## **LF40 Series Inductive Proximity Sensors**



### 40 x 40 x 66 mm rectangular plastic - DC

- Sensing face has five selectable positions.
- IP67 rated
- LED power (green) and status (yellow) indicators are visible at a wide angle.
- Rotatable and locking M12 connector
- Single and complementary outputs available
- Purchase cable separately.
- Lifetime warranty



LF40 Series DC Inductive Proximity Selection Chart										
Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Dimensions		
LF40-AP-1H	\$47.50	20mm [0.79 in]	Flush	N.O.	PNP	M12 [12mm] quick-disconnect	Diagram 1	Figure 1		
LF40-0P-1H	\$51.00	20mm [0.79 in]	Flush	N.O./N.C. Complementary	PNP	M12 [12mm] quick-disconnect	Diagram 2	Figure 1		
LF40-AP-2H	\$47.50	35mm [1.38 in]	Non-flush	N.O.	PNP	M12 [12mm] quick-disconnect	Diagram 1	Figure 1		
LF40-0P-2H	\$51.00	35mm [1.38 in]	Non-flush	N.O./N.C. Complementary	PNP	M12 [12mm] quick-disconnect	Diagram 2	Figure 1		

Note: Class 2 power supply required

#### **Wiring Diagrams**

Diagram 1
PNP output

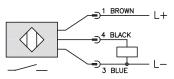
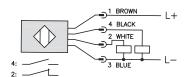


Diagram 2
PNP output



Connector
M12 Connector



# **LF40 Series Inductive Proximity Sensors**

LF40 Series DC Inductive Proximity Specifications										
Model	<u>LF40-AP-1H</u>	<u>LF40-AP-2H</u>	<u>LF40-0P-1H</u>	<u>LF40-0P-2H</u>						
Mounting Type	Flush	Non-flush	Flush	Non-flush						
Nominal Distance	20 mm ± 10%	± 10% 35 mm ± 10% 20 mm ± 10%		35 mm ± 10%						
Operating Distance	0 to 16.2 mm [0 to 0.64 in]	0 to 28.3 mm [0 to 1.11 in]	0 to 16.2 mm [0 to 0.64 in]	0 to 28.3 mm [0 to 1.11 in]						
Material Correction Factors	See the Material influence table									
Output Type	PNP, N.O. only PNP, N.O. N.C. Complementary									
Operating Voltage	10 to 36 VDC									
No-load Supply Current	< 20 mA									
Operating (Load) Current	200 mA									
Off-state (Leakage) Current	< 0.1 mA									
Voltage Drop	< 2.5 V									
Switching Frequency	100Hz	80Hz	100Hz	80Hz						
Differential Travel (% of Nominal Distance)	1 to 20 % of Sr									
Repeat Accuracy	NA									
Ripple	NA									
Time Delay Before Availability (tv)	NA									
Reverse Polarity Protection	Yes									
Short-Circuit Protection	Yes (non-latching)									
Operating Temperature	-25 to 70°C [-13 to 158°F]									
Protection Degree (DIN 40050)	IEC IP67									
Indication/Switch Status	Power: Green Switching status: Yellow									
Housing Material	PPE: diecast zinc nickel-plated									
Sensing Face Material	Polyamide (PA)									
Shock Resistance / Vibration	See Proximity Sensor Terminology									
Tightening Torque	NA									
Weight	146g [5.15 oz]	151g [5.33 oz]	147g [5.19 oz]	153g [5.4 oz]						
Connection	M12 quick-disconnect									
Agency Approvals	ency Approvals cULus file E328811, CE, RoHS									

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

#### **Dimensions**

mm [inches]

Figure 1

