



3/4 INCH [19.05 MM] OD TRANSDUCER, ANALOG ASIC HYBRID SPB112-XX-YYY



Part Number Coding: AAA BBB - XX - YYY
 Family Options Pressure Temperature

FEATURES AND BENEFITS

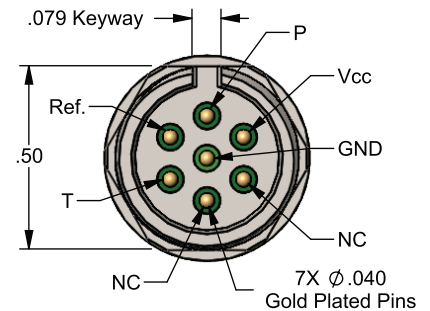
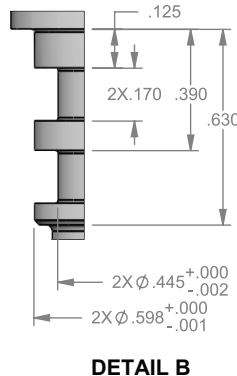
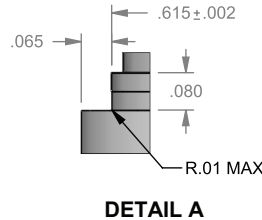
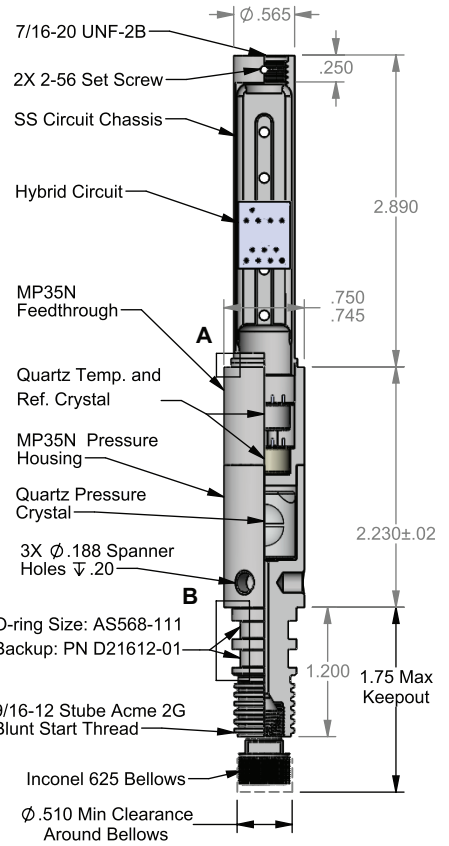
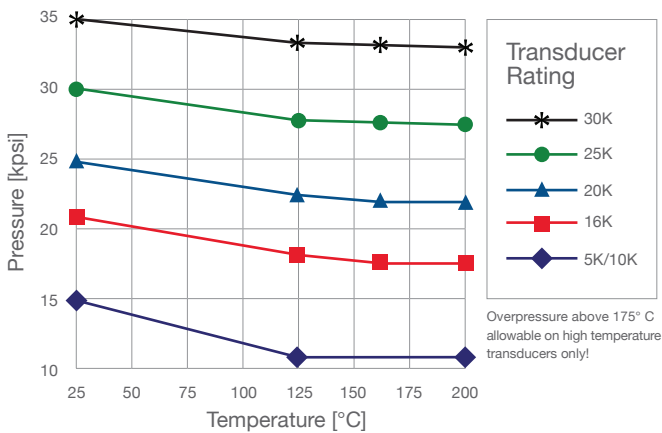
Pressure range: 0 - 35,000 psi [0 to 2415 bar]
 Operating temperature range: -40° to 225°C
 Drift at max temperature and pressure: 0.02% FS / year
 NIST Traceable Calibration
 External pressurization capable
 Fast transient response

MECHANICAL SPECIFICATIONS

Proof Pressure 35,000 psi (2415 bar)
 Overpressure without sensor damage Varies with temperature; see plot below
 Fluid Filled . . . Non-toxic engineered sebacate or mineral oil; depends on temperature
 Mechanical Shock / Vibration See Quartzdyne document **E20-032**
 Weight 11.5 oz. [326g]

OVERPRESSURE LIMITS

For Quartzdyne® Pressure Transducers



ELECTRICAL CONNECTIONS

Output: Analog Frequency

Wire: 28 AWG Solid Core, TFE ET (Ø0.027" [0.69mm]) 18 inch [450mm] flying leads

Color	Description	Color	Description
Blue	VCC (5.5V DC max)	Purple	Pressure Signal
White	Reference Signal	Yellow	Temperature Signal
White w/Black Stripe	Ground		

TOOL DESIGN CONSIDERATIONS

1. Circuit chassis is not designed for structural attachment. See SPB115-XX-YYY for ruggedized model.
2. If attaching a secondary carrier to the end of the transducer, allow for a 0.125 inch minimum clearance hole for the output wires. The edges of this hole should be generously rounded to prevent insulation damage. Adding a piece of tubing (i.e., FEP Teflon heat shrink) to prevent wire damage is also recommended.
3. When utilizing a thick-walled tube to cover the Quartzdyne electronics carrier, it is recommended that the ID of the tube be 0.584 ± 0.015 inches. This design consideration will ensure that the thermal response of the transducer is similar to the response during transducer calibration at Quartzdyne. It will also ensure that the calibration remains valid. For tools that see full-scale pressure on the electronics enclosure, e-beam welding must be utilized at the pressure feedthrough connection to prevent damage to the electronics, and reference crystals.