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7080 / 7081 GENERATOR BARS

The 7080 and 7081 Generator Bars provide a safe, controllable, reliable and cost-effective method of applying static charge for temporary adhesion in industry.

- 7081 Generator Bars are for use with current Fraser 30 kV Generators.
- 7080 Generator Bars are the same as the 7081 but have a cable and connector compatible with older Fraser 7330 and 7324 Generators.

PERFORMANCE

- The 7081 is a medium duty static generator bar for use with Fraser 30 kV IONFIX Generators.
- It is suitable for most industrial applications.

ESSENTIAL QUALITIES

- All parts completely encapsulated for reliability and safety.
- Emitters at a 10 mm pitch, resistively coupled for spark-free operation.
- Compact size and rigid construction.
- Cable protected with flexible nylon conduit. Cable exit 180° or 90°.

CONNECTIVITY AND CONTROL

 Used with Fraser IONFIX 30 kV Generators the operator has full control and operational feedback.

APPLICATIONS

 Wide range of electrostatic adhesion applications – interleaving, pinning, labelling, in-mould labelling (IML), wrapping, bagmaking and many others.



SPECIFICATION

Construction:

Extruded PVC with ABS endcaps, epoxy resin encapsulant. Stay sharp alloy emitters at 10 mm pitch.

Cable:

 $2~{\rm m}$ HV cable as standard. Longer lengths can be specified at time of order. Max cable length 10 m. 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:

7081: use with Fraser 30 kV Generators.

7080: use with Fraser 7330 and 7324 Generators.

State generator model at time of order.

Certification:

CE

Options:

Tungsten emitters at 5 mm pitch (7080-T5 and 7081-T5). 90° cable outlet.



HOW IT WORKS

The system consists of a Static Generator and one or more Generator Bars. The Generator produces direct current up to 30 kV. The 7080/7081 Bars emit this current in the form of an ion cloud.

Materials passing through this ion cloud become charged at the same polarity as the Generator on the side of the Bar, with a mirror image charge on the opposite side, produced by the earth. The non-conductive barrier (i.e. the material) prevents these two charges coming together - this is what causes the adhesion.

If the barrier is a good non-conductor, like plastic film, the adhesion will be strong. If the material is more conductive, like paper, the adhesion will be weaker as more current will pass through the material.

DIMENSIONS AND CONSTRUCTION

Dimensions: 20 x 45 mm (W x H). Available lengths: minimum 100 mm, then in 100 mm steps to 4000 mm. A 60 mm option is available for specialist applications. Active length = overall length - 70 mm.

