

# 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

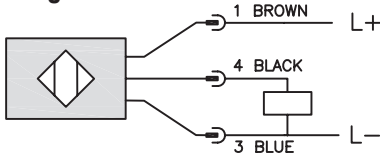


## KSM Series M12 Inductive Proximity Selection Chart

Part Number	Price	Sensing Range	Mounting	Output State	Logic	Voltage	Connection	Wiring	Dimensions
<b>KSM6-AP-3H</b>	\$28.50	4mm [0.16in]	Flush	N.O.	PNP	10 - 30 VDC	4-pin M12 quick-disconnect	Diagram 1	Figure 1
<b>KSM6-AP-4H</b>	\$28.50	10mm [0.39in]	Non-flush						Figure 2
<b>KSM-AP-3H</b>	\$28.50	4mm [0.16in]	Flush						
<b>KSM-AP-4H</b>	\$28.50	10mm [0.39in]	Non-flush						

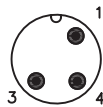
## Wiring Diagrams

Diagram 1



Connector

4-pin M12 connector



## Dimensions

mm [inches]

Figure 1

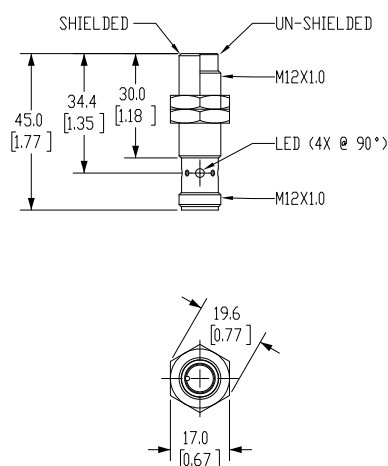
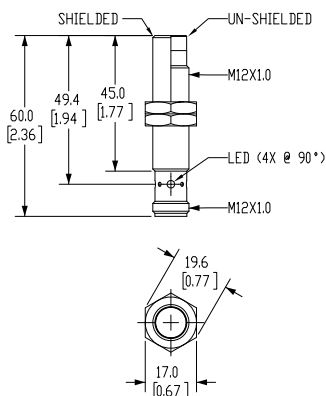


Figure 2



# KSM Series Factor 1 Inductive Proximity Sensors

## KSM Series M12 Inductive Proximity Specifications

<b>Models</b>	<b><i>KSM6-AP-3H</i></b>	<b><i>KSM6-AP-4H</i></b>	<b><i>KSM-AP-3H</i></b>	<b><i>KSM-AP-4H</i></b>
<b>Mounting Type</b>	Flush	Non-flush	Flush	Non-flush
<b>Nominal Sensing Distance</b>	4mm [0.16 in]	10mm [0.39 in]	4mm [0.16 in]	10mm [0.39 in]
<b>Operating Distance</b>	0 - 3.24 mm	0 - 8.10 mm	0 - 3.24 mm	0 - 8.10 mm
<b>Material Correction Factors</b>	Correction Factor (K-Factor) = 1			
<b>Output Type</b>	N.O.			
<b>Operating Voltage</b>	10 to 30 VDC			
<b>No-load Supply Current</b>	< 20 mA			
<b>Operating (Load) Current</b>	100 mA			
<b>Off-state Leakage Current</b>	NA			
<b>Voltage Drop</b>	< 2.5 V			
<b>Switching Frequency</b>	2000Hz			
<b>Differential Travel (% of Nominal Distance)</b>	3 - 15			
<b>Repeat Accuracy</b>	NA			
<b>Ripple</b>	NA			
<b>Time Delay Before Availability (tv)</b>	NA			
<b>Short Circuit Protection</b>	Yes			
<b>Operating Temperature</b>	-40 to 85°C [-40 to 185°F]			
<b>Protection Degree (DIN 40050)</b>	IP65 / IP66 / IP67 / IP68 / IP69K			
<b>LED Indicators</b>	Illuminated when energized			
<b>Housing Material</b>	stainless steel [316L]; LED window: Polyetherimide [PEI]			
<b>Sensing Face Material</b>	active face: Liquid Crystal Polymer (LCP) white			
<b>Shock/Vibration</b>	See <a href="#">Proximity Sensor Terminology</a>			
<b>Weight</b>	0.026 kg	0.024 kg	0.029 kg	0.027 kg
<b>Connection</b>	4-pin M12 quick-disconnect			
<b>Agency Approvals</b>	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.