

Quartz High-Pressure Sensor Operates to 6,000 BAR



Kistler North America (www.kistler.com) has announced the availability of its Type 6215. Type 6215 is a quartz-based, high-precision pressure sensor, known as a field-proven industry gold standard for meeting the rigorous application demands of internal ballistics; closed bomb testing; weapons discharge and cartridge chamber testing; and other extreme high-pressure measurement requirements.

Design of the Kistler Type 6215 incorporates a quartz crystal sensing element and front sealed diaphragm, packaged together within a rugged, stainless steel housing. This technology is industry exclusive to Kistler in North America and allows for low mechanical and thermal stresses upon the sensor, with no mounting gap (small dead volume) and a largely reduced surface pressure within the sealing part. The result is a finished product with long useful service life, excellent long-term measurement stability and highly repeatable extreme precision pressure measurement capabilities. Small caliber weapons users have reported more than 20,000 rounds of extreme high accuracy results.

Offered with a measurement range from 0 to 6,000 BAR (0 to 87,000 psi), the Type 6215 features a high-impedance output and sensitivity of -1.4 pC/bar (-0.1 pC/psi) with a natural frequency of >240 kHz. Units are rugged to 25,000 g shock, with a 1 μ s rise time and $\pm 1\%$ FSO linearity specification across all pressure ranges. Depending upon desired measurement configuration, the Type 6215 may also be installed with an optional (sold separately) protective shield or diaphragm protection. In particular, thermal shields or plates further reduce the potential for thermal shock errors and diaphragm protection provides resistance to mechanical damage from metal fragments and powder particles. Sensor mounting is achieved

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via a M10x1 threaded hole.

Type 6215 pressure sensors have been accepted by the North Atlantic Treaty Organization (NATO) as part of their standardization agreements (STANGAGs) and Manner of Proof and Inspections (MOPIs). In addition, all U.S. sale and promotion of the Kistler Type 6215 is conducted in full compliance with International Traffic in Arms (ITAR) and other export control regulations, with an approved commercial license required for all non-U.S. shipments, and other potential restrictions on customer sale and end use.

For additional details, please contact Kistler North America toll-free (in the US & Canada) at 1-888-KISTLER, via email at sales.us@kistler.com [2], or by visiting www.kistler.com [1]

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