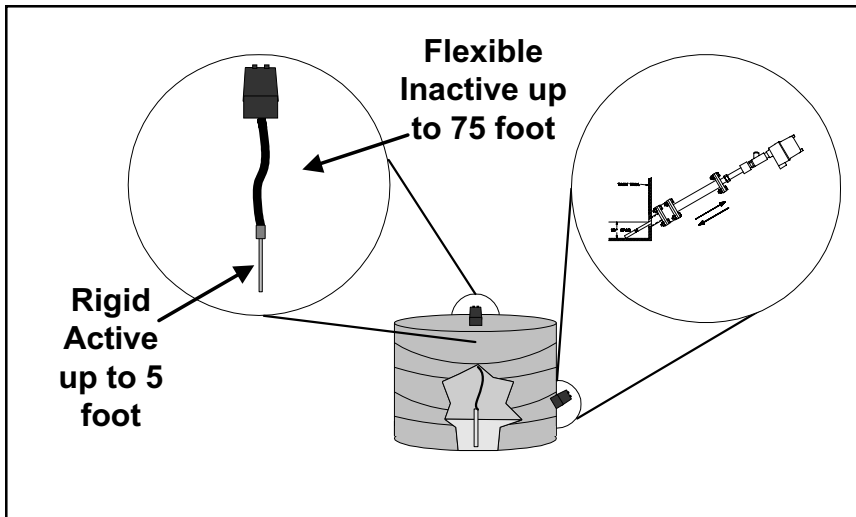


Leader in Level Measurement

Water Bottoms

RF Level Transmitter



Measurement Independent of Changing Densities

System accuracy is not affected by changes in temperature, density, or variations in oil level.

Get Right to the Bottom of the Tank

Minimal dead space allows the operator to read the water level **within one inch of the tank bottom**. If the sensing element is located in a sump there is **no dead space**.

Mounting Flexibility

Sensing element may be **top mounted or side mounted**.

No Routine Maintenance

No moving parts to corrode, break down or wear out.

Supplied with Calibration Details for Bench Calibration

Final calibration can be done quickly and accurately after installation with a known water level.

TM: Tradename of AMETEK Drexelbrook.

Drexelbrook's Interface transmitter can accurately measure the hydrocarbon/water (BS&W) interface location at the bottom of fuel storage tanks.

Drexelbrook's RF/Admittance level transmitter can be used to provide **water level information to a fuel management inventory system** so that net gallons of Petroleum can be computed accurately. It can also be used for **leak detection**, where any unscheduled decrease in water level indicates a leak in the tank bottom. The signal can also be used to **control automatic water draw-off**.

For **installation convenience**, the intrinsically-safe sensing element can be mounted through a side wall of the tank or through the roof. The specific model and measuring area (active length) of the sensing element should be specified to be consistent with the expected maximum height of the water level, mounting considerations and mounting tolerances.

Final calibration can be done quickly and accurately with a known water level on the sensing element after installation. There are no moving parts to break or wear out, and materials of construction resist corrosion.

The transmitter is available with Honeywell[™] or HART[®] smart protocols or two-wire Analog 4-20mA output, and is intrinsically safe when used with an approved power supply. World Wide Hazard Certifications are available.

Transmitter Characteristics

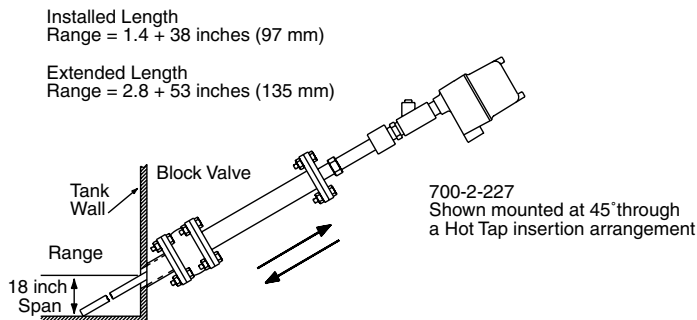
Sensing element and Mounting	Transmitters Available**	Process Press. & Temp.	Materials of Construction	Sensor Dimensions	Ranges
Mounted thru Hot Tap*	509-56-724 509-76-724 508-46-24	200psi @ 150°F (13.8 bar @ 65°C)	CS, 316SS, FEP	.56-inch (14) O.D. FEP insulated rod † Max. active 4 ft. (1.2M) 26-inch (660) active standard	0-10 in. (254) 0-18 in. (457) 0-26 in. (660) 0-35 in. (889)
Top of Tank 1-inch NPT or Flange 700-5-96	509-56-722 509-76-722 508-46-722	Atmospheric @ 150°F(65°C)	316SS, PVC, FEP	PVC covered cable with .56-inch (14) O.D. insulated rod 75 ft. (22.9M) adjustable cable, 5 ft. (1.5M) active rod standard.	0-60 inches (1524)
At Bottom of Standpipe 2-inch 150# Flange 700-2-27 Mod (91-260)	509-56-723 509-76-723 508-46-723	200psi @ 150°F (13.8 bar @ 65°C)	CS, FEP	56 (14) O.D. FEP insulated rod Max. length 10 ft. (3M)	0-60 inches (1524)

* 285-1-211 Hot Tap Kit required. ** See **Transmitter Specification; Output** on Pg. 3.
Consult Factory for Flexible Sensing Element that can be anchored to vessel bottom.

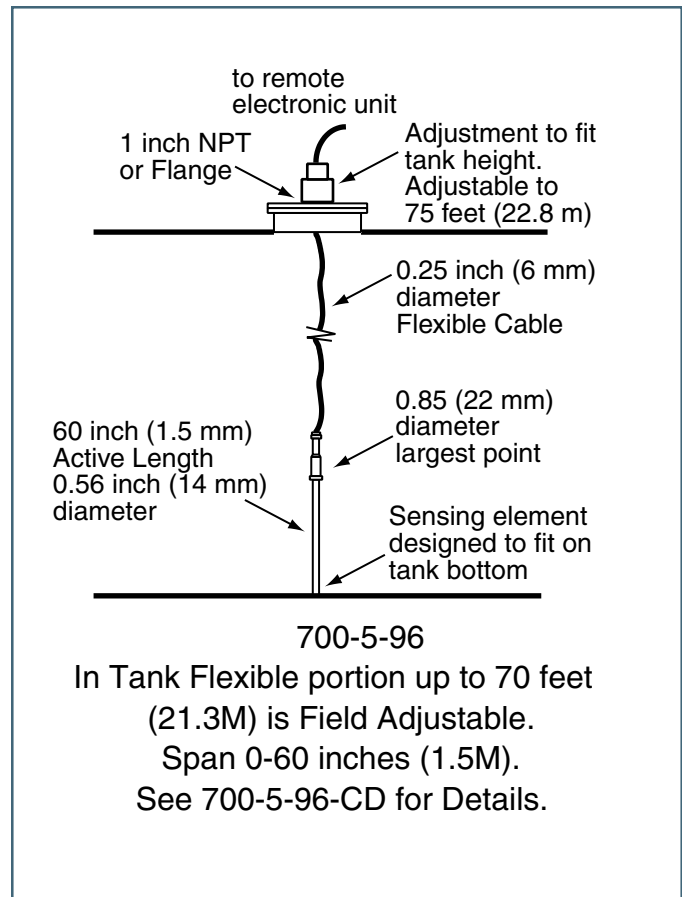
†Consult Factory for longer lengths.
All dimensions in inches (mm) unless noted.

Most Common Sensing Element Installation Methods

Hot Tap Side Mount



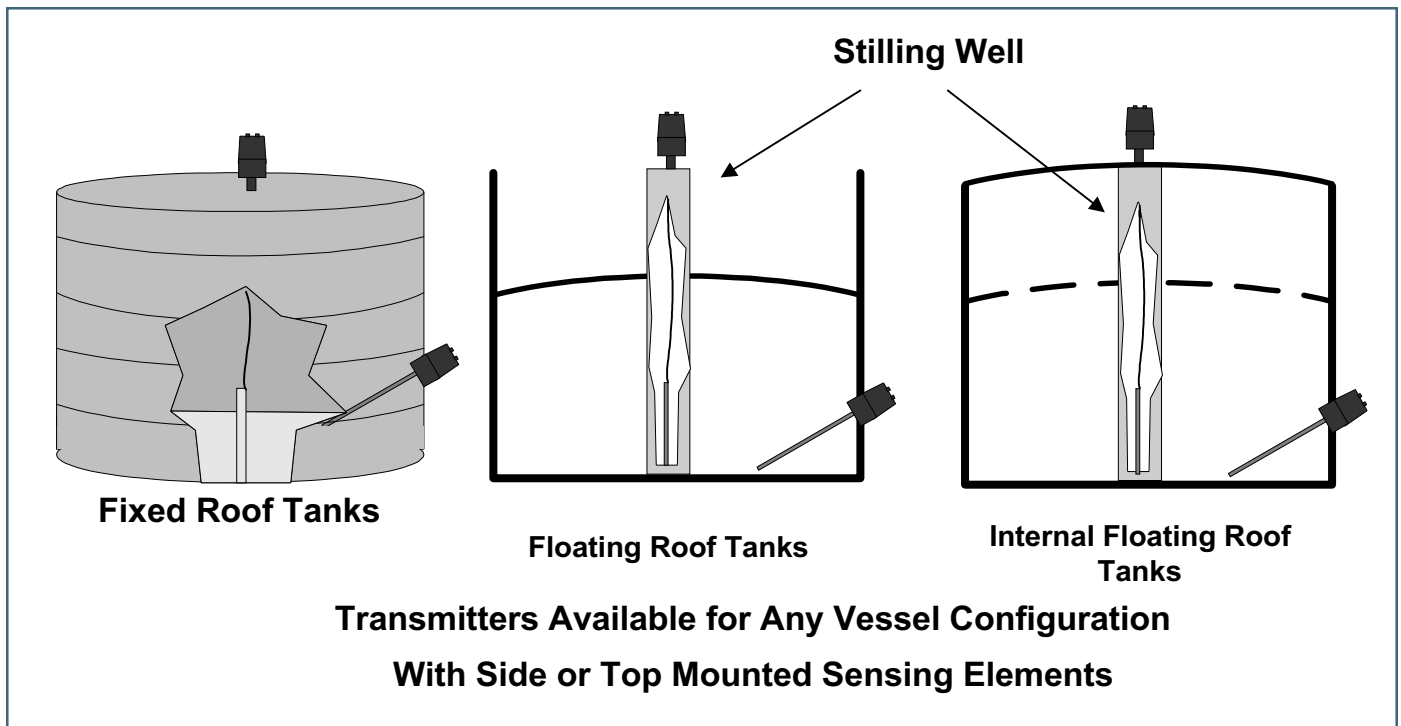
Top Mount



Transmitter Specifications:

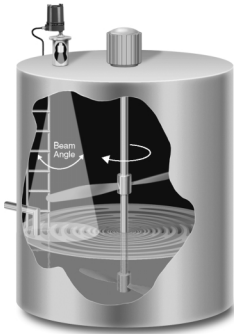
Output	Honeywell Protocol	HART Protocol	2-wire Analog
Transmitter Series	509-56	509-76	508-46
Minimum Span	6 inches	6 inches	6 inches
Electronic Unit	Integral / Remote	Integral / Remote	Integral / Remote
Output Isolation Voltage Breakdown:	4000V	4000V	4000V
Supply Voltage Effect (per 40vdc change)	± 0.1% of full scale	± 0.1% of full scale	± 0.2% of full scale
Minimum Operating Voltage (at 20mA)	13vdc at transmitter	13vdc at transmitter	11.5vdc at transmitter
Maximum Load Resistance at 24vdc	600 ohms	600 ohms	625 ohms
Accuracy	± 1% of full scale	± 1% of full scale	± 1% of full scale
Ambient Temperature Limits	-40°F to +185°F (-40°C to +85°C)	-40°F to +185°F (-40°C to +85°C)	-40°F to +185°F (-40°C to +85°C)
Ambient Temperature Effects	±0.1% per 50°F (28°C)	±0.1% per 50°F (28°C)	±0.25% per 30°F (17°C)
Linearity	±0.25%	±0.25%	±0.25%
Response Time	less than 2 seconds	less than 2 seconds	20 milliseconds

- **Electronic Housings:** available to meet Nema 4X and Nema 7 requirements.
- **Intrinsically Safe Sensing Element and Cable:** Safe for Class I, Groups A, B, C, D, and Class II Groups E, F, G (Div. 1 and 2), and Eexia IIC Zone 0.
- **Electronics and Signal Wires:** Intrinsically safe for Class 1, Div.1 Groups C and D when used with approved barriers. Also non-incendive for Class 1, Div.2 Groups A, B, C, D, and Eexia IIC Zone 1, when powered from an intrinsically safe power source.
- **Approvals** Consult Factory for Specific Approvals. FM, CSA, CENELEC (Kema), SAA, plus others available.

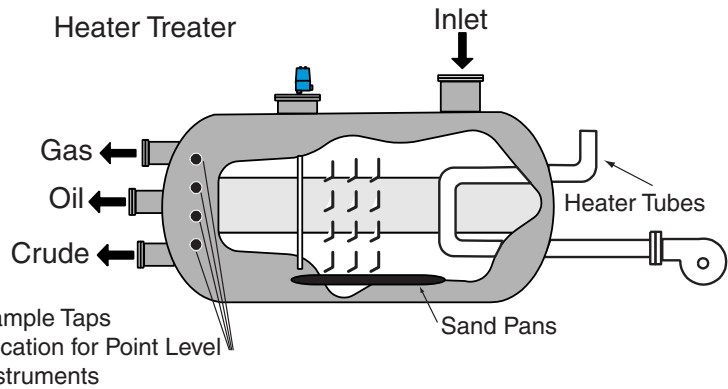


Other Level Measuring Instruments from

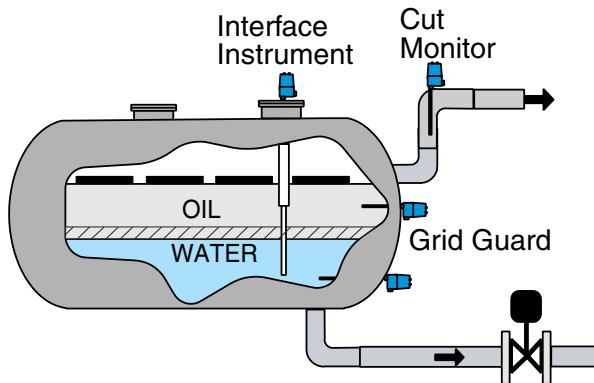
AMETEK Drexelbrook . . .



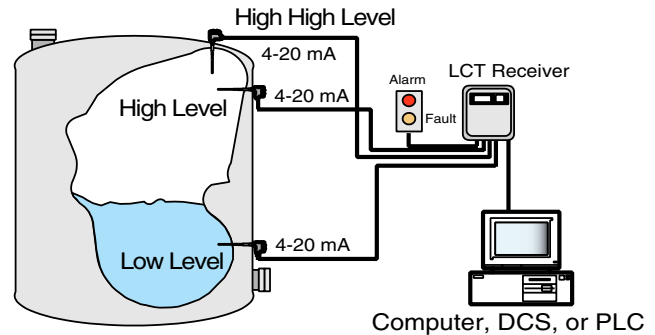
Ultrasonic Level Transmitter with Auto-profiling



Sample Taps Location for Point Level Instruments



Desalter Control



Overfill/Spill Prevention System with Manual or AutoVerify™ Test

Guaranteed Performance

Because of our conviction that Drexelbrook level instrumentation will handle even the most difficult problems, we offer our products on a guaranteed-performance basis.

If the Drexelbrook instrument does not perform according to our quotation, we will accept its return for full credit within a specified period after delivery.

This guarantee is subject to our inspection at the job site and the condition that Drexelbrook be given a reasonable amount of time in which to correct any problems, with the customer's cooperation in effecting such changes.

To purchase a Drexelbrook product with this guarantee, we ask only that you describe the application as completely as possible using our standard quotation request form. With the information you provide, plus any supplementary data we consider important, we will quote on a guaranteed-performance basis and provide you with a written customer satisfaction guarantee.

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