# Z-tron IIITM Z02X-Series



# **Economical**

Effective, low-cost material level detection in a wide variety of applications, and a desirable alternative to electromechanical level switches. No expendable parts to buy and stock. No expensive, extra-cost options.

#### **Maintenance-Free**

Unlike paddle wheels, vibrating tines or other mechanical instruments, there are no components to jam, break or wear out. No need for routine maintenance, cleaning or replacing of worn parts.

### **Reliable Operation**

Cote-Shield circuitry allows the Z-tron III to ignore coatings or build up on the sensing element. There are no false signals from dust or tunneling.

# **Easy-Installation**

One-piece unit is easily installed through a single 3/4-inch vessel opening. Calibration is quick and

# **Z-tron III**<sup>™</sup> Point Level Switch, a reliable low-cost, on/off level switch

The low-cost, Drexelbrook Z-tron III level switch is unaffected by sticky coatings and impervious to corrosive liquids. The all-electronic design means no moving parts to wear, break or fail. Based on field-proven RF technology, the Z-tron III is a simple and reliable on/off level switch.

The compact one-piece unit is inserted through a standard 3/4-inch NPT opening into the vessel so that the sensing element is positioned at the desired high or low level. (Other connection types and sizes are also available.) When the material level reaches a predetermined point on the sensing element, it causes a change in status at the electronic unit, resulting in actuation of the DPDT relay. The relay can be used to operate alarms, annunciators, valves, or other control or indication devices.

# Drexelbrook's exclusive Cote-Shield™ circuitry enables the Z-tron III to ignore dust pileups, coatings, and sticky buildups on the sensing element.

Suspended dust particles are also no problem as the Z-tron III reacts only to actual high or low level conditions.



















# **Point Level Measurement**

# Z-tron III™ Z02X-Series

# **Specifications**

#### Power requirement

120 ± 25 Vac, 50/60 Hz (std.) 230 ± 25 Vac, 50/60 Hz (optional) 15-30 Vdc (optional) (1 Watt maximum)

#### Output

DPDT relay

#### **Contact Rating**

Non-inductive 5A @ 120 Vac or 2A @ 230 Vac Min. Rating 100mA/12VDC

#### **Spark Tolerance**

100 A (std)

#### Fail Safe

High (HLFS) or Low (LLFS) field adjustable

#### **Response Time**

Approx. 0.2 sec. Adjustable 0-60 seconds

#### Sensitivity

0.3 pF

#### **Differential**

Worst case with horizontal sensing element, 1/64"(.4mm) or less

#### Recommended Ambient Electronics Temperature

-40°F to 145°F\* (-40°C to 63°C)

\*Unit will operate above 145°F but with reduced component life.

### **Temperature Effect**

 $\pm$  0.5 pF/50°F(10°C)

#### **Line Voltage Effect**

± 0.2 pF/20V

#### Sensing Element Connection 3/4" NPT (Optional Flange Mount)

Sensing Element Wetted Parts 316SS & PEEK (2)

# Process Pressure & Temperature

200 psi at 250° F

14 BAR at 121° C

**Note:** Temperature at electronics must not exceed 145° F.

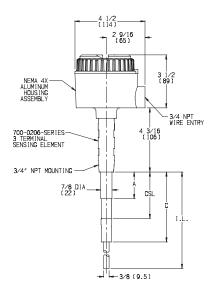
#### **Approvals**

UL/CUL/508 General Purpose CE 0344

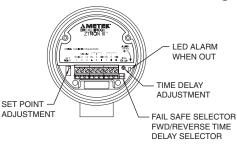
#### Housing

NEMA 1through 5 & 12

### **Dimensions**



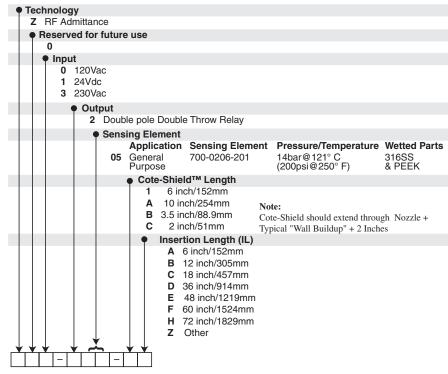
## Wiring



NOTE: FAIL SAFE AND TIME DELAY SELECTED WITH DIP SWITCHES

POWER			RELAY CONNECTIONS					
1	2	3	4	5	6	7	8	9
GND	L1	L2	NC	С	NO	NC	С	NO

#### **Model Number**



(1) Private label/OEM optimization available. Contact your Drexelbrook representative or factory for more detailed information.

(2) PEEK (Polyether-Ether-Ketone) is a special, high-temperature thermoplastic similar to TFE but with better abrasion resistance.

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