

Internal / External Gauge Carrier

The Omega Internal / External Gauge Carrier is designed as a platform for data acquisition.

The Internal / External Gauge Carrier provides one pocket, which houses two Omega Micro Automatic Gauges and/or accelerometer Units. The Micro Automatic Gauges provide a record of internal drill pipe ID pressure and temperature and well bore pressure and temperature.

When dressed with Accelerometer Units stick slip, rotation, well deviation, vibration as well as acceleration /deceleration is measured and stored in memory.

Designed to be deployed on drill pipe, the Carrier is ideally suited for drilling, liner cementation, and expandable applications.

The Internal / External Gauge Carrier requires no input from the operator. Once made up to the drill pipe the Micro Automatic Gauges will automatically start to record data once the pre-programmed temperature and pressure thresholds are exceeded and switch off automatically, below the thresholds when retrieved to surface.

The Omega Micro Automatic Gauge and Accelerometer Unit have their own built in real time clock allowing any number of gauges to be synchronised to each other and a surface reference point.

Features

- Standard field proven memory gauges.
- Gauges start recording automatically.
- Temperature compensation.
- No Specialised personnel required.
- Standard Omega Software compatible with windows.
- No dangerous goods certification required.

Applications

- Monitoring Gravel Pack Operations.
- Drill Stem Testing DST
- Monitoring Liner Running Strings during Cementing Operations.

Benefits

- The ability to record actual data directly above the Drill Bit, Expansion Device or during cementing operations.
- Data may be downloaded and reviewed at the rig site.
- Compact dimensions do not impact on the BHA design.
- Ideally suited for surface testing of new equipment.



Technical Specifications

Technical Specifications: Carrier			
Tool Size	4.250"	5.875"	7.00"
End Connections	2-7/8" API REG	3-1/2" API I.F	4-1/2" API I.F
Material	AISI 4140 30-36Rc	AISI 4140 30-36Rc	AISI 4140 30-36Rc
OD	4.250" max	5.880" max	7.060" max
ID	0.985" min	2.500" min	2.990" min
Weight	175 lbs	250 lbs	325 lbs
Length	51.00"	51.00"	51.00"
Torque Rating	11,900 ft/lbs	16,500 ft/lbs	34,500 ft/lbs
Compressive Rating	425,000 lbs	538,000 lbs	865,333 lbs

Technical Specifications: Micro Automatic Gauge	
Pressure:	
Resolution	0.2 psi
Accuracy	+/- 0.06% FSO
Range	8,800 psi or 15,000 psi
Temperature:	
Resolution	0.05°C
Accuracy	+/- 1.0°C
Range	0-150°C
Memory Size	1,040,000 data sets
Sample rate	1 second to 600 seconds
Battery Life	Up to 1 year
Battery Type	AA Lithium

Technical Specifications: Accelerometer Unit	
Measurements	10 per second with max/min recorded.
Range	+/- 5G or as specified
Plane	Axial or Lateral
Pressure Rating	15,000 psi
Temperature Rating	150°C
Memory Life at 1 sec Sample Rate	277 hours (11.5 days)
Memory Size	1,000,000 data sets
Sample rate	1 second to 10 seconds
Battery Life	Memory filled once
Battery Type	AA Lithium

Other sizes and ratings available for diverse applications.

DATA ACQUISITION



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