

## ThePoint™ RFSeries

### **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

34-inch NPT

**Ingress Protection:** 

IP66 NEMA 4X

Approvals:



#### **Remote Sensors**

FΜ

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 = 700 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,  $Ta = -30^{\circ}C \text{ to } +70^{\circ}C$ 

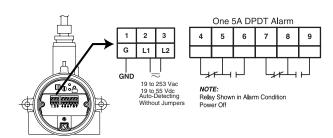
**SAA** (For Remote Electronics)

Electronics Ex d[ia] IIC T5 DIP A21

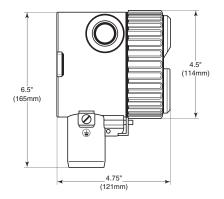
 $Ta = -100^{\circ}C$ 

Sensing Element Ex ia IIC T6

#### Wiring



#### **Dimensions**



## Point Level Measurement

## The Point™

### **Model Numbering**

	Admit															
M	asurei Mani		•	nt, Point	t I ovol											
G				,	t Level, High	Sensitivity										
9	Input															
				ower S	upply 21-10	0 VDC, 85-250	VAC, (	)-400	) Hz							
		Outpu														
		2 C	ne D	PDT R		ated contacts (			00 mA / 12 VDC A / 12 VDC)	)						
	Housing															
		1 2 3	<ul> <li>No Approvals, NEMA 4X/IP66, M20 x 1.5 conduit entries</li> <li>No Approvals, NEMA 4X/IP66 ¾* NPT conduit entries</li> <li>CENELEC/ATEX</li> <li>FM Approved</li> <li>CSA Approved</li> </ul>													
			₱ E	lectron	ics											
			1	Rem	note, no cab			8	Rmt. w/ (50 ft.)				E		75 ft.) 1st 10ft Hi-Te	emp. C
			3			ft.) G.P. cable 25 ft.) G.P. cable	e	9 A	Rmt. w/ (75 ft.) Rmt. w/ (10 ft.)				F G		5 ft.) G.P. Cable 5 ft.) Tri-Ax Cable	
			4	Rmt	. w/ 10.6 m	(35 ft.) G.P. cab	ole	В	Rmt. w/ (25 ft.)	1st 10ft l	Hi-Temp.	Cbl.	Н	Rmt. w/ (	10 ft.) Tri-Ax Cable	
			5 6 7	Rmt		(50 ft.) G.P. cab 5 ft.) G.P. cable		C D	Rmt. w/ (35 ft.) Rmt. w/ (50 ft.)				J K		35 ft.) Tri-Ax Cable 5 ft.) Hi-Temp. Cabl	e
			l'		sing Eleme											
				Plu	gged Chute	Detection	(1) A	/ailal	ole with remote	electroni	cs only	(2) Use	P00	OX mount	ing option	
				App	olication		Sens	ing I	Element	Pressu	re/Tempe	erature			Wetted Parts	
			50 Flush Mount Sensor 305mm <sup>2</sup> (12 inches <sup>2</sup> ) heavy duty		12 inches <sup>2</sup> )	700-0207-001			0.1 bar @ 82°C (1 PSI @ 180°F)			°F)	304 SS and Polyurethane			
				51	51 Flush Mount Sensor 305mm² (12 inches²) higher temperature		700-0207-002 700-0207-003 129, 305 mm (6, 9, or 12 inch			0.1 bar @ 149°C (1 PSI @ 300°F)  0.1 bar @ 82°C (1 PSI @ 180°F) es)			0°F)	304 SS and TFE		
				52 Flush Mount Sensor 305mm <sup>2</sup> (12 inches <sup>2</sup> ) with curved radius 153, 2		12 inches <sup>2</sup> )							°F)	304 SS and Neoprene		
			53 Flush Mount Sensor 305mm² (12 inches²) extra heavy duty		700-0207-004			0.1 bar @ 82°C (1 PSI @ 180°F)			°F)	410 SS and UHMW Polyethylene	V			
				55	Flush Mour 203mm <sup>2</sup> (8 heavy duty	3 inches²)	700-0	)207-	-006	0.1 bar	@ 82°C (	(1 PSI @	180	°F)	304 SS and Polyurethane	
				ZZ	Sensing Ele	ement Not Liste	ed									
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## **Point Level Measurement**

### Other Great Solutions By: DREXELBROOK ®

### IntelliPoint RF<sup>TM</sup> Series

**Two-Wire Point Level Switch** 



### TF-100™ Series **Vibrating Tuning Fork**



#### The Point™

Two-Wire RF Series Point Level Switch



#### Clear Line™

**In-Line Fluid Detector** 



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