



Industrial Equipments



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Instruction Manual

Product: SE-SGB-30 Series

Static Generation Bar

1-SE-SGB-30 Series Static Generation Bar

"The SE-SGB-30 series provides a safe, controllable, reliable and cost-effective method of applying static charge for temporary electrostatic adhesion in industrial applications.

It improves material handling by generating a controlled and even static field on various surfaces and is designed for continuous operation in industrial environments.

The product is intended for use with high-voltage static generators."

2-Performance

- "• SE-SGB-30 series Static Pinners operate at up to 30 kV.
- Powered by Föge SE-GEN-30N-AC Generator or equivalent high-voltage static generators.
- Suitable for medium-duty industrial electrostatic adhesion applications."

3-Essential Qualities

"• Precisely spaced emitters at 15 mm pitch, designed to maintain consistent performance over extended use.

- All parts completely encapsulated to ensure high reliability and safe operation in industrial environments.
- All models are resistively coupled for spark-free operation; each emitter on the SSE-SGB-30 series model is individually protected by an integrated resistor.
- Emitters designed for long service life and reliable continuous operation.
- Close 15 mm emitter pitch generates an intense and uniform electrostatic field, resulting in improved and consistent adhesion."

4-Connectivity and control

"• When used with the Föge SE-GEN-30N-AC Generator, the operator has full control of the system with clear operational feedback."

5-Applications

"• Wide range of electrostatic adhesion applications, including interleaving, pinning, labelling, in-mould labelling (IML), wrapping, bag-making and many other converting processes."

6-How It Works

"The SE-SGB-30 series system consists of a Static Generator and one or more Generator Bars. The Generator produces direct current (DC) up to 30 kV, which the Bars emit as an ion cloud.

As materials pass through this ion cloud, the side of the material facing the Bar becomes charged with the same polarity as the Generator. Simultaneously, a mirror-image charge is induced on the opposite side of the material by the earth.

The material itself acts as a non-conductive barrier, preventing the two charges from neutralizing each other. This separation of charges is what creates the temporary electrostatic adhesion.

Non-conductive materials (e.g., plastic film) retain the charge efficiently, resulting in strong adhesion.

Partially conductive materials (e.g., paper) allow some current to pass through, producing weaker adhesion.

The adhesion strength depends on material conductivity, thickness, and the distance between the Bar and the material.

The SE-SGB-30 series Bars are designed with emitters, resistively coupled for spark-free operation. The ion cloud generated is uniform and controlled, ensuring consistent adhesion across the material surface.

Operators can adjust the generator output and Bar positioning to optimize adhesion for different materials and production speeds. Continuous operation in industrial environments is supported, with all components fully encapsulated for reliability and safety."

7. Technical Information

Technical Information	
Product	SE-SGB-30-XXXX-C2
Output	30kV Shockless
Length for ordering(mm)	100 – 4000
Power Supply	SE-GEN-30N-AC
Power Connector	High-voltage (HV) connector
Environment	Clean, dry and oil-free. 0–60 °C, max. 70 % RH
Safety	100 Mohm resistance for safe operation
Standards	"2014/30/EU EMC Directive"
	2014/35/EU Low Voltage Directive

SPECIFICATION

Construction:
"Extruded PVC body with ABS end caps, fully encapsulated with epoxy resin.
Stay-sharp alloy emitters at 15 mm pitch."

Cable:
"2 m of HV cable. Longer lengths can be specified at time of order.
Cable terminates in HV connector. Protective nylon conduit on cable.
Minimum bend diameter 100 mm."

Safety:
100 Mohm resistance for safe operation.

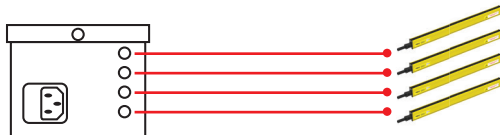
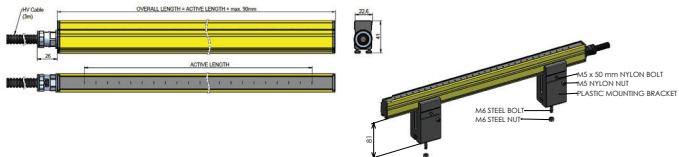
Environmental:
Clean, dry, and oil-free location. Temperature: 0 – 60 °C, 70% rH non-condensing max.

Generator:
Use with Föge SE-GEN-30N-AC generators. State generator model at time of order.

Certification:
CE.

8. Dimensions / Installation

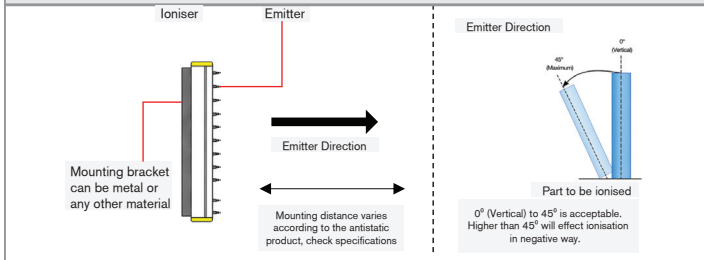
Dimensions: 22.6 x 41 mm (W x H). Available lengths: minimum 100 mm, then in 100 mm steps to Active length is 90 mm shorter than overall length.



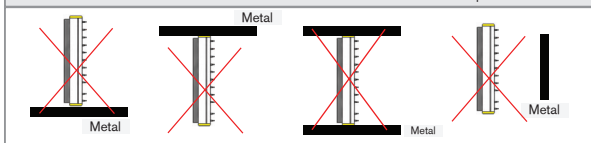
Up to four charging bars can be connected to a single generator power supply

IMPORTANT

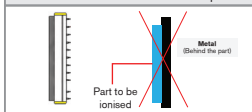
Attention: When assembling ionisers without air, always emitter direction look towards the part. Tilt mounting up to 45 degrees would be ok but be informed that higher than this angle will effect ionisation in negative way.



Attention: Do not cover the ioniser with metal or attach metal close to the emitter pins of the ionisers.



Attention: Never put metal behind part to be ionised. This will cause static eliminator unable to neutralize the part.



9. Faults

In any of below cases or others do not open the product.  

If switch is on but the ON/OFF light is OFF, change the fuse inside the power unit. Fuse type: F0.5AL250V Fast Blow Glass Fuse 5x20mm

10. Warnings

Connect the power supply and the display/output device according to the safety regulations for electrical equipment.

The supply voltage must not exceed the specified limits.

Avoid shocks and impacts to the sensor.

Protect the cable against damage.

Possible Results of Avoidance

Risk of injury by electric shock 

Damage to or destruction of the sensor  

11. Maintenance

Because of the nature of ionisation process particles in the air sticks to the emitter pins and carbonizes. This process have a negative effect on ionisation performance.

All AC and DC ionising bars should be checked regularly and cleaned. FÖGE

Antistatic Bar Celaning Liquids and Brushes. 

12. Safety

System operation assumes knowledge of the assembly instructions. The following symbols are used in these assembly instructions:



Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.



Indicates a situation that may result in property damage if not avoided.



Indicates an electrical shock if not avoided or properly follow comments.

13. Liability for Material Defects

All components of the device have been checked and tested for functionality at the production facility. However, if defects occur despite our careful quality control, FÖGE or your dealer must be notified immediately.

The liability for material defects is 12 months from delivery.

Within this period, defective parts, except for wearing parts, will be repaired or replaced free of charge, if the device is returned to FÖGE with shipping costs prepaid. Any damage that is caused by improper handling, the use of force or by repairs or modifications by third parties is not covered by the liability for material defects. Repairs are carried out exclusively by FÖGE.

Further claims can not be made. Claims arising from the purchase contract remain unaffected. In particular, FÖGE shall not be liable for any consequential, special, indirect or incidental damage. In the interest of further development, FÖGE reserves the right to make design changes without notification.

14. Decommissioning, Disposal

Remove the power supply and output cable on the sensor.

Incorrect disposal may cause harm to the environment.

Dispose of the device, its components and accessories, as well as the packaging materials in compliance with the applicable country-specific waste treatment and disposal regulations of the region of use.