

Qz1 Permanent Installation Gauge



Description

The SST Qz1 Permanent Installation Gauge utilizes proprietary technology based on a high accuracy "Quartzdyne" quartz frequency transducer.

The SST Qz1 Gauge incorporates advanced ceramic Hybrid and SMT electronics technology to process the pressure and temperature data and then transmits the data over a proprietary SST high speed digital telemetry interface. This SST high speed digital telemetry interface allows for up to 32 SST Pz1 or Qz1 gauges to be connected to a single TEC data cable.

The SST Qz1 Gauge housing is an entirely Electron Beam Welded housing utilizing no elastomeric seals to the well bore or annulus. The entire system is purged to a vacuum during welding and is hermetically sealed, thus reducing electronic corrosion due to component outgassing. The bottom connection is an industry standard "Autoclave Medium Pressure" style metal to metal seal connector. The top connection of all SST gauges incorporates industry standard "Swagelok Medium Pressure" style connections and can be used with either the SST Single Seal Testable Cable Head or our Dual Seal Testable Cable Head.

The electronics of the SST Qz1 Gauge also have a current limiting function that isolates the gauge from the high speed digital telemetry interface in the event of an electronic failure, thus allowing continued operation of other gauges in the system. This rugged design philosophy makes the SST Qz1 ideally suited for long-term, high accuracy permanent monitoring environments.

Features

- Utilizes high accuracy, high resolution quartz frequency technology
- Fully welded, hermetically sealed housing with full metal to metal seal end connections
- Utilizes "Medium Pressure" metal to metal seal technology
- Available in 17-4PH materials for standard service and Inconel 718 for NACE MR 01-75 and hostile CO2 environments
- Up to 32 gauges can be installed on one MultiGauge TEC installation

Applications

- Permanent monitoring for reservoir characterization and production optimization
- ESP and gas lift monitoring and performance optimization
- Plugged & abandoned well monitoring
- Drill stem testing, fracturing stimulation and chemical treatment operations

Operating Specification

WORKING PRESSURE RANGES AVAILABLE	10, 16 & 20 psi
OPERATING TEMPERATURE RANGE	25 – 150° C
PRESSURE ACCURACY	0.020% of Full Scale
PRESSURE RESOLUTION	0.00006% of Full Scale
PRESSURE DRIFT	< 0.02% of Full Scale / Year
TEMPERATURE ACCURACY	+/- 0.25° C
TEMPERATURE RESOLUTION	< 0.005° C
TEMPERATURE REPEATABILITY	< 0.01° C
DIMENSIONS	0.75 in. Ø x 17.08 in. L

