

### Model Number

**NJ2-D-US-1.025-V12**

Cylinder Position Switch

### Features

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

### Accessories

#### V12-G-YE2M-PVC

Connecting cable, 1/2" - 20 UNF, 3-pin, PVC cable

#### V12-W-YE2M-PVC

Connecting cable, 1/2" - 20 UNF, 3-pin, PVC 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 $r_{AI}$		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 (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	3000 psi
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### 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
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### Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
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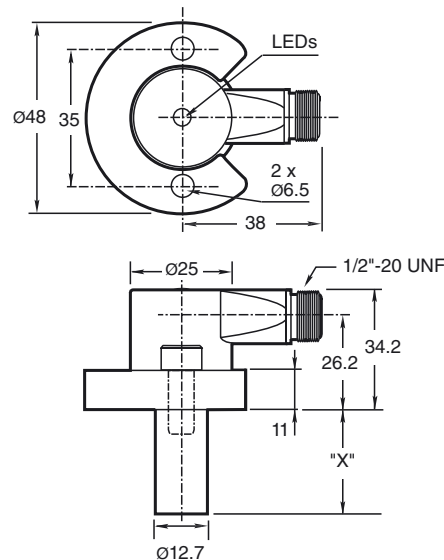
### Mechanical specifications

Connection type	Connector 1/2"-20 UNF, 3-pin
Degree of protection	IP67
Material	Housing: zinc Probe: aluminum
Note	X = 1.025 in (26 mm)

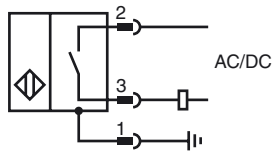
### Approvals and certificates

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

## Dimensions



Electrical Connection



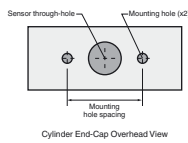
Pinout



Wire colors

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