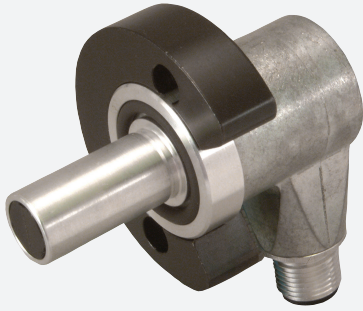


# Inductive sensor

## NJ2-D-US-1.250-V12

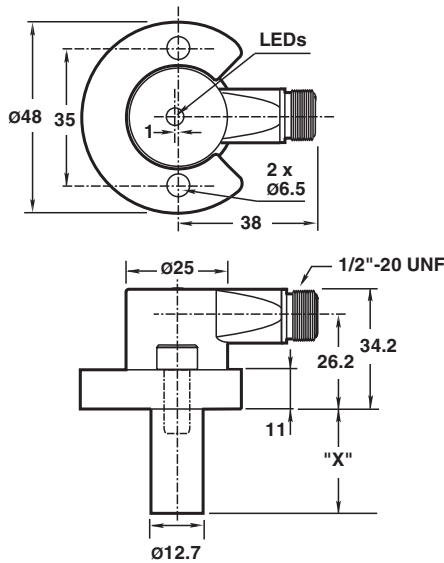


- 2-wire AC/DC
- Weld Immune
- Sensing range 2 mm
- 3000 psi rating

### 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      |

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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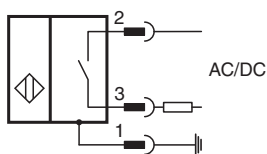
Singapore: +65 6779 9091  
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**PF** PEPPERL+FUCHS

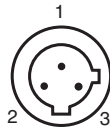
## Technical Data

|                                      |       |                                   |
|--------------------------------------|-------|-----------------------------------|
| Reduction factor $r_{AI}$            |       | 0.4                               |
| Reduction factor $r_{304}$           |       | 0.85                              |
| Output type                          |       | 2-wire                            |
| <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 % 15 typ.               |
| 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 plug 1/2"-20 UN , 3-pin |
| Degree of protection                 |       | IP67                              |
| Material                             |       | Housing: zinc<br>Probe: aluminum  |
| Note                                 |       | X = 1.250 in (31.8 mm)            |

## Connection



## Connection Assignment



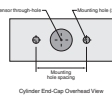
Wire colors

- 1 | GN (green)
- 2 | 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.

## Accessories

|  |                              |
|--|------------------------------|
| <b>SPACER 0.160 TO 0.375 : Spacer for cylinder switches X.XXX"</b> | Spacer for cylinder switches |
| <b>SPACER 0.380 TO 0.875 : Spacer for cylinder switches X.XXX"</b> | Spacer for cylinder switches |

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