

LF40 Series Inductive Proximity Sensors



LF40-AP-2H

40 x 40 x 66 mm rectangular plastic - DC

- Two Flush and two Non-flush 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	Mounting	Output State	Logic	Connection	Wiring	Dimensions
LF40-AP-1H		20mm (0.79 in)	Flush	N.O.	PNP	M12 (12mm) quick-disconnect	Diagram 1	Figure 1
LF40-OP-1H		20mm (0.79 in)	Flush	N.O./N.C. Complementary	PNP	M12 (12mm) quick-disconnect	Diagram 2	Figure 1
LF40-AP-2H		35mm (1.38 in)	Non-flush	N.O.	PNP	M12 (12mm) quick-disconnect	Diagram 1	Figure 1
LF40-OP-2H		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

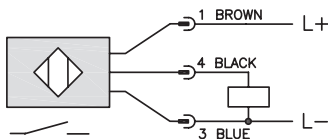
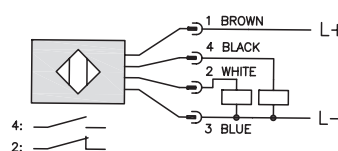


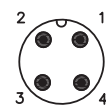
Diagram 2

PNP output



Connector

M12 Connector



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LF40 Series Specifications	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 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	100Hz	80Hz	100Hz	80 z
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			

Dimensions

mm [inches]

Figure 1

