

F263 Series Liquid Level Float Switches

Description

The F263 Series Liquid Level Float Switches are designed to maintain a liquid level in indoor or outdoor closed tanks that hold water or other nonhazardous liquids. When the liquid level in the tank rises above or falls below the required level, the single-pole, double-throw (SPDT) switch closes one circuit and opens a second circuit.

Refer to the F263 Series Liquid Level Float Switches Product Bulletin (LIT-12011989) for important product application information.

Application

Use F263 Series Float Switches in closed tanks where a liquid level is to be maintained. A change in the liquid level opens or closes an electrical circuit.

Use F263MAP switches on indoor or outdoor tanks that hold water or other nonhazardous liquids at temperatures greater than the liquid's freezing point and between -20°F (-29°C) and 212°F (100°C). The maximum allowable liquid pressure is 150 psig (1,035 kpa).

Use F263MAC switches on indoor or outdoor tanks that hold water or other nonhazardous liquids at temperatures greater than the liquid's freezing point and between -20°F (-29°C) and 250°F (121°C). The maximum allowable liquid pressure is 100 psig (690 kpa).

Note: Do not use these float switches with liquids that are lighter than water.

Features

- Viton® diaphragm allows use in fluid lines carrying chlorinated water, treated water, or other nonhazardous liquids.
- single-pole, double-throw switch provides control where liquid levels rise and fall
- sturdy Type 4 (NEMA) enclosure allows for use in indoor or outdoor applications; inhibits the formation of moisture in low temperature applications.
- solid polycarbonate float (F263MAP models) provides greater resistance to corrosion



F263 Liquid Level Float Switch

Repair Information

If the F263 Series Liquid Level Float Switch fails to operate within its specifications, replace the unit. For a replacement F263 Switch, contact the nearest Johnson Controls® representative.

Selection Chart

| Product Code Number | Description |
|---------------------|--|
| F263MAC-V01C | SPDT float switch with Type 4 (NEMA) enclosure and copper float for liquid temperatures -20 to 250°F (-29 to 121°C); maximum liquid pressure 100 psig (690 kPa) |
| F263MAP-V01C | SPDT float switch with Type 4 (NEMA) enclosure and polycarbonate float for liquid temperatures -20 to 212°F (-29 to 100°C); maximum liquid pressure 150 psig (1,035 kPa) |

Technical Specifications

F263 Switch Electrical Ratings

| Volts 50/60 Hz | UL60730 | | | EN60730 | | |
|----------------------|---------|-----|-----|---------|-----|-----|
| | 24 | 120 | 208 | 240 | 24 | 230 |
| Horsepower | - | 1 | 1 | 1 | _ | _ |
| Full Load Amperes | - | 16 | 10 | 10 | _ | 8 |
| Locked Rotor Amperes | - | 96 | 60 | 60 | _ | 48 |
| Resistive Amperes | 16 | 16 | 10 | 10 | 16 | 16 |
| Plot Duty VA | 125 | 720 | 720 | 720 | 125 | 720 |



Liquid Level and Flow Controls

F263 Series Liquid Level Float Switches (Continued)

| F263 Series Liquid Level Float Switches | | | | | |
|---|---|--|--|--|--|
| Switch | SPDT | | | | |
| Enclosure | UL: Type 4 (NEMA) CE: IP67 | | | | |
| Wiring Connections | Three color-coded screw terminals and one ground terminal | | | | |
| Conduit Connection | One 7/8 in. (22 mm) hole for 1/2 in. trade size (or PG16) conduit | | | | |
| Pipe Connector | 1 in. 11-1/2 NPT threads | | | | |
| Minimum Tank Diameter | 9 in. (229 mm) | | | | |
| Maximum Liquid Pressure | 100 psig (690 kPa) for copper float 150 psig (1,035 kPa) for polycarbonate float | | | | |
| Liquid Temperature Range | Minimum: -20°F (-29°C) or liquid freezing point Maximum: 212°F (100°C) polycarbonate, 250°F (121°C) copper | | | | |
| Ambient Conditions | Minimum: -40°F (-40°C) Maximum: 140°F (60°C) | | | | |
| Compliance | North America: cULus Listed; UL 60730, File E6688; FCC Compliant to CFR47, Part 15, Subpart B, Class B Industry Canada (IC) Compliant to Canadian ICES-003, Class B limits | | | | |
| C€ | Europe: CE Mark – Johnson Controls, Inc. declares that this product is in compliance with the essential requirements and other relevant provisions of the EMC Directive and the Low Voltage Directive. | | | | |
| | Australia/New Zealand Mark: RCM Compliant | | | | |