

LF40 Series Inductive Proximity Sensors

40 x 40 x 66 mm rectangular plastic - DC



LF40-AP-2H

- Two shielded and two unshielded models available
- 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 Prox Selection Chart								
Part Number	Price	Sensing Range	Housing	Output State	Logic	Connection	Wiring	Dimensions
LF40-AP-1H	\$39.00	20 mm (0.79 in)	Shielded	NO	PNP	M12 (12 mm) quick disconnect	Diagram 1	Figure 1
LF40-OP-1H	\$42.00	20 mm (0.79 in)	Shielded	NO/NC Complementary	PNP	M12 (12 mm) quick disconnect	Diagram 2	Figure 1
LF40-AP-2H	\$39.00	35 mm (1.38 in)	Unshielded	NO	PNP	M12 (12 mm) quick disconnect	Diagram 1	Figure 1
LF40-OP-2H	\$42.00	35 mm (1.38 in)	Unshielded	NO/NC Complementary	PNP	M12 (12 mm) quick disconnect	Diagram 2	Figure 1

NOTE: CLASS 2 POWER SUPPLY REQUIRED

Wiring diagrams

Diagram 1

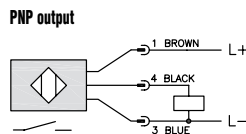
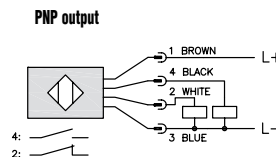


Diagram 2



Connector



LF40 Series Inductive Proximity Sensors

LF40 Series Specifications	LF40-AP-1H	LF40-AP-2H	LF40-OP-1H	LF40-OP-2H
Mounting Type	Shielded	Unshielded	Shielded	Unshielded
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 Material influence table			
Output Type	PNP, NO only		PNP, NO NC 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	100 Hz	80 Hz	100 Hz	80 Hz
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	146 g (5.15 oz)	151 g (5.33 oz)	147 g (5.19 oz)	153 g (5.4 oz)
Connection	M12 quick disconnect			
Agency Approvals	cULus file E328811, CE, RoHS			

Dimensions

mm [inches]

Figure 1

