Continuous Level Transmitter with 700-5-54 Series Sensing Element

Key Benefits:

**Economical**
Low system price and low price per foot adds up to the most economical system available.

**Easy Installation**
Light weight flexible sensing element can be installed in any connection 3/4” NPT or larger with only 10 inches of overhead clearance needed.

**Proven Performance**
Based on 25 years of level measurement experience with a technology that has proven successful in tens of thousands of applications all over the world.

**Versatile**
System is appropriate for almost all process materials, and the sensing element is easily shortened in the field.

Continuous Level transmitter uses a lightweight flexible sensor for measurement lengths up to 400 feet.

The Drexelbrook continuous level measuring systems with a PFA insulated light-weight flexible sensing element (0.093-inch O.D.) provides the highest reliability at the lowest price. The sensing element is easily installed through existing vessel openings and is available with a variety of weights to accommodate any process connection 3/4-inch NPT or larger. The PFA insulation is compatible with almost all process materials, and the sensing element is easily shortened in the field for maximum versatility. The sensing element design and patented Cote-Shield™ circuitry allow the system to ignore the effects of coatings that may build up on the sensing element or vessel walls. No maintenance is required, and the sensing element can be used in lengths up to 400 feet.
Typical Systems

<table>
<thead>
<tr>
<th>Model#</th>
<th>Process Pressure/Temp</th>
<th>Sensor Dimensions</th>
<th>Std. Sensor Mounting</th>
<th>Sensor Materials of Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP21010000-318-0 (Heavy Coatings)</td>
<td>300 psi @ 300°F (2)</td>
<td>.093-inch O.D. 400 ft. max. insertion length</td>
<td>3/4-inch NPT</td>
<td>PFA insulated flexible cable</td>
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<tr>
<td>508-45-25</td>
<td>300 psi @ 300°F (2)</td>
<td>.093-inch O.D. 400 ft. max. insertion length</td>
<td>3/4-inch NPT</td>
<td>PFA insulated flexible cable</td>
</tr>
<tr>
<td>UL21010000-318-0 (Light Coatings)</td>
<td>300 psi @ 300°F (2)</td>
<td>.093-inch O.D. 400 ft. max. insertion length (3)</td>
<td>3/4-inch NPT</td>
<td>PFA insulated flexible cable</td>
</tr>
</tbody>
</table>

(1) For Universal II electronic specifications, see 508-45-A
(2) Temperatures in excess of 212°F (100°C) require a 6” cooling extension to maintain the pressure rating.
(3) Reduced span for lengths ≤ 140 ft with Lite electronics

Electronics Specifications (Universal IV)

Technology
RF Admittance / Capacitance

Supply Voltage
13-30VDC, 2-wire loop powered

Output/Digital Protocol
4-20mA, HART
Compatible with HART®
HART device description available

Load Resistance
Maximum 550 ohms at 24 VDC
Minimum 250 ohms for HART protocol

Ambient Temperature
-40°C to 75°C (-40°F to 167°F)

Process Connection
NPT, BSP, JIS, DIN, Grayloc, Tri-Clamp, Perlick Fitting and more upon request

Main Wetted Parts
316L, TFE, PFA

Capacitance Measurement Range
Autoranging (6 ranges)
1-45,000 pF (Pro model)
20-7,000 pF (Lite model)
Universal IV™ Series Pro and Lite Models

Cote-Shield™
Pro model: Coating rejection with 100Khz or 15Khz and 45° phasing
Lite model: 100Khz or 15Khz without phasing for insulating coating or conductive non-coating applications only

Integral or Remote Configuration
100 ft max cable length for remote configuration

Accuracy
0.25% of span (ranges 2-6)
Includes the effects of linearity, hysteresis and repeatability on electronics only

Response Time to Level Changes
350 msec nominal (no damping applied)
1-90 seconds programmable damping time

Supply Voltage Effect
0.2% of full scale max

Temperature Effect
0.5% per 100°F (37.7°C) change

Start-Up Time
< 12 seconds

Configuration and Calibration
Standard LCD display and keypad on all models
HRTWIN™ PC-based software
Or third party Model 275, 375, 475 handheld communicator

Emission and Surge Protection
Compliant with IEC61000-4.2, 3, 4, 6, 8
Compliant with CISPR11 Group I, Class B

Approvals
 Intrinsically Safe (IS)
Explosion Proof (XP) without IS barrier
FM, FMc, ATEX, IECEx
CE Mark