# 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

Connector

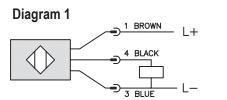
4-pin M12 connector

- 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	\$28.50	4mm [0.16in]	Flush	- - N.O.	PNP	10 - 30 VDC	4-pin M12 quick- disconnect	Diagram 1	Figure 1			
KSM6-AP-4H	\$28.50	10mm [0.39in]	Non-flush									
KSM-AP-3H	\$28.50	4mm [0.16in]	Flush						Figure 2			
KSM-AP-4H	\$28.50	10mm [0.39in]	Non-flush									

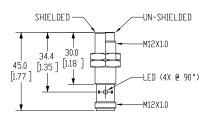
### Wiring Diagrams



### Dimensions

mm [inches]

#### Figure 1



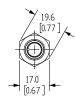
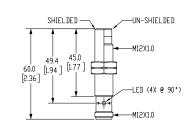


Figure 2





## **KSM Series Factor 1 Inductive Proximity Sensors**

KSM Series M12 Inductive Proximity Specifications										
Models	KSM6-AP-3H	KSM6-AP-4H	<u>KSM-AP-3H</u>	KSM-AP-4H						
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.