



### Model Number

**NJ2-F-US-1.250-V93**

Cylinder Position Switch

### Features

- Weld Immune
- Sensing range 2 mm
- 1000 psi rating
- 2-wire AC/DC

### Accessories

#### V93-G-YE2M-STOOW

Female cordset, 7/8" - 16 UNF, 3-pin, PUR cable

#### SPACER 0.160 TO 0.375 : X.XXX"

Spacer for cylinder switches

#### SPACER 0.380 TO 0.875 : X.XXX"

Spacer for cylinder switches

## Technical Data

### General specifications

|                            |       |               |    |
|----------------------------|-------|---------------|----|
| Switching element function |       | AC/DC         | NO |
| Rated operating distance   | $s_n$ | 2 mm          |    |
| Installation               |       | flush         |    |
| Output polarity            |       | AC/DC         | NO |
| Assured operating distance | $s_a$ | 0 ... 1.62 mm |    |
| Reduction factor $r_{Al}$  |       | 0.4           |    |
| Reduction factor $r_{304}$ |       | 0.85          |    |

### Nominal ratings

|                                      |       |                                 |
|--------------------------------------|-------|---------------------------------|
| 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) |       | $\leq 3$ 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                          |

### Limit data

|                                |          |
|--------------------------------|----------|
| Operating pressure dynamically | 1000 psi |
|--------------------------------|----------|

### Indicators/operating means

|               |                                   |
|---------------|-----------------------------------|
| LED green     | Power on                          |
| LED red       | Output status                     |
| LED red/green | Short circuit/overload indication |

### Standard conformity

|           |              |
|-----------|--------------|
| Standards | EN 60947-5-2 |
|-----------|--------------|

### Ambient conditions

|                     |                                |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
|---------------------|--------------------------------|

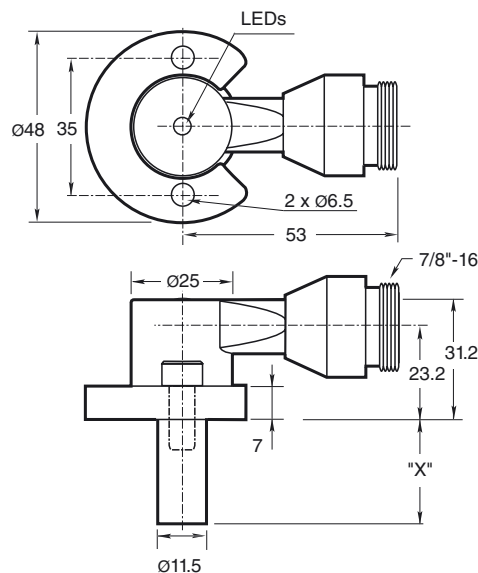
### Mechanical specifications

|                      |                                  |
|----------------------|----------------------------------|
| 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)           |

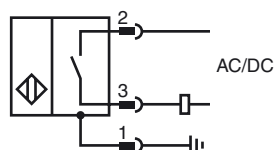
### Approvals and certificates

|              |                                |
|--------------|--------------------------------|
| UL approval  | cULus Listed, General Purpose  |
| CSA approval | cCSAus Listed, General Purpose |

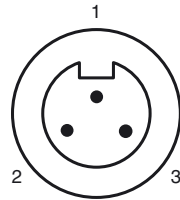
## Dimensions



## Electrical Connection



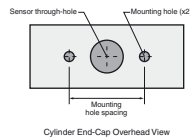
## Pinout



### Wire colors

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

**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.