

# 101 / 201 STATIC DISCHARGERS

Fraser 101 and 201 Static Dischargers are extremely efficient anti-static tools which are used on countless machines processing sheets and webs.

Particularly effective for high speeds and high charges, Fraser static dischargers offer high performance with unrivalled cost-effectiveness and versatility.

## PERFORMANCE

- The fine conductive tips of the fibre concentrate the electric field to create ionised air which allows the static charge to flow to earth.
- Static dischargers are often called 'passive' static eliminators, but this does not mean that they are weak. They are particularly efficient at neutralising high charge levels.
- They also cope well with high speeds.

## ESSENTIAL QUALITIES

- Available in two versions:
  - 101 with an aluminium 'h' body.
  - 201 with an aluminium 'u' body and fixed mounting studs.
- Choice of carbon fibre or conductive nylon fibre, in four fibre lengths – see page 2.

## CONNECTIVITY AND CONTROL

- Static dischargers must be connected to earth.

## APPLICATIONS

- A wide variety of web and sheet applications.
- The tips of the fibre do not need to touch the material, but need to be 2-3 mm from it.
- For ATEX applications, see EX-HPSD 101/201 Static Dischargers.



## SPECIFICATION

### Construction:

101 - Robust 2 mm extruded aluminium walls with 'h' body.  
 201 - Compact 9.5 mm x 9.5 mm aluminium body.

### Available Lengths:

101 - Any length of static discharger up to 4000 mm.  
 201 - Any length of static discharger up to 3000 mm.

### Fibres:

Carbon Fibre: 6/7 µm diameter. 60,000 filaments per cm.  
 Nylon Fibre: 35 µm diameter. 4-5000 filaments per cm.  
 Available with 18 mm (standard), 30 mm, 50 mm or 80 mm fibre length.

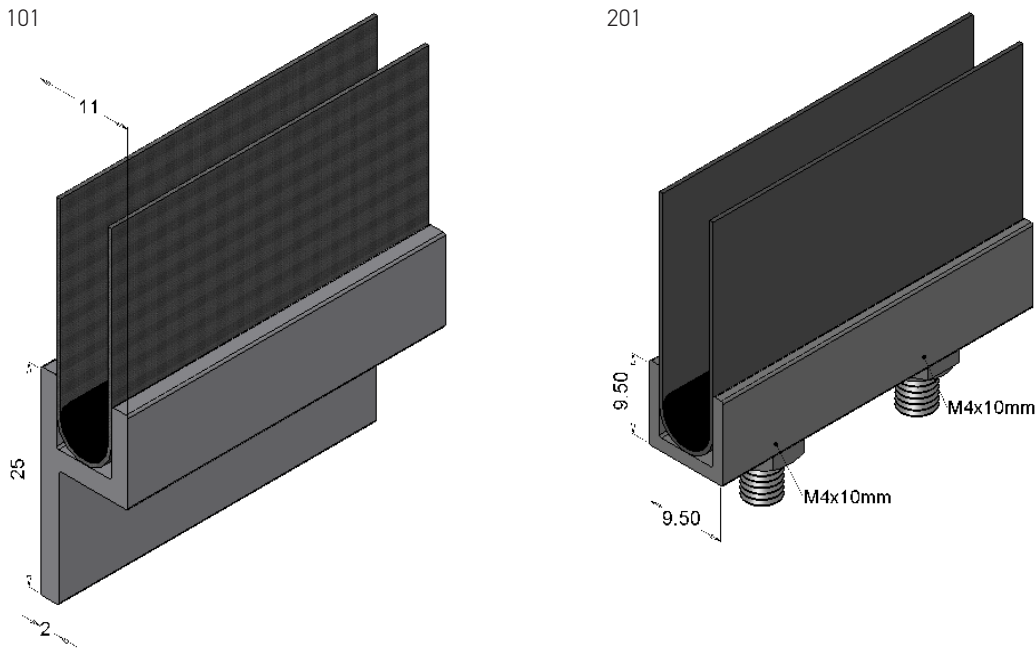
### Fixing:

101 - Fixing holes can be drilled in the single wall upright of the 'h' body.  
 201 - The M4 x 10 mm fixing studs are 10 mm from each end and also in the middle for lengths above 1000 mm.

**HOW IT WORKS**

The 'brushes' have a large number of highly conductive fibres. The fine tips of the fibres concentrate the electric field of the static charge and ionise the air. This ionised air provides ions of the opposite polarity to neutralise the static charge and allow it to flow to earth through the brush body. The tips of the fibre do not need to touch the material to be neutralised, normally they are positioned 2-3 mm from it. The body of the static discharger must be connected to an earth/ground.

**DIMENSIONS**



**OPTIONS**

**Choice of Fibre**

Carbon or Conductive Nylon?

- Carbon fibre is more effective and lower in cost. It is suitable for 90% of applications.
- Nylon fibre has more resilience and can be washed in water to clean out dust and other contaminants.

For standard applications we recommend carbon fibre; for 'clean' applications we recommend nylon.

**Fibre Length**

In addition to the choice of carbon or nylon fibre, there is a choice of fibre length. 18 mm is standard and suitable for most applications. We can also supply 30 mm, 50 mm and 80 mm fibre lengths.

**ATEX/Hazardous Area Applications**

See EX-HPSD 101/201 Static Dischargers. ATEX Certified Static Dischargers with solvent resistant construction are available in lengths up to 4000 mm.