

## ThePoint™ RF Series

### Point Level Switch for Plugged Chute Detection



#### Intelligent Electronics Save Time and Money

- Automatically recognizes and ignores coatings to prevent false alarms.
- Universal power supply automatically detects & adjusts to input power source
- Standard & High Sensitivity Electronics, Field Selectable

#### Application

- Detects the presence of plugged material in chutes

#### 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 Electronics

- Unlike many technologies, electronics can be remote mounted to a convenient or safe location

#### Eliminate Costly Plugged Chutes with Drexelbrook Sensors!

#### Downtime is expensive and so is the clean up of process spills.

Reliable detection of plugged chutes will keep your plant running smoothly and virtually eliminate spills that occur because of plugged conditions.

#### Drexelbrook's Flush-Mounted Sensors

reliably detect presence or absence of material flowing through chutes. If process material stops flowing due to a plugged condition, the system will alarm, allowing further action to occur (alerting an operator, shutting down a conveyor belt, etc.). This permits the operator to prevent a problem before it happens.

#### Rugged sensor design

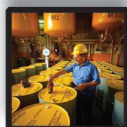
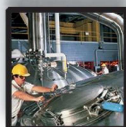
makes these systems ideal for coal (pulverizer and transfer chutes), wood chips, ores, powders, etc. Since they are flush mounted through a chute wall, nothing protrudes into the chute to interfere with or to obstruct material flow.

#### Dust coating and/or wall build up will not affect the measurement.

Drexelbrooks Cote-Shield circuitry "Sees" through any coating condition and eliminates false plugged chute signals.

#### Curved and flat sensors are available.

Chutes vary in size and shape. We have a sensor design to fit your chute.



# Point Level Measurement

## The Point™

### Specifications

**Technology:**

RF Admittance.

**Calibration:**

None (for most applications).

**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:**

2 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

0 -200 mA / 12 VDC (Optional)

**Housing:**

Powder-Coated aluminum with two cable entries.

**Cable Entry:**

M20 x 1.5

¾-inch NPT

**Ingress Protection:**

IP66 NEMA 4X

**Approvals:****Remote Sensors**

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 420-0004-181-CD.

**Integral:**

[Same, but Group A does not apply.]

**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



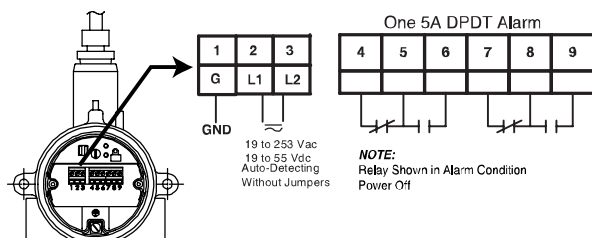
II 1/2 GD EEx d[ia] IIC T2..T5,  
Ta = -30°C to +70°C

**SAA (For Remote Electronics)**

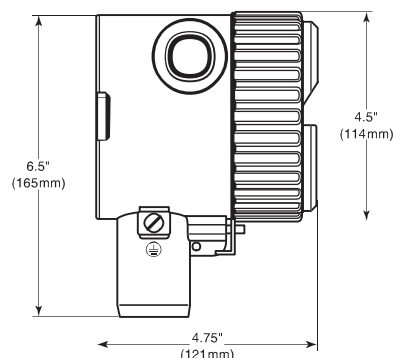
Electronics      Ex d[ia] IIC T5 DIP A21  
Ta = -100°C

Sensing Element      Ex ia IIC T6

### Wiring



### Dimensions



# Point Level Measurement

## The Point™

### Model Numbering

Technology			
P	RF Admittance		
Measurement Type			
M	Manual Set Point, Point Level		
G	Manual Set Point, Point Level, High Sensitivity		
Input			
L	Universal Power Supply 21-100 VDC, 85-250 VAC, 0-400 Hz		
Output			
1	One DPDT Relay, dry contacts, 5A, 120VAC (Min 100 mA / 12 VDC)		
2	One DPDT Relay, gold plated contacts (Max 200 mA / 12 VDC)		
Housing			
0	No Approvals, NEMA 4X/IP66, M20 x 1.5 conduit entries		
1	No Approvals, NEMA 4X/IP66 ¾" NPT conduit entries		
2	CENELEC/ATEX		
3	FM Approved		
4	CSA Approved		
Electronics			
1	Remote, no cable	8	Rmt. w/ (50 ft.) Tri-Ax Cable
2	Rmt. w/ 3 m (10 ft.) G.P. cable	9	Rmt. w/ (75 ft.) Tri-Ax Cable
3	Rmt. w/ 7.6 m (25 ft.) G.P. cable	A	Rmt. w/ (10 ft.) Hi-Temp. Cable
4	Rmt. w/ 10.6 m (35 ft.) G.P. cable	B	Rmt. w/ (25 ft.) 1st 10ft Hi-Temp. Cbl.
5	Rmt. w/ 15.2 m (50 ft.) G.P. cable	C	Rmt. w/ (35 ft.) 1st 10ft Hi-Temp. Cbl.
6	Rmt. w/ 23 m (75 ft.) G.P. cable	D	Rmt. w/ (50 ft.) 1st 10ft Hi-Temp. Cbl.
7	Rmt. w/ (25 ft.) Tri-Ax Cable	E	Rmt. w/ (75 ft.) 1st 10ft Hi-Temp. Cbl.
		F	Rmt. w/ (5 ft.) G.P. Cable
		G	Rmt. w/ (5 ft.) Tri-Ax Cable
		H	Rmt. w/ (10 ft.) Tri-Ax Cable
		J	Rmt. w/ (35 ft.) Tri-Ax Cable
		K	Rmt. w/ (5 ft.) Hi-Temp. Cable
Sensing Element			
Plugged Chute Detection (1) Available with remote electronics only (2) Use P00X mounting option			
Application		Sensing Element	Pressure/Temperature
50 Flush Mount Sensor 305mm² (12 inches²) heavy duty		700-0207-001	0.1 bar @ 82°C (1 PSI @ 180°F)
51 Flush Mount Sensor 305mm² (12 inches²) higher temperature		700-0207-002	0.1 bar @ 149°C (1 PSI @ 300°F)
52 Flush Mount Sensor 305mm² (12 inches²) with curved radius 153, 229, 305 mm (6, 9, or 12 inches)		700-0207-003	0.1 bar @ 82°C (1 PSI @ 180°F)
53 Flush Mount Sensor 305mm² (12 inches²) extra heavy duty		700-0207-004	0.1 bar @ 82°C (1 PSI @ 180°F)
55 Flush Mount Sensor 203mm² (8 inches²) heavy duty		700-0207-006	0.1 bar @ 82°C (1 PSI @ 180°F)
ZZ Sensing Element Not Listed			
Mounting Type			
P00X IL/CSL factory set for Plugged Chute			
P	L		P00X

# Point Level Measurement

## Other Great Solutions By: DREXELBROOK®

### IntelliPoint RF™ Series

Two-Wire Point Level Switch



### The Point™

Two-Wire RF Series Point Level Switch



### TF-100™ Series

Vibrating Tuning Fork



### Clear Line™

In-Line Fluid Detector



U.S.A. Sales: 800-553-9092 • 24-Hour Service: 800-527-6297 • International Support: 215-674-1234 • Fax: 215-674-2731

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