2852-PCD
Plugged Chute Detector

Non-intrusive monitoring of chutes and hoppers for bulk material detection

Over 40 years of capacitance experience stands behind the 2852-PCD plugged chute detectors. The flush mount sensor continuously monitors the change from a normal material chute condition to a plugged condition.

- capacitance technology responds to any material type
- no moving parts
- remote alarm unit mounts safely away from pipe
- no intrusion into chute or hopper

The 2852-PCD sensor monitors the capacitance field in front of the sensor plate. The sensing plate forms part of the chute or hopper wall to sense the product within. The increased presence of product in front of the sensor due to a plugging condition increases the capacitance field and initiates an alarm.

The sensing plates are embedded into a polyethylene plate which provides monitoring without any intrusion into the product flow.

2852-PCD

Features and Benefits

- flush mount sensor forms part of the chute wall
- adjustable time delay and sensitivity to eliminate nuisance alarms
- remote electronics via standard twisted pair
- Sensor available Intrinsically Safe for Hazardous Locations
- high erosion resistant polyethylene resists wear
- capacitance technology responds to all types of bulk materials
- non-intrusive sensor design does not restrict product movement

Alternate probe designs are available for specialty applications.

Technical Specifications - Control Unit

Operating Temp.	-20˚C to +55˚C
Resolution	0.007% (.07 pF at 1,000 pF)
Accuracy	0.2 %
Power Input	12 vdc or 24 vdc or 100-240 vac +/- 10%
Alarm Relay	Two common 3 amp SPDT dry contacts
Analog Output	4 mA normal/20 mA alarm
Communication	Modbus RS-485
Enclosure	Type 4/IP 66 painted steel or Type 4X/IP 66 polycarbonate or SS
Optional	Light, buzzer, beacon

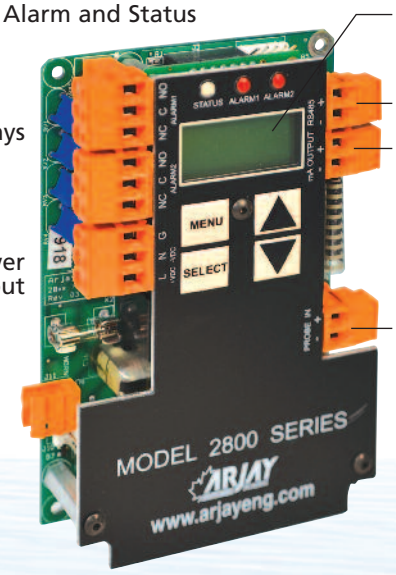
Technical Specifications - Sensor

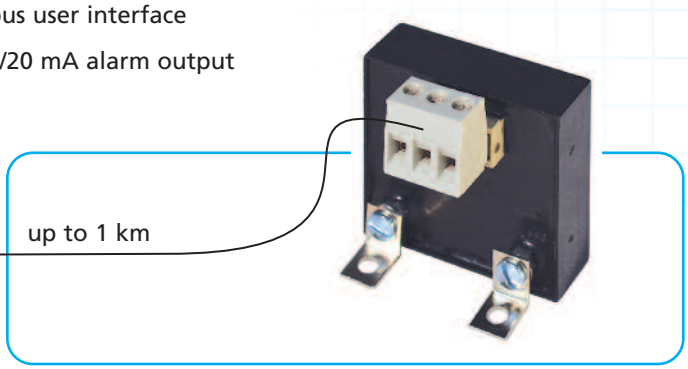
Operating Temp.	-40˚C to +55˚C
Wetted Parts	UHMWPE (optional Teflon)

Certifications (certificates available on website)

Included Standard on Control Unit and Sensor - Ordinary Location Use
UL/CSA/IEC 61010-1
CAN/CSA 22.2
CE

Optional on Sensor for Hazardous Location Use
(Intrinsic Safety Barrier must be ordered in control unit)
UL/CSA/IEC 60079
ANSI/UL 913-2013
Class I; Division 1,2; Groups A,B,C,D; T4
Class II; Division 1,2; Groups E,F,G
Class III; Division 1,2
Class 1, Zone 0,1,2; Ex ia IIC T4 Ga





The unique PMC circuit design, installed at the probe and exclusive to Arjay, immediately converts the sensor signal to a frequency pulse for furtherance to the controller.

ARJAY ENGINEERING

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