¾ INCH [19.05 MM] OD TRANSDUCER, DIGITAL ASIC HYBRID

DXB012-XX-YYY

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

FEATURES AND BENEFITS

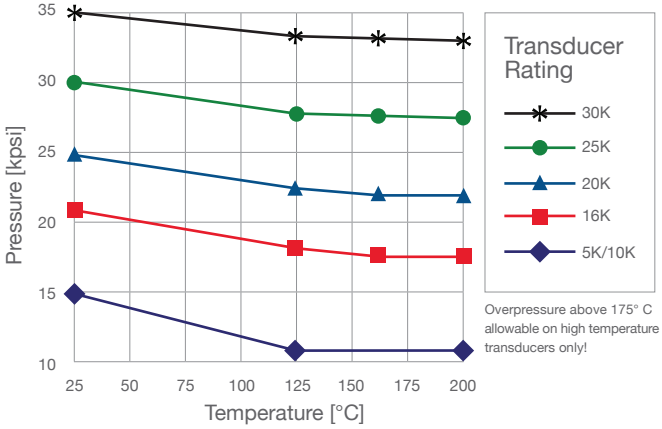
Pressure range: . . . . . 0 - 35,000 psi [0 to 2415 bar]
Operating temperature range: . . . . . -40° to 225°C
Drift at max temperature and pressure: . . . . . 0.02% FS / year
NIST Traceable Calibration
External pressurization capable
Fast transient response

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

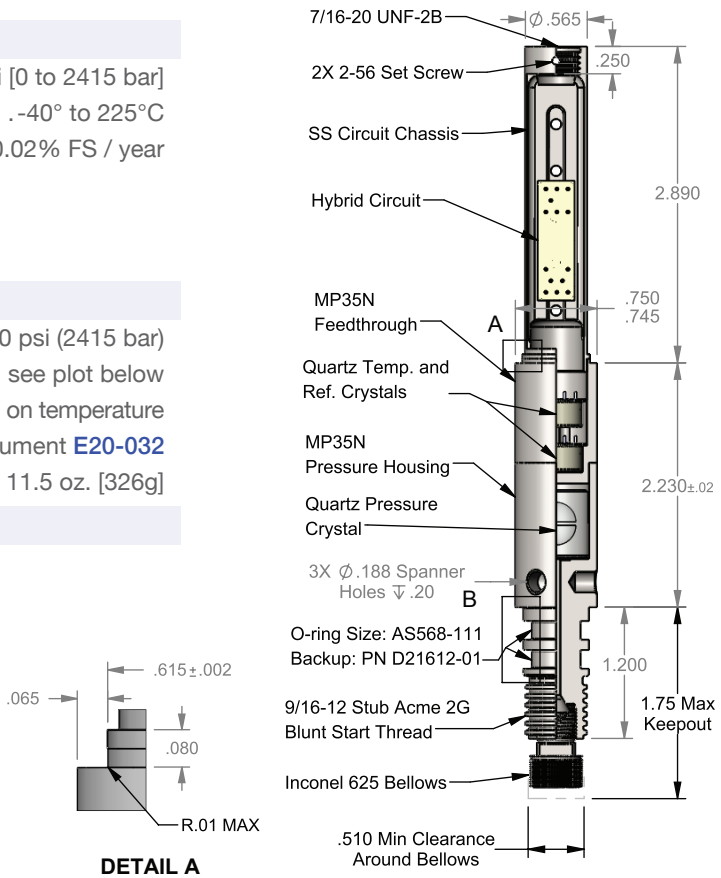


ELECTRICAL CONNECTIONS

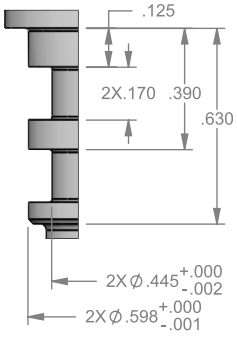
Output: Digital I²C

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

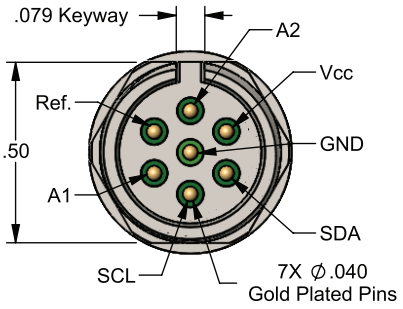
Color	Description	Color	Description
Blue	VCC (5.5V DC max)	Purple	A2 (Address 2)
White	Reference Signal	Yellow	A1 (Address 1)
Green	SDA (Data)	Slate	SLC (Clock)
White w/Black Stripe	Ground		



DETAIL A



DETAIL B



TOOL DESIGN CONSIDERATIONS

1. Circuit chassis is not designed for structural attachment. See DXB015-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 feedthru connection to prevent damage to the electronics, and reference crystals.

Quartzdyne 4334 W. Links Drive, Salt Lake City, Utah 84120