

APS Inductive Proximity Sensors



Top Sensing
APS4-12S-E-D



Front Sensing
APS4-12M-E-D

Compact 12 x 27 / 8 x 26.5 mm plastic – DC

- Compact polycarbonate housing; comes with mounting plate
- High-frequency oscillation type
- Top or front sensing models
- DC 2-wire or 3-wire
- NPN, PNP, or NPN/PNP
- N.O. or N.C.
- Axial cable
- LED indicator
- IP67 rated
- Lifetime warranty



Top Sensing
APS25-8S-E-D



Front Sensing
APS25-8M-E-D

| Compact Rectangular DC Proximity Selection Chart | | | | | | | | |
|--|---------|------------------|-----------|--------------|----------|-------------------------|-----------|------------|
| Part Number | Price | Sensing Range | Mounting | Output State | Logic | Connection | Wiring | Dimensions |
| Top-Sensing | | | | | | | | |
| <u>APS25-8S-E-D</u> | \$22.50 | 2.5mm [0.098 in] | Non-flush | N.O. | NPN | 2m [6.5 ft] axial cable | Diagram 1 | Figure 1 |
| <u>APS4-12S-E-D</u> | \$22.50 | 4mm [0.157 in] | | N.O. | | | | PNP |
| <u>APS4-12S-E1-D</u> | \$22.50 | | | N.C. | | | | |
| <u>APS4-12S-E2-D</u> | \$22.50 | | | N.O. | | | | |
| <u>APS4-12S-Z-D</u> | \$22.50 | | | N.O. | NPN/ PNP | | Diagram 3 | |
| Front-Sensing | | | | | | | | |
| <u>APS25-8M-E-D</u> | \$22.50 | 2.5mm [0.098 in] | Non-flush | N.O. | NPN | 2m [6.5 ft] axial cable | Diagram 1 | Figure 2 |
| <u>APS4-12M-E-D</u> | \$22.50 | 4mm [0.157 in] | | N.O. | | | | PNP |
| <u>APS4-12M-E1-D</u> | \$22.50 | | | N.C. | | | | |
| <u>APS4-12M-E2-D</u> | \$22.50 | | | N.O. | | | | |
| <u>APS4-12M-Z-D</u> | \$22.50 | | | N.O. | NPN/ PNP | | Diagram 3 | |

Wiring Diagrams

Diagram 1
NPN Output

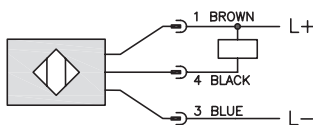


Diagram 2
PNP Output

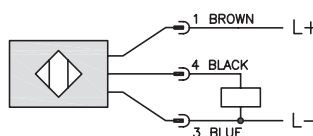
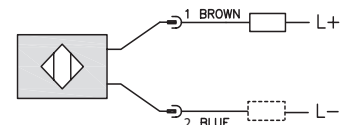


Diagram 3
NPN/PNP Output



APS Inductive Proximity Sensors

| Compact Rectangular DC Proximity Specifications | | |
|---|--|-------------------|
| | APS25 | APS4 |
| Mounting Type | Non-flush | |
| Nominal Distance | 2.5 mm [0.09 in] | 4mm [0.157 in] |
| Operating Distance | NA | |
| Material Correction Factor | See the Material influence table | |
| Output Type | See sensor selection chart | |
| Operating Voltage | 10-30 VDC | |
| No-load Supply Current | ≤ 20mA | ≤ 20mA (NA for Z) |
| Operating (Load) Current | ≤ 50mA | |
| Off-state (Leakage) Current | ≤ 0.1 mA (≤ 1.0 mA for Z units) | |
| Voltage Drop | ≤ 1.0 VDC (< 3V for Z models) | |
| Switching Frequency | 500Hz | 200Hz |
| Differential Travel | < 20% | |
| Repeat Accuracy | NA | |
| Ripple | NA | |
| Time Delay Before Availability (tv) | 5ms | |
| Reverse Polarity Protection | NA | |
| Short Circuit Protection | NA | |
| Operating Temperature | -10 to +50°C [14 to 122°F] | |
| Protection Degree (DIN 40050) | IEC IP67 | |
| Indication/Switch Status | Embedded red LED (illuminated when output is active) | |
| Housing, Sensing Face Material | Polycarbonate | |
| Shock/Vibration | See Proximity Sensor Terminology | |
| Tightening Torque | < 0.4 Nm | |
| Weight (cable/M8 connector) | 0.0816 lb | |
| Connection | 2m [6.5 ft] axial cable | |
| Agency Approvals | CE, cURus [UR E198343] | |

Dimensions

mm [inches]

Figure 1

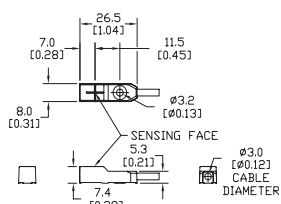


Figure 2

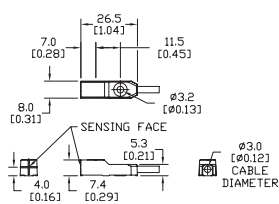


Figure 3

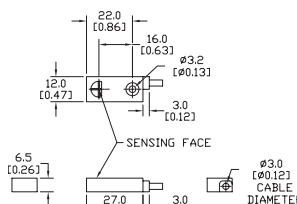
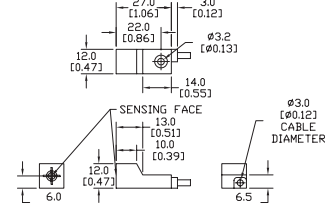
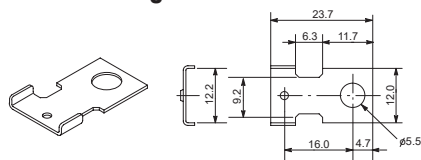


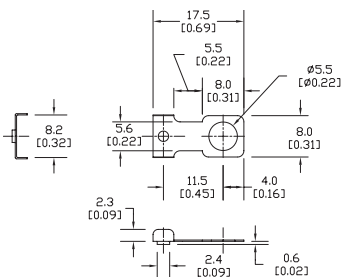
Figure 4



Mounting Plate



Supplied with APS4x sensors



Supplied with APS25x sensors

