



# MULTI-FINGER CALIPER (MFC)

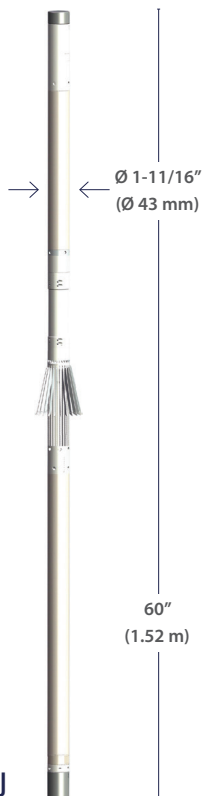
**Multi-Finger Caliper** tools provide direct, accurate and reliable measurements of internal tubing and casing diameters. Used in both drilling and production environments, applications include the evaluation of corrosion, erosion, wear, bending, buckling, pits, holes and other defects with high accuracy.

Measuring fingers move radially along the inner casing or tubing wall, detecting any diameter change. This produces a high resolution record of the tubular geometry which can be viewed and presented as a conventional log, a cross section, or a 3-D color enhanced image.

The **Multi-Finger Caliper** may also be used to measure the buildup of scale, paraffin or other mineral deposits in the wellbore. Auxiliary measurements include an integral wellbore temperature probe, along with deviation and relative bearing information. A range of instrument diameters with different finger arrays are available to provide optimized measurements in tubulars ranging from 2-3/8 in. to 16 in. diameter.

## APPLICATIONS & FEATURES

- Available in 24, 40, and 56 fingers
- Extended fingers available
- Combinable with all Pegasus Series Tools
- Compatible with PegasusStar Cased Hole Logging Platform
- Has Built-in Wellbore Temperature and 3-axis accelerometer able to provide crucial information about the Well Conditions including: Temperature, Deviation and Finger position
- MIPSPro™ Compatible for analysis and reporting
- Warrior Compatible



MFC24C-J



MFC40C-G



MFC56C-H



# MULTI-FINGER CALIPER (MFC)

## SPECIFICATIONS

	MFC24C-J	MFC40C-G	MFC56C-H
	P/N 100511763	P/N 100511762	P/N 100512537
<b>GENERAL SPECS</b>			
Maximum Pressure	15,000PSI (103MPa)		
Maximum Temperature	350°F (175°C)		
Diameter	1-11/16" (43 mm)	2-7/8" (73 mm)	3-1/2" (89 mm)
Length	60 in. (1.52 m)		83.7 in. (2.13 m)
Caliper Measure Point	33.9 in. (861 mm)	28.7 in. (729.5 mm)	27.7 in. (704.3 mm)
Weight	28.7 lbs (13 kg)	81.6 lbs (37.0 kg)	138.9 lbs (63.0 kg)
Steel Grade	17-4 SST, Titanium & Al-Bronze		
<b>CALIPER MEASUREMENT</b>			
Number of arms	24 arms	40 arms	56 arms
Minimum	1.96 in. (50 mm)	3.14 in. (80 mm)	3.94 in. (100 mm)
Maximum	7.09 in. (180 mm)	8.26 in. (210 mm)	9.65 in. (245 mm)
Finger Force	3.15 - 4.63 N	4.64 - 7.44 N	3 - 4.54 N
Accuracy	±0.02 in. (0.5 mm)		
Resolution	0.0039 in. (0.1 mm)		
Sensor Type	Linear Displacement Sensor		
<b>TEMPERATURE MEASUREMENT</b>			
Range	-13°F (-25° C) --- 350 °F (175°C)		
Accuracy	± 2° C		
Resolution	0.05° C		
Response Time	≤2 sec		
Sensor Type	Platinum Resistor PT100		
<b>INCLINATION MEASUREMENT</b>			
Minimum	0°		
Maximum	180°		
Accuracy	±5.0°		
Resolution	0.1°		
<b>RELATIVE BEARING MEASUREMENT</b>			
Minimum	0°		
Maximum	360°		
Accuracy	±5.0° (Dev ≥ 5.0°)		
Resolution	0.1° (Dev ≥ 5.0°)		
<b>DATA ACQUISITION</b>			
Typical Logging Speed	30 ft/min (9.14 m/min)		
Vertical Resolution @100 samples/ft	0.12 in. (3.05 mm)		
<b>POWER REQUIREMENTS</b>			
Voltage	18V to 36V		
Current	80 mA (±5 mA)		
<b>EXTENDED FINGER OPTION</b>			
Maximum Casing Size	9.7 in. (246 mm)		XF 13.78 in (350 mm) XXF 16 in (400 mm)
Accuracy	0.026 in. (0.66 mm)		
Resolution	0.005 in (0.13 mm)		