LF40 Series Inductive Proximity Sensors



LF40-AP-2H

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

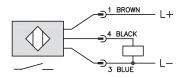
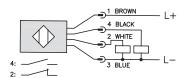


Diagram 2
PNP output



Connector
M12 Connector



LF40 Series Inductive Proximity Sensors

LF40 S	Series DC Inducti	ve Proximity Spo	ecifications					
Model	<u>LF40-AP-1H</u>	<u>LF40-AP-2H</u>	<u>LF40-0P-1H</u>	<u>LF40-0P-2H</u>				
Mounting Type	Flush	Flush Non-flush		Non-flush				
Nominal Distance	20 mm ± 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]				
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	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

