

KSM Series Factor 1 Inductive Proximity Sensors



M12 (12mm)

- 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
- Flush and Non-flush mounting
- Lifetime warranty

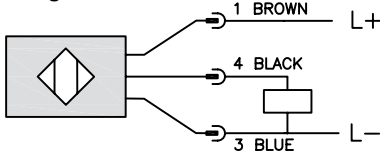


KSM Series M12 Inductive Proximity Selection Chart

Part Number	Price	Sensing Range	Mounting	Output State	Logic	Voltage	Connection	Wiring	Dimensions
KSM6-AP-3H	\$2a8n:	4mm [0.16in]	Flush	N.O.	PNP	10 - 30 VDC	4-pin M12 quick-disconnect	Diagram 1	Figure 1
KSM6-AP-4H	\$2a8o:	10mm [0.39in]	Non-flush						Figure 2
KSM-AP-3H	\$2a8p:	4mm [0.16in]	Flush						
KSM-AP-4H	\$2a8q:	10mm [0.39in]	Non-flush						

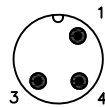
Wiring Diagrams

Diagram 1



Connector

4-pin M12 connector



Dimensions

mm [inches]

Figure 1

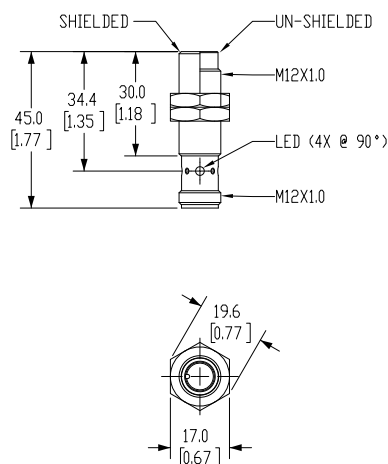
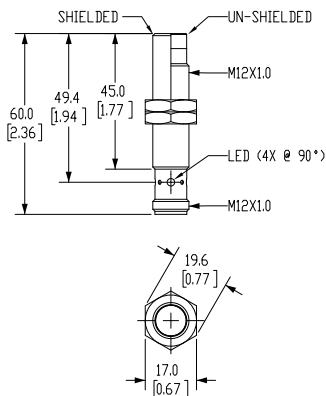


Figure 2



KSM Series Factor 1 Inductive Proximity Sensors

KSM Series M12 Inductive Proximity Specifications				
Models	<i>KSM6-AP-3H</i>	<i>KSM6-AP-4H</i>	<i>KSM-AP-3H</i>	<i>KSM-AP-4H</i>
Mounting Type	Flush	Non-flush	Flush	Non-flush
Nominal Sensing Distance	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	N.O.			
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 to 85°C [-40 to 185°F]			
Protection Degree (DIN 40050)	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			

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.