

KSM Series Factor 1 Inductive Proximity Sensors



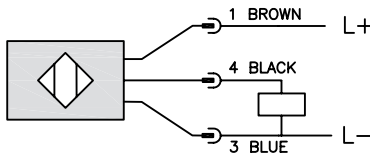
M12 (12mm)

- 4 models available
- Correction Factor (K-Factor) = 1
- Low cost/high performance
- Inductive sensor
- Metal thread M12 x 1 Connector
- Increased sensing range
- Gold-plated contacts
- Electromagnetic field immune
- Shielded and unshielded mounting
- Lifetime warranty

KSM Series M12 Inductive Prox Selection Chart									
Part Number	Price	Sensing Range	Housing	Output State	Logic	Voltage	Connection	Wiring	Dimensions
KSM6-AP-3H	\$24.50	4mm (0.16in)	Shielded	NO	PNP	10 - 30 VDC	4-pin M12 quick disconnect	Diagram 1	Figure 1
KSM6-AP-4H	\$24.50	10mm (0.39in)	Unshielded						Figure 2
KSM-AP-3H	\$24.50	4mm (0.16in)	Shielded						
KSM-AP-4H	\$24.50	10mm (0.39in)	Unshielded						

Wiring Diagrams

Diagram 1



Connector

4-pin M12 connector



Dimensions

mm [inches]

Figure 1

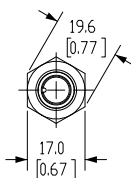
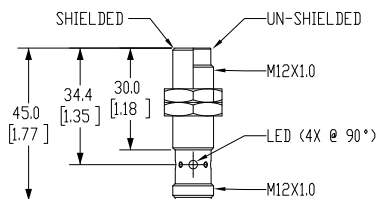
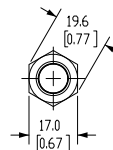
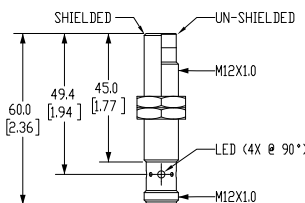


Figure 2



KSM Series Factor 1 Inductive Proximity Sensors

Specifications	M12 Models			
Models	KSM6-AP-3H	KSM6-AP-4H	KSM-AP-3H	KSM-AP-4H
Mounting Type	Shielded	Unshielded	Shielded	Unshielded
Nominal Sensing Distance (mm)	4mm (0.16 in)	10mm (0.39 in)	4mm (0.16 in)	10mm (0.39 in)
Operating Distance	0 - 3.24 mm	0 - 8.10 mm	0 - 3.24 mm	0 - 8.10 mm
Material Correction Factors	Correction Factor (K-Factor) = 1			
Output Type	NO			
Operating Voltage	10 to 30 VDC			
No-load Supply Current	< 20 mA			
Operating (Load) Current	100 mA			
Off-state Leakage Current	NA			
Voltage Drop	< 2.5 V			
Switching Frequency	2000Hz			
Differential Travel (% of Nominal Distance)	3 - 15			
Repeat Accuracy	NA			
Ripple	NA			
Time Delay Before Availability (tv)	NA			
Short Circuit Protection	Yes			
Operating Temperature	-40 — 85 °C [-40 — 185 °F]			
Protection Degree (DIN 40 050)	IP65 / IP66 / IP67 / IP68 / IP69K			
LED Indicators	Illuminated when energized			
Housing Material	stainless steel (316L); LED window: Polyetherimide (PEI)			
Sensing Face Material	active face: Liquid Crystal Polymer (LCP) white			
Shock/Vibration	See Proximity Sensor Terminology			
Weight	0.026 kg	0.024 kg	0.029 kg	0.027 kg
Connection	4-pin M12 quick disconnect			
Agency Approvals	cULus E328811, CE			