

# WSE Series Weld Slag Resistant Inductive Proximity Sensors



## M8 (8mm)

- Low cost/high performance
- Weld slag resistant coating
- Inductive sensor
- Full metal housing
- Increased sensing range
- Gold-plated contacts
- Flush mounting
- Lifetime warranty

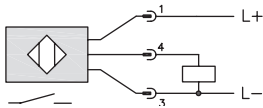


### WSE Series M8 Inductive Proximity Selection Chart

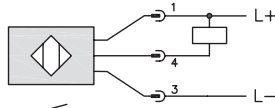
| Part Number                      | Price   | Sensing Range | Mounting | Output State | Logic   | Voltage     | Connection                 | Wiring    | Dimensions |  |
|----------------------------------|---------|---------------|----------|--------------|---------|-------------|----------------------------|-----------|------------|--|
| <a href="#"><u>WSE-AP-3H</u></a> | \$52.00 | 2mm [0.08 in] | Flush    | N.O.         | PNP     | 10 - 36 VDC | 4-pin M12 quick-disconnect | Diagram 1 | Figure 1   |  |
| <a href="#"><u>WSE-AN-3H</u></a> | \$57.00 |               |          |              | NPN     |             |                            | Diagram 2 | Figure 1   |  |
| <a href="#"><u>WSE-A0-3E</u></a> | \$57.00 |               |          |              | PNP/NPN |             | 4-pin M12 with 0.3 m cable | Diagram 3 | Figure 2   |  |
| <a href="#"><u>WSE-A0-3A</u></a> | \$55.00 |               |          |              |         |             | 3m axial cable             | Diagram 4 |            |  |

## Wiring Diagrams

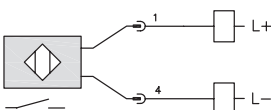
### Diagram 1



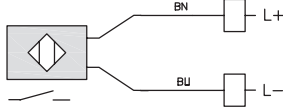
### Diagram 2



### Diagram 3



### Diagram 4



## Connector

### 4-pin M12



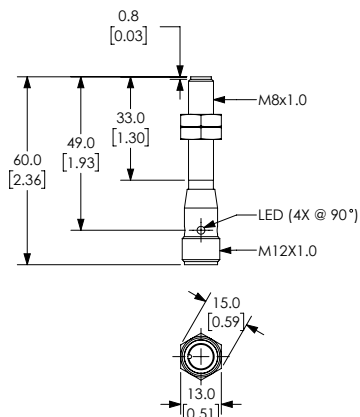
### 4-pin M12 0.3m



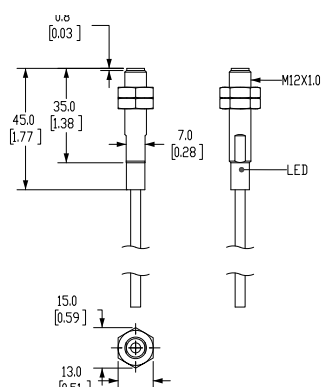
## Dimensions

mm [inches]

### Figure 1



### Figure 2



# WSE Series Weld Slag Resistant Inductive Proximity Sensors

| WSE Series M8 Inductive Proximity Specifications |                                                                                                  |           |                                                                 |                           |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------|---------------------------|
| Model                                            | WSE-AP-3H                                                                                        | WSE-AN-3H | WSE-A0-3E                                                       | WSE-A0-3A                 |
| Mounting Type                                    | Flush                                                                                            |           |                                                                 |                           |
| Nominal Sensing Distance                         | 2mm [0.08 in]                                                                                    |           |                                                                 |                           |
| Operating Distance                               | 0 - 1.6 mm                                                                                       |           |                                                                 |                           |
| Material Correction Factors                      | See the <a href="#">Material Influence table</a>                                                 |           |                                                                 |                           |
| Output Type                                      | N.O.                                                                                             |           |                                                                 |                           |
| Operating Voltage                                | 10 to 36 VDC                                                                                     |           |                                                                 |                           |
| No-load Supply Current                           | < 20 mA                                                                                          |           | NA                                                              |                           |
| Operating (Load) Current                         | 100mA                                                                                            |           |                                                                 |                           |
| Off-state Leakage Current                        | NA                                                                                               |           | < 0.75 mA                                                       |                           |
| Voltage Drop                                     | < 2.5 V                                                                                          |           |                                                                 |                           |
| Switching Frequency                              | 100Hz                                                                                            |           | 150Hz                                                           |                           |
| Differential Travel<br>(% of Nominal Distance)   | 1-15                                                                                             | 1-20      |                                                                 |                           |
| Repeat Accuracy                                  | NA                                                                                               |           |                                                                 |                           |
| Ripple                                           | NA                                                                                               |           |                                                                 |                           |
| Time Delay Before Availability (tv)              | NA                                                                                               |           |                                                                 |                           |
| Short Circuit Protection                         | Yes                                                                                              |           |                                                                 |                           |
| Operating Temperature                            | 0 to 85°C [32 to 185°F]                                                                          |           | -25 to 70°C [-13 to 158°F]                                      |                           |
| Protection Degree (DIN 40050)                    | IP67 / IP68                                                                                      |           | IP67                                                            |                           |
| LED Indicators                                   | Illuminated when energized                                                                       |           |                                                                 |                           |
| Housing Material                                 | Stainless steel 316L / 1.4404 with anti-spatter ceramic (Polytetrafluoroethylene [PTFE]) coating |           |                                                                 |                           |
| Sensing Face Material                            | active face: stainless steel 316L<br>1.4404 anti-spatter                                         |           |                                                                 |                           |
| Shock/Vibration                                  | See <a href="#">Proximity Sensor Terminology</a>                                                 |           |                                                                 |                           |
| Weight                                           | 0.021 kg                                                                                         | 0.021 kg  | 0.035 kg                                                        | 0.070 kg                  |
| Connection                                       | 4-pin M12 quick-disconnect                                                                       |           | PUR cable / 0.3m; 2x0.5 mm²;<br>with 4-pin M12 quick-disconnect | PUR cable / 3m; 2x0.5 mm² |
| 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.