

# Model AP/APX

RF Admittance Point Level Sensor

***Proven RF Technology, Universal Application***

Ideal for Wide Range of Bulk Solid, Liquid and Slurry Applications,  
Universal Power Supply, Several Probe Versions



***The Next Level***

**BlueLevel**<sup>®</sup>  
technologies

# Model AP/APX

## RF Admittance Point Level Sensor

- ✓ Universal AC/DC Power Supply
- ✓ Simple Calibration
- ✓ Multiple Probe Versions
- ✓ DPDT Relay Output Fail-Safe
- ✓ High Process Temp Available (842°F/450°C)
- ✓ IP65 (NEMA Type 4X) Enclosure
- ✓ Explosionproof Version Available (pending)
- ✓ You are protected - *Golden Parachute Support*

### Principal of Operation

RF admittance technology is the next generation of capacitance based level sensors. It detects the presence or absence of material surrounding the probe based on changing capacitance within a circuit as a result of the dielectric property of the material being sensed. When the presence or absence of material is detected the relay output changes state to indicate the appropriate condition. In addition, unlike strict capacitance level sensors the Model AP/APX RF admittance point level sensor also employs a driven shield circuit that effectively ignores material build-up along the sensor probe should it occur.

### Application and Use

The Model AP/APX is a point level sensor using RF admittance technology. These level switches are suitable for detecting the presence and absence of powder, granular, liquid and slurry materials in a wide range of industries. Mounted on bins, tanks and silos from the top or side, the filling and emptying of vessels can be controlled using the Model AP/APX as the unit generates fail-safe alarms (on power failure) providing overflow or dry run protection.

### Standard Sensor Model Includes

- Standard Probe (12.8"/326mm insertion length)
- Mini Probe (2.5"/63mm long)
- Cable Extended Probe (25'/7.6m Maximum)
- High Temp Probe (17.8"/450mm long)
- Super High Temp Probe (22.8"/580mm long)
- Hazardous Locations (Pending)

### Technical Data Summary

Power Supply: 20-250VAC/DC, 50/60Hz  
Consumption: 25VA  
Enclosure Protection: IP65 (NEMA Type 4X)  
Sensitivity: 0.3pF  
Ambient Temp: -40°F to +176°F  
(-40°C to +80°C)

Process Temp:  
Standard -40°F to +302°F  
(-40°C to +150°C)  
Mini -40°F to +302°F  
(-40°C to +150°C)  
Cable Extended -40°F to +302°F  
(-40°C to +150°C)  
High -40°F to +450°F  
(-40°C to +232°C)  
Super High -40°F to +842°F  
(-40°C to +450°C)

Maximum Pressure: 284 psi (20 bar)  
Local Indication: Alarm – Red  
Normal – Blue  
Output: DPDT Relay, 5A @ 240VAC  
Fail-Safe: Selectable – High / Low  
Time Delay: 0-30 seconds, Adjustable  
Probe Material: Stainless Steel

Insulator Material:  
Standard PTFE  
Mini PTFE  
Cable Extended PTFE  
High PEEK  
Super High Ceramic  
Housing: Die-Cast Aluminum, Powder Coat,  
NEMA Type 4X, IP65  
Certifications: CE Mark  
Hazardous Locations (pending)

### Ordering Information

Final Assembly Part Number Structure

44 - 1 **XXX** - 1 **XX**

#### Electronics

1 - Integral

#### Probe Type

1 – Standard  
2 – Mini  
3 – Cable Extended  
4 – High Temp  
5 – Super High Temp

#### Output

1 – DPDT Relay

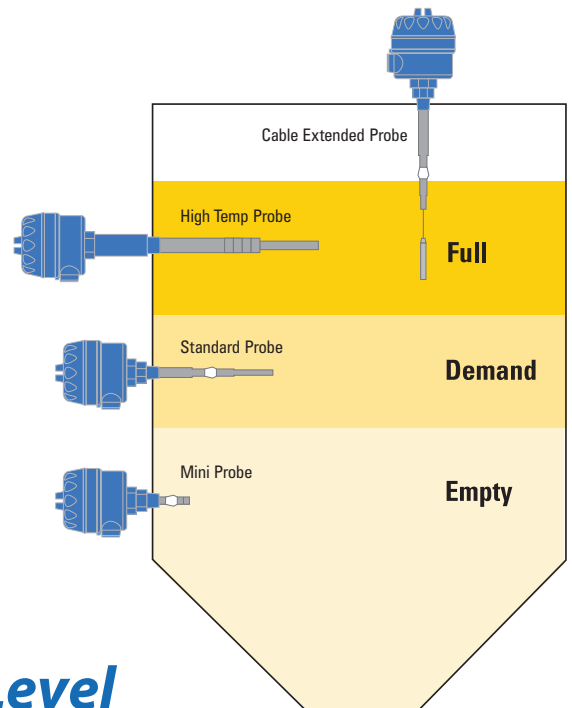
#### Approvals

1 – Ordinary Location (CE Mark)  
2 – Hazardous Location (Pending)

#### Process Connection

1 – 3/4" NPT  
2 – 1" NPT (High Temp)  
3 – 1-1/4" NPT (Super High Temp)

### Product Use



## The Next Level

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