Specification For Paddlewheel Flow Sensor

- Sensor shall be capable of sensing flow in either direction (bi-directional).
- The flow sensor shall be insertion paddlewheel, with an electrical output signal proportional to flow velocity over a range of 1.0-20 feet per second.
- Signal transmission lengths shall be capable of distances up to 200 feet.
- Sensor shall generate a sinusoidal frequency pulse nominal 6 Hz per ft/s @ 1 volt peak to peak per ft/s.
- The sensor shall be inserted at the correct depth and there shall be a fully developed flow profile.
- The sensor shall not create a pressure drop of >1 psi at any flow rate.
- With a fully developed flow profile, the sensor output shall be linear to ±1% of full range, with a repeatability of ±0.5% of full range, and supplied with a certificate traceable to N.I.S.T.
- The sensor shall be FM approved
- Three optional sensor lengths shall allow the flow sensor to install into pipes from 0.5 to 36 inches.
- The sensor body materials shall be glass-filled polypropylene (black) or, PVDF (natural).
- The flow sensor shall be equipped with dual o-ring seals. The elastomeric seals shall be FPM-Viton® (standard) with optional EPDM or FFPM-Kalrez®.
- Rotor pins shall be Titanium (standard for PP), Hastelloy-C or PVDF (standard for PVDF), with optional ceramic, Tantalum, or stainless steel.
- Rotor material shall be black PVDF (standard for PP) or natural PVDF (standard for PVDF) with optional Tefzel® with or without Fluoraloy G® sleeve.
- Sensor shall have option capable of integrally mounting a NEMA-4X Flow Indicating Transmitter with 4-20 mA output.
- The flow sensor shall be a Georg Fischer Signet model 515 or equal.