The Point™
RF Series Point Level Switch

**One of the Drexelbrook RF Point Level Switches You Won’t Have to Calibrate**

Simply install ThePoint Series into the tank and apply power...that’s it! Unlike other RF or capacitance systems that require calibration via setpoint potentiometers, jumpers, magnets, or pushbuttons, ThePoint Series reliably detects the absence or presence of material without any adjustments.

ThePoint Series software continuously monitors the application for changes in composition, dielectric or conductivity, and maintains a repeatable trip point on the probe. Other RF and capacitance systems require calibration adjustments when the process material is changed. Since ThePoint Series recognizes changes in material, it is ideal for non-dedicated tanks that are used for a wide variety of products.

**Lower Cost of Ownership**
In addition to lower initial investment, ThePoint continues to save with little or no maintenance compared with other technologies. Further, the sensor can be lengthened or shortened in the field, saving need for additional purchases.

**Universal Power Supply**
ThePoint electronics use a universal power supply module that can be powered from a 19 to 250 Vac or 18 to 200 Vdc supply without moving jumpers.

**Intelligent Electronics Save Time and Money**
- UNIQUE! - NO calibration or setpoint adjustments.
- UNIQUE! - Ignores changes in dielectric or conductivity.
- Automatically recognizes and ignores coatings to prevent false alarms.
- Universal power supply automatically detects & adjusts to input power source.

**Diverse Applications**
- Detects the absence or presence of liquids, slurries, and granulars.
- Capable of high pressures and temperatures.

**Economical Without Sacrifice**
- Retains superior performance.
- Less maintenance than other technologies; no moving parts to hang up or wear out.

**Output**
- DPDT relay dry contacts at 5A, 120VAC.

**Remote or Integral Electronics**
- Unlike many technologies, electronics can be remote mounted to a convenient or safe location.
**The Point™**

**Specifications**

**Technology:**
RF Admittance.

**Calibration:**
None.

**Modes Of Operation:**
High and Low Level.

**Repeatability:**
2 mm (0.08 inch) conductive liquids.

**Response Time:**
Less than one second.

**Ambient Electronic Temperature:**
-40 to 70°C (-40 to 158°F) FM, CSA

**Storage Temperature:**
-40 to 85°C (-40 to 185°F).

**Indicators:**
LEDs: Green Power, Red Relay 1.

**Time Delay:**
0-60 seconds, forward or reverse-acting.

**Supply Voltage:**
19-250 VAC
18-200 VDC
Auto-detecting without jumpers.

**Power Consumption:**
4 watts maximum.

**Relay Contacts:**
DPDT dry contacts at 5A, 120Vac.

**Maximum Contact Load:**
5A/30 VDC
5A/250 VAC

**Maximum Switching Capacity:**
2000 VA/150 Watt.

**Minimum Contact Load (DC):**
100 mA/12 VDC

**Housing:**
Powder-Coated aluminum with two cable entries.

**Cable Entry:**
M20 x 1.5
¾-inch NPT

**Dimensions**

**Wiring**

- **One 5A DPDT Alarm**
- **G**
- **L1**
- **L2**

**Ingress Protection:**
IP66 NEMA 4X

**Approvals:**

**Remote**
Explosion-proof for Class I, Division 1, Groups A, B, C, and D; Dust-Ignition proof for Class II, III, Division 1, Groups E, F, and G; Non-incendiary for Class I, Division 2, Groups A, B, C, & D; Suitable for Class II, III, Groups F & G hazardous outdoor Type 4X, IP66 (classified) locations with Intrinsically Safe connections to Class I, II, III, Division 1, Groups A, B, C, D, E, F, and G hazardous (classified) locations in accordance with Control Drawing 420-0004-144-CD.

**Integral:**
[Same, but Group A does not apply.]

**Integral Sensors**
Class I, Groups B, C, D; Class II, Groups E, F, G; Class III; Type 4, 4X, IP66; T5 for Ta = 70o C. Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F, G; Class III; Type 4, 4X, IP66; T5 for Ta = 70o C

**Remote Sensors**
Class I, Groups A, B, C, D; Class II, Groups E, F, G; Class III; Type 4, 4X, IP66; T5 for Ta = 70o C
Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F, G; Class III; Type 4, 4X, IP66; T5 for Ta = 70o C

**II 1/2 GD EEx d[ia] IIC T2..T5,**
Ta = -30˚C to +70˚C

**SAA (Pending)**

**19 to 253 Vac**
**19 to 55 Vdc**
**Auto-Detecting**
**Without Jumpers**

**Dimensions**

- 4.5” (114mm)
- 6.5” (165mm)
- 4.75” (120mm)
## Point Level Measurement

### Model Numbering

<table>
<thead>
<tr>
<th>Application</th>
<th>Sensing Element</th>
<th>Pressure/Temperature</th>
<th>Wetted Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopper Installation up to 200mm (8 inches)</td>
<td>700-0029-002</td>
<td>0.1 bar @ 260°C (2 PSI @ 500°F)</td>
<td>316SS and TFE (CS inactive)</td>
</tr>
<tr>
<td>Hopper Installation up to 250mm (10 inches)</td>
<td>700-0029-003</td>
<td>0.1 bar @ 260°C (2 PSI @ 500°F)</td>
<td>316SS and TFE (CS inactive)</td>
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<tr>
<td>Hopper Installation up to 330mm (13 inches)</td>
<td>700-0029-004</td>
<td>0.1 bar @ 260°C (2 PSI @ 500°F)</td>
<td>316SS and TFE (CS inactive)</td>
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<tr>
<td>Hopper Installation up to 400mm (16 inches)</td>
<td>700-0029-005</td>
<td>0.1 bar @ 260°C (2 PSI @ 500°F)</td>
<td>316SS and TFE (CS inactive)</td>
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</tbody>
</table>

### Mounting Type

- **IL**: No hopper installation
- **CSL**: Other

### Notes:

1. Available with remote electronics only
2. Use A1P mounting option
3. Choose from sanitary mounting options only
4. Available with 0-inch CSL only
5. Use P00X mounting option

### DIN Flanges (cont.)

<table>
<thead>
<tr>
<th>Flange</th>
<th>Size</th>
<th>Pressure</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>E02</td>
<td>25 mm</td>
<td>16 bar</td>
<td>RF Carbon Steel</td>
</tr>
<tr>
<td>E03</td>
<td>25 mm</td>
<td>40 bar</td>
<td>RF Carbon Steel</td>
</tr>
<tr>
<td>E04</td>
<td>50 mm</td>
<td>16 bar</td>
<td>RF Carbon Steel</td>
</tr>
<tr>
<td>E05</td>
<td>50 mm</td>
<td>40 bar</td>
<td>RF Carbon Steel</td>
</tr>
<tr>
<td>E06</td>
<td>80 mm</td>
<td>16 bar</td>
<td>RF Carbon Steel</td>
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<tr>
<td>E07</td>
<td>80 mm</td>
<td>40 bar</td>
<td>RF Carbon Steel</td>
</tr>
<tr>
<td>E08</td>
<td>100 mm</td>
<td>16 bar</td>
<td>RF Carbon Steel</td>
</tr>
<tr>
<td>E09</td>
<td>100 mm</td>
<td>40 bar</td>
<td>RF Carbon Steel</td>
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<tr>
<td>E10</td>
<td>150 mm</td>
<td>16 bar</td>
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</tr>
<tr>
<td>E11</td>
<td>150 mm</td>
<td>40 bar</td>
<td>RF Carbon Steel</td>
</tr>
</tbody>
</table>

### ANSI Flanges (cont.)

<table>
<thead>
<tr>
<th>Flange</th>
<th>Size</th>
<th>Pressure</th>
<th>Material</th>
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</thead>
<tbody>
<tr>
<td>DA1</td>
<td>1”</td>
<td>150#</td>
<td>RF 316/316L SS</td>
</tr>
<tr>
<td>DB1</td>
<td>11/2”</td>
<td>150#</td>
<td>RF 316/316L SS</td>
</tr>
<tr>
<td>DC1</td>
<td>2”</td>
<td>150#</td>
<td>RF 316/316L SS</td>
</tr>
<tr>
<td>DD1</td>
<td>21/2”</td>
<td>150#</td>
<td>RF 316/316L SS</td>
</tr>
<tr>
<td>DF1</td>
<td>11/2”</td>
<td>300#</td>
<td>RF 316/316L SS</td>
</tr>
<tr>
<td>DG1</td>
<td>2”</td>
<td>300#</td>
<td>RF 316/316L SS</td>
</tr>
<tr>
<td>DH1</td>
<td>21/2”</td>
<td>300#</td>
<td>RF 316/316L SS</td>
</tr>
<tr>
<td>DI1</td>
<td>3”</td>
<td>150#</td>
<td>RF 316/316L SS</td>
</tr>
</tbody>
</table>

### Notes:

- Use A1B mounting option
- Use A8B mounting option (1/4-inch NPT)
- Available with 0-inch CSL only
- Not all mounting options available with all sensing elements

### Sanitary TriClamps

- **C2B**: 1” Tri Clamp
- **C3B**: 11/2” Tri Clamp
- **C4B**: 2” Tri Clamp

### DIN Flanges

- **A1B**: 1/4” NPT 316SS
- **A1C**: 1/4” NPT Hastelloy C
- **A1P**: 1/4” NPT PFA
- **A2B**: 1” NPT 316SS
- **A2C**: 1” NPT Hastelloy C

### NPT Threads

- **A1B**: 1/4” NPT 316SS
- **A1C**: 1/4” NPT Hastelloy C
- **A1P**: 1/4” NPT PFA
- **A2B**: 1” NPT 316SS
- **A2C**: 1” NPT Hastelloy C

### Sanitary Flanges

- **DREXELBROOK**: 1” NPT 316SS
- **DC1**: 2” NPT 316SS
- **DD1**: 21/2” NPT 316SS
- **DE1**: 3” NPT 316SS
- **DF1**: 21/2” 300# RF Carbon Steel
- **DG1**: 3” 300# RF Carbon Steel
- **DH1**: 21/2” 300# RF Carbon Steel
- **DI1**: 3” 150# RF Carbon Steel

### Sanitary TriClamps

- **C2B**: 1” Tri Clamp 316SS
- **C3B**: 11/2” Tri Clamp 316SS
- **C4B**: 2” Tri Clamp 316SS

### DIN Flanges

- **E01**: 25 mm 16 bar RF 316/316L SS
- **E02**: 25 mm 40 bar RF Carbon Steel
- **E03**: 50 mm 16 bar RF 316/316L SS
- **E04**: 50 mm 40 bar RF Carbon Steel
- **E05**: 80 mm 16 bar RF 316/316L SS
- **E06**: 80 mm 40 bar RF Carbon Steel
- **E07**: 100 mm 16 bar RF Carbon Steel
- **E08**: 100 mm 40 bar RF Carbon Steel
- **E09**: 150 mm 16 bar RF Carbon Steel
- **E10**: 150 mm 40 bar RF Carbon Steel

### Sanitary Flanges

- **DA1**: 1” 150# RF 316/316L SS
- **DB1**: 11/2” 150# RF 316/316L SS
- **DC1**: 2” 150# RF 316/316L SS
- **DD1**: 21/2” 150# RF 316/316L SS
- **DE1**: 3” 300# RF 316/316L SS
- **DF1**: 21/2” 300# RF 316/316L SS
- **DG1**: 3” 300# RF 316/316L SS
- **DH1**: 21/2” 150# RF Carbon Steel
- **DI1**: 3” 150# RF Carbon Steel

### Notes:

- Available with remote electronics only
- Use A1P mounting option
- Choose from sanitary mounting options only
- Available with 0-inch CSL only
- Use P00X mounting option
- Available with remote electronics only
- Not all mounting options available with all sensing elements