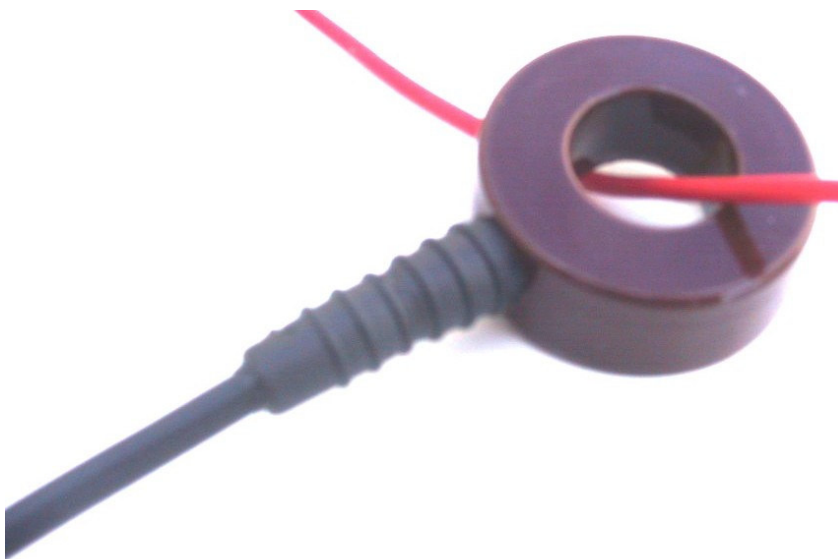


SURETECH

Rogowski Current Sensor

General purpose, wide bandwidth, solid core

- ✓ SURETECH RCS sensors can be used in a wide range of measurement applications, including power frequencies, high frequency and pulse applications, such as measuring gate current on SCRs and GTOs, IGBTs etc in power electronics drive systems
- ✓ SURETECH RCS bandwidth is very wide extending well beyond 1MHz. Rogowski technology does not respond to DC (zero output at zero frequency input), but the sensors are very useful to measure the AC current components on a DC line
- ✓ SURETECH RCS sensors have been value engineered for cost effectiveness, even in applications that require sensing points to be installed for later maintenance / monitoring; (without installing an integrator at every sensor). This feature is extremely useful to improve maintainability in motor drives and power electronic systems
- ✓ SURETECH RCS sensors are available in various formats, sizes, insulation levels, bandwidths etc
- ✓ SURETECH RCS-F43/22/13 shown here (actual size), has an OD=43mm, ID=22mm, and 13mm thickness, and is in production



RCS General Features:

- ✓ Moulded in solid resin for ruggedness, reliability, long life, stability and easy application
- ✓ Rubberised strain relief
- ✓ Coaxial cable tail provides interface to integrator
- ✓ BNC connector available as flying lead OR panel mount, OR none
- ✓ Accuracy 0.5%
- ✓ Standard cable tail length: 300mm (other lengths available on request)
- ✓ Electrostatic shielded to operate in high dv/dt applications
- ✓ Split-core versions are available, but are more expensive and generally less accurate
- ✓ Insulation voltage is 1000 volts standard, higher available on order
- ✓ Various mounting options available
- ✓ RCS sensors can be supplied with Rogowski signal processing or stand alone
- ✓ Galvanic isolation from HV source
- ✓ Patents pending

RCS Signal Processing options:

- ✓ Wide range of current sensitivity options available from (user to specify):
 - ✓ >100mV/Amp for low current applications to
 - ✓ <100uV/Amp for high current applications
- ✓ Ultra linear measurement circuits for excellent accuracy
- ✓ RCS signal processor (including integrator) can be mounted close to sensing coils, or up to a few metres away
- ✓ Filters are available to extend low frequency or high frequency response
- ✓ Wide selection of output options including relay, opto-isolated transistor, analog voltage (+/-5V) to oscilloscope, RS232
- ✓ Sensors can be supplied with Rogowski signal conditioners, including integrators, filters, ASP & DSP, harmonic analysers
- ✓ Smart Load Processor (SLP) is available to perform various functions such as protection, indication, etc. including RS232 outputs
- ✓ Wide selection of auxiliary power supply options
- ✓ Engineering backup to provides support for design, applications information, installation & calibration, maintenance
- ✓ Patents pending

Typical Applications:

- ✓ For use on 50Hz / 60Hz power applications
- ✓ For use in protection and fault current measurements
- ✓ Measure high frequency sine waveforms
- ✓ Measure current pulse waveforms, such as capacitor discharges, lightning research etc
- ✓ Measure power semiconductor waveforms, such as SCRs, Thyristors, GTO devices, IGBTs, power transistors etc
- ✓ Welding plant, generators, motor drives, induction heating, furnaces, HVDC
- ✓ Diode and rectifier stack monitoring
- ✓ Measure harmonics

Power supply & enclosure options:

- ✓ Aux supply: 90-260V ac or dc
- ✓ Aux supply: 10-40V ac or dc
- ✓ Aux supply: Battery powered with portable enclosure
- ✓ Power consumption per sense point <1VA
- ✓ Transient suppression on power rails



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