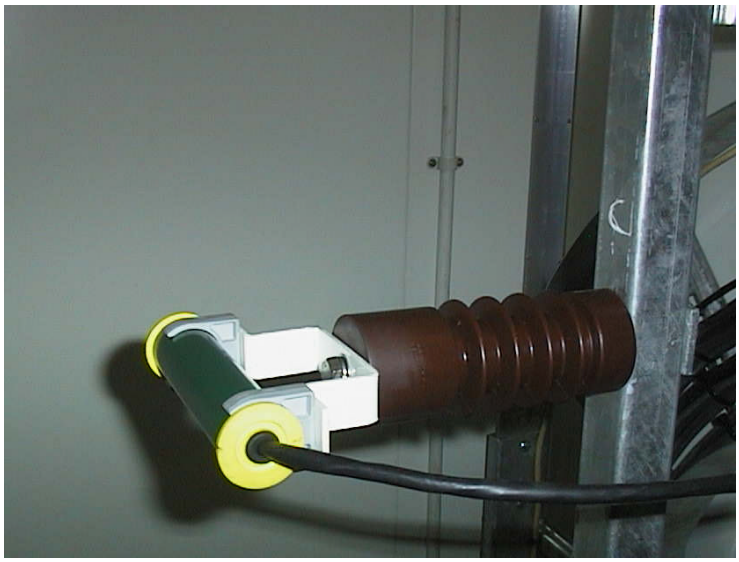
New indoor and outdoor High Voltage instrumentation transducers extend our HV Transducer range of high accuracy sensors

SURETECH™
HV Voltage Proximity Sensors

These proximity sensors measure AC voltage on HV power systems without making physical contact with the HV source. Sensors can be used in place of normal VTs (Voltage Transformers) to measure voltage levels up to 400kV. Proximity sensors can be fitted with filters for required signal processing.



The family of products covers the following range of parameters.

Directionality (order required configuration)	**Type**
Omni-directional	DO
Directional	DR
Directional - narrow (enquire)	DN

Sensing Voltage	**Nominal operating distance**	**Type**
220 / 380 Volts	100 mm	LV
3.3 kV	100 mm	3,3kV
11 kV	150 mm	11kV
33 kV	300 mm	33kV
66 kV	600 mm	66kV
132 kV	1200 mm	132kV
400 kV	2500 mm	400kV

Output type	Range	Type
Logic (OC transistor)	Upper & lower threshold (settable by potentiometer)	LOC
Analog voltage	0-2V, 0-5V, 0-10V	AV2, AV5, AV10
Analog current	0-1mA, 5mA, 20mA, 4-20mA	AI1, AI5, AI20, AI420
RS232	Voltage, frequency, angle	RS232

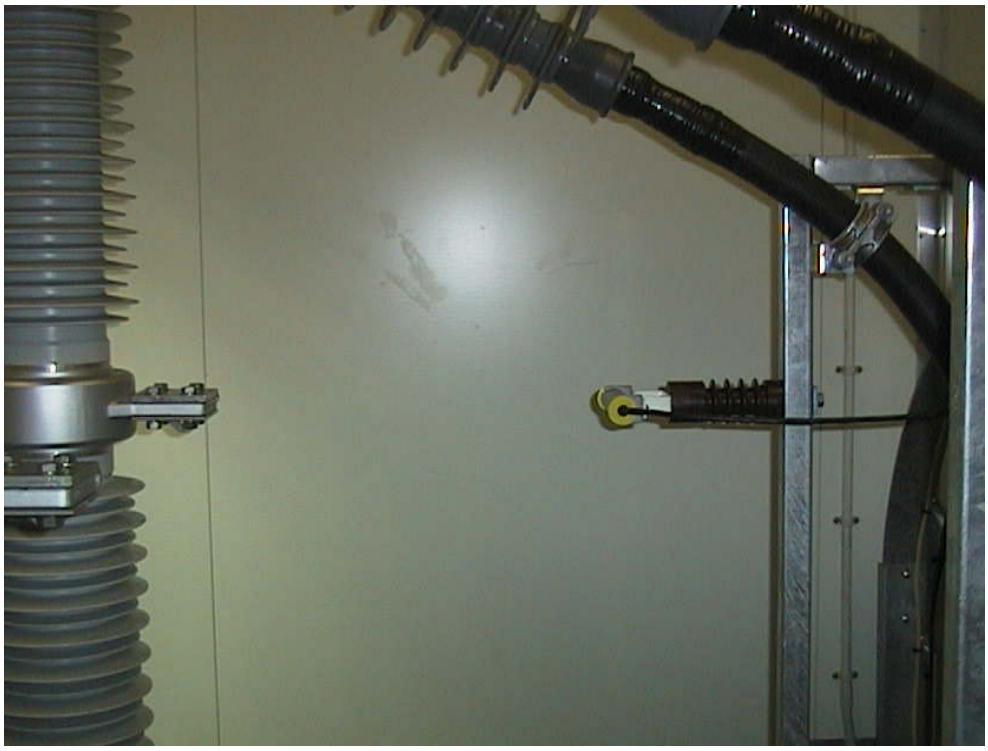
Aux Power Supply	Tolerance	Type
12V battery	10 Vdc to 20Vdc	12
30V battery	20 Vdc to 35Vdc	30
110 Vac (50 / 60 Hz)	+/-20%	110
220 Vac (50 / 60 Hz)	+/-20%	220

Typical Applications:

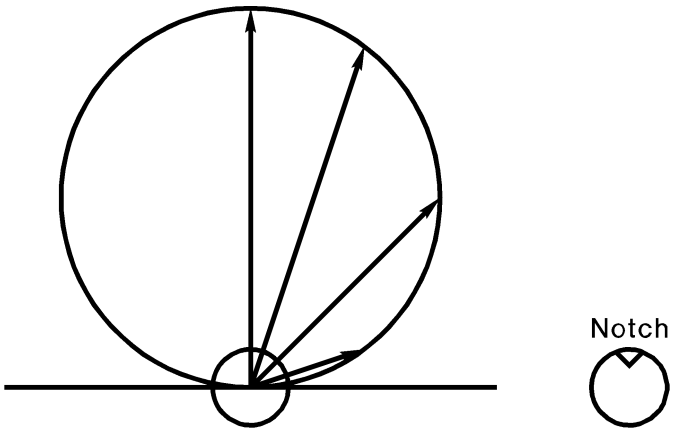
- ✓ Cranes and tip-trucks working near power lines need sensors to warn operator of live line
- ✓ Safety interlocks in HV panels
- ✓ HV panel voltage alarms (upper & lower)
- ✓ HV line recloser voltage control
- ✓ HV panel voltage measurements
- ✓ HV frequency counter
- ✓ Synchronise other measurements such as cameras and oscilloscopes to the HV power system in the field
- ✓ HV pylon monitoring of voltage on each of six phases, Each sensor can feed into a radio telemetry system to transfer power line voltage to system control centre. Line fault location will be much quicker.
- ✓ Measure the voltage on the rotor of an HV motor or generator as it turns
- ✓ Monitor and measure induced voltages on power circuits.

General Features:

- ✓ Accuracy can be calibrated to better than 2%, and in cases where environmental stability is maintained, better than 0.5%
- ✓ Frequency measurement accuracy 50ppm
- ✓ Capacitively coupled to HV source through air or insulation
- ✓ Ultra linear measurement circuits
- ✓ Corona discharge filter available
- ✓ Static discharge filter available
- ✓ Cylindrical enclosure has epoxy potted components for long life
- ✓ Dimensions: 34mm diameter x 150mm
- ✓ Integral cable connection
- ✓ Transient suppression on input and outputs
- ✓ Wide selection of input and output options including, logic, analogue and RS232
- ✓ Wide selection of auxiliary power supply options
- ✓ Galvanically isolated from HV source
- ✓ Engineering backup to provide you support for design, applications information, installation & calibration, maintenance
- ✓ For use on 50Hz and 60Hz systems
- ✓ Patent pending

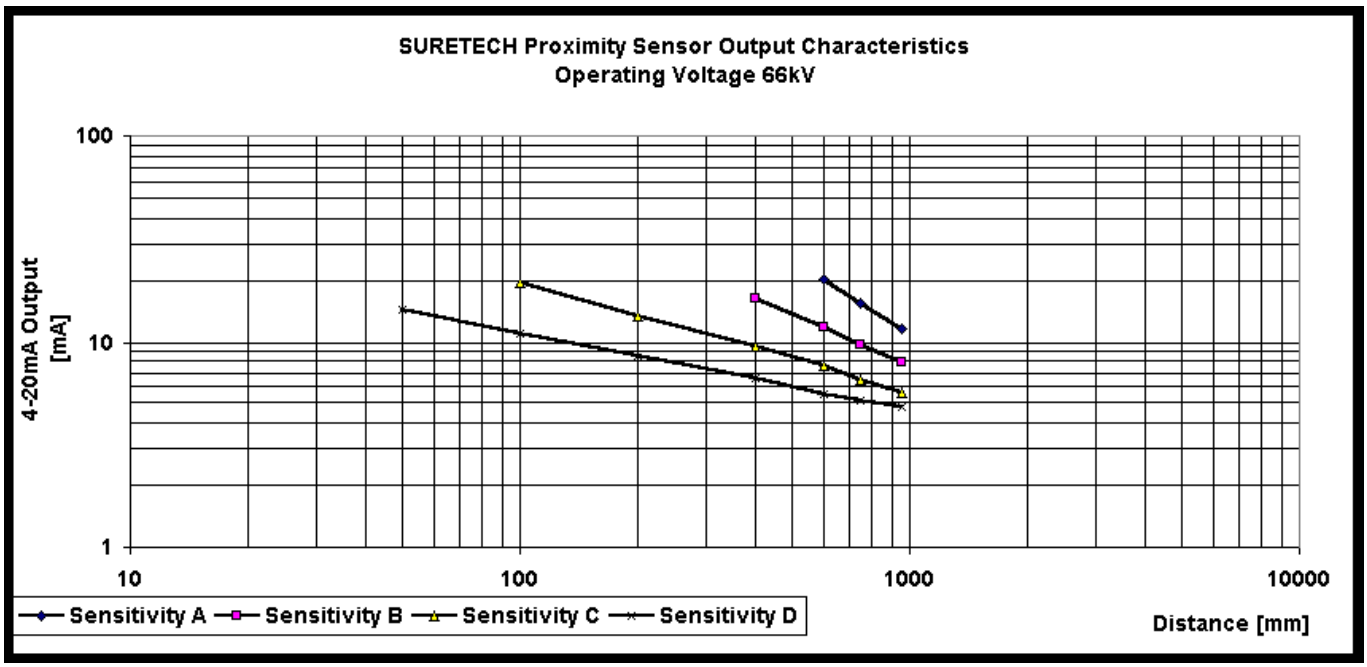


HV Transducer Proximity Sensor response characteristics:



SURETECH Proximity Sensor
COSINE Response

The following graph is an example of the Proximity Sensor's response at 66kV. The user should specify which sensitivity is required. Typical response at other voltages is also available.



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