

Dynatrol®

Density Systems

Dynatrol® Density Systems can measure density in familiar units such as API gravity, specific gravity, degrees Baumé, degrees Brix and can also measure the percent solids or percent concentration of a liquid or slurry. Dynatrol® Density Systems achieve exceptional accuracy over a wide range of process changes in ambient temperature, pressure, viscosity or flow. Our products are well-proven, extremely versatile process tools that are highly respected and relied upon in a variety of industries. Industries currently using Dynatrol® products include:

- REFINING
- PIPELINES
- OIL PRODUCTION
- MINING
- CHEMICAL
- POWER PLANTS
- PHARMACEUTICALS
- DAIRY
- FOODS
- SUGAR REFINING
- BREWING
- BEVERAGES
- PULP & PAPER MILLS
- STEEL
- TEXTILES
- RUBBER
- TOBACCO
- MANUFACTURING PLANTS
- and more!



ADVANTAGES

Easily Installed - Rugged - Accurate

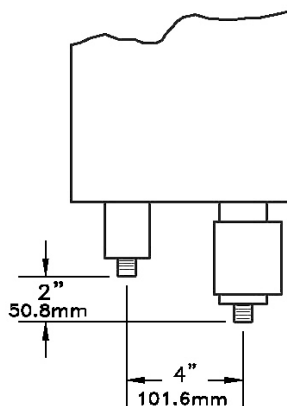
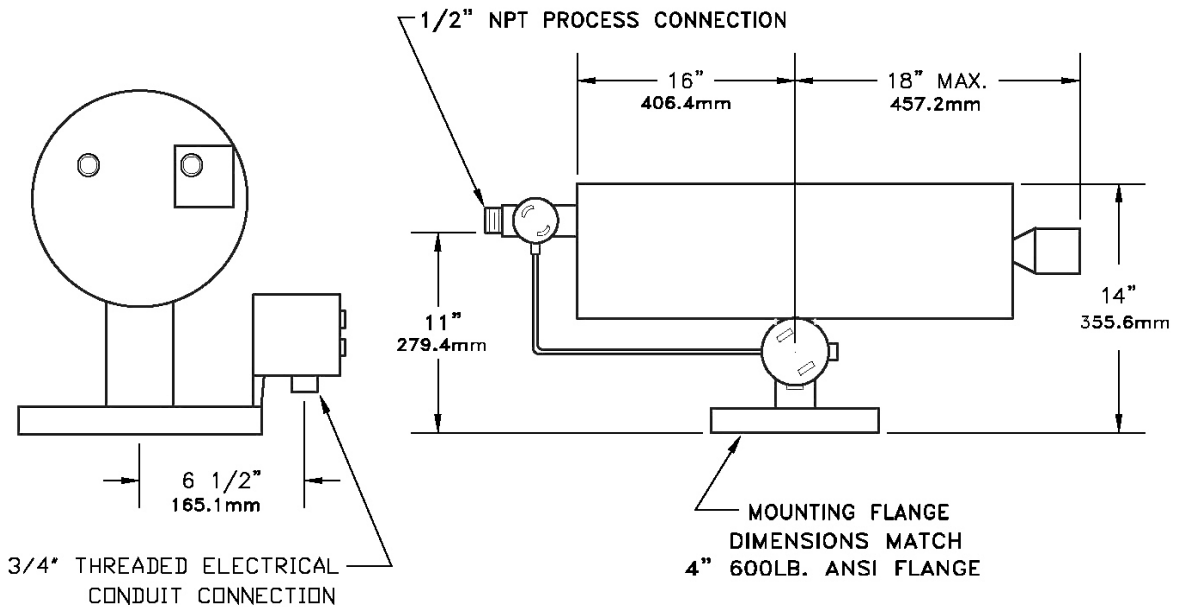
Dynatrol® Cells are designed and manufactured for easy installation and all components are constructed for a long operating life. The cell can be installed across a main-line transfer pump, a recirculating pump, an orifice plate or a pressure drop point to ensure the media flows through the cell's U-tube.

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Dynatrol® Density Cell Information

PRINCIPLE OF OPERATION

The media-under-test flows through the internal U-tube portion of the Dynatrol® cell. The ½-inch tubing is driven into mechanical vibration by the electrically excited drive coil. As the density or specific gravity of the media increases (or decreases), so does the effective mass of the U-tube and this changes the frequency of vibration. The pick-up end, consisting of an armature and coil arrangement, senses the vibration and provides an output that is a function of the density, specific gravity or percent solids of the process media.



SPECIFICATIONS

DYNATROL® Density Cell

- PRESSURE RATINGS: ANSI 150#, 1000 and 1480 PSI (standard)
- TEMPERATURE RATING: 300°F and 500°F (standard)
- PROCESS CONNECTION: ½-inch Flanged, ½-inch NPT CIP available
- INTEGRAL TEMPERATURE MEASUREMENT: Platinum RTD
- HOUSING: Rugged, Sealed, All-Weather X-proof
- CSA NRTL/C Approved for Class 1, Group D, Division 1
- VARIETY OF CORROSION RESISTANT MATERIALS: 316 SS (standard), 304 SS, 400 Series (abrasion resistant) SS, Hastelloy, Nickel, Carpenter 20, Titanium, Zirconium, Tantalum, Monel and others.