



SLT™ 509-55 Series

Smart Level Transmitter



High Accuracy

Digital electronics mean precise level indication along the entire sensing element's measurement span.

One Transmitter for All Applications

With RF Admittance technology, one transmitter handles all your applications (Liquids, granulars, slurries, interfaces; cryogenic to 500°F, full vacuum to 10,000 PSI)

Easiest Calibration Ever

Configure this transmitter from anywhere along the two wire-loop without changing the level in the vessel.

Smart Advantages

Major advantages of the SLT transmitter include:

- Built in tank strapping
- Choice of output in level, flow, weight or volume
- Factory precalibration
- Choice of digital or 4-20 mA transmission
- Built-in self diagnostics

The SLT Smart Level Transmitter provides remote calibration with-out having to empty and fill the vessel.

Configuration Without Changing Level

Configure the SLT quickly and easily before installation or on the vessel without moving the level. Simply key in the calibration data and walk away.

Remote Configuration

No longer is it necessary to "sniff" for hazardous gasses or to go out in inclement weather to calibrate your level transmitter. Configure the SLT from the convenience and comfort of the control room...or anywhere along the two-wire loop.

Quick and Easy Calibration

Use your existing Honeywell smart Field communicator (STS 103 or later) or Drexelbrook's PC software to configure the transmitter.

Tamper Proof

No adjustments on the transmitter; prevents unauthorized "tweaking" or inadvertent changes in calibration.

Unsurpassed Accuracy

No other RF transmitter matches the accuracy, stability, and repeatability of the SLT. This translates into smoother operation and less down-time.

Compatibility with the Future

The standard Honeywell protocol is a proven instrumentation protocol. The SLT is available in both Honeywell R100/R200 4-20 mA output and Honeywell Digital Enhanced protocol.



Continuous Level Measurement

SLT™ 509-55 Series

Specifications

Output

4-20 mA with Honeywell R100/200 protocol or all digital Honeywell DE protocol.

Supply Voltage

12 to 30 Vdc

Ambient Temperature:

- 40°F to 185°F (- 40°C to 85°C)

Max. Load Resistance

$\frac{V_s}{I_s} - 12$

.02 (i.e. max 625 ohms @ 24 Vdc)

Response Time

1 second delay with no delay
Adjustable 1-30 seconds delay

Supply Voltage Error

less than 0.1% maximum of full scale for 39.2 volt change

Accuracy

± 1% of span (nominal)

Cable Length: (remote mount only)

100 feet (30), 25 feet (7) standard.

Allowable Static Discharge to Sensor

10 amps maximum (standard)
100 amps with optional protection circuit

Sensing Element Connection

NPT (standard)
Flange mounting (optional)

Electronic Housing:

Meets NEMA 1-5 and 12 including NEMA 4X. Suitable for Class I, Groups A, B, C, D; Class II, Groups E, F & G; Class III; Div. 1 & 2. The housing is suitable for Explosion Proof installations in Div. 1 hazardous locations when the electronics are powered from an approved source. Refer to system Control Drawings for proper and safe installation and wiring.

Area Classifications:

Cables and Sensors are intrinsically safe for all Groups, Division 1 & 2 when the electronics are powered from an approved source. The electronics are intrinsically safe for Groups C, D, E, F & G, Division 1 when powered from an approved source. The system (electronic unit, cable and sensor) is non-incendive and non-sparking and suitable for all Groups, Div. 2 without intrinsic safety barriers.

Approvals Available



Pending:
FM, KEMA/CENELEC, CE Mark
Consult factory.

Note: A HART® version of the Smart Level Transmitter is also available.

Process Specifications Sensing Element

Sensing Element-dependent.
See UIII Catalog Pages. Substitute SLT II Electronic Unit.

Typical Applications

Sensing Element-dependent
See UIII Catalog Pages. Substitute SLT II Electronic Unit.

Model Number of Electronics

409 - 12 **3** 0 - **0** **0** **9** - 00 - ----- Electronic Unit

Phasing

0 = 0 degree phasing
3 = 45 degree phasing
for coating rejection

Agency Approvals

C = CSA
K = KEMA
F = FM
0 = No approvals

Frequency

0 = 100 kHz
1 = 15 kHz

Housing options

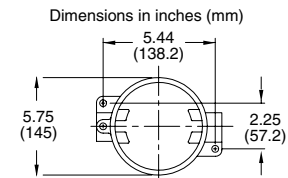
4 = Remote Nema 4X Explosionproof
6 = Remote Nema 4X Explosionproof with Drexelcote
8 = Integral Nema 4X Explosionproof with Drexelcote
9 = Integral Nema 4X Explosionproof

Digital Integral Meter Option

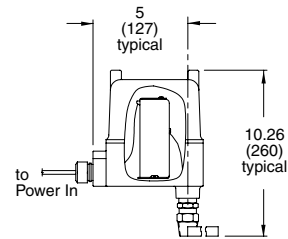
Mounted in Dome with Viewport
Not available with Housing Options 6 and 8
If Meter is not required, these numbers are not used
M0037 = Forward/Reverse-acting for remote housings
M0038 = Forward/Reverse-acting for integral housings

Denotes default value

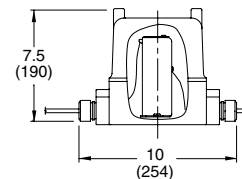
Dimensions



Top View



Integral Mount Housing



Remote Mount Housing





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