

Sensor Characteristics

	Interval	Frequency	Range	Accuracy
Phase difference	41 in.	2 MHz	0.1 to 3,000 ohm-m	± 2% (0.1 to 20 ohm-m) ± 1 mmho/m (>20 ohm-m)
		400 kHz	0.1 to 500 ohm-m	± 2% (0.1 to 10 ohm-m) ± 2 mmho/m (>10 ohm-m)
	19 in.	2 MHz	0.1 to 1,000 ohm-m	± 1% (0.1 to 10 ohm-m) ± 1 mmho/m (>10 ohm-m)
		400 kHz	0.1 to 250 ohm-m	± 3% (0.1 to 5 ohm-m) ± 6 mmho/m (>5 ohm-m)
Amplitude ratio	41 in.	2 MHz	0.1 to 50 ohm-m	± 5% (0.1 to 16 ohm-m) ± 3 mmho/m (>16 ohm-m)
		400 kHz	0.1 to 10 ohm-m	± 3% (0.1 to 3 ohm-m) ± 10 mmho/m (>3 ohm-m)
	19 in.	2 MHz	0.1 to 50 ohm-m	± 5% (0.1 to 8 ohm-m) ± 6 mmho/m (>8 ohm-m)
		400 kHz	0.1 to 10 ohm-m	± 5% (0.1 to 3 ohm-m) ± 15 mmho/m (>3 ohm-m)
Vertical resolution	6 in. 1 (less than 10ohmde conductive layer)			

Mechanical Specifications

	4.75 in.	6.91 in.	8.25 in.
Outer diameter of tool	Antenna 5.0 " Wear-resistant belt 5.25 "	Antenna 6.91" Wear-resistant belt 7.16"	Antenna 8.25" Wear-resistant belt 8.5"
Length	14.5 ft (174 in.)	14.5 ft (174 in.)	15.16 ft (182 in.)
Tool connection	31/2 in. IF (NC-38)	41/2 in. IF (NC-50)	65/8 in. API Reg
Equivalent stiffness	5.00 in. x 2.81 in.	6.58 in. x 2.81 in.	8.25 in. x 2.81 in.
Makeup torque	9,600 lbf-ft	30,000 lbf-ft	54,000 lbf-ft
Working displacement	100 - 350 usgpm	300 - 750 usgpm	450 - 1200 usgpm
Max. overall angle change rate rotation	12.2°/100 ft	8°/100 ft	7°/100 ft
Max. overall angle change rate slip	25°/100 ft	17°/100 ft	14°/100 ft
Max. working temperature	150 /175°C		
Max. withstand temperature	160 /185°C		
Max. working pressure	20,000 psi		
Max. sediment content	1% (volume)		
Max. plugging material content	40-50 lb/bbl evenly mixed, any size		