

KSK Series Factor 1 Inductive Proximity Sensors



M18 (18mm)

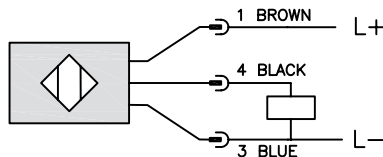
- Correction Factor (K-Factor) = 1
- Low cost/high performance
- Inductive sensor
- Metal thread M12 x 1 Connector
- Increased sensing range
- Gold-plated contacts
- Electromagnetic field immune
- Flush and Non-flush mounting
- Lifetime warranty



| KSK Series M18 Inductive Proximity Selection Chart | | | | | | | | | |
|--|----------|----------------|-----------|--------------|-------|-------------|----------------------------|-----------|------------|
| Part Number | Price | Sensing Range | Mounting | Output State | Logic | Voltage | Connection | Wiring | Dimensions |
| KSK6-AP-3H | \$2a8s: | 8mm [0.31 in] | Flush | N.O. | PNP | 10 - 30 VDC | 4-pin M12 quick-disconnect | Diagram 1 | Figure 1 |
| KSK6-AP-4H | \$;2a8t: | 12mm [0.47 in] | Non-flush | | | | | | Figure 2 |
| KSK-AP-3H | \$2a8u: | 8mm [0.31 in] | Flush | | | | | | |
| KSK-AP-4H | \$2a8v: | 15mm [0.59 in] | Non-flush | | | | | | |

Wiring Diagrams

Diagram 1



Connector



Dimensions

mm [inches]

Figure 1

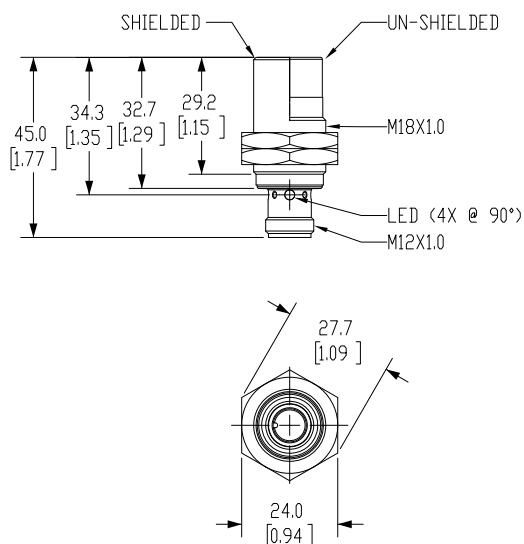
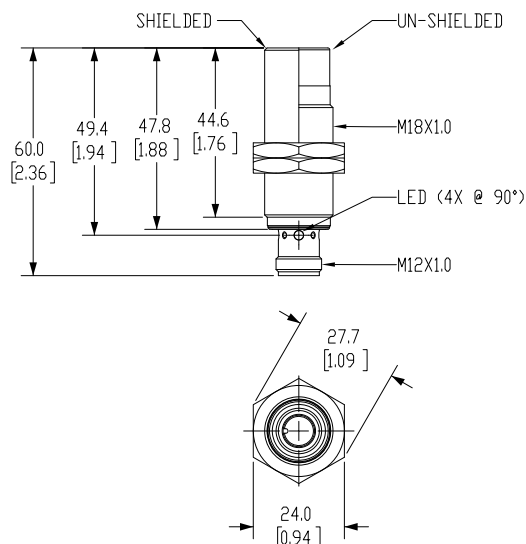


Figure 2



KSK Series Factor 1 Inductive Proximity Sensors

| KSK Series M18 Inductive Proximity Specifications | | | | |
|---|--|-------------------|------------------|------------------|
| Model | <u>KSK6-AP-3H</u> | <u>KSK6-AP-4H</u> | <u>KSK-AP-3H</u> | <u>KSK-AP-4H</u> |
| Mounting Type | Flush | Non-flush | Flush | Non-flush |
| Nominal Sensing Distance | 8mm [0.31in] | 12mm [0.47 in] | 8mm [0.31in] | 15mm [0.59 in] |
| Operating Distance | 0 - 6.48 mm | 0 - 9.72 mm | 0 - 6.48 mm | 0 - 12.15 mm |
| Material Correction Factors | Correction Factor (K-Factor) = 1 | | | |
| Output Type | N.O. | | | |
| Operating Voltage | 10 to 30 VDC | | | |
| No-load Supply Current | < 20mA | | | |
| Operating (Load) Current | 100mA | | | |
| 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 | 0.04 kg | 0.035 kg | 0.046 kg | 0.042 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.