

# MODEL JS-10/JS-30 SERIES MAGNETIC LEVEL SWITCH FOR MAGNETIC LIQUID LEVEL INDICATORS



## DESCRIPTION

The Jogler JS-10/JS-30 Series switches are magnetically actuated point level switches. The JS-10 (1 amp) and JS-30 (3 amp) can be configured as a SPDT or DPDT\* and are available in a “flying lead” configuration (no enclosure), an epoxy-coated Aluminum enclosure, or a 316 stainless steel enclosure. The JS-10 is a low power switch best suited for DCS or PLC inputs. The JS-30 is a high power switch used to actuate larger relays and solenoid valves. The JS-10/JS-30 switches are non-intrusive level switches that require no contact with the process fluid and have no wetted parts.

\*Note: DPDT configuration consists of 2 SPDT switches.

## TECHNOLOGY

The JS-10/JS-30 Series contain 1 or 2 form C bi-stable latching switches. The switches consist of a magnetically actuated reed switch and bias magnet. The reed switch contains precious metal contacts hermetically sealed in an inert gas atmosphere sealed with a glass-to-metal bond. The bias magnet holds the switch in its last state, allowing it to maintain its state even in high-vibration environments. The hermetically sealed contacts ensure safe operation even in hazardous environments.

## STANDARD FEATURES

- Magnetically actuated, hermetically sealed, bi-stable latching switch
- No process piping or valves required
- Easy mounting with infinitely adjustable setpoint
- Hermetically sealed magnetic reed switch
- Latching bias magnet maintains state in high-vibration environments
- Available with flying leads (no enclosure), Epoxy-coated Aluminum enclosure, or a Stainless Steel Enclosure
- Extended operation in extreme environments

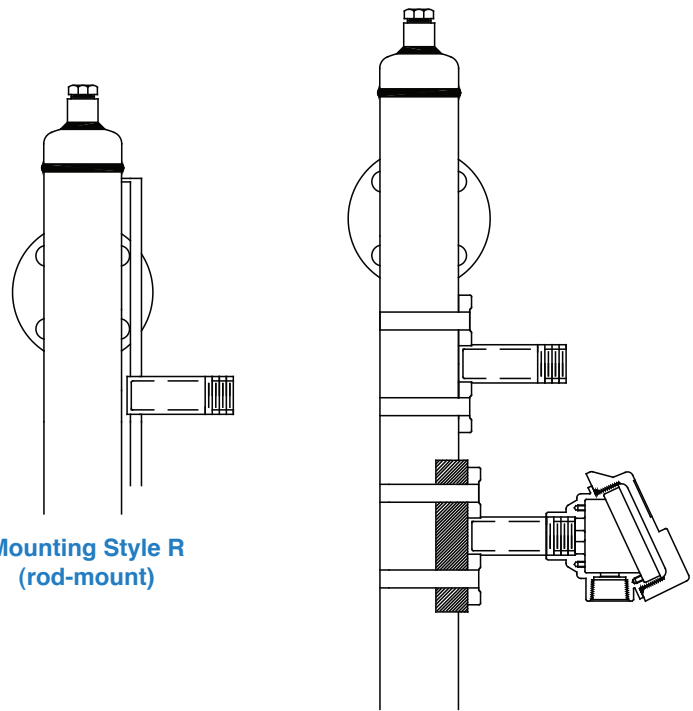
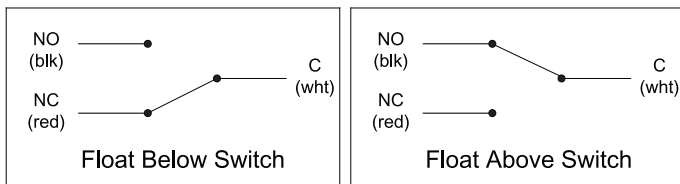


# SPECIFICATIONS

– Switch Type		Magnetically actuated, hermetically sealed bi-stable latching switch	
– Contact Material	JS-10 JS-30	Rhodium Tungsten	
– Max Deadband		0.6" (differential between 2 SPDT switches is 1/8")	
– Contact Ratings	JS-10 JS-30	150VDC, 1A, 25W; 150VDC, 3A, 75W;	130VAC, 0.2A max / 230VAC, 0.1A max 120VAC, 0.625A max / 25VAC, 3A max / 240VAC, 0.3125A max
– Ambient Temperature Rating*		-40°F(-40°C) to 220°F(105°C)	
– Min. Process Temperature*		-40°F(-40°C) *Contact factory for colder applications to -320°F process temps	
– Max. Process Temperature*		390°F(200°C) *For process temperatures to 890°F see mounting options below	
– Customer Connection		3/4" FNPT conduit and 18AWG wiring harness	
– Enclosure Options		Epoxy coated Aluminum, 316 Stainless Steel	
– Mounting Options		For process temperatures up to 390°F - Mounting style 0 For process temperatures up to 690°F - Mounting style H For process temperatures up to 890°F - Mounting style R	
– Hazardous Area Ratings		XP Class I / Div 1 / Groups BCD NI Class I / Div 2 / Groups ABCD DIP Class II,III / Div 1 / Groups EFG NEMA 4X	

\*Note: Ambient and operating temps are for enclosure styles 0 and S only. Subtract 40°C from max temps for Aluminum enclosure

# WIRING DIAGRAM



# ORDERING INFORMATION

Model Number: JS-ab-c-d

- a Current Rating
  - 1 1 amp
  - 3 3 amp
- b Number of Reed Switches
  - 1 1 switch (SPDT configuration)
  - 2 2 switches (DPDT configuration)
- c Enclosure
  - 0 Flying lead (no enclosure)
  - A Epoxy-coated Aluminum Explosion-proof Enclosure
  - S Stainless Steel Explosion-proof Enclosure
- d Mounting
  - 0 Standard clamp mounting to magnetic level gauge
  - H Standard clamp mounting to magnetic level gauge with high-temperature insulation pad
  - R Rod mounting to magnetic level gauge with high-temperature insulation blanket

**JS-ab-0-0 as High-High Level Switch**  
**JS-ab-A-H as High Level Switch**