

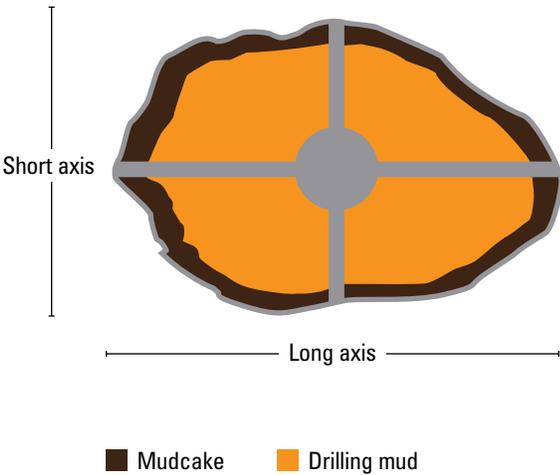
PPC

Powered positioning caliper

APPLICATIONS

- Borehole volume for compliance with API RP 65 Part 2
- Borehole diameter
- Borehole shape
- Environmental correction to log output

Caliper devices are integral to most standard logging tools because measurement of borehole axes is an extremely useful parameter for environmental correction, quantitative interpretation, and cement volume calculation. The powered positioning caliper (PPC) is a multipurpose, four-arm powered caliper that delivers accurate dual-axis wellbore diameter measurements. In addition to reducing operational costs with its fast logging and running speeds and quick rig-up and rig-down time, the PPC measures both the short and long axes of the borehole and provides accurate determination of a wellbore's volume in advance of running and cementing casing strings in place. Measurements from the PPC offer compliance with API RP 65 Part 2 requirements for accurately measuring borehole volumes prior to cementing casing with the objective of isolating potential flow zones during well construction. The PPC can be run stand alone or in combination with the majority of wireline services, including gamma ray correlation tools.



Powered positioning caliper position in wellbore.



Powered positioning caliper.

Measurement Specifications

	PPC-B	PPC-B with Extension Arms
Logging speed	7,200 ft/h [2,194 m/h]	7,200 ft/h [2,194 m/h]
Range of measurement	5 to 18 in [12.70 to 45.72 cm]	6 to 40 in [15.24 to 101.60 cm]
Vertical resolution	6 in [15.24 cm]	6 in [15.24 cm]
Accuracy	±0.1 in [0.25 cm] or 3%, whichever greater	±0.2 in [0.51 cm] or 3%, whichever greater
Depth of investigation	Borehole	Borehole
Mud type or weight limitations	None	None
Combinability	Combinable with most tools	Combinable with most tools
Special applications	API RP 65 Part 2 hole volume	API RP 65 Part 2 hole volume

Mechanical Specifications

	PPC-B	PPC-B with Extension Arms
Temperature rating	350 degF [177 degC]	350 degF [177 degC]
Pressure rating	20,000 psi [138 MPa]	20,000 psi [138 MPa]
Borehole size—min.	5 in [12.70 cm]	6 in [15.24 cm]
Borehole size—max.	18 in [45.72 cm]	40 in [101.60 cm]
Outside diameter	4.3 in [10.92 cm]	5.25 in [13.34 cm]
Length	8 ft [2.44 m]	8 ft [2.44 m]
Weight	170 lbm [77 kg]	190 lbm [86 kg]
Tension	50,000 lbf [222,411 N]	50,000 lbf [222,411 N]
Compression	10,000 lbf [44,482 N]	10,000 lbf [44,482 N]