

SNOW FILTERS FOR FILTER SYSTEMS IN RAIL VEHICLES

As of: 08/2024

THE PRIMARY ADVANTAGES OF OUR SNOW FILTERS ARE:

- Very sturdy and easy to clean metal filter mesh
- One filter for snow, dust and water (only with low air inflow velocities)
- The filter can also be used in combination with a ventilation grille



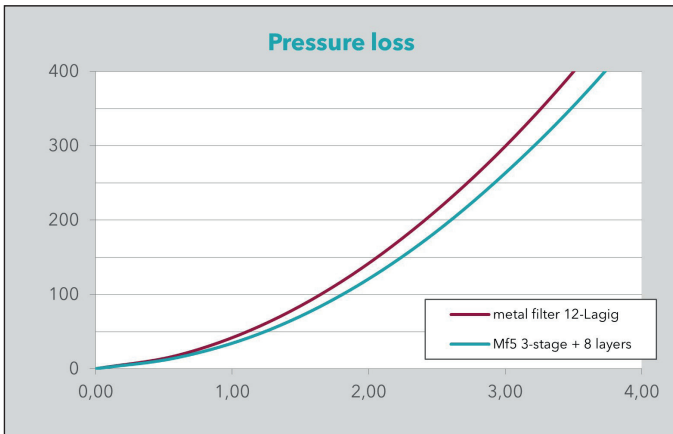
DESCRIPTION:

Sufficient fresh and cool air needs to be constantly available in rail vehicles for the supply of fresh air and the cooling of technical units, even in winter operation.

- The snow contained in the intake air may settle on and in the filter
 - > Restriction or blockage of the air flow possible
- Small snow crystals are formed due to 'drifting snow' and 'snow swirls'
 - > These small snow crystals cannot be separated by weather protection grilles and ventilation grilles but are able to get inside the ventilation system.
- The snow melts in the warmer zone and has the potential to cause water damage (e.g. short circuits in electrical components)

Krapf & Lex has been specialising in snow filtration in rail vehicles for over 20 years now and has already supplied a wide range of air intake systems for new projects and retrofitting of existing rail vehicles. We are able to offer you the right solution, taking into consideration the specific applications and design limits.

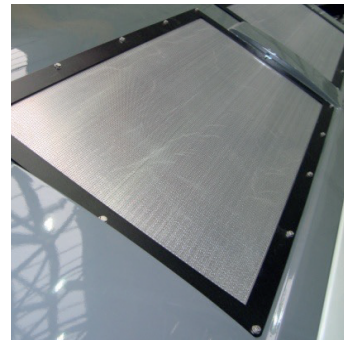
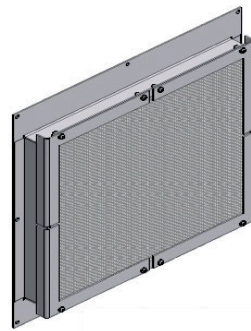
TECHNICAL DATA:



FUNCTIONAL PRINCIPLE / SERVICE LIFE

These snow filters are produced from a very sturdy, water-repellent aluminium mesh and fixed in an aluminium frame. This ensures that snow cannot penetrate and the filter is almost impossible to block.

Just like a ventilation grille, the air flow is channelled around many curves. Snow crystals, dust particles and water droplets get filtered out in the bends.



Dust filter class DIN EN 799	comparable to G2
Initial pressure difference at 1 m/s	80 Pa
Medium degree of separation with snow	80 %
Medium degree of separation with water	95 % (<2m/s)
Dimensions (height x width)	depending on customer requirements

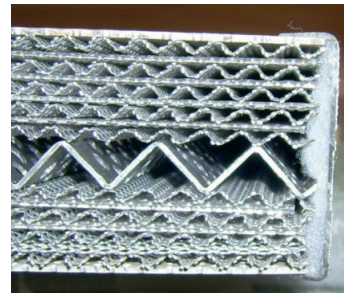


Fig.1: Travelling in light snowfall



Fig.2: Snow crystal