

HAUG Ionization - for measuring electrostatic charges



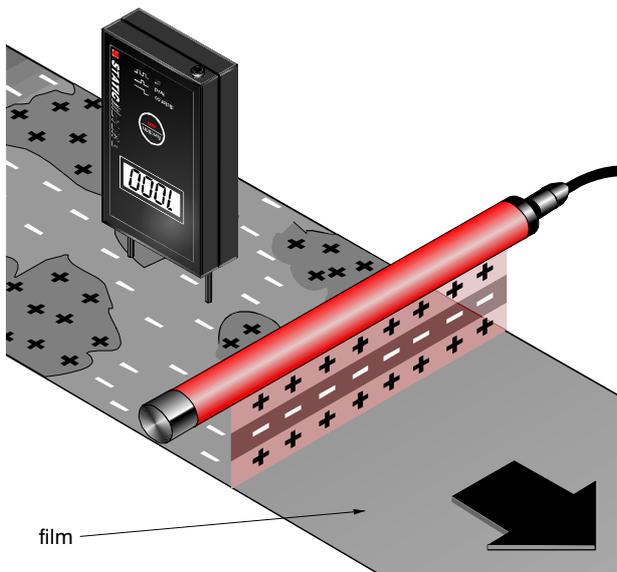
Measuring electrostatic charges

Electrostatic charges always occur where highly insulating materials, such as most plastics, are used. The resulting field patterns, such as **A** and **B**, are easy to be evaluated theoretically, but they are of minor interest to the practician. For the latter it is important to know the level of these electrostatic charges and the spot in the machine of facility where they occur. Therefore he should have specific devices at his disposal to measure these interfering charges.

Static Meter I

The recently developed **Static Meter I** electrofieldmeter is a small hand-held field strength meter with digital display for measuring electrostatic charges in Volt. It perfectly combines easy operation with accurate measuring technique. The **Static Meter I** measures electrostatic charges according to the fieldmill influence principle **C**: The influenced charges, caused by electrical field, generate an alternating current proportional to the electrical field strength. The selective amplifier converts this value into the corresponding field strength or electrical potential – without withdrawing energy from the electric field over the averaged time.

iii. 1



Applications

The use of the **Static Meter I** can be a precautionary measure in all manufacturing processes, where electrostatic charges may occur. However, this device is not approved for use in hazardous locations!

Special features and advantages

- Variable measuring distance:
In order to obtain optimum results, the distance between test object and sensor head – depending on the degree of charge and the condition of the object's surface – can be selected incrementally.
- Hold function:
The device is equipped with a Hold function to keep the measured value stored on the display.
- Display in V:
The integrated micro-computer automatically converts the measured field strength into the equivalent charge in V.

Accessories

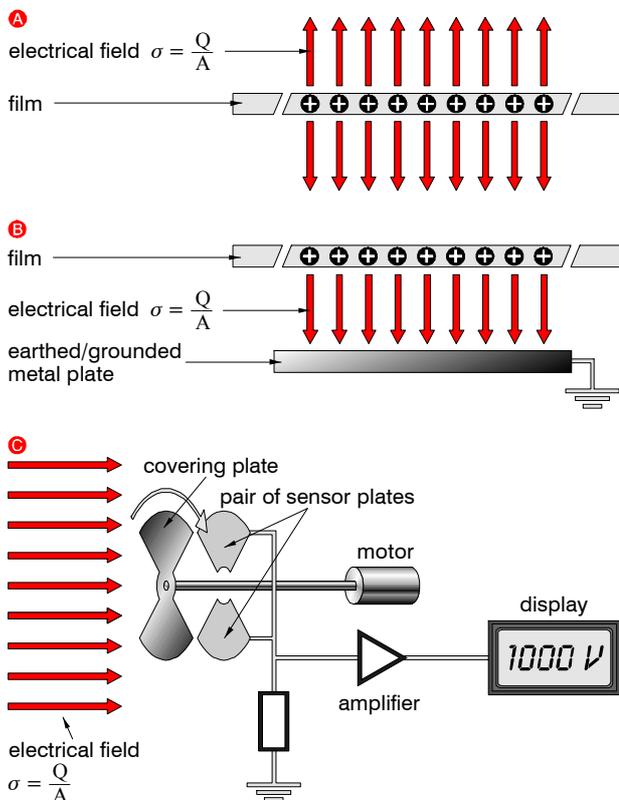
Two 26 mm long spaces are supplied together with the device. These ensure that the distance of measurement is always correct (= 2 cm).



Static Meter I

Mode of operation

Field pattern of an uniformly charged film **A** and of a uniformly charged film above an earthed/grounded metal plate **B**.



The electric field of the electrostatic charge is converted into a measuring alternating current through the cyclical covering of the sensor plates. The display shows a tension proportional to the intensity and polarity of the field to be measured. Field strength meters that are working according to this principle have a high measuring sensitivity and allow very accurate measuring.

HAUG GmbH & Co. KG

Germany

Friedrich-List-Str. 18
D-70771 Leinf.-Echterdingen
Phone: +49 711 / 94 98-0
Telefax: +49 711 / 94 98-298

www.haug.de
E-mail: info@haug.de

HAUG Biel AG

Switzerland

Johann-Renfer-Str. 60
CH-2500 Biel-Bienne 6
Phone: +41 32 / 344 96 96
Telefax: +41 32 / 344 96 97

www.haug-ionisation.com
E-mail: info@haug-biel.ch





Static Meter I

Technical data Static Meter I

Type:	Static Meter I	Order-No: 12.7210.000
Power supply:	9 V - alkaline battery IEC 6F22 or 9 V NiCd or NiMH accu	
Measuring ranges:	Distance 1 cm: 0 .. 10 kV, max. resolution 1 V Distance 2 cm: 0 .. 20 kV, max. resolution 2 V Distance 5 cm: 0 .. 50 kV, max. resolution 10 V Distance 10 cm: 0 .. 100 kV, max. resolution 10 V Distance 20 cm: 0 .. 200 kV, max. resolution 20 V	
Display:	alphanumeric LCD-display, two lines with 12 digits each	
Operating time:	approx. 10 hours in continuous duty	
Balancing:	within the homogeneous field of a plate capacitors, measuring device built in the center of the pasted plate plate size 100 mm x 100 mm, distance between plates 20 mm	
Operating temperature:	+5 °C to +50 °C	
Storage/transport temperature:	-15 °C to +60 °C	
Weight:	130 g (without battery)	

Subject to technical changes!

