



QUARTZDYNE, INC.

DOVER COMPANY

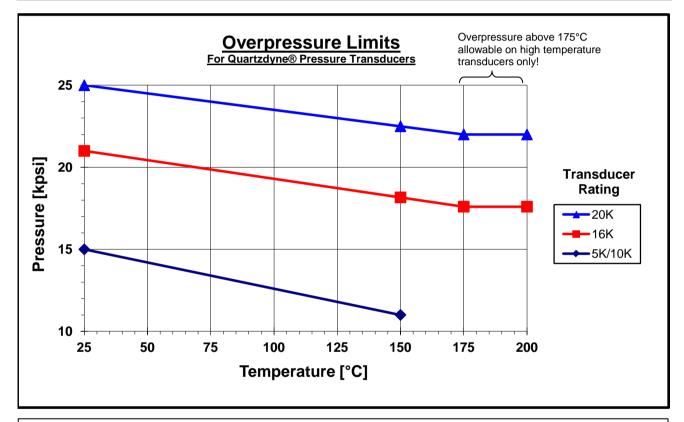
Mechanical Specifications

E20-020

A0

Mechanical Specifications for SPB102 Transducers

Mechanical Proof Pressure	25,000 psia [1725 bar]
Sensor Pressure Limit	varies with temperature; see plot below
Pressure Media	particle-free fluid compatible with Inconel 625 and Inconel 718
Mechanical Shock	500 g, 2 ms half-sine
Vibration	10 – 2,000 Hz, 10.9 gRMS Random Vibration
Weight	7.8 oz [222 g]



This transducer allows you to construct a 0.75 inch [19mm] or larger diameter tool. When designing this transducer into your tool, please consider the following items:

- Although the transducer includes grooves for o-rings, we do not recommend using o-ring seals for more than a few days' time. The most reliable seal is an electron beam (EB) weld to the transducer. We recommend that your electronics housing ID is 0.584 ± 0.015 inches. This improves its thermal response; more importantly, this is the way we calibrated it at Quartzdyne.
- 2. This transducer comes standard with a connector, secured to the side of the transducer. To remove the connector, follow electrostatic discharge (ESD) precautions.
- 3. If you thread into the end of the circuit carrier, 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.)