

ProMAC[™] 40 | Multi-Arm Caliper Tool - HD - 2 ³/₄ in.



The latest generation $\mathsf{ProMAC}^{^\mathsf{TM}}$ series 40-arm caliper tool incorporates a series of mechanical, electrical and electronic design features that greatly increase tool accuracy, reliability, maintainability and overall cost efficiency.

Ratings & Dimensions

Max Temperature	350°F (177°C)	
Max Pressure	20,000 psi (138 MPa)	
Diameter	2.75 in (69.9 mm)	
Length	63.66 in (1,617 mm)	
Weight	66 lb (29.9 kg)	
Tensile Strength	Connection: 15,000 lbF Body: 20,000 lbF	
Measure Points	Caliper: 33.85 in (860 mm) from bottom of tool Inclination: 52.4 in (1331 mm) from bottom of tool	
Materials	Corrosion resistant materials used throughout	

Hardware Characteristics

Sensor Type	Inclinometer: 3-axis accelerometer	
	Caliper: Differential Variable Reluctance Transducer	
Combinability	All HD tools: GR, CCL, iQ, RADii, RAS, PLT	
Tool Positioning	Centralized	
Acquisition Mode	SRO w/ TCU Mem w/ MLT	

Electrical Specification

Voltage	SRO	50V DC
	Memory	19.2V DC
Current	SRO	40mA(log) 100mA(opening)
	Memory	104mA(log) 260mA(opening)

Caliper Measurements

Sampling Rate	50 sps	
Vertical Resolution	0.12 in (3 mm)	
Radial Resolution	0.001 in (0.025mm)	
Logging Speed	30 ft/min (9 m/min)	
Radial Accuracy	+/- 0.02 in (+/- 0.5 mm)	
Diameter Range	2.80 in (71.1 mm) to 9.63 in (244.6 mm)	
Primary Output	40 independent radii measurements	
Secondary Output	Head voltage, internal temperature, accelerometer	

Accelerometer Measurements

	Inclination	Relative Bearing
Range	0° to 180°	0° to 360°
Accuracy	+/- 1.0°	+/- 1.0°
Resolution	+/- 0.1°	+/- 0.1°

Calibration

Primary / Wellsite	Precision machined calibration bowl