

# Inductive sensor

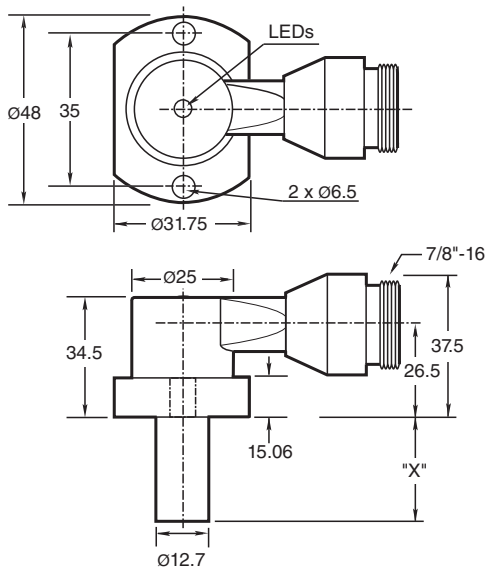
## NJ1.5-PD-US-1.250-V93

- 2-wire AC/DC
- Weld Immune
- Sensing range 1.5 mm
- 3000 psi rating

Proximity switch



### Dimensions



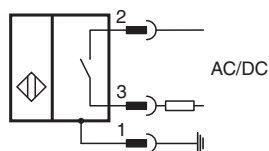
### Technical Data

| General specifications     |                |                    |
|----------------------------|----------------|--------------------|
| Switching function         |                | Normally open (NO) |
| Output type                |                | Two-wire           |
| Rated operating distance   | S <sub>n</sub> | 1.5 mm             |
| Installation               |                | flush              |
| Output polarity            |                | AC/DC              |
| Assured operating distance | S <sub>a</sub> | 0 ... 1.21 mm      |

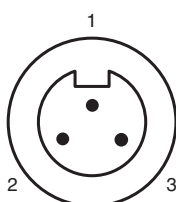
## Technical Data

|                                      |       |                                   |
|--------------------------------------|-------|-----------------------------------|
| Reduction factor $r_{Al}$            |       | 0.4                               |
| Reduction factor $r_{304}$           |       | 0.85                              |
| <b>Nominal ratings</b>               |       |                                   |
| Operating voltage                    | $U_B$ | 20 ... 250 V AC/20 ... 300 V DC   |
| Switching frequency                  | $f$   | 0 ... 20 Hz                       |
| Hysteresis                           | $H$   | 10 ... 20 typ. 15 %               |
| Reverse polarity protection          |       | yes                               |
| Short-circuit protection             |       | yes                               |
| Voltage drop                         | $U_d$ | $\leq 7$ V                        |
| Momentary current<br>(20 ms, 0.1 Hz) |       | max. 3 A                          |
| Operating current                    | $I_L$ | 8 ... 300 mA                      |
| Off-state current                    | $I_r$ | $< 1.7$ mA                        |
| Mag. Field strength, AC fields       |       | 250 mT                            |
| Mag. Field strength, DC fields       |       | 100 mT                            |
| <b>Limit data</b>                    |       |                                   |
| Operating pressure dynamically       |       | 3000 psi                          |
| <b>Indicators/operating means</b>    |       |                                   |
| LED green                            |       | Power on                          |
| LED red                              |       | Output status                     |
| LED red/green                        |       | Short circuit/overload indication |
| <b>Standard conformity</b>           |       |                                   |
| Standards                            |       | EN 60947-5-2                      |
| <b>Approvals and certificates</b>    |       |                                   |
| UL approval                          |       | cULus Listed, General Purpose     |
| CSA approval                         |       | cCSAus Listed, General Purpose    |
| <b>Ambient conditions</b>            |       |                                   |
| Ambient temperature                  |       | -25 ... 70 °C (-13 ... 158 °F)    |
| <b>Mechanical specifications</b>     |       |                                   |
| Connection type                      |       | Connector 7/8"-16 UN , 3-pin      |
| Degree of protection                 |       | IP67                              |
| Material                             |       | Housing: zinc<br>Probe: aluminum  |
| Note                                 |       | X = 1.250 in (31.8 mm)            |

## Connection



## Connection Assignment

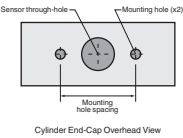


Wire colors

|   |    |         |
|---|----|---------|
| 1 | GN | (green) |
| 2 | BK | (black) |
| 3 | WH | (white) |

Additional Information

**NPT Type Mounting Holes:**  
1000 and 3000 psi NPT Types:  
Mounting hole screw thread shall be 1/4" - 20.  
Minimum thread engagement depth is 0.250" (6.35 mm)  
Hole spacing is 35 mm center to center.



**Mounting Screws:**  
Standard 1000 and 3000 psi models use two, self-locking 1/4"- 20 socket head cap screws (provided).  
Recommended tightening torque: 150 in lb (16.95 N-m).

 **Important:** When using spacers, make certain to maintain the 0.250" (6.35 mm) minimum mounting screw thread engagement.

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