

TITLE: CASING PRESSURE SENSOR SYSTEM

DEPARTMENT: TECHNICAL SUPPORT

DESCRIPTION:

A pressure transducer is mounted into the Drilling Rig Choke Manifold or Hydraulic system.

Casing, or Choke Pressure is measured directly.



A. Standard Unit Specifications.

BRAND: Rosemount
MODEL: Model 3051 Smart Pressure Transmitter
SENSOR TYPE: Diaphragm - Piezoresistive Silicon Sensor
INSTALLATION LOCATION: Choke or Casing Manifold.
MEASURING RANGE: 0-10,000 psi (Re-rangeable SPAN from 0 - 2,000 psi to 0 - 10,000 psi)
SENSITIVITY: 0.5 psi
ACCURACY: $\pm 0.075\%$ of SPAN
RESPONSE TIME: 100 ms
STABILITY: ± 3.5 psi for 5 years
APPROVALS/CERTIFICATION: Explosion proof for Class I, Division I, Groups B, C, and D. Dust-Ignition Proof for Class II and Class III, Division 1, Groups E, F, and G.
Suitable for indoor and outdoor (NEMA 4X) hazardous locations. Factory Sealed.
OUTPUT: Chart Recorder, DLS System, Digital Monitors



TECHNICAL DATA SHEET
CASING PRESSURE SENSOR

No. SPECS-DRL-046

Rev. 0

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IL STANDARD MODEL CONFIGURATION:

10,000 psi Pressure Transducers: **3051TG5A2B21AE5Q4**

3051T: Transmitter Type ("Pressure Transmitter")

G: Pressure Type ("Gage")

5: Pressure Range / Minimum Span ("-14.7 to 10000 psi/2000 psi -- -101 to 68900 kPa/13800 kPa")

A: Output ("4-20 mA with Digital Signal Based on HART Protocol")

2B: Process Connection Style ("1/2-14 NPT Female")

2: Isolating Diaphragm ("316L SST")

1: Fill Fluid ("Silicone")

A: Housing Material / Conduit Entry Size ("Polyurethane-covered Aluminum / 1/2-14 NPT")

E5: Hazardous Locations Certifications ("FM Explosionproof Approval")

Q4: Other Options ("Calibration Data Sheet")

APPROVAL:

Dept. Supervisor : VICTOR SAET

Date: 22nd July 2002

Technical Committee : ALAN MORRISON

Date: 22nd July 2002