

# Extend the workload of your calibrators with current coils

## Application note

Fluke Calibration offers three multi-turn coils that enable Fluke Calibration dc/If calibrators to calibrate current clamps and Rogowski coils at current values up to 6000 amps.



The **5500A/COIL 50-turn Current Coil** is a non-powered coil with a maximum compliance voltage rating of 3 volts RMS. At its rated current of 20 amps, it can calibrate clamp meters up to 1000 amps. It may run continuously to 11 amps, and must observe a 20% duty cycle from 11 amps to 20 amps.



The **52120A/COIL3KA, COIL, 25 TURN, 3000 AMP** is a 12V-powered coil with a maximum compliance voltage rating of 4.5 volts RMS. With forced-convection cooling, it may run continuously at 120 amps, allowing it to calibrate clamp meters up to 3000 amps.



The **52120A/COIL6KA, COIL, 50 TURN, 6000 AMP** is a 12V-powered coil with a maximum compliance voltage rating of 4.5 volts RMS. Also convectively cooled, it may run continuously at 120 amps, allowing it to calibrate interruptible Rogowski coils, of lengths greater than 18 inches, at up to 6000 amps.

The following table shows the maximum current that each of eight Fluke Calibration products is capable of driving through the coils at commonly used frequencies of dc, 50/60 Hz, and 400 Hz.

- 52120A Transconductance Amplifier
- 6105A Electrical Power Standard, along with its optional 50A and 80A models
- 5500A Calibrator
- 5522A Multi-Product Calibrator
- 5700A/5720A Multifunction Calibrators
- 5080A Multi-Product Calibrator



In each test case, the coil was loaded with a Fluke-381 Clamp or iFlex2500 Rogowski Coil.

Amp-turns	5500A/COIL (50 turns)			52120A/COIL3KA (25 turns)			52120A/COIL6KA (50 turns)		
	DC	50/60 Hz	400 Hz	DC	50/60 Hz	400 Hz	DC	50/60 Hz	400 Hz
<b>52120A</b>	1000	1000	545	2500	3000	1150	5000	6000	6000
<b>6105A</b>	525	1000	1000	263	525	525	525	1050	1050
<b>6105A/50A</b>		1000	340		1250	650		2500	2500
<b>6105A/80A</b>		1000			2000	425		4000	3350
<b>5500A</b>	550	550	260	275	275	243	550	550	550
<b>5522A</b>	1000	1000	450	513	513	513	1025	1025	1025
<b>5700A/25A</b>	550	550	550	275	275	275	550	550	550
<b>5080A</b>	1000	1000	450	513	513	513	1025	1025	1025

**Fluke Calibration.** Precision, performance, confidence.™

Electrical	RF	Temperature	Pressure	Flow	Software
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