

Well Testing

Measurement

Wellhead Chart Recorder

Chart recorders are used in Expro field operations to provide accurate, reliable measurement and recording of pressure and temperature in a wide variety of applications.

The Barton 242E temperature and pressure recorder is a versatile and rugged instrument designed for general temperature and pressure applications. It records monitored temperature and pressure on a 12-inch diameter chart. Up to four elements may be used in any combination to operate up to four individual recording pens.

Static pressure - The static pressure system consists of a helical bourdon tube connected to system piping. The static pressure element measures the static pressure in a piping system. Elements are available for measuring pressures ranging from 0 to 30,000 psi.

Temperature - The temperature output consists of a spiral bourdon tube, a capillary, and a bulb. All parts are made of stainless steel. The bulb is fitted with a bendable extension, and the capillary is protected with stainless steel armour.

Recording mechanism - The recording mechanism is a linkage and pen system that permanently records data. It converts mechanical inputs from the pressure and temperature elements to link lines on a revolving chart.

All operative parts of the recorder mechanism are made of stainless steel for a long field life. The pen mount is exceptionally rugged. All lines are adjustable. Screw adjustments for zero, range, and linearity assure fast and accurate calibration.

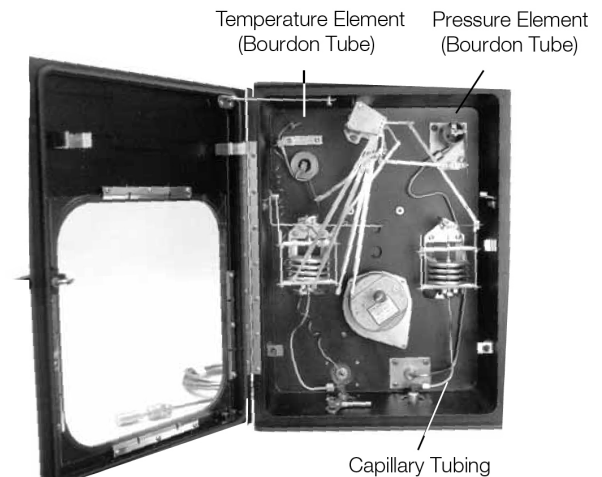
Case - The 242E is housed in an aluminium case with a hinged door providing access for chart changes and calibration adjustment. The Model 242E connects to the system or transmitter through fittings in the bottom of the case.

Applications

- Offshore well testing
- Onshore well testing
- Production well testing
- Flow-back and clean-up well testing

Features and Benefits

- Various ranges of pressure and temperature
- Rugged construction for field use
- Accurate and reliable to industry standards
- Free standing or mountable (wall and yoke)



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Technical specifications				
Case (242E)	Die-cast aluminium, black polyurethane electrostatic powder paint, hinged glass-front door, neoprene gasket seal			
Chart drive	Chart size	Chart rotation	Number of pens	Pen style
Spring-wound or Battery-operated	12-inch diameter	60 minutes to 31 days	1 to 4 (one per element)	Disposable
Element				
Type	Number	Range	Accuracy	Material
Pressure: helical (bourdon) Temperature: helical (bourdon)	1 to 4 (any combination)	Helical (0 to 30" Hg vacuum to 0 to 30,000 psi)	Static pressure ±1% of full scale Temperature ±1% of full scale	Helical Stainless steel K-Monel
Class V Thermal System (Ambient Temperature Compensated)				
Class VA	Class VB			
Fully compensated -40° to 600°F (-40° to 315°C)	Case compensated -40° to 600°F (-40° to 315°C)			
Class I Thermal System: (Ambient temperature compensated)				
Class IA	Class IB			
Fully compensated	Case compensated			
Class I Range Limits				
Ethyl-Benzene (EB)	Kerosene (KER)		Alcohol (ALC)	
-125° to 350°F (-87° to 177°C)	-20° to 500°F (-29° to 260°C)		-200° to 150°F (-129° to 66°C)	

Note: Other sizes, configurations and pressure ratings are available to meet most applications, for more information contact your local Expro representative or email welltesting@exprogroup.com