



## OPERATION

The J200 Series RF Capacitance level switches are designed for point level alarm or control of conductive and non-conductive liquids, granular materials, foams, pastes, slurries and interface applications.

The J200 Series may be used with any Jerguson insulated or driven shield level sensing probe. When a driven shield probe is used, special shield driven circuitry ignores the effect of conductive material build-up on the level probe surface. Other features include adjustable relay time delay to prevent chattering in turbulent applications and field-selectable low or high level fail-safe modes of operation.

An optional differential adjustment feature is available for high/low pump control. The J200 Series is also offered with a PUSH-TO-TEST option to verify high level (overflow) alarm operation without actually filling the vessel. This easy test is performed at the unit or from a remote location via a switch closure. (An adjustable capacitor is switched in parallel with level probe to check proper sensitivity adjustment and that the instrument functions properly.)

The electronics are housed in a cast aluminum weatherproof and explosion proof enclosure. Certifications options are available for the J200 Series by FM or CSA when used with an insulated type level probe.

The J200 Series enclosures are normally mounted directly on the level probe fitting, but can also be mounted up to 25 feet from the level probe using remote mount accessories.

## FEATURES

- Coating Rejection Circuitry
- Conductive & Non-Conductive Liquids
- Explosion Proof Enclosure
- Time Delay Relay
- Field Selectable Hi/Lo Failsafe

## SPECIFICATIONS

### Operational:

Measurement ..... RF Capacitance  
Setpoint Range ..... 0.1 to 250pF  
Temperature Range ..... -40 to 160°F electronics;  
..... Wetside -40 to 450°F  
Protection ..... RFI, EMI, and designed to pass  
..... IEC-801-2 static discharge test  
Spark Protection ..... 100 amps  
Power Requirements ... 120 or 240 VAC±10%; 50-60 Hz  
..... 24 VDC±4 VDC; 6 watts

### Relay Function:

Output ..... Qty (1) DPDT, Two Form C contacts  
..... 5A Resistive @ 120/240 VAC  
..... 5A Resistive @ 30 VDC  
Time Delay..... Adjustable 0-20 seconds, field-  
..... selectable to delay on pull-in,  
..... drop-out, or both directions  
Fail-Safe..... Field Selectable Low or High

### Performance:

Sensitivity ..... 0.2pF  
Stability ..... 0.01pF per 24 hrs  
Temperature Drift..... 0.01pF per °F  
Repeatability..... 0.1pF  
Response Time ..... 100 milliseconds minimum

### Mechanical:

Enclosure ..... Cast aluminum, urethane finish  
..... Cl. I, Div. 1, Grp. C & D  
Sensor Wetted Mat'ls .. 316 SST and PFA Teflon  
Connection ..... 3/4" NPT  
Net Weight..... 4.5 lbs. (2.0 kg) approximately



