

DataCan⁺
Product Catalog

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STRENGTHEN CONCRETE

1.438 Cablehead

Application

The cablehead provides a mechanical and electrical connection between braided e-line and the tool string. It is intended as a “weak link” if the tool string becomes stuck in a wellbore. The wireline will pull out of the cablehead in a controlled fashion when predetermined force is applied.

Benefits

The Cablehead has a simple yet reliable design that makes it quick and easy to install.

Features

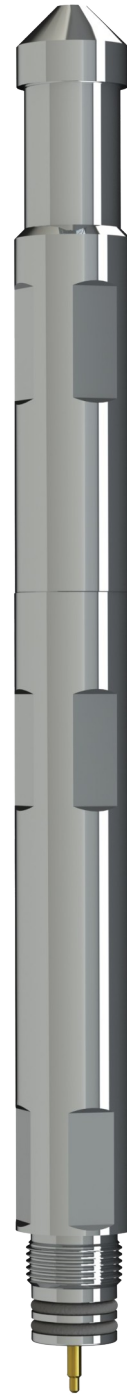
- Universal Connection
- “Weak Link” of the Tool String

Cablehead

Size	Type	Part No.
7/32"	Standard Service	AM009WA0002
	H2S Service	AM009WB0002
5/16"	Standard Service	AM009WA0004
	H2S Service	AM009WB0004

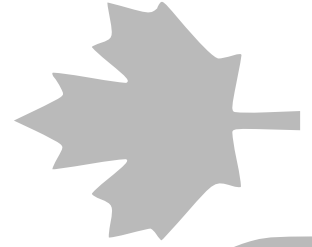
Spare Parts and Accessories

Accessory Type	Part No.
7/32" Cablehead Kit Assembly	AM009UU0007
5/16" Cablehead Kit Assembly	AM009UU0008
Replacement O-rings	PM933RB2211
Accessories	
Crimping Pliers	100241



Specifications

	Value
Fishneck	1.375" (3.49 cm)
OD	1.438" (3.7 cm)
Length	15.125" (38.4 cm)
Weight	5.5 lb (2.5 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)



DATA CORP

1 3 7 5 Telemetry

Application

The Telemetry Tool provides real-time data from within a wellbore to a surface acquisition system. The telemetry can multiplex up to 16 digital channels of data allowing for use on a single conductor electric line. Included on the telemetry are a casing collar locator (CCL) and a gamma-ray detector.

Features

- Multiplex up to 16 digital channels
- Casing collar locator (CCL)
- Gamma-ray detector

Telemetry

Type	Part No.
Standard Service	AM003WA0001
H2S Service	AM003WB0001

Spare Parts

Accessory Type	Part No.
Spring Pin (x 6)	SP1/16SB050
Seal Kit	AM003RK0001

Specifications

	Value
OD	1.375" (34.9 mm)
Length	59.6" (151 cm)
Weight	14.2 lb (6.4 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)
Normal Current Draw	~25-35 mA
Operating Voltage	~100-110 VDC
Sampling Rate	25 samples/sec



Memory Adapter Tool

Application

The Memory Adapter Tool (MAT) collects and records digital data from each sensor in a tool string. Unlike the Telemetry Tool (which transmits all data to a surface acquisition system), the memory adapter stores all data within its own, internal memory. A casing collar locator (CCL) is contained in the adapter, but a separate gamma ray is required in a tool string. The MAT tool requires a lithium battery pack in order to operate. Memory Production Logging (MPL) is done using the MAT Job feature in the Premier Logging Suite. It is used to configure tool settings, upload and download settings and data, and manage information that is obtained from the memory adapter tool. MAT Job performs the following functions:

- Allows for configuration of the tool at surface (upload of program table, synchronization of tool and computer clocks, tool erase).
- Sets the program table, including the data acquisition rate.
- Allows tool string (sonde) selection.
- Time stamps the individual logging pass in a tabulated format.
- Retrieves data from the memory adapter tool at job completion.
- Merges time-stamped logging passes with depth and creates data files of individual passes.

Benefits

The sampling rate of the MAT tool is quick and easy to program using the Premier Logging Suite. The MAT tool allows for direct communication over a standard USB connector and has an on-board real-time clock to allow easy merging of data with depth. In case of power loss, all information is stored internally.

Features

- Collects digital data from connected downhole tools
- Lithium battery pack powers MAT and all tools in string
- Stores data withing 64MB internal memory core
- 1, 12.5, and 25 samples/sec recording rates per tool channel
- Data is downloaded into a computer via USB
- Software generates Premier Logging file
- CCL contained within tool body
- Perfect for use in remote or hazardous environments



Memory Adapter Tool

Type	Temperature Rating	Part No.
Standard Service	177°C (350°F)	106235
Sour Service	177°C (350°F)	106236

Spare Parts and Accessories

Type	Part No.
Hex Socket Cap	SCC6-32SB01875
Seal Kit	AM015RK0001
Spring Pin	SP1/16SB050 (x2)
Accessories	
Standard Lithium Battery(165°C)	AM015UU0006
High Temperature Lithium Battery (180°C)	106285
Battery De-Passivation Box	106326
18V AC Adapter	AE309UU0001
Portable Memory System Includes LineWise System, Premier Software Suite, laptop, thermal printer, and rugged carrying case)	AE302UU0008

Specifications

	Details
OD	1.375 in (34.9 mm)
Length	44.9 in (1,140 mm)
Weight	10.8 lb (5 kg)
Pressure Rating	15,000 psi (103.5 MPa)
Memory Size	64 MB
Recording Rate(s)	1, 12.5, and 25 samples/sec
Lithium Battery Specifications	
Pack Length (complete assembly)	35.8 (910 mm)
Capacity	11 Ah



1 3 7 5 Gamma Ray

Application

The Gamma Ray Tool employs a sensitive sodium iodide scintillation crystal and photomultiplier tube to detect naturally occurring and artificially induced gamma radiation. The tool is used for correlation to the surrounding lithology of the well.

Gamma ray logs are useful for recording induced radiation. A tracer log can be used to determine fluid movement by tracing radioactive iodine ejected into the wellbore. Radioactive sand can also be traced to determine the direction of fractures.

Gamma Ray

Type	Part No.
Single Sensor Standard Service	AM012WA0001
Single Sensor H2S Service	AM012WB0001
Dual Sensor Standard Service	AM012WA0002
Dual Sensor H2S Service	AM012WB0002

Spare Parts

Type	Part No.
Seal Kit	AM012RK0001

Specifications

	Details
OD	1.375 in (34.9 mm)
Length	35.4 in. (900 mm)
Weight	8.6 lb (3.9 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)
18V Power Requirement (Memory String)	34mA
100V Power Requirement (Telemetry String)	5 mA



Memory Adaptor Tool

Type	Part No.
Standard Service	106235
Sour Service	106236

Spare Parts and Accessories

Type	Part No.
Hex Socket Cap	SCC6-32SB01875
Seal Kit	AM015RK0001
Spring Pin	SP1/16SB050 (x2)
Accessories	
Standard Lithium Battery(165°C)	AM015UU0006
High Temperature Lithium Battery (180°C)	106285
Battery De-Passivation Box	106326
18V AC Adapter	AE309UU0001
Portable Memory System Includes Linewise System, Premier Software Suite, laptop, thermal printer, and rugged carrying case)	AE302UU0008

Specifications

	Details
OD	1.375 in (34.9 mm)
Length	44.9 in (1,140 mm)
Weight	10.8 lb (5 kg)
Pressure Rating	15,000 psi (103.5 MPa)
Max Temperature	350°F (177°C)
Memory Size	64 MB
Recording Rate(s)	1, 12.5, and 25 samples/sec
Lithium Battery Specifications	
Pack Length (complete assembly)	35.8 (910 mm)
Capacity	11 Ah

Gradiomanometer

Application

The gradiomanometer is a non-radioactive tool used to derive fluid density in a wellbore. It uses a high-resolution, differential transducer to measure the differential pressure over the length of a 24 in. column of fluid. The pressure enters the tool via two ports spaced 24 in. apart and a differential pressure measurement is taken. Since the column height and gravity are constants, the average fluid density is easily calculated. Due to the fast and sensitive response, this measurement can be obtained while continuously moving in the wellbore.

The tool is used to quantitatively establish the density of the fluid or gas in the wellbore and the depths of water/oil, water/gas, and oil/gas contacts are then derived from this information.

The gradiomanometer is used with other tools in a tool string, and transmits its data to either the telemetry tool or the memory adapter tool (MAT).

Benefits

The Gradio tool has a convenient field serviceable sensor that is quick and easy to access. The density readings produced by the Gradio tool are very accurate and highly sensitive.

Gradiomanometer

Type	Part No.
Standard Service	AM002WA0001
H2S Service	AM002WB0001

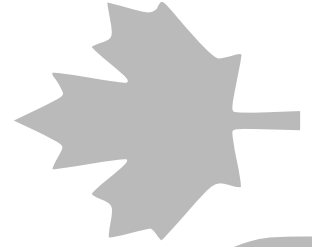


Spare Parts

Type	Part No.
Seal Kit	AM012RK0001
O-Ring	PM933RC3x1.5 (x2)
Upper Tube Bushing	PM002CB0029
Upper Tube Screw	PM002CB0028
Sockethead Cap Screw #6-32x0.75L	101452 (x2)
Sockethead Cap Screw #6-32x0.25L	100141 (x2)
Bottom Sense Port Plug	PM002SA0027
Gradio Port Plug	PM002SA0004 (x2)
Cap Screw 6-32UNCx0.1875	SCC6-32SB01875 (x2)
Feed Thru Pin	PM002UU0034 (x4)
Lower Buffer Tube	PM002SA0036
Lower Buffer Tube Extender	PM002SD0020
Accessories	
Gradio Fill Pump	AM002UU0005
Multipin Jumper Cable	AM007UU0007
Gradio Fluid	PE545UU0035-1

Specifications

	Details
OD	1.375 in (34.9 mm)
Length	51.6 in. (131 cm)
Weight	15.6 lb (7.1 kg)
Resolution	0.001 g/cc (1 kg/m ³)
Accuracy	± 0.03 g/cc (± 30 kg/m ³)
Range	0 - 2 g/cc (0 - 2,000 kg/m ³)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103 MPa)
18V Power Requirement (Memory String)	27 mA
18V Power Requirement (Telemetry String)	5 mA



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Dielectric

Application

The dielectric tool, also known as "water hold-up" or "water cut", measures the capacitance of the fluid that passes between the probe and the body of the tool. This measurement is used to help determine water percentage and to locate first water entry.

The tool is useful when oil is the main phase and the water cut does not exceed 30 percent. The contents in some sour wells will result in inaccurate readings.

Benefits

The dielectric probe is generally superior to the nuclear or gradiomanometer density log in distinguishing oil from water. This is a result of the high dielectric contrast that exists between water (approximately 80) and oil (range from 2 to 6). Use of the dielectric tool, however, is restricted to flow conditions where hydrocarbon is the continuous phase, which typically requires a water cut of less than 30 to 40 percent.

Features

- Determine water entry points: with the dielectric tool, there is a big change in the frequency readings between water and air. It is easy to identify the water entry point.
- Identify static fluid interfaces: in an observation well (with no flow), the dielectric tool can be used to record where the different well contents, such as water, oil, solvents, and gas are located. The measurements can be used over a period of time to indicate how the fluids are shifting in level.
- Supplement the interpretation of multi-purpose flow regimes during production logging.

Dielectric

Type	Part No.
Standard Service	AM006WA0001
H2S Service	AM006WB0001

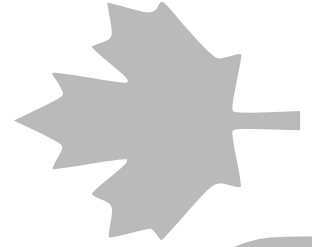


Spare Parts

Type	Part No.
Seal Kit	AM006RK0001

Specifications

	Details
OD	1.375 in (3.5 cm)
Length	26.8 in (68 cm)
Weight	6.6 lb (3 kg)
Resolution	0.1 Epsilon = dielectric Constant = 1 in air
Accuracy	2%
Dielectric Constant Readings	1 to 80
Connector Type	15 pin
Output	12 volt (pin #6)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)
18V Power Requirement (Memory String)	5 mA
100V Power Requirement (Telemetry String)	3 mA



dataCamp

1.375 Knuckle Joint 5

Application

The Knuckle Joint can pivot 10° thanks to its ball connector sub. This pivoting ability aids movement of a tool string through deviated, misaligned, or horizontal wells. It also allows a tool string to be de-centralized.

Features

- 10° bend angle

Dielectric

Type	Part No.
Multi Pin Standard Service	AM017WA0001
Multi Pin H2S Service	AM017WB0001
Single Pin H2S Standard Service	AM017WA0002
Single Pin H2S Service	AM017WB0002

Spare Parts

Type	Part No.
Seal Kit	104143 (x2)
Set screw 1/4"x28x0.250"	105510
O-Ring 2-120 Viton 90	PM933RC2120 (x10)
O-Ring 2-119 Viton 90	103969 (x4)
O-Ring 2-120 Viton 90	PM933RC2120 (x10)

Accessories	Part No.
Grease Nipple 1/4" x 28TPI	105511
Grease Gun	PM810UU0972

Specifications

	Details
OD	1.375 in (3.5 cm)
Length	20.1 in (51 cm)
Weight	7.4 lb (3.4 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)



Inline Flowmeter

Application

The inline flowmeter contains an electrical through-connection allowing it to be run anywhere in a tool string. When operated in combination with a fullbore flowmeter, the inline flowmeter allows for production profiling in tubing and casing on a single logging run. It may also be used as a backup flowmeter for horizontal well logging where the fullbore spinner may be damaged by debris in the well. This flowmeter performs in all well orientations from vertical to horizontal.

The spinner is mounted by precision roller bearings and rotation detection is through zero drag hall effect devices, giving very low threshold and optimizing low flow measurement. At high flow rates the flowmeter is similarly reliable due to the precision bearings employed in the assembly.

Benefits

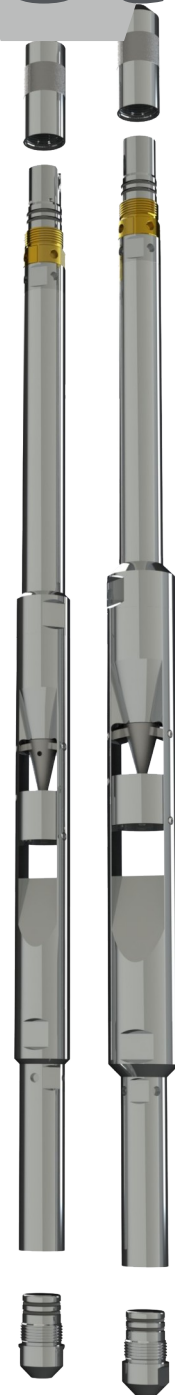
Due to its small outer diameter, the Inline Flowmeter is capable of measuring flow in small diameter casing and tubing. The lightweight impeller is highly sensitive which allows for accurate flow readings in any flow rate applications, and is especially useful in very low flow rate applications. The impeller unit is self-contained making it easily serviceable.

Features

- Precision roller bearings.
- Zero drag sensor for low threshold, low-flow measurement.
- Run at any point in tool string.
- Deviated and horizontal well operation.

Inline Flowmeter

Type	Size	Part No.
Standard Service	1.688 in	AM005WA0013
	2.125 in	AM005WA0016
H2S Service	1.688 in	AM005WB0013
	2.125 in	AM005WB0016



Spare Parts

Type	Number of Parts		Part No.
	1.688 in	2.125 in	
Seal Kit	1	-	AM005RK0013
Seal Kit	-	1	AM005RK0016
Pan Head Phillips Screw #4-40x0.188"	8	8	PPH4-40SB0.1875
Flow Meter Bearing	2	2	PM005UU0029
Set Screw 10-32x0.19"	1	1	SSC10-32SB019

Specifications

	Details	
	1.688" Model	2.125" Model
OD	1.688 in (4.3 cm)	2.125 in (5.4 cm)
Length	31.1 in (79 cm)	32.3 in (82 cm)
Weight	11 lbs (5 kg)	14 lbs (6.4 kg)
Temperature Rating	350°F (177°C)	
Pressure Rating	15,000 psi (103.5 MPa)	
Threshold Velocity	26.25 ft/min (8 m/min)	
Spinner Response	0.037 rps/ft/min (0.12 rps/m/min)	

1.375 Pressure-Temperature-Flow

Application

The High-Resolution Pressure/Temperature/Flow rate (PTF) Tool is used to measure pressure, temperature, and flow in a wellbore. A silicone fluid buffer is used to isolate wellbore contaminants from direct contact with the pressure transducer bellows.

The tool sends five frequencies:

- Wellbore temperature
- Internal transducer temperature
- Pressure
- Flow rate up
- Flow rate down

The tool transmits data from the transducer (pressure and internal temperature) serially to a telemetry tool, which transfers data to a surface acquisition system, or to a memory adapter, which stores data within internal memory.

The frequency for temperature is generated on the temperature board and should be approximately 15kHz at room temperature. Flow frequency is generated from a magnetic hub in the head of a flowmeter attached to the bottom of the PTF tool. As these magnets pass sensors inside the PTF, two signals are generated that can be used to decode the direction of fluid flow past the tool. A flowmeter will generate 12 pulses per revolution on the output channels. Only one channel at a time will have an output on it for flow; this changes depending on the direction of fluid flow past tool.

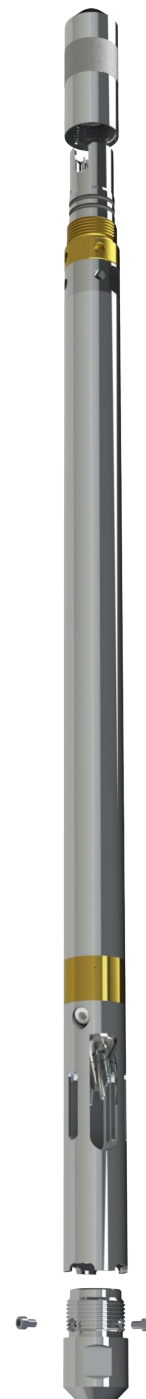
All serial data and flow frequencies are generated on the high-resolution board, but the tool must be connected to a DataCan Services' Lee Specialties Telemetry or Memory Adapter Tool before the serial data will be transmitted.

Benefits

The PTF tool is designed with a quartz sensor for long-term stability, even in high temperature applications. It also has 18-bit resolution data for improved pressure reading accuracy and resolution.

Features

- Incorporates a Quartz Pressure Sensor, Temperature sensor, and Bidirectional Flow Sensor



- Pressure Sensor has Built-in Temperature Compensation
- Bellows and Buffer of Silicone Oil Isolates Sensors from Wellbore Fluids
- RTD Resistor Temperature Sensor
- Flow Rate Sensor Obtains Rotational Direction and Speed from an Attached Spinner
- PTF is Compatible with Both Fullbore and Continuous Spinners

Pressure Temperature Flow Sensor

Type	Part No.
Standard Service	AM008WA0010
H2S Service	AM008WB0010

Spare Parts and Accessories

Spare Parts

Type	Part No.
Seal Kit	AM008RK0010
Spring Pin	SP1/16SB050 (x2)
Port Plug	PM008SB0029
Socket Cap Screw 8-32x3/16"	SCC8-32SB01875
Socket Head Cap Screw 10-32x0.25"	PE545UU0046
Spacer O-Ring	PM008SA0015

Accessories

Type	Part No.
PTF Fill Pump	AM002UU0005
Adapter	PM008AA0030

Specifications

	Details
OD	1.375 in (34.9 mm)
Length	27.2 in (690 mm)
Weight	7.8 lbs (3.5 kg)
Temperature Rating	350°F (177°C)
Temperature Resolution	0.018°F (0.01°C)
Temperature Accuracy	±1.6°F (±1°C)
Temperature Repeatability	0.36°F (0.2°C)
Pressure Rating	15,000 psi (103.5 MPa)
Pressure Resolution	0.02 psi (0.14 kPa)
Pressure Accuracy	±3.2 psi (±22 kPa) (equivalent to 0.02%)
Flow Resolution	0.083 rps
Flow Accuracy	±2%
18V Power Requirement (Memory String)	41 mA
100V Power Requirement (Telemetry String)	9 mA

FLOW

Fullbore Spinner

Application

The Fullbore Spinner is a versatile and reliable fluid velocity measurement tool that incorporates a collapsible impeller that allows the spinner to be run through the tubing and expand into a large diameter casing. This design provides a velocity measurement of a large cross-sectional area. The sensitivity of a Fullbore Spinner results in accurate flow measurement across the cross-section of the well.

Features

- Collapsible Impeller to 1.375"
- Large Cross-Sectional Velocity Measurements
- Increased Sensitivity - More Accurate Flow Measurements

Fullbore Spinner

Type	Size	Part No.
Standard Service	5"	AM005WA0002
	7"	AM005WA0008
H2S Service	5"	AM005WB0002
	7"	AM005WB0008



Spare Parts and Accessories

Type	Number of Parts		Part No.
	5"	7"	
Bow Spring 5"	4	-	PM005SA0028
Bow Spring 7"	-	4	PM005SA0037
Undercut Phillips 8-32 x 0.3125"	16	16	PFU8-32SB031
Impeller Assembly 3"	1	-	AM005UU0015
Impeller Assembly 4"	-	1	AM005UU0022
Impeller Assembly 5"	-	optional	AM005UU0023
Pin 1/8" diameter x 0.70"	8	8	PM005NE0036
Pin 3/32" diameter x 0.58"	4	4	PM005NE0037
Pin 3/32" diameter x 0.65"	4	4	PM005NE0038
Bearing	2	2	PM005UU0029
Socket Head Screw 4-40x0.188"	1	-	PE545UU0071
Set Screw 10-32x0.19"	1	1	SSC10-32SB019
Hex Socket Cap Screw 4-40x0.1875"	8	8	SCC4/40SB0188
Socket Set Screw 6-32x3/16"	-	2	105760
Socket Cap Screw 8-32x3/16"	1	1	SCC8-32SB01875
Short Shaft Spacer	1	1	PM005SD0020
Long Shaft Spacer w/ Guard	1	1	PM005SD0041
Impeller Shaft 5"	1	-	PM005TA0017
Impeller Shaft 7"	-	1	PM005TA0051
Impeller Shaft Nut	1	1	PM005TA0018
Nose Cone	1	1	PM005UU0025
Long Arms 5"	4	-	PM005SD0009
Long Arms 7"	-	4	PM005SD0049
Accessories			
Spring Wear Gauge	PM005SA0062		

Specifications

	Details	
	5" Model	7" Model
OD (collapsed)	1.375 in (34.9 mm)	1.375 in (34.9 mm)
OD (expanded)	5 in (127 mm)	7 in (178 mm)
Length	20.1 in (510 mm)	27.6 in (700 mm)
Weight	4 lbs (1.8 kg)	6 lbs (2.7 kg)
Temperature Rating	350°F (177°C)	
Pressure Rating	15,000 psi (103.5 MPa)	
Threshold Velocity	3.28 ft/min (1 m/min)	
Spinner Response	0.037 rps/ft/min (0.12 rps/m/min)	



FLOW

Continuous Spinner



Application

The Continuous Spinner is used in combination with the PTF tool or flow tool. It incorporates a single piece solid helical impeller in the tool body. This configuration is effective in restricted bore holes, tubing, and in areas of very high-flow velocity. The spinner is available in a number of sizes to accommodate various applications and is most often used in small diameter tubing.

Benefits

The Continuous Spinner is robust and reliable as it has a fixed cage to protect the impeller from any downhole debris.

Features

- Impeller Incorporated into the Tool Body
- Available in 1.375 in. to 2.125 in. Diameters

Continuous Spinner

Type	Size	Part No.
Standard Service	1.375"	AM005WA0003
	1.688"	AM005WA0004
	2.125"	AM005WA0007
H2S Service	1.375"	AM005WB0003
	1.688"	AM005WB0004
	2.125"	AM005WB0007

Spare Parts and Accessories

Type	Number of Parts			Part No.
	1.375"	1.688"	2.125"	
Bearing	2	2	2	PM005UU0029
Socket Cap Screw 8-32x3/16"	2	2	2	SCC8-32SB0187
Socket Head Screw 4-40x0.094"	3	4	4	PE545UU0048
Socket Set Screw 6-32x3/16"	2	2	2	105760
Impeller 1.375"	1	-	-	PM005TA0011
Impeller Assembly 1.687"	-	1	-	PM005TA0012
Impeller 2.125"	-	-	1	PM005TA0034
Accessories				
5" Fullbore Conversion Kit to 1.375" Continuous	AM005UU0025			
5" Fullbore Conversion Kit to 2.125" Continuous	AM005UU0017			

Specifications

	Details		
	1.375" Model	1.688" Model	2.125" Model
OD	1.375 in (34.9 mm)	1.687 in (4.28 cm)	2.125 in (5.4 cm)
Length	8.7 in (22 cm)	9.1 in (23.5 cm)	9.5 in (23.5 cm)
Weight	2.2 lbs (1 kg)	2.4 lbs (1.1 kg)	2.8 lbs (1.3 kg)
Temperature Rating	350°F (177°C)		
Pressure Rating	15,000 psi (103.5 MPa)		
Threshold Velocity	3.28 ft/min (1 m/min)		
Spinner Response	0.037 rps/ft/min (0.12 rps/m/min)		



1 3 7 5 Roller Centralizer

Application

The Roller Centralizer is a mechanical device that centralizes a tool string while it is run in or out of the wellbore. Carbide rollers on the contact points prevent wear on the arms as they expand and contract to fit the wellbore.

The Roller Centralizer is positioned anywhere within the tool string except below the PTF (Pressure Temperature Flow) tool. Often, two Roller Centralizers are used in a string, one at the top and one near the bottom, to further increase the string stability.

Benefits

The Roller Centralizer provides electrical contact for all 15 points of contact in a Lee Production Logging String and has adjustable tension to accommodate the customer's needs.

Features

- Centers Tool String as it Moves In and Out of Well
- Arms Expand and Contract to Fit Casing or Tubing
- Carbide Rollers Eliminate Friction and Wear
- 0-100 lb (0-45.4 kg) Adjustable Arm Tension
- 2.125 in. Model (225 lb Arm Tension) and Single Pin Version Also Available
- Pass-Through Wire

Roller Centralizer

Type	Part No.
Standard Service	AM011WA0001
H2S Service	AM011WB0001



Spare Parts

Description	Part No.
Roller Centralizer Mechanical Repair Kit	AM011RK0001
Roller Centralizer Redress Kit - Viton 90	AM011RD0001

Specifications

	Details
OD (collapsed)	1.375 in (34.9 mm)
OD (expanded)	9 in. (22.9 cm)
Length	37 in. (94 cm)
Weight	12.5 lb (5.7 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)

Bowstring Centralizer

Application

The Bowstring Centralizer is a mechanical device used to centralize the tool string while it is ran in and out of a cased or tubed well. Keeping the tool string centralized helps to prevent it from getting stuck downhole. The centralizer's four springs connect to retaining arms that apply even force against the inner wall of the wellbore to stabilize the tool string. It can be positioned anywhere on the tool string except below the Pressure Temperature Flow (PTF) tool. Often, two Bowstring Centralizers are used in a string, one at the top and one near the bottom, to further increase the strings stability.

Benefits

The Bowstring Centralizer provides electrical contact for all 15 points of contact in a Lee Production Logging String and is quick and easy to service.

Features

- Centers Tool String as it Moves In and Out of Well
- Arms Expand and Contract to Fit Casing or Tubing
- Single Pin Version also Available
- Pass-Through Wire

Bowstring Centralizer

Type	Part No.
Single Pin Standard Service	AM011WA0004
Single Pin H2S Service	AM011WB0004
Multi Pin Standard Service	AM011WA0006
Multi Pin H2S Service	AM011WB0006



Spare Parts and Accessories

Type	Part No.
Multi Pin Centralizer Seal Kit - Viton 90	AM011RK0006
Single Pin Centralizer Seal Kit - Viton 90	AM011RK0004

Type	Number of Parts	Part No.
Bow Spring	4	PM011SG0037
Dowel Pin 1/8"x5/8"	8	PM940SD0005
Undercut Phillips Screw 8-32x0.3125"	16	PFU8-32SB031
Socket Cap Screw 4-40x0.1875"	8	SCC4-40SB0188
Set Screw #10-32x0.25	4	101127

Accessories		
Spring Wear Gauge		PM005SA0062
Spring Wear Gauge		PM005SA0062

Specifications

	Details
OD (collapsed)	1.375 in. (3.5 cm)
OD (expanded)	7 in. (17.8 cm)
Length	32.3 in. (82 cm)
Weight	11 lb (5 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)

1.375 37 5 Temperature

Application

The Temperature Tool measures temperature in a wellbore. The Temperature Tool transmits a frequency based on the measurement of a RTD (Resistive Temperature Device) to a telemetry tool, which transfers data to a surface acquisition system, or to a memory adapter, which stores data within internal memory.

Features

- RTD Resistor Temperature Sensor
- Compatible with All Lee Specialties Logging Tools

Temperature

Type	Part No.
Standard Service	AM008WA0003
H2S Service	AM008WB0003

Spare Parts

Seal Kit - Viton 90	AM008RK0003
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Specifications

	Details
OD	1.375 in. (3.5 cm)
Length	22.75 in (57.8 cm)
Weight	6.6 lb (3.1 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)



1 Flow 3 7 5

Application

The Flow Tool works in conjunction with Lee Specialties Continuous or Fullbore Flowmeters to measure flow in a wellbore.

The tool transmits frequencies from the flowrate sensors to a telemetry tool, which transfers data to a surface acquisition system, or to a memory adapter, which stores data within the internal memory.

Features

- Flowrate Sensor Obtains Rotational Direction and Speed from an Attached Spinner
- Compatible with Both the Fullbore and the Continuous Spinners

Flow

Type	Part No.
Standard Service	AM008WA0006
H2S Service	AM008WB0006

Spare Parts

Seal Kit - Viton 90	AM008RK0006
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Specifications

	Details
OD	1.375 in. (3.5 cm)
Length	16.75 in (42.4 cm)
Weight	3.75 lb (1.7 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)



1.6888

Dual Spaced Neutron

Application

The Dual Spaced Neutron Tool uses two neutron detectors and a neutron source to provide information on the formation porosity.

Benefits

The Dual Spaced Neutron tool uses a high response rate neutron detector that gives a clearer characteristic of the surrounding lithography. Its slim design allows it to pass through well restrictions and lighter pressure control equipment.

Features

- Neutron Source (Customer to Provide Source)
- Boron Shielding Between Source and Detectors
- Uses He3 (Helium-3) Detectors to Derive Readings
- Compatible with Surface Readout (Telemetry) or Memory Operation

Neutron Tool

Type	Part No.
Standard Service	AM021WA0002
H2S Service	AM021WB0002

Spare Parts

Seal Kit - Viton 90	AM021RK0002
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Specifications

	Details
OD	1.688 in (4.3 cm)
Length	52 in (132.1 cm)
Weight	18 lb (8.2 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)



1 3 7 5

RA Density

Application

The Radio Active Density Tool uses low energy gamma rays to determine the downhole fluid density during a production log. The tool provides consistent and reliable measurement in deviated and horizontal wells while remaining unaffected by flow rates.

Gamma rays are emitted from a radioactive source at one end of the measuring cell and are detected at the opposite end by a scintillation detector and photomultiplier.

Benefits

The RA Density's slim design allows it to pass through downhole restrictions and lighter pressure control equipment.

Features

- Tungsten Shielded Detector is Highly Resistant to Radioactive Interference
- Operates in all Deviated and Horizontal Wells
- Density Measurements in a Range of Fluid Flow Rates
- Gamma Ray Source Required (Not Included)
- Multi-Phase Production Profiling when Used in Conjunction with Other Lee Specialties Production Logging Tools
- Compatible with All Lee Specialties Production Logging Tools

RA Density

Type	Part No.
H2S Service	AM028WB0011

Spare Parts	
Seal Kit - Viton 90	AM0281RK0011

Specifications

	Details
OD	1.375 in (3.5 cm)
Length	38 in (96.5 cm)
Weight	11 lb (4.9 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)



1.375 Dual Gamma Ray

Application

The Dual Gamma Ray Tool employs two sensitive iodide sodium scintillation crystals and two photomultiplier tubes to detect gamma ray radiation. Use the tool to correlate to the surrounding lithology of the well. Dual Gamma Ray logs are useful for recording induced radiation. A tracer log can determine fluid movement by tracing radioactive iodine ejected into the wellbore.

Benefits

The Dual Gamma Ray tool provides chemical measure of flow rate that is unaffected by turbulence or back flows.

Features

- Two Scintillation Crystal Gamma Ray Detectors
- Detects Naturally Occurring and Artificially Induced Gamma Radiation
- Correlates Surrounding Lithology

Dual Gamma Ray

Service Type	Part No.
Standard Service	AM012WA0002
H2S Service	AM012WB0002

Spare Parts	
Seal Kit - Viton 90	AM012RK0001

Specifications

	Details
OD	1.375 in (3.5 cm)
Length	67.5 in. (171 cm)
Weight	16.3 lb (7.4 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)



Tracer Ejector

Application

The identification of flow behind the casing and determines fluid velocity and direction. The Tracer Ejector Tool uses a pressure-balanced chamber to eject radioactive iodine. An electrically activated solenoid ejects a finite amount of radioactive fluid in which the concentration is minimal with a short half-life. The Gamma-Ray Detectors (sold separately) then determine fluid velocity and direction. Flow profiles can be determined from the data sent to the acquisition system.

Benefits

The Tracer Ejector tool works independent of well pressure and can be implemented to execute multiple releases in one pass.

Features

- Maintains a Constant Internal Pressure which Exceeds the Wellbore Pressure
- Fill Pump Provides a Safe and Efficient Method of Transfer to Radioactive Fluids
- Radioactive Fluid Not Provided

Tracer Ejector

Service Type	Part No.
Standard Service	AM004WA0008
H2S Service	AM004WB0008

Accessories

Accessory Type	Part No.
Ejector Fill Pump	AM004UU0003

Spare Parts	Part No.
Seal Kit - Viton 90	AM004RK0008

Specifications

	Details
OD	1.375 in (3.5 cm)
Length	40.9 in (104 cm)
Weight	18 lb (8.2 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)



1.375 PL Bulkhead 5

Application

The Production Logging Bulkhead is compatible with all 1.375" Lee production logging tools and it provides pressure isolation between tools in a Lee production logging tool string. Using a sealed electrical feedthru rated to 15,000 psi, the PL Bulkhead limits liability by preventing seal failures from propagating through the entire string.

Features

- Sealed Electrical Feedthroughs (15,000 psi)
- Compatible with all 1.375 Lee Production Logging Tools

Fullbore Spinner

Type	Part No.
Standard Service	106456
H2S Service	106457

Spare Parts	
Seal Kit - Viton 90	106495

Specifications

	Details
OD (collapsed)	1.375 (3.5 cm)
Length	7.673 (19.5 cm)
Weight	2 lbs (0.9 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)



1 3 7 5 Sinkers Bar

Features

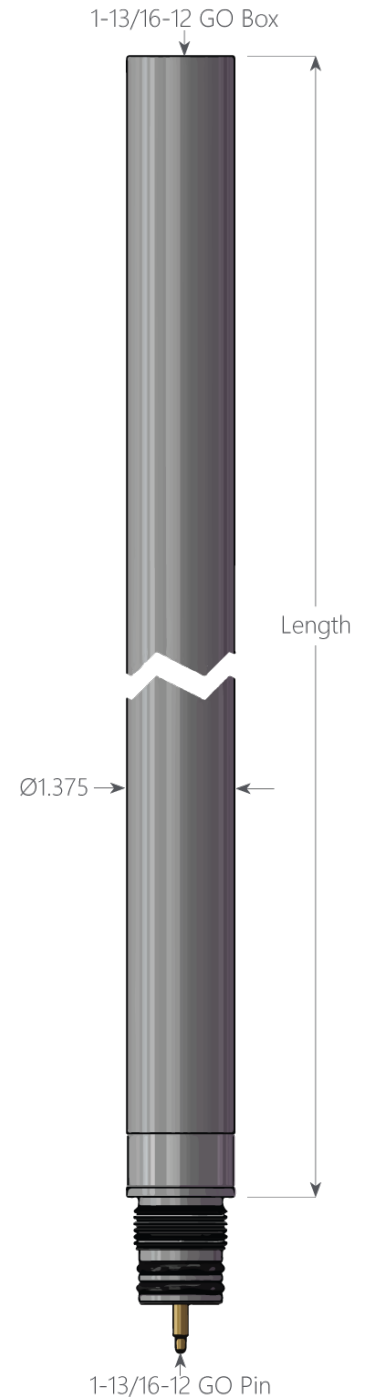
- Lead and Tungsten Weights Protected by Strong
- Steel Casing
- Do Not Require Any Electrical Connections
- Used in Highly Deviated Wells

1.375" OD Sinker Bar

Type	Length	Weight	Part No.
Steel	3 ft	13 lbs	107111
	5 ft	22 lbs	107112
	7 ft	32 lbs	107113
Lead Filled	3 ft	16 lbs	107114
	5 ft	27 lbs	107115
	7 ft	39 lbs	107116
Tungsten Filled	3 ft	22 lbs	105758
	5 ft	38 lbs	107109
	7 ft	54 lbs	107110

Specifications

Max Temperature	400°C
Max Pressure	20,000 psi
Max Voltage	600 VDC
Max Current	2,000 mA
Max Tension	59,000 lbf



3 Sensor Caliper

Application

The Three-Sensor Caliper is a downhole, production logging tool used to measure the inside diameter of a wellbore. Three sensors, connected to three equally spaced arms, measure the diameter of the well. These measurements allow operators to gather information regarding the condition of the well. Data from the tool indicates the presence and inside diameter of restrictions or out-of-round conditions in a wellbore.

The tool is designed to pass from a large diameter to a smaller diameter while logging down. It can also log up to a small diameter restriction without locking up the arms.

Features

- Measure inside diameter of a wellbore
- Sensors connected to three equally spaced arms provide well ID measurement
- Arms move independently
- Tool data indicates the presence of restrictions or out-of-round conditions
- 0.2 in. (0.5 cm) resolution
- 1.625 in. - 11 in. (4 cm - 28 cm) measurement range

3 Sensor Caliper

Type	Part No.
Standard Service	AM016WA0006
H2S Service	AM016WB0006

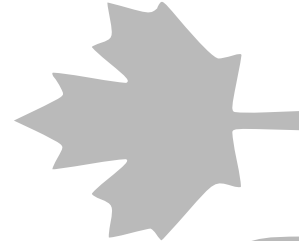
Accessories

Accessory	Part No.
Caliper Calibration Assembly	107739
Redress Kit - Viton 90	AM016RK0006



Specifications

	Details
OD	1.375 (3.5 cm)
Length	60.375 in (153 cm)
Weight	16.2 lb (7.32 kg)
Temperature Rating	350°F (177°C)
Pressure Rating	15,000 psi (103.5 MPa)
Resolution	0.02in (0.5 mm)
Accuracy	0.2 in (5 mm)
Measurement Range	1.625 in - 11 in (41 mm - 279 mm)
18V Power Requirement (Memory String)	105 mA
100V Power Requirement (Telemetry String)	53 mA



dataCamp

Contact DataCan Sales for individual replacement parts needs. Email to sales@datacan.ca

This all started with a ping-pong table...

We were four friends with two things in common: a knack for engineering and no jobs. After the 2006 oil crash, we began using James' basement to meet and create downhole tools. Although the basement wasn't our ideal workspace, we made it work, including using an old ping-pong table as a surface to stage our shipments.

We wanted to make downhole pressure gauges that were easy to use and that worked all of the time. At the time, too many downhole electronic products had high failure rates. Thankfully, Katie found the calibration system too noisy. Along with the ping-pong table, we moved into a massive 1,500 square foot commercial space. It seemed like a huge risk.

Slowly but surely, we began to develop new designs and the foundation for a healthy small business. A daring few joined us and today our family has grown into a team of almost fifty people. We occupy three offices in three countries with about 20,000 square feet of space (slightly bigger than a basement). We opened a branch in Houston, TX and were awarded Red Deer Canada's '2019 Business of the Year' award.

Although we've changed a lot over the last fourteen years, one thing remains the same...that ping-pong table looks good in our offices.

James Wright



Mark Hartwell



Sheldon Nadeau



Brad Pound



ABOUT