# **J4 Series Plunger Switches**

## **Product Series Summary Sheet**



Our J4 Series ball switches were developed for some of the most demanding applications, where traditional sealed ball switches failed. We've applied the same patented ball carrier design to ultra high-performance plunger switches, which offer flexibility in mounting and actuator configuration.

Stainless steel construction

Completely submersible (meets IP68)

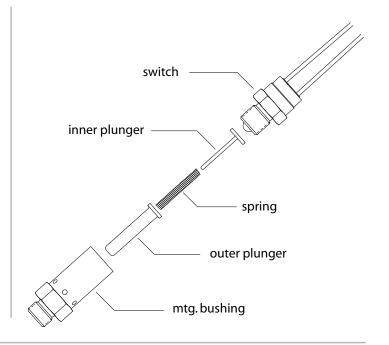
Patented ball-carrier design

Ultra high-temperature capability

Normally open and normally closed versions available

### **Variable Parameters**

- · plunger length
- · mounting thread
- terminations
- · actuation force
- · travel parameters
- · sealed or vented extension



## **J4 Series General Specifications**

(for all J4 models unless otherwise noted or not applicable)

Electrical Rating: 5A @ 28 VDC Contact Configuration: SPST

Electromechanical

Endurance: 100,000 cycles @  $5A/28VDC^*$ Temperature Resistance:  $-50^{\circ}F$  to  $185^{\circ}F$  ( $-45^{\circ}C$  to  $85^{\circ}C$ ) (up to  $302^{\circ}F$  ( $150^{\circ}C$ ) available)

Travel Parameters

Pre-travel: .004" (.102mm) min., .032" (.813mm) max.

Over-travel: to top of bushing

Standard Body Material

J4001, J4002: plated steel
J4201, J4202: brass
J4301: stainless steel
J4401: stainless steel
Standard Wire: 16 AWG GXL

\*other electromechanical ratings available - please contact the factory.

## **Applications**

- hatch / door interlock switch (amphibious military vehicles)
- valve position sensing (diesel turbochargers)
- · neutral safety switch
- reverse safety

(back-up alarm)

- · battery interlock
- operator presence
- · hydraulic valve handle position sensing



# The J4 Family of Designs

## **Switches**

# 7/8 hex

## J4 Standard Design

Part Numbers: J4001 (NO), J4002 (NC)

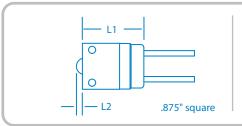
**Dimensions** 

J4001: L1 = .870" / 22.10mm, L2 = .419" / 10.64mm J4002: L1 = .830"/ 21.08mm, L2 = .424" / 10.77mm

Mounting: 9/16-18UNF-2A

Total Actuator Travel: .110" / 2.79mm

## **J4 Square Body Design**



Part Numbers: J4201 (NO), J4202 (NC)

**Dimensions** 

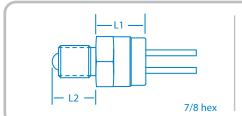
J4201: L1 = 1.170" / 29.72mm), L2 = .114" / 2.90mm J4202: L1 = 1.120" / 28.45mm), L2 = .108" / 2.74mm

Mounting: .177" / 4.50mm) dia. through-holes,

.625" / 15.87mm apart

Total Actuator Travel: .108" / 2.74mm) NC; .114" / 2.90mm NO

## J4 Extended-Thread Design



Part Numbers: J4301(NO), J4302 (NC)

**Dimensions** 

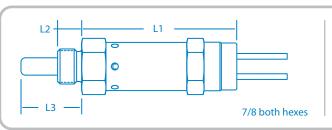
J4301: L1 = .870" / 22.10mm), L2 = .762" / 19.35mm

J4302: L1 =TBD, L2 = TBD

Mounting: 5/8-18UNF-2A

Total ActuatorTravel: .109" / 2.77mm

## Switches With Attachments - J4401



## J4 Plunger Design

**Dimensions** 

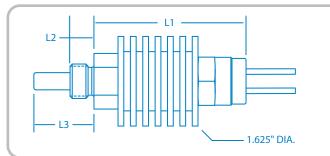
L1 = 2.140" / 54.36mm L2 = .433" / 11mm

L3 =1 .090" / 27.69mm

Mounting: M16 x 1.5

Travel Parameters: please contact factory Total ActuatorTravel: .657" / 16.69mm (approx.)

## J4 High Temperature Design



Dimensions

L1 = 2.760" / 70.10mm

L2 = .433" / 11mm

L3 = 1.090" / 27.69mm

Mounting: 5/8-18UNF-2A

Travel Parameters: please contact factory

Total ActuatorTravel: .657" / 16.69mm (approx.) Operational Temperature: up to 302F (150C)