

ProMAC™ 60 | Multi-Arm Caliper Tool - HD - 3 3/4 in.



The latest generation ProMAC™ series 60-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 | 3.75 in (95.3 mm) |
| Length | 65.49 in (1,663 mm) |
| Weight | 102 lb (46.3 kg) |
| Tensile Strength | Connection: 15,000 lbF Body: 20,000 lbF |
| Measure Points | Caliper: 34.48 in (876 mm) from bottom of tool Inclination: 54.1 in (1374 mm) from bottom of tool |
| Materials | Corrosion resistant materials used throughout |

Hardware Characteristics

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|-------------------------|---|
| 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

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|----------------------------|--|
| 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 | 3.80 in (96.5 mm) to 11.75 in (298.5 mm) – standard arms |
| Primary Output | 60 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 |
|---------------------------|-------------------------------------|