AMETEK®

DREXELBROOK®

EUROTEC
TECNOLOGIE IMPIANTISTICHE - AUTOMAZIONE - TELECONTROLLO

Z-tron™ IV



Z4-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 IV 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, probe dependent vessel opening. Calibration is quick and simple.

Z-tron IV™ Point Level Switch, a reliable low-cost, on/off level switch

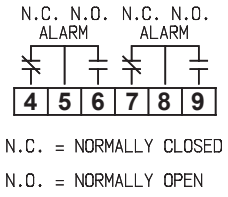
The low-cost, Drexelbrook Z-tron IV level switch is unaffected by sticky coatings and impervious to corrosive liquids. The all-electronic design means no moving parts to wear, break or fail. Based on field-proven RF technology, the Z-tron IV is a simple and reliable on/off level switch.

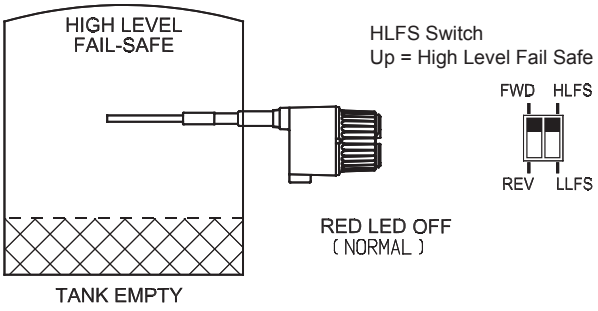
The compact one-piece unit is inserted through a standard 3/4-inch , probe dependent, NPT opening into the vessel so that the sensing element is positioned at the desired high or low level. (Other connection types and sizes are also available.) When the material level reaches a predetermined point on 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.

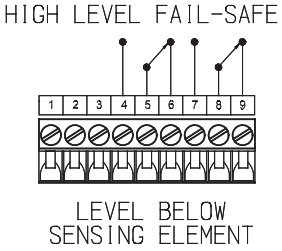
Drexelbrook's Exclusive Cote-Shield™
Cote-Shield enables the Z-tron IV to ignore dust pileups, coatings, and sticky buildups on the sensing element.

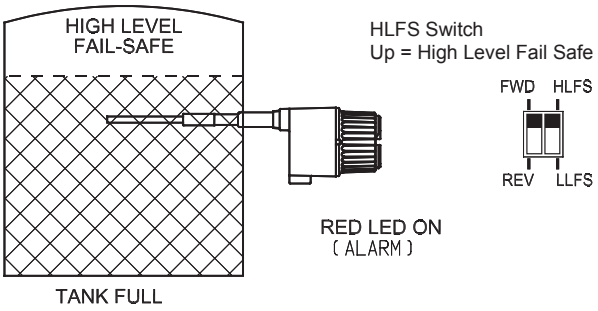
Relay Wiring

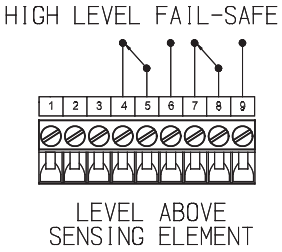
High Level Fail Safe



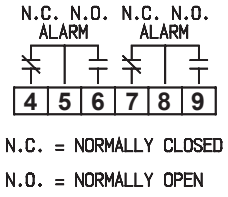


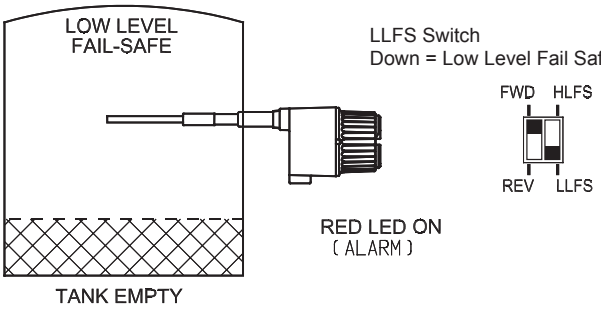


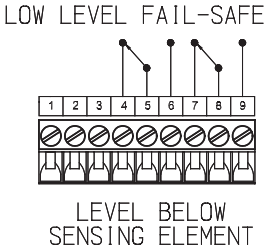


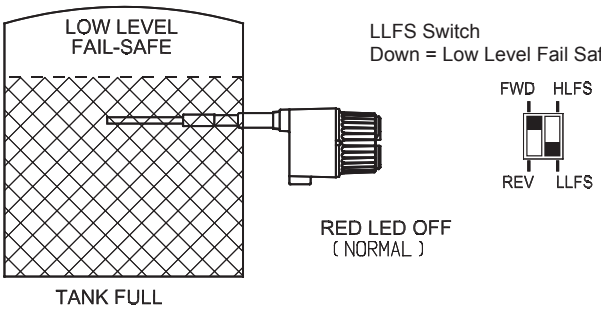


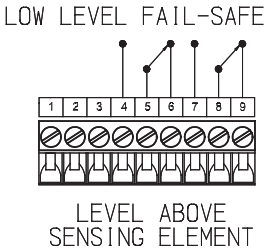
Low Level Fail Safe



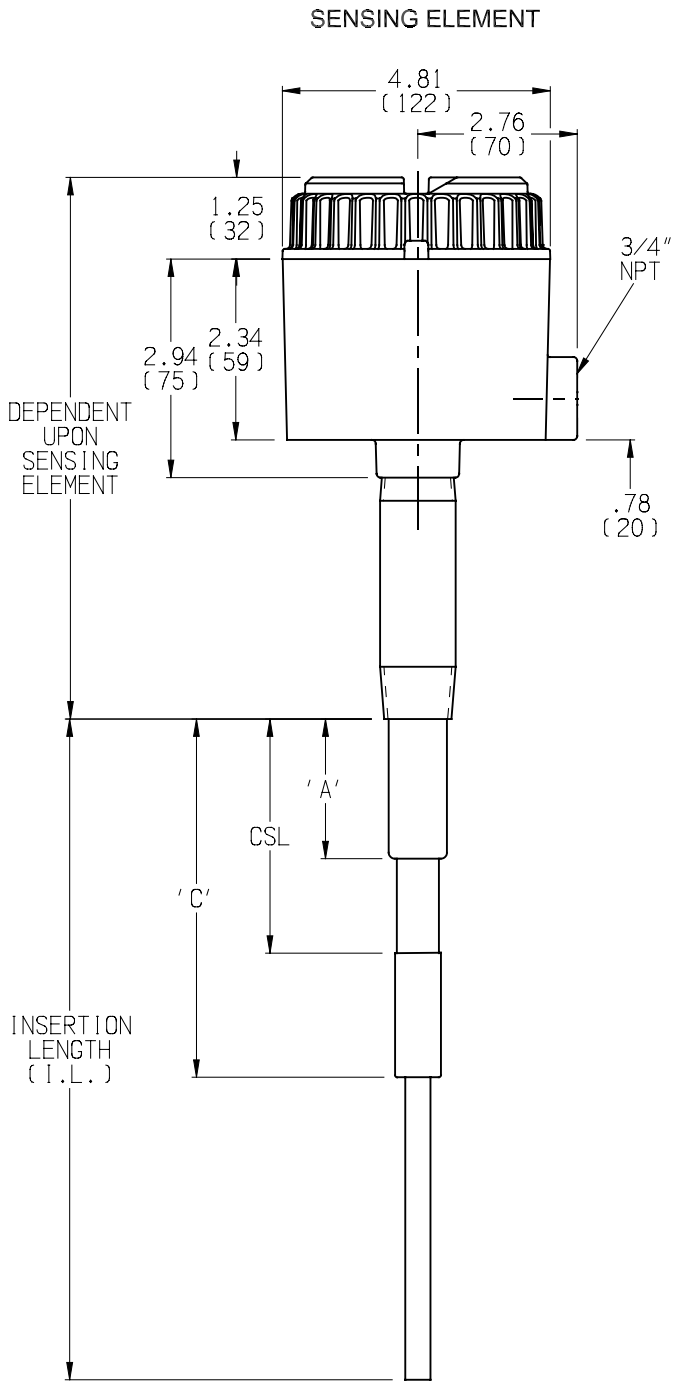






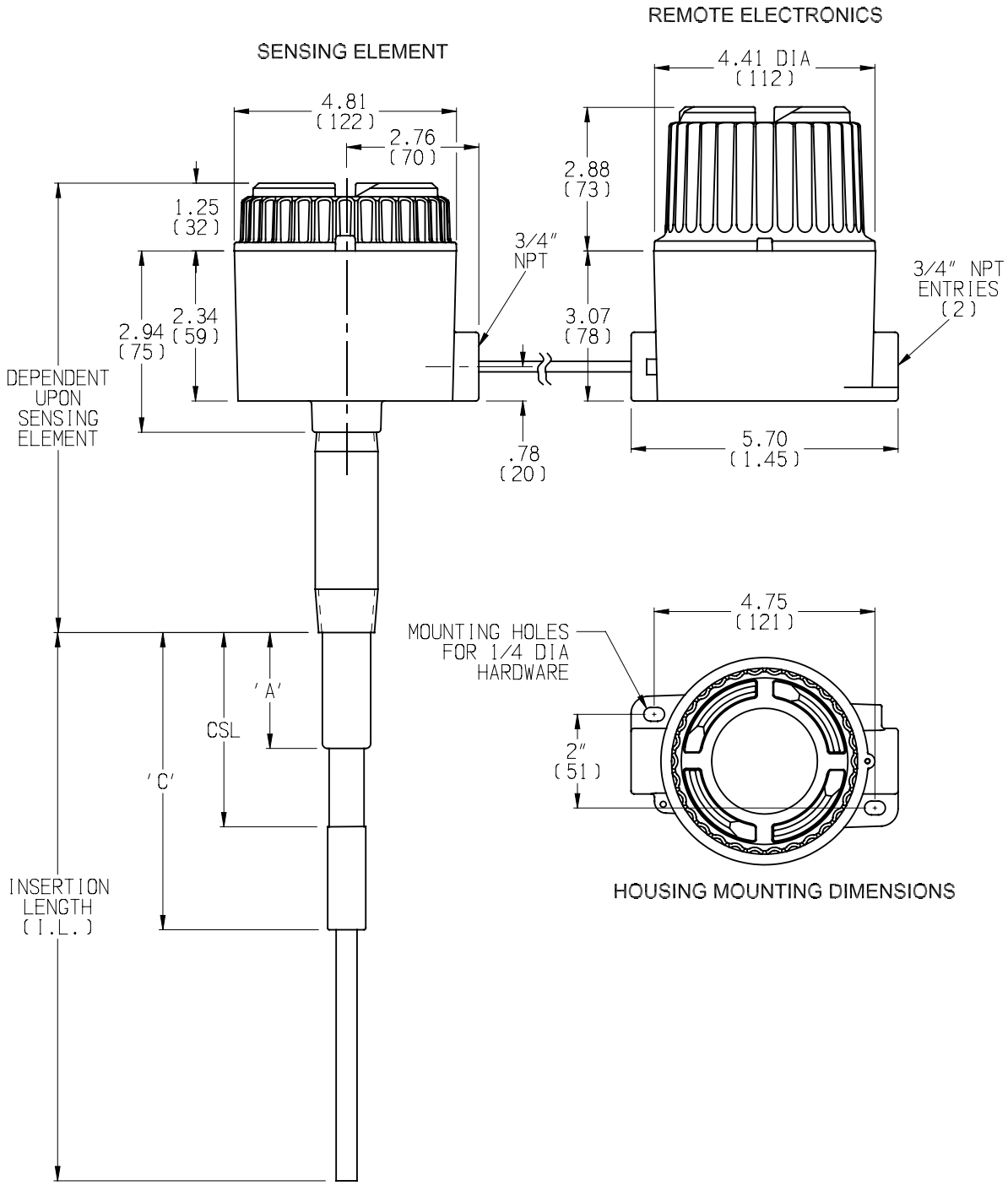


Integral Mounting Dimensions



DIMENSIONS ARE IN INCHES (mm)

Remote Mounting Dimensions



DIMENSIONS ARE IN INCHES (mm)

Z-tron IV™ Z02X-Series

Model Numbering

Technology
Z4 Z-tron IV RF Admittance Level Measurement System

Input Power
1 24 VDC
2 115 VAC, Field Selectable
3 230 VAC, Field Selectable

Electronics

0	Integral	(No Cable)	**6**	Remote	w/ 25 Ft Gp Cable	**C**	Remote	w/ 5 Ft Hi Temp Cable	**I**	Remote	w/ 75 Ft Hi Temp Comp Cable
1	Remote	w/ Out Cable	**7**	Remote	w/ 35 Ft Gp Cable	**D**	Remote	w/ 10 Ft Hi Temp Cable	**J**	Remote	w/ 100 Ft Hi Temp Comp Cable
2	Remote	w/ 5 Ft Gp Cable	**8**	Remote	w/ 50 Ft Gp Cable	**E**	Remote	w/ 15 Ft Hi Temp Comp Cable	**K**	Remote	w/ 150 Ft Hi Temp Comp Cable
3	Remote	w/ 10 Ft Gp Cable	**9**	Remote	w/ 75 Ft Gp Cable	**F**	Remote	w/ 20 Ft Hi Temp Comp Cable			
4	Remote	w/ 15 Ft Gp Cable	**A**	Remote	w/ 100 Ft Gp Cable	**G**	Remote	w/ 25 Ft Hi Temp Comp Cable			
5	Remote	w/ 20 Ft Gp Cable	**B**	Remote	w/ 150 Ft Gp Cable	**H**	Remote	w/ 50 Ft Hi Temp Comp Cable			

OEM Code

Series
1 Standard
2 China

Sensing Element

* temperatures > 300 °F require a 6" cooling extension

	Model #	Press. &Temp.	Wetted Parts
101	700-1202-001	200 psi @ 450°F	316 SS and PEEK
103	700-1202-014	200 psi @ 450°F	316 SS and PEEK
106	700-1202-041	1000 psi @ 250°F / 300 psi @ 450°F	316 SS and PEEK
301	700-0001-022	1000 psi @ 100°F / 500 psi @ 300 °F	316 SS and TFE
325	700-1202-031	200 psi @ 450°F	316 SS and PEEK, FDA approved
327	700-0202-002	50 psi @ 300 °F / 20 psi @ 450 °F*	316 SS and TFE
701	700-0001-018	50 psi @ 300 °F	PFA
753	700-0206-101	200 psi @ 250°F	316 SS and PEEK
754	700-0029-001	2 psi @ 500 °F	316 SS and TFE
755	700-0029-002	2 psi @ 500 °F	316 SS and TFE
756	700-0029-003	2 psi @ 500 °F	316 SS and TFE
757	700-0029-004	2 psi @ 500 °F	316 SS and TFE
758	700-0029-005	2 psi @ 500 °F	316 SS and TFE
760	700-0029-021	2 psi @ 500 °F	316 SS and TFE
761	700-0029-022	2 psi @ 500 °F	316 SS and TFE
762	700-0029-023	2 psi @ 500 °F	316 SS and TFE
763	700-0029-024	2 psi @ 500 °F	316 SS and TFE
764	700-0029-025	2 psi @ 500 °F	316 SS and TFE
766	700-0029-102	2 psi @ 1500 °F	316 SS and Alumina
767	700-0029-103	2 psi @ 1500 °F	316 SS and Alumina
768	700-0029-104	2 psi @ 1500 °F	316 SS and Alumina
769	700-0029-105	2 psi @ 1500 °F	316 SS and Alumina
770	700-0029-106	2 psi @ 1500 °F	316 SS and Alumina

Process gland wetted part (X)
B 316/316L SS
P PFA (700-0001-018)
X* Upon request

Process connection (XX)

A0	3/4" NPT	
B0	1" NPT	
BA	1" 150# RF	Carbon Steel
BB	1" 150# RF	316/316L Stainless Steel
CA	1" 300# RF	Carbon Steel
CB	1" 300# RF	316/316L Stainless Steel
FA	2" 150# RF	Carbon Steel
FB	2" 150# RF	316/316L Stainless Steel
GA	2" 300# RF	Carbon Steel
GB	2" 300# RF	316/316L Stainless Steel
IA	3" 150# RF	Carbon Steel
IB	3" 150# RF	316/316L Stainless Steel
JA	3" 300# RF	Carbon Steel
JB	3" 300# RF	316/316L Stainless Steel
KA	4" 150# RF	Carbon Steel
KB	4" 150# RF	316/316L Stainless Steel
LA	4" 300# RF	Carbon Steel
LB	4" 300# RF	316/316L Stainless Steel

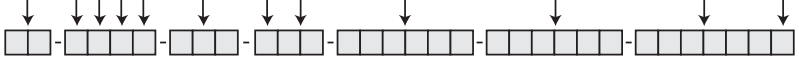
XX* Many more options available upon request (ASME/ANSI, DIN)

Insertion Length in mm
XXXXXX Length of the probe in millimeters from process connection to the bottom of the probe

Cote-Shield™ Length in mm
XXXXXX Length of the Cote-Shield in millimeters for 3-terminal probes. Not applicable for 2-terminal probes

Inactive Length in mm
XXXXXX Length of the inactive part of the probe that is not measured.
This option is primarily used in Interface measurement and Desalters

Inactive Material
B 316/316L SS
N Not Applicable
X* Many more options are available upon request



AMETEK®
DREXELBROOK

Specifications

Power Requirements:
AC Units - Field Adjustable:
95-145 VAC, 50/60 Hz, 2 Watt
215-265 VAC, 50/60 Hz, 2 Watt
DC Units:
24 VDC Unit: 19-29 VDC input, 2 Watt

Sensitivity:
0.3pF or less

Operating Point Range:
0 - 80 pF (20 Turn Pot / 4 pF per Turn)
Extended range with external pad capacitor, Pad ratio 1:1

Load Resistance:
Center to Ground, 1500 Ohms
Center to Shield, 750 Ohms
Shield to Ground, 750 Ohms

Failsafe:
Field adjustable to either High-Level Fail-Safe (HLFS)
or
Low-Level Fail-Safe (LLFS)

Output:
DPDT relay closure

Contact Rating:
5A @ 120 Vac non-inductive
2A @ 230 Vac non-inductive

Ambient Temperature:
-40°F to 145°F (-40°C to 63°C)

Temperature Effect:
0.5pF/50°F

Line Voltage Effect:
0.2pF/20V @ 120 Vac

Stability:
0.15pF/6 mo. maximum shift

Spark Protection:
100 Amp

Mounting: (Probe Dependant)
¾-inch NPT (Typical)

Housing:
The standard housing meets the following classifications:

Nema 1	General-Purpose
Nema 2	Drip-Tight
Nema 3	Weather-Resistant
Nema 4	Waterproof
Nema 5	Dust-Tight
Nema 12	Industrial Use

If hazardous area approval is required, use the Drexelbrook PXL The Point™ instrument for point level control.

Time Delay:
0-60 seconds (3/4 Turn Pot) 270° Potentiometer

Approvals
FM / FMC 3810 General Purpose

Via Lirone 60/i, Castel Maggiore (BO) 40013
e-mail: info@eurotecsrl.com Website: www.eurotecsrl.com
Tel: +39 051/6321595 C.F. 04103780377 P.I. 01596581205

AMETEK®
DREXELBROOK