

# 2852-PCD Plugged Chute Detector



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

Remote Electronics available in painted steel, SS or polycarbonate enclosure

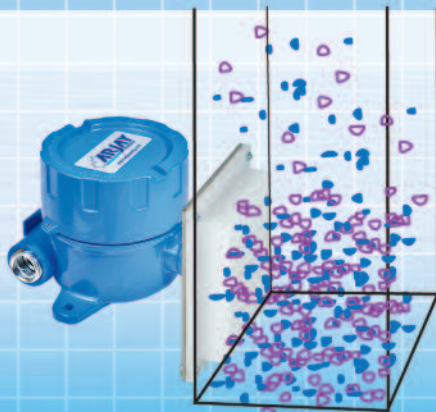
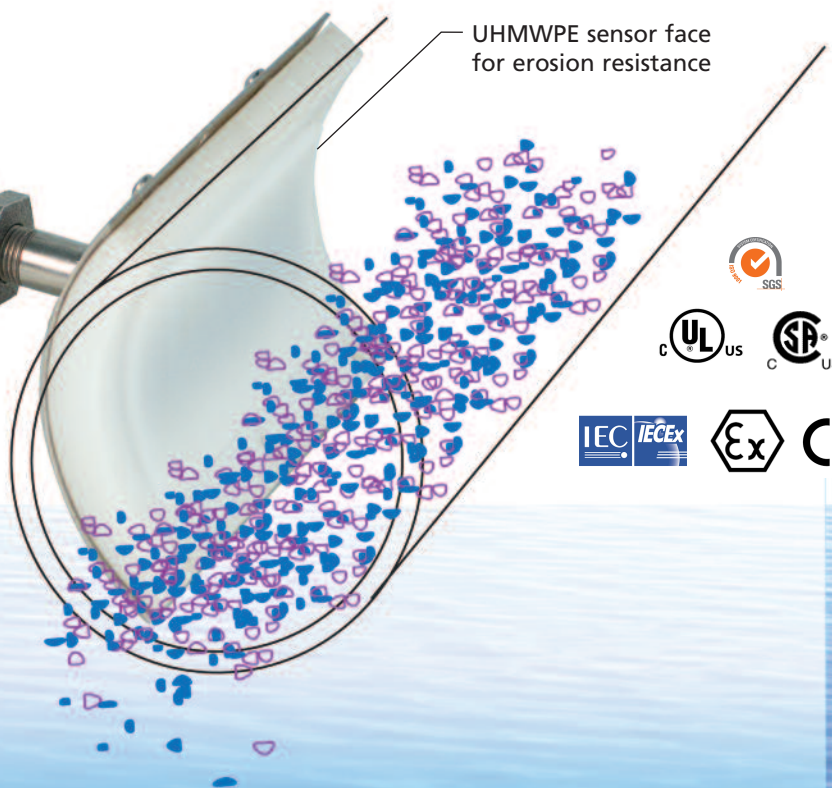


optional alarm light and/or buzzer

up to 1 km



Optional Intrinsically Safe Sensor



non-intrusive monitoring  
of bulk product chutes  
and tanks

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      | .04 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<br>or Type 4X/IP 66 polycarbonate or SS |
| Optional        | Light, buzzer, beacon                                              |

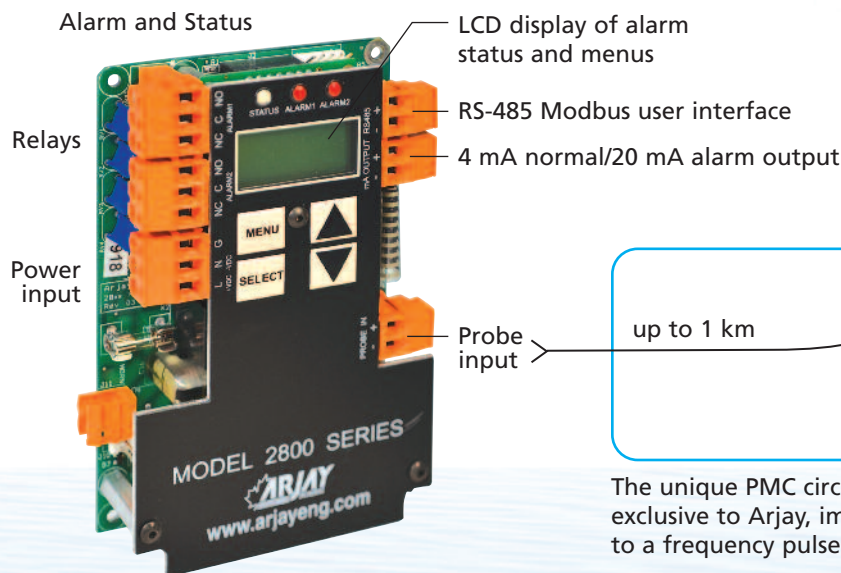
## Technical Specifications - Sensor

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

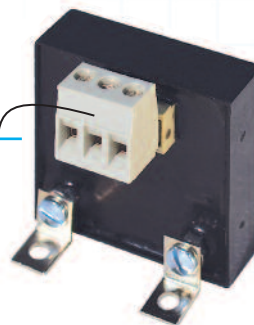
### Certifications (certificates available on website)

**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



up to 1 km



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.

