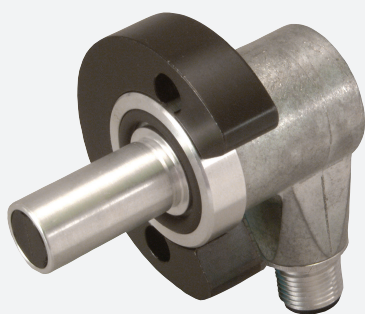




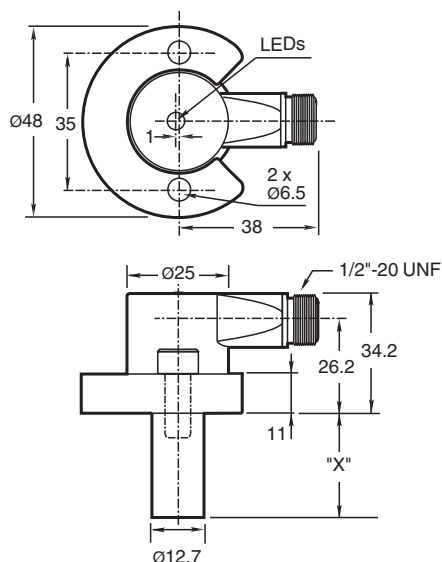
## Inductive sensor NJ2-D-US-1.500-V12

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

### Cylinder Position Switch



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | Two-wire           |
| Rated operating distance   | $s_n$ | 2 mm               |
| Installation               |       | flush              |
| Output polarity            |       | AC/DC              |
| Assured operating distance | $s_a$ | 0 ... 1.62 mm      |
| Reduction factor $r_{AI}$  |       | 0.4                |
| Reduction factor $r_{304}$ |       | 0.85               |
| Output type                |       | 2-wire             |

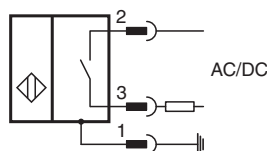
#### Nominal ratings

|                             |     |                       |
|-----------------------------|-----|-----------------------|
| Switching frequency         | $f$ | 0 ... 20 Hz           |
| Hysteresis                  | $H$ | 10 ... 20 % typ. 15 % |
| Reverse polarity protection |     | yes                   |

## Technical Data

|                                      |       |                                   |
|--------------------------------------|-------|-----------------------------------|
| Short-circuit protection             |       | yes                               |
| Voltage drop                         | $U_d$ | $\leq 7\text{ V}$                 |
| Momentary current<br>(20 ms, 0.1 Hz) |       | max. 3 A                          |
| Rated operating current              | $I_e$ | 8 ... 300 mA AC/DC                |
| Off-state current                    | $I_r$ | $< 1.7\text{ mA}$                 |
| 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>Electrical specifications</b>     |       |                                   |
| Rated operating voltage              | $U_e$ | 20 ... 250 V AC/DC                |
| <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 plug                    |
| Degree of protection                 |       | IP67                              |
| Material                             |       | Housing: zinc<br>Probe: aluminum  |
| Connector                            |       |                                   |
| Threading                            |       | 1/2"-20 UN                        |
| Number of pins                       |       | 3                                 |
| Mass                                 |       | 195 g                             |
| Dimensions                           |       |                                   |
| Length                               |       | 34.5 mm                           |
| Diameter                             |       | 12.7 mm                           |
| Note                                 |       | X = 1.50 in (38.1 mm)             |

## Connection



Connection Assignment



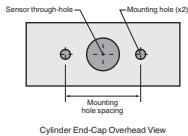
Wire colors

|   |       |             |
|---|-------|-------------|
| 1 | GN    | (green)     |
| 2 | RD/BK | (red/black) |
| 3 | RD/WH | (red/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.