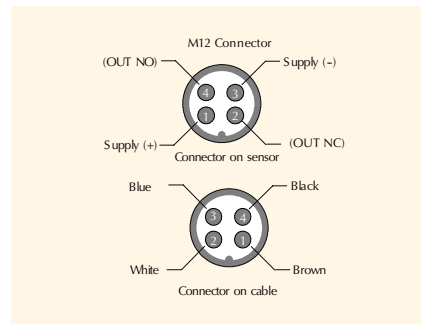


Diagram 2



Connectors



Cables and Accessories

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

PKW Series Inductive Proximity Sensors

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

Specifications	Standard Distance Models	Extended Distance Models	Triple Distance Models
Type	Shielded	Unshielded	Shielded
Operating Distance	5mm (0.197in) ¹	8mm (0.315in) ¹	10mm (0.394in)
Material Correction Factors	*See Material Influence table #1		*See Material Influence table #3
Differential Travel	2 to 10%		≤15%
Repeat Accuracy	≤5%		
Operating Voltage	10-30VDC		
Ripple	≤10%		≤20%
Load Current	≤400mA		≤200mA
Voltage Drop	≤0.8V		≤2.0V
Output Type	NPN or PNP and N.O./N.C. complementary		NPN or PNP, N.O. only
Leakage Current	≤10μA		≤100μA
Switching Frequency	1kHz		200Hz
(tv) Time Delay Before Availability	100ms		≤10ms
Temperature Range / Temperature Drift	-25° to +70° C (-13° to 158° F) / 10%/Sr		
Protection Degree (DIN 40050)	IEC IP67/68 ²		IEC IP67 ³ (connector) IP68 ³ (cable)
LED Indicators	Yellow (N.O. output energized)		
Housing Material	Stainless steel		Stainless steel
Sensing Face Material	PSU		Stainless steel
Tightening Torque	40Nm (29lb./ft.)		50Nm (37lb./ft.)
Weight	70g (2.47oz)		114g (4.02oz)/50g (1.76oz)

¹With 12 x 12mm FE360 target ²Only with M12 connector in fully-tightened position. While this sensor has good resistance to chemicals and oil, it should be tested before using in a harsh environment. ³Fully submersible to 290 psi.

*See Material Influence tables # 1 and #3 on page 17-53

Dimensions

Figure 1

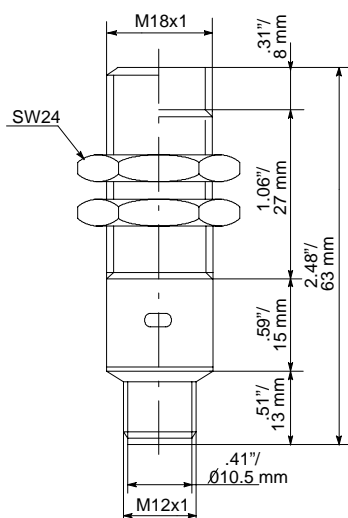


Figure 2

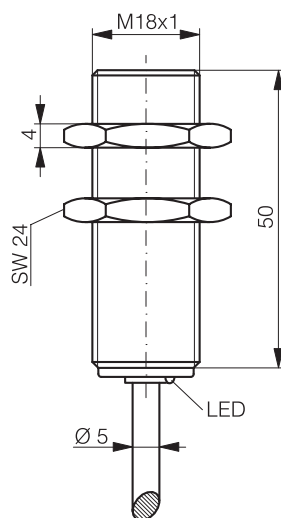


Figure 3

