

2.875" Force Gauge

Application

Applications Include:

- Measure and record downhole forces.
- Confirm force dependent manipulation of downhole installations.
- Capture high-speed force data and evaluate plug drill-out programs.
- Gain insight into downhole forces for extended reach tool performance.

With memory and battery capacity for up to 14 days of continuous recording at 10 samples per second, the Force Gauge provides operators with critical insight into downhole conditions.

The Downhole Force Gauge features internally mounted strain gauges capable of measuring up to 60,000 lbf in both tension and compression, as well as up to 1,200 ft-lb of torque. The tool is rated for operation at temperatures up to 300°F (150°C) and built to withstand multiple 50G acceleration events.

Higher sample rate pressure, temperature, and acceleration tools can be mounted separately inside the force gauge, allowing users to capture additional downhole data for enhanced analysis and operational insight.

Benefits

The Downhole Force Gauge features a simple, field-proven design built for reliability in demanding downhole environments. The tool is constructed with high-quality, ruggedized components rated for high-temperature operation and housed within a shock-mounted enclosure for enhanced durability. Programming and data retrieval are performed using DataCan's intuitive Program and Download Software, allowing for fast and efficient setup and data management.

Features

- 60,000 lbf Max Tensile and Compressive Rating
- 1200 ft-lb Torque rating
- 10 Hz Sampling Frequency
- 14 day Sample Capacity
- 2.875" OD
- 1.063" ID



- 15,000 psi Internal/External Pressure Rating
- 300°F Temperature Rating
- Field Replaceable Battery Packs
- Separate Pressure, Temperature, and Acceleration tools can be mounted inside
- Resplendent Nickel Plated Finish for Chemical Resistance

McNewton - Nickel Plated 4140 Steel

OD	Axial Force	Torsion	Part No.
2.875"	± 60,000 lbf	1200 ft-lbf	113040

Accessories

Accessory Type	Part No.
USB Download Cable	114941
Pelican Case and Tool Kit	115202
Full Redress Kit (Viton)	114939
Primary Redress Kit (Viton)	115299
Battery Pack (150°C)	114283
Internal Gauge Hanger, Stainless Steel, 1/2"-13 UNC	115046
Piston Puller	115179
3/32" T-Handle Hex Key	114946
Piston Vent Plug	115174
Set Screw	PM950SB025-037

Specifications

Memory Capacity	14 Days
Battery Capacity	14 Days
Sample Rate	10 Hz
Axial Force Rating	±60,000 lbf
Torque Rating	+1200 ft-lbf
Axial and Torque Accuracy	0.5% F.S.
Axial and Torque Resolution	0.005% F.S.

