

# LF40 Series Inductive Proximity Sensors

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



LF40-AP-2H

- 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
<b>LF40-AP-1H</b>	\$47.50	20mm [0.79 in]	Flush	N.O.	PNP	M12 [12mm] quick-disconnect	Diagram 1	Figure 1
<b>LF40-OP-1H</b>	\$51.00	20mm [0.79 in]	Flush	N.O./N.C. Complementary	PNP	M12 [12mm] quick-disconnect	Diagram 2	Figure 1
<b>LF40-AP-2H</b>	\$47.50	35mm [1.38 in]	Non-flush	N.O.	PNP	M12 [12mm] quick-disconnect	Diagram 1	Figure 1
<b>LF40-OP-2H</b>	\$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

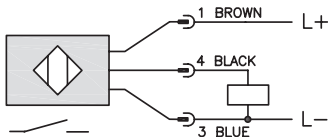
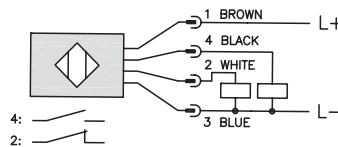


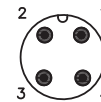
Diagram 2

PNP output



Connector

M12 Connector



# LF40 Series Inductive Proximity Sensors

## LF40 Series DC Inductive Proximity Specifications

Model	LF40-AP-1H	LF40-AP-2H	LF40-OP-1H	LF40-OP-2H
Mounting Type	Flush	Non-flush	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]	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 <a href="#">Material influence table</a>			
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 <a href="#">Proximity Sensor Terminology</a>			
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

