

# 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**

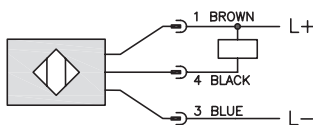


**Front Sensing**  
**APS25-8M-E-D**

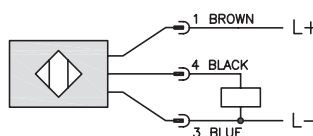
| Compact Rectangular DC Proximity Selection Chart |         |                  |           |              |          |                         |           |            |
|--|---------|------------------|-----------|--------------|----------|-------------------------|-----------|------------|
| Part Number                                      | Price   | Sensing Range    | Mounting  | Output State | Logic    | Connection              | Wiring    | Dimensions |
| <b>Top-Sensing</b>                               |         |                  |           |              |          |                         |           |            |
| <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 |            |
| <b>Front-Sensing</b>                             |         |                  |           |              |          |                         |           |            |
| <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

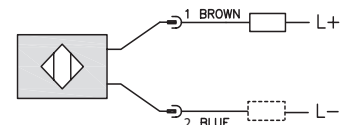
**Diagram 1**  
**NPN Output**



**Diagram 2**  
**PNP Output**



**Diagram 3**  
**NPN/PNP Output**



# APS Inductive Proximity Sensors

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

## Dimensions

mm [inches]

Figure 1

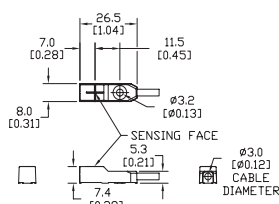


Figure 2

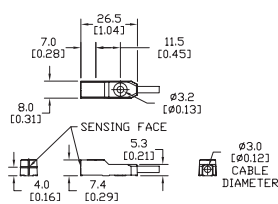


Figure 3

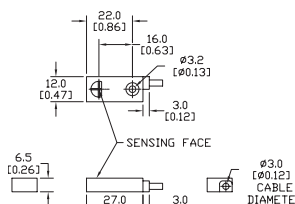
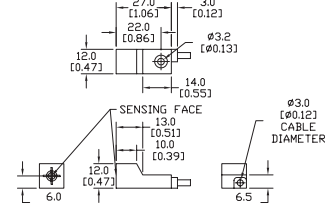
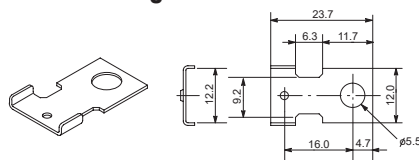


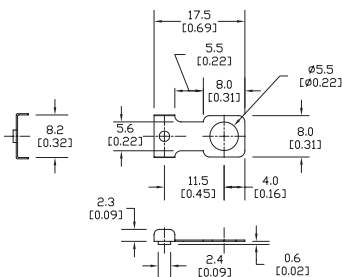
Figure 4



### Mounting Plate



Supplied with APS4x sensors



Supplied with APS25x sensors

