

Electronic DENSITROL® On-Line Liquid Density Monitor

Instrumentation designed with the user in mind.

Specific Gravity Measurement

Mass Balance Technique Instantaneous - Sensitive Temperature Compensated

Applications

Concentration

Separation

Evaporation

Blending

Dilution

Mixing

Features

Real-Time On-Line Monitor
Continuous Measurement
Accurate, Reliable, Sensitive
Maintenance Free
No radiation sources
No vibratory components
Choice of wetted materials;
316SS ~ PVC ~ CPVC ~ Teflon
Temperature Compensation (option)



W702-WPI

Description

Specific gravity (or density) is a very critical control parameter in many industrial processes.

Frequently density is indicative of the process liquid's composition or concentration and as a result is used to control and optimize the process.

The **Densitrol**® is a highly sensitive accurate and maintenance free instrument that provides real-time on-line measurement of specific gravity.

Densitrol® is the ideal liquid density instrument for use in a variety of industries including: automotive, chemical, electronics, food processing, metals, mining, petrochemical, pharmaceutical, photographic, plastics, power and pulp/paper.

The **Densitrol**[®] line of specific gravity instruments has been in use for more than five decades.

Designed to withstand harsh industrial environments while continuously monitoring liquid composition in flowing streams, the **Densitrol®'s Reliability, Sensitivity, Stability & Versatility** are truly amazing.

Electronic DENSITROL® On-Line Liquid Density Monitor

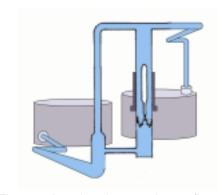
DENSITROL® SPECIFICATIONS

Range Limits 0.005 to 0.2 gm/cc Densities 0.5 to 3.5 gm/cc	Viscosity Limit 50 cps max. @ Operating Temp. For viscosity greater than 50 cps, Consult factory	
Accuracy ± 3% of range or 0.0002 gm/cc, Which ever is greater	Flow Rate Typical flow rates through the chamber are 0.1 to 0.5 gpm	
Sensitivity ±½% of range	Speed of Response Less than 30 seconds	
Temperature Compensation Typically ±50°F	Output 4 to 20 mA DC standard Options: 1 - 5 or 10 - 50 mA DC or -5 to +5 mV DC	

SIGNAL CONDITIONERS

Model WPI		EP2	
Illustration			
Case Type Weatherproof, NEMA 4, Surface mount		Explosion-proof, Class 1, Group D, Surface mount	
Dimensions 13" x 11" x 6"		13" x 14" x 9"	

DENSITROL® BASICS



The sensing chamber receives a flow of process liquid which flows upward through the chamber.

The patented chain-weighted plummet / LVDT sensor responds to the density of the liquid and an RTD senses the temperature.

These two signals are transmitted to the remotely located electronics (integrator) in which they are combined to produce a temperature corrected density output signal.

SENSING CHAMBERS

Model	W-702	W-706	W-716
Dimensions	24" x 15" x 7.5"	19" x 14" x 9"	24" x 14" x 9"
Illustration			
Case Type	Weatherproof NEMA 4	Explosion-proof cast aluminum	Explosion-proof cast aluminum
Chamber Surfaces	316 SS., optional: PVC, CPVC, alloy #20, K-Monel, Hastelloy	316 SS., optional: alloy #20, K-Monel, Hastelloy	Teflon lined stainless steel
Connections	½, ¾, 1" NPT ½, ¾, 1" Flanged		1" 150 # flanged, Teflon faced
Temperature Rating	110°C standard, 230°C optional w/ high temp transducer		
Pressure Rating	200 PSI Standard 500 PSI Optional		100 PSI

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