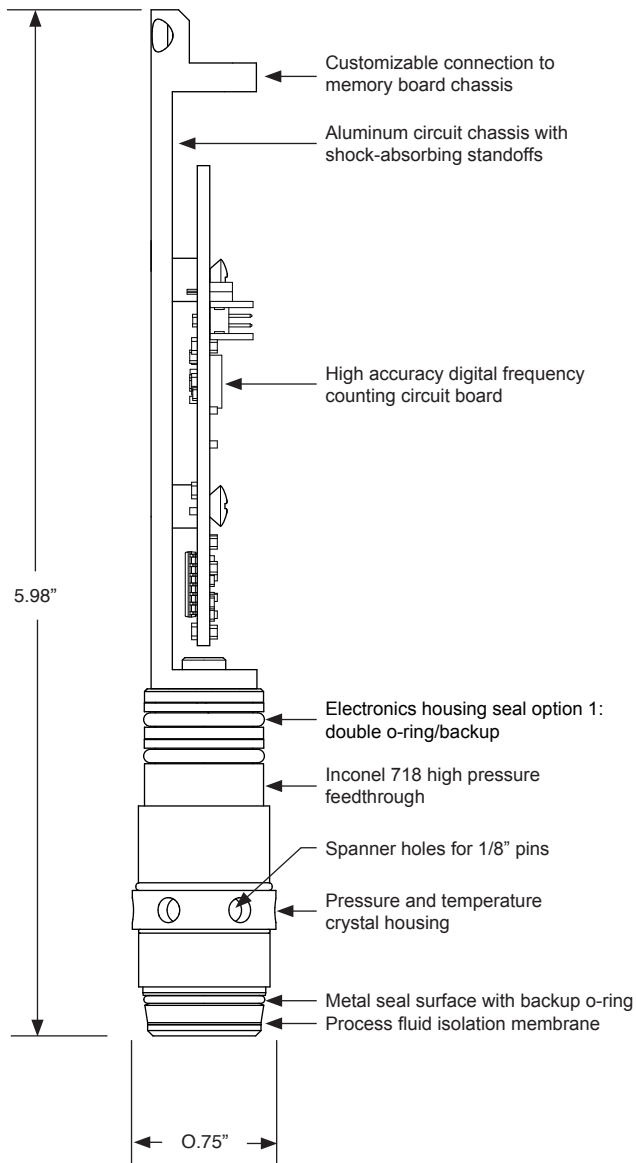


**PHASE ADVANCED SENSOR SYSTEMS
PASSION REFLECTED THROUGH DESIGN**



**XTALX DOWNHOLE DIGITAL QUARTZ
PRESSURE TRANSDUCER
DDQS1-15000-177
15000: PRESSURE RATING
177: TEMPERATURE RATING**



SPECIFICATION HIGHLIGHTS

CALIBRATED PRESSURE RANGE ---- atm to 15,000psi (1 to 1,034 bar)
 CALIBRATED TEMPERATURE RANGE ----- 20° to 177°C
 PRESSURE ACCURACY ----- 0.02% F.S.
 DRIFT @ MAX TEMPERATURE & PRESSURE ----- 0.1% F.S./YEAR
 TEMPERATURE ACCURACY ----- 0.1°C
 DRIFT @ MAX TEMPERATURE & PRESSURE ----- 0.02°C/YEAR

MECHANICAL SPECIFICATIONS

WEIGHT ----- 325 g
 HEIGHT ----- 152 mm (6")
 MAXIMUM WIDTH ----- 25 mm (0.75")
 PROOF PRESSURE ----- 138 MPa (20,000psi)

ELECTRICAL SPECIFICATIONS

MAXIMUM VOLTAGE RATINGS ----- -0.3 TO 13.5V
 DC VOLTAGE SUPPLY RANGE ----- 2.2 TO 12V DC
 AUTONOMOUS MODE (SLEEP BETWEEN SAMPLES)
 MAXIMUM CURRENT DRAW @22°C ----- 9 mA
 MAXIMUM CURRENT DRAW @180°C ----- 30 mA
 AVG CURRENT DRAW @22°C (1SEC/SAMPLE) ----- 1.1 mA
 AVG CURRENT DRAW @180°C (1SEC/SAMPLE) ----- 3.8 mA
 AVG CURRENT DRAW @22°C (5SEC/SAMPLE) ----- 0.3 mA
 AVG CURRENT DRAW @180°C (5SEC/SAMPLE) ----- 1.0 mA
 CONTINUOUS MODE (10 SAMPLES PER SECOND)
 AVG CURRENT DRAW @22°C ----- 11.1mA
 AVG CURRENT DRAW @180°C ----- 45mA
 OUTPUT ----- TTL-232R - (VOLTAGE = SUPPLY VOLTAGE)
 BAUD RATE ----- 57600
 ESD ----- ±2kV
 STARTUP TIME & SETTLE TIME ----- 900 ms

ADDITIONAL SPECIFICATIONS

STORAGE TEMPERATURE ----- -65° to 150°C
 ACHIEVABLE RESOLUTION ----- 0.002psi
 REPEATABILITY ----- 0.05% F.S.
 NOMINAL SENSITIVITY ----- 3psi/Hz
 RESPONSE TIME ----- 0.1s
 GRAVITATIONAL EFFECTS ----- NEGLIGIBLE
 ORIENTATIONAL EFFECTS ----- NEGLIGIBLE
 ACCELERATION SENSITIVITY ----- NEGLIGIBLE
 AVERAGE LIFETIME EXPECTANCY @ 150°C ----- 1.4 YEARS
 AVERAGE LIFETIME EXPECTANCY @ 175°C ----- 6 MONTHS
 AVERAGE LIFETIME EXPECTANCY @ 200°C ----- 65 DAYS