

Z-tron III™ 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 simple.

Z-tron III™ 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

± 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.

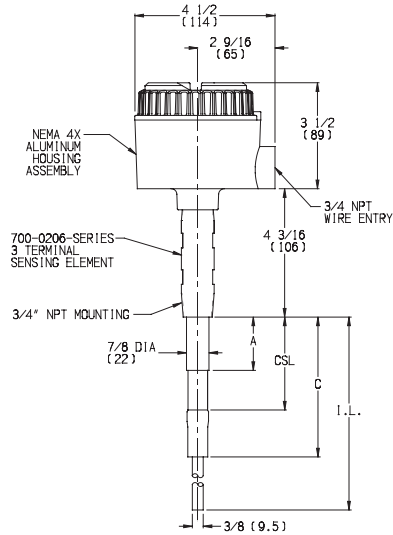
Approvals

UL/CUL/508 General Purpose
 CE 0344

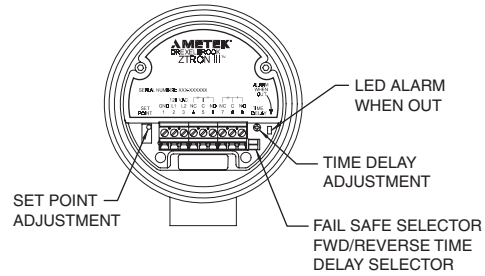
Housing

NEMA 1 through 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	C	NO	NC	C	NO

Model Number

● Technology	Z RF Admittance
● Reserved for future use	0
● Input	0 120Vac 1 24Vdc 3 230Vac
● Output	2 Double pole Double Throw Relay
● Sensing Element	Application Sensing Element Pressure/Temperature Wetted Parts 05 General Purpose 700-0206-201 14bar@121° C (200psi@250° F) 316SS & PEEK
● Cote-Shield™ Length	1 6 inch/152mm A 10 inch/254mm B 3.5 inch/88.9mm C 2 inch/51mm Note: Cote-Shield should extend through Nozzle + Typical "Wall Buildup" + 2 Inches
● Insertion Length (IL)	A 6 inch/152mm B 12 inch/305mm C 18 inch/457mm D 36 inch/914mm E 48 inch/1219mm F 60 inch/1524mm H 72 inch/1829mm Z Other

(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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