

## Hazardous Location Classifications (NEC)

**Class I: Areas in which flammable gases or vapors may be present in the air in sufficient quantities to be explosive**

**Group A:** Atmospheres containing acetylene

**Group B:** Atmospheres such as butadiene, ethylene oxide, propylene oxide, acrolein, or hydrogen (gases or vapors equivalent in hazard to hydrogen, such as manufactured gas)

**Group C:** Atmospheres such as cyclopropane, ethyl ether, ethylene, gas or vapors of equivalent hazard

**Group D:** Atmospheres such as acetone, alcohol, ammonia, benzene, benzol, butane, gasoline, hexane, lacquer solvent vapors, naphtha, natural gas, propane, or gas or vapors of equivalent hazard

**Class II: Areas made hazardous by the presence of combustible dust**

**Group E:** Atmospheres containing combustible metal dusts, regardless of resistivity; dust of similarly hazardous characteristics having a resistivity of less than 100 Kohms-cm; electrically conductive dusts

**Group F:** Atmospheres containing combustible carbon black, charcoal, or coke dusts having more than 8% total volatile material; dusts so sensitized that they present an explosion hazard, and dusts having a resistivity of greater than 100 ohm-cm but less than or equal to  $1 \times 10^9$  ohm-cm

**Group G:** Atmospheres containing combustible dust having resistivity equal to or greater than 100K ohm-cm; electrically nonconductive dusts

**Class III: Areas made hazardous by the presence of easily ignitable fibers or dust, but which are not likely to be in suspension in the air in quantities that are sufficient to ignite**

**Division 1:** Atmospheres where hazardous concentrations exist continuously, intermittently or periodic under normal operating conditions

**Division 2:** Atmospheres where hazardous concentrations exist only in case of accidental rupture or breakdown of equipment

## Why NOSHOK is the Best Choice

- Stable sensing technologies mean that there is no need for periodic recalibration. NOSHOK transducers do not have glues, epoxies or adhesives in the transduction portion of the sensor module because such organic agents cause calibration drift with temperature and pressure cycling, and over time in some applications, cause complete failure.
- Broad product offering results in best fit of product configuration to customer application requirements.
- CE compliance and an environmentally hardened design mean maximum performance and reliability in difficult real world applications. Products are manufactured in an ISO 9001 certified facility.
- All product specifications are conservatively stated in the literature so that product performance exceeds customer expectations. No specmanship or games are ever employed, only honest information.
- The calibration of every product is verified in NOSHOK's modern facility with the best available pressure controllers and computerized readout equipment that are at least 4 times the accuracy of the product being checked.
- Highly automated production minimizing the variations in product caused by human labor mean more consistency from unit to unit resulting in interchangeability and consistent performance.
- Simple and proven dc electronics improves reliability and longer mean time between failure (MTBF) characteristics.
- While field failures are few, NOSHOK backs its electronic products with a 3-year warranty that is the best in the market.
- Products provide significant performance and application flexibility at competitive prices addressing the needs of the OEM and the user alike.
- As a privately owned and run business, NOSHOK employees focus on continually improving customer satisfaction.

### Specmanship – What to Look for in Comparing Other Transducers and Transmitters to NOSHOK Products

- Be on the lookout for suppliers specifying "high accuracy" with a low price. In many cases you will find indications of zero offsets and span offsets of up to 2% each. The specified accuracy of NOSHOK transducers includes any offsets and is a true accuracy upon which you can depend.
- If the competitors do not specify a long term stability specification, then this bears out our contention that many of these other sensing technologies do not yield an attractive stability specification otherwise it would be printed in the literature.
- Look out for the "typical" nomenclature or the Root-Sum-Square (RSS) designation. While these methods provide a statistical probability of how most of the products will perform, it means that if a quantity of units is considered then a percentage of the products will not meet the listed specification. NOSHOK specifications are worst case, so all the transducers meet that specification.