



*Kalsep's JET filter is an Inline filter without moving inner parts. The patented design allows for nearly all materials, flow rates, and mounting positions.*

**ADVANTAGES**

- High backwash speed (up to 10 m/s)
- Any mounting position (horizontally / vertically)
- Simple installation (inline construction)
- Low wear (no movable parts in the filter)
- Low backwash water loss
- No increase in differential pressure during the filtering process
- Wide range of materials
- Ready-made cabling
- Special design possible on customer's request

**OUR FILTER SYSTEMS PROTECT**



Plate Heat Exchangers



Spray Nozzles



Piping Systems



Mechanical Seals



Pumps

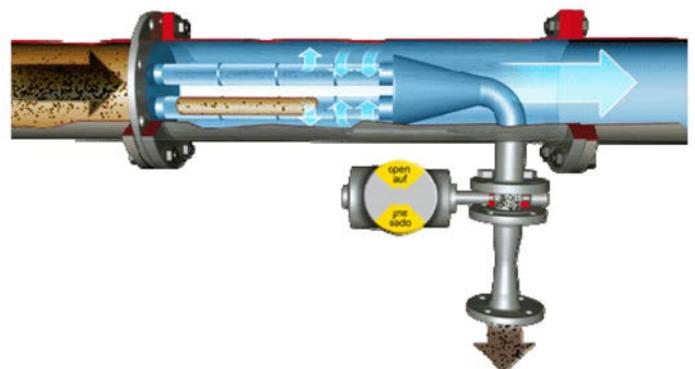


Micro Filtration

**MODE OF OPERATION**



**FILTRATION**



**BACKWASH**

The raw water enters the filter elements through the ports of the cartridge holding plate. The reduction of the cross section leads to a proportional increase of the axial flow speed in the filter elements up to 5 - 7 m/s. At one end of the filter elements a conical common dirt collector is placed. According to the rule of Bernoulli the raw water filtration takes place in the last third of the filter elements. The raw water passes the filter elements from inside to outside. The cleaned water then passes the common collector and leaves the filter on the clean water side. Because of the axial flow speed of 5 - 7 m/s in the filter elements the dirt particles are discharged in the common collector. The backwash process is triggered off by the differential pressure (pressure difference between raw and clean water side). Additionally, an adjustable time lag relay in the electric control permits the start of the backwash process.

The filter cleaning starts off with the opening of the motor driven backwash valve. Now a small amount of raw water flows through the backwash port thereby flushing the dirt particles from the common collector out of the filter. During backwashing the axial flow speed in the filter elements is increased to up to 10 m/s. This high speed also contributes to cleaning the filter elements. Additionally, an under pressure in the filter elements is produced. This guarantees the elements' backwashing from outside to inside with clean water. After 10-20 seconds, the backwash process is finished and the backwash valve closes automatically. During backwashing the filtration process is not interrupted.

**JET FILTER (JET)**  
**Filtration in any position**



Inline filter without moving inner parts. The patented design allows for nearly all materials, flow rates, and mounting positions.

- flow rate 1 m<sup>3</sup>/h to 25,000 m<sup>3</sup>/h
- filter fineness ≥ 50 μm, ≤ 5 mm
- operating pressure 1.5 to 63 bar
- flange DN 50 to DN 3000
- manual/automatic backwash
- filter housing steel, stainless steel, plastic, glass-fibre-reinforced plastic (GRP)

**JET FILTER S (JET-S)**  
**Small and fine**



More compact, ready-mounted backwash filter for low flow rates. Universally applicable for practically all application areas.

- flow rate 1 m<sup>3</sup>/h to 25 m<sup>3</sup>/h
- filter fineness ≥ 50 μm
- operating pressure 1.5 to 10 bar
- threaded connection R 2"
- automatic/manual backwash
- filter housing stainless steel, plastic

