

PULSATION TESTING

DETECTING ERRORS IN MEASUREMENT

SRE-6

SRE Carry Case with Foam

USB Transmitter Interface Assembly

Validyne Transmitter, Manifold and Tubing Assembly

SRE Interface Cable Assembly

SRE6-01 Software

SRE Installation, Operation & Maintenance (I.O.M.) Manual

GLE-6

GLE Carry Case with Foam

Two (2) Validyne Transmitter Cable Assemblies

Coequal DP to DP Adapter Kit

Double Flange Integral Manifold

USB Transmitter Interface

Two (2) Validyne Transmitter, Manifold and Tubing Assemblies

Interface Cable Box Assembly

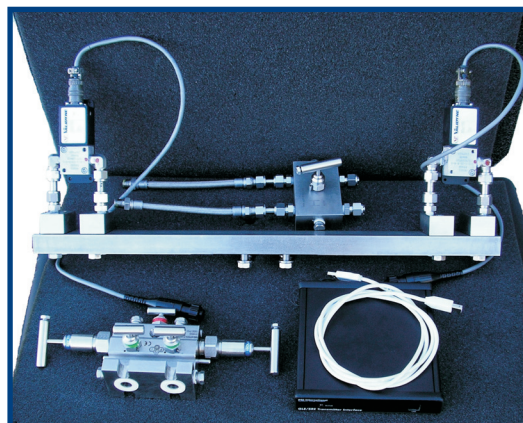
Stabilizer Connector Flange Kit

90° Double Flange Manifold

GLE6 Software

GLE/SRE Installation, Operation & Maintenance (I.O.M.) Manual

ISO 9001:2008 Certified Quality System



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All necessary calibration equipment, connections, hardware and fittings are also included.

SRE-6 AND SRE/GLE-6

Square Root Error Indicator

Most natural gas flow measurement in the United States is performed by measuring pressure drop at two points (pressure differential) induced by an orifice plate. The gas flow rate (Q) is calculated using the basic formula $Q = K/\sqrt{rPXP}$. The fixed orifice coefficient (K) is derived from a formula found in the latest edition of AGA Report Number 3. Differential pressure rP and line pressure P are measured either using mechanical chart recorders or electronic transmitters, remotely or direct mounted to the pressure taps, using a configuration of instrumentation valves, manifolds, and tubing.

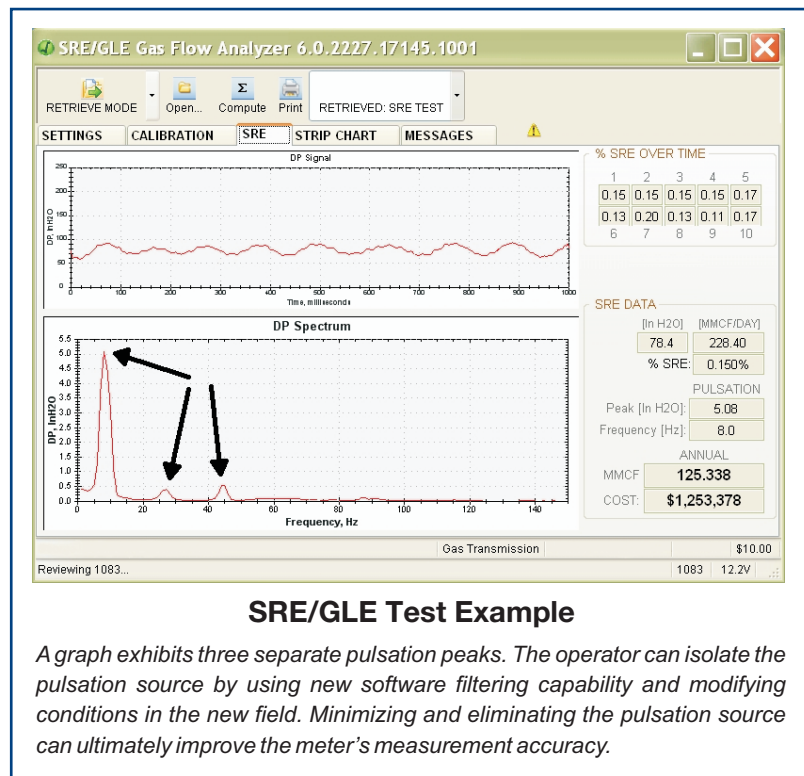
Percent Square Root Error (%SRE) is measured with a device manufactured and marketed by PGI International called the Square Root Error (SRE) Indicator. The indicator is used by field technicians to measure the severity and calculate %SRE. The %SRE is measured at operating conditions and is used to approximate the primary element error induced by pulsation and to determine whether corrective action is necessary.

Gauge Line Error Indicator

PGI International developed its initial Gauge Line Error (GLE) in 1990, while our most current SRE/GLE Indicator includes the ability to perform both %SRE and GLE tests, thus measuring and quantifying both Square Root Error and Gauge Line Error.

Gauge Line Error (GLE) exists when the differential pressure (rP) at the taps does not equal the differential pressure (rP) at the end of the gauge lines. GLE is typically caused by either pulsation or other flow phenomena.

The GLE Indicator compares the differential pressure at the orifice taps with the differential pressure at the end of the gauge lines. Any difference between the two signals would be associated with gauge line error.



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