



## QUARTZDYNE, INC.

Mechanical Specifications

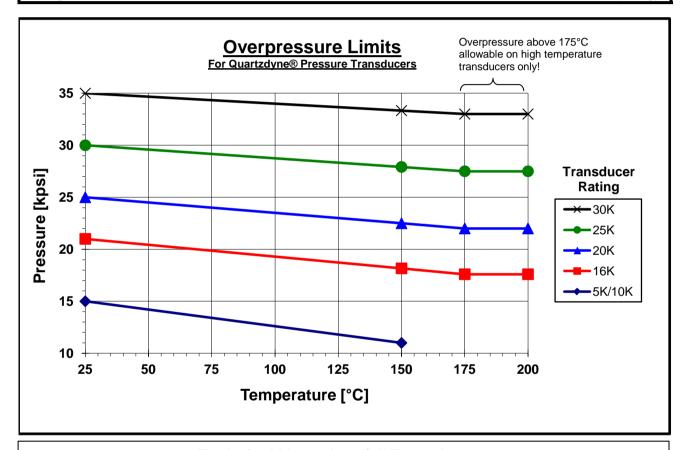
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## Mechanical Specifications for 3/4" (0.75) Transducers

Mechanical Proof Pressure	35,000 psi [2415 bar]
Sensor Pressure Limit	varies with temperature; see plot below
Pressure Media	particle-free fluid compatible with Inconel 625 and MP35N
Mechanical Shock	500 g, 2 ms half-sine
Vibration	10 – 2,000 Hz, 10.9 gRMS Random Vibration
Weight	11.5 oz [326 g]



## **Technical Notes for 3/4" Transducers**

This transducer has been specifically designed to allow you to construct a Ø.75 inch [19mm] or larger diameter tool. When designing this transducer into your tool, please consider the following items:

- If you plan to thread a stud into the end of the circuit carrier (7/16-20 UNEF-2B thread), allow for a 0.125 inch
  [3.2mm] minimum clearance hole for the output wires. The edges of this hole should be generously rounded
  to prevent insulation damage, and we recommend insulating the bundle in a piece of tubing (i.e., FEP Teflon
  heat shrink.)
- 2. Once you have designed the attachment of your electronics carrier to our circuit carrier, we recommend that the ID of the thick-walled tube covering our carrier be 0.584 ± 0.015 inches. This improves the thermal response of the transducer; more importantly, this is the way the transducer was calibrated at Quartzdyne, so the calibration will still be valid. For tools which will see full-scale pressure on the electronics enclosure, your custom electronics housing must be e-beam welded to our pressure feedthru.

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