Inline Ionizer
Data sheet

The Kongskilde Inline Ionizer (Antistatic pipe) is designed to neutralize static charged materials in pneumatic conveying systems.

Plastic can be statically charged during conveying through a pneumatic conveying system creating problems at the discharge or collection point. The statically charged material is normally not a problem during the conveying, but if the material tends to be very static generative Kongskilde recommends an In-line Ionizer (Antistatic pipe) to be installed in the system.

The Inline Ionizer (Antistatic pipe) needs to be installed as close as possible to the discharge point which could be a static separator, cyclone or similar to prevent regeneration of the charge.

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Application

The Inline Ionizer is a valuable solution to minimize problems like:

- Process waste material, like thin plastic foil, clinging to the inside or outside of a discharge box, cyclone, container etc.
- Contamination of virgin materials in pneumatic conveying lines
- Undesired separation of virgin and reclaimed material due to static charges
- Hazardous static charges build up on machine surfaces

Technical Data

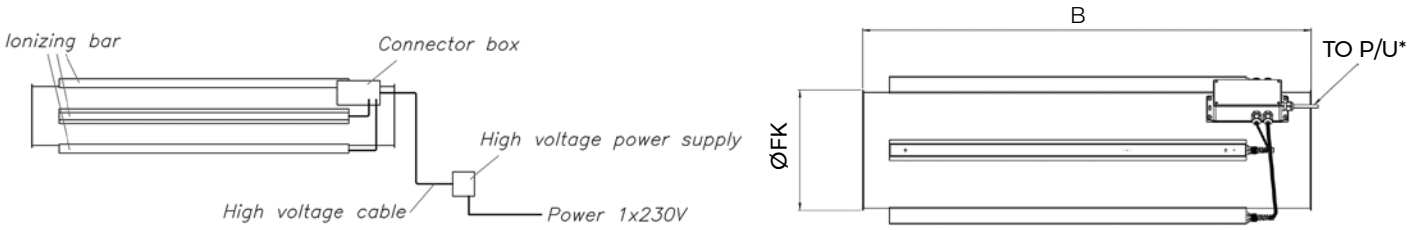
The ionizing bars are 0,75m long and installed in the length direction of a standard 2mm painted 1 meter long pipe with Kongskilde FK flanges. The number of ionizing bars varies with the diameter of the Inline Ionizer (see table 1). Physically the ionizing bars are mounted flush with the sidewall of the pipe.

For the Inline Ionizer a high voltage power supply is needed and generally the power supplies are delivered in an IP54 powder coated steel enclosure.

The power supply accepts 1x230V 50/60Hz. The output of the power supply is 5,5kV with a current limit of 0,2A. Kongskilde can deliver 2 different versions.

As the Inline Ionizer is working with high voltage, the efficiency and functioning are highly dependent on the environment, in which it is being installed and used. For outdoor installations Kongskilde recommends that the high voltage power supply is installed in an additional enclosure following the local codes and requirements. The Inline Ionizer is manufactured as a fully welded construction and uses IP67 cable glands. Rubber washers for the bar studs penetrations secure the water tightness in this area, and the connector box on the pipe is an IP68 box with ozone resistant seal.

Despite the high IP class requirement on the Inline Ionizer itself, Kongskilde recommends that the Inline Ionizer is installed protected from direct rain, as water can find its way into the Inline Ionizer from leaking clamps etc. Water built up inside the Inline Ionizer can cause the Inline Ionizer to shut down.



Components explanation for the Inline Ionizer (Antistatic Pipes)

* P/U Power Unit

Description ØFK	No. and length of static eliminators	Length of pipe "B"	Total length of "bars and cable" on the tube "y"
FK 100 Antistatic pipe	3 x 750mm	1.0m	3m + connector cable**
FK 125 Antistatic pipe	3 x 750mm	1.0m	3m + connector cable**
FK 140 Antistatic pipe	3 x 750mm	1.0m	3m + connector cable**
FK 160 Antistatic pipe	3 x 750mm	1.0m	3m + connector cable**
FK 200 Antistatic pipe	4 x 750mm	1.0m	3m + connector cable**
FK 250 Antistatic pipe	4 x 750mm	1.0m	3m + connector cable**
FK 275 Antistatic pipe	5 x 750mm	1.0m	3m + connector cable**
FK 300 Antistatic pipe	5 x 750mm	1.0m	3m + connector cable**
FK 400 Antistatic pipe	7 x 750mm	1.0m	3m + connector cable**

**Total length of antistatic bars and cabling from the bars to the connector box

Subject to modification. 123001733 EXP/CB/Inline Ionizer/DATA/0920

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