JET FILTER S

COMPACT AUTOMATIC FILTER WITHOUT ANY MOVING PARTS







JET FILTER S (JET-S)

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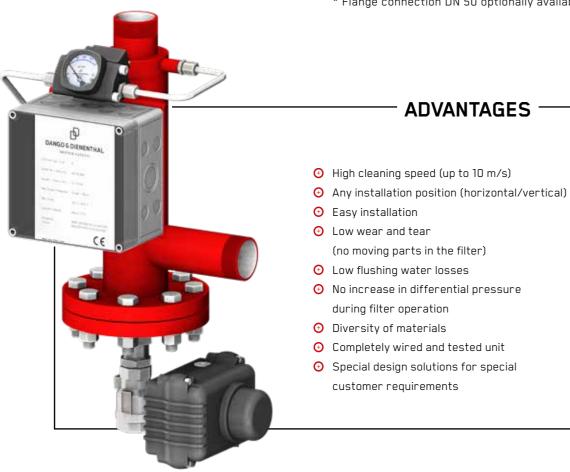
Due to its electronic controller, the JET Filter S is immediately ready for use as a complete module. The filter element can be exchanged without removing the filter. It is suitable for universal use in practically all areas of application.

Stainless steel, plastic
Stainless steel, plastic

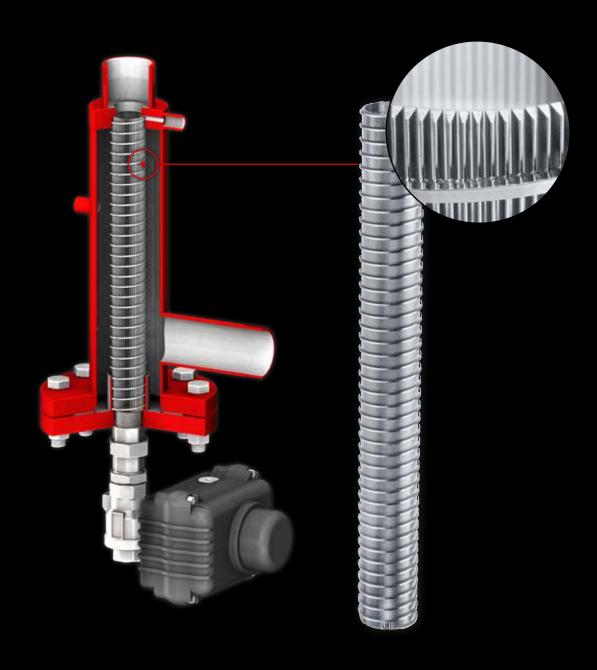
Special designs possible for filter housings and technical specifications. Feel free to contact us! We are happy to advise you.

TECHNICAL DATA	
Flow rate	Max. 125 m³/h
Filter fineness	≥ 50 µm
Operating pressure	1.5 to 25 bar
Pressure loss with clean filter	0.1 to 0.3 bar
Flanges	2"(*) to DN 150
Temperature	-10 to +110°C
Automatic cleaning	Yes

^{*} Flange connection DN 50 optionally available



FILTER ELEMENT



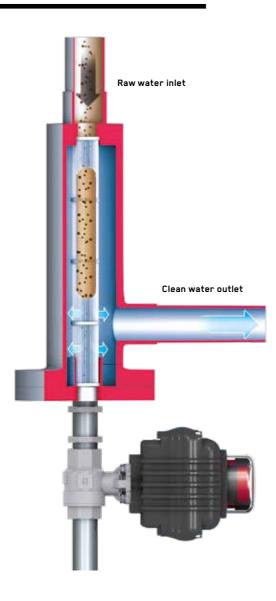
THE FILTER CARTRIDGE

- 6 Based on welded stainless steel triangular rods The filter elements have a long-lasting stainless
- Axial gaps for optimal filter element cleaning
- Highly robust design
- Can be manufactured in various stainless steel grades
- Filter fineness ≥ 50 μm

The filter elements have a long-lasting stainless steel design for maximum durability.

 2

FILTRATION



The raw water flows through the inlet opening, entering the filter element located behind it. The reductions in cross-section bring about a proportional increase in the axial flow velocity in the filter element of 5–7 m/s.

The raw water is filtered according to Bernoulli's law in the last third of the filter element. The raw water flows through the filter element from the inside to the outside. The clean water exits the JET Filter S through the clean water nozzle on the side of the filter.

The axial flow velocity in the filter element of 5–7 m/s guides the dirt particles into the dirt collection container. The filter backwash process is initiated by the differential pressure (the pressure difference between the raw and clean water side).

In addition, an adjustable timer in the electrical control system enables the filter backwash process.



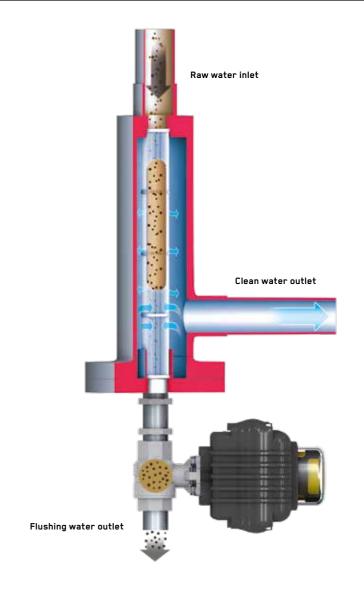
THE NEW DEFINITION OF PURITY FOR YOUR MEDIUM

- Cooling water
- River water
- Seawater & ballast water
- Sinter & scale water
- Process water
- Oils & emulsions
- Mussels & mussel larvae infested waters
- Drinking water
- Effluent water

OUR FILTER SYSTEMS PROTECT

- Plate heat exchangers
- Spray nozzles
- Piping systems
- Mechanical seals
- Pumps
- Microfiltration systems
- The environment
- Final products

BACKWASH PROCESS



At the start of filter cleaning, the motor-driven backwash valve opens. A small amount of the raw water then flows through the backwash opening. This flushes the dirt particles in the dirt collection container out of the filter. During backwashing, the axial flow velocity in the filter elements increases to up to 10 m/s. This high axial velocity additionally cleans the filter element. Furthermore, a vacuum is generated in the filter element, which guarantees that backwashing proceeds from the outside to the inside with clean water.

The backwashing process is complete after 10–20 seconds and the backwash valve is then closed automatically. Filtration is not interrupted during backwashing.

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FILTER COMPONENTS



DIFFERENTIAL PRESSURE MEASUREMENT

Comprising:

- Optical display for differential pressure
- Two preset switching contacts
- Start of filter flushing
- Alarm message



ELECTRICAL CONTROL SYSTEM

The backwash process is initiated depending on time and/or differential pressure, thereby enabling fully automatic filter operation.

The standard control system includes the following signal exchange with the customer process control system (PCS):

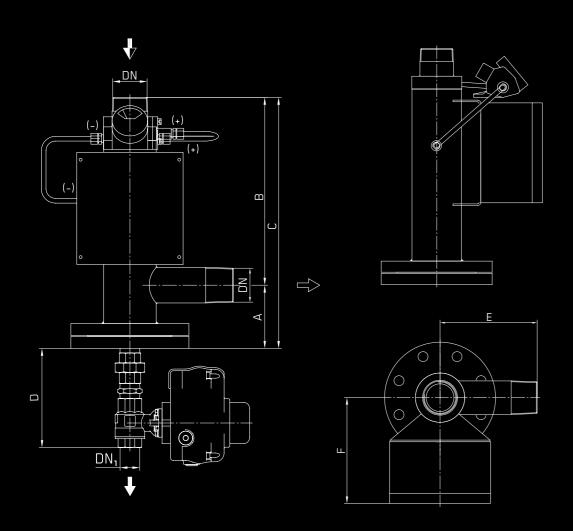
- Collective fault
- Ready for operation
- Filter in flushing mode
- External triggering of filter backwash
- External release for filter backwash

VENTURI NOZZLE WITH BACKWASH VALVE

The Venturi nozzle is designed to suit the customer's operating conditions to adjust the required flushing water quantity and to prevent pressure fluctuations in the pipe network. The backwash valve is equipped with an electric actuator as standard.



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TYPE/ DN	DIMENSIONS IN MM							WEIGHT IN KG
J.K	Α	В	С	D	E	F	DN ₁	
2″(*)	107	318	425	168	175	190	1″	24
80	182	340	522	185	180	203	1½″	40
100	172	470	642	185	200	203	1½″	43
150	222	584	806	185	225	230	1½″	62

^{*} Flange connection DN 50 optionally available

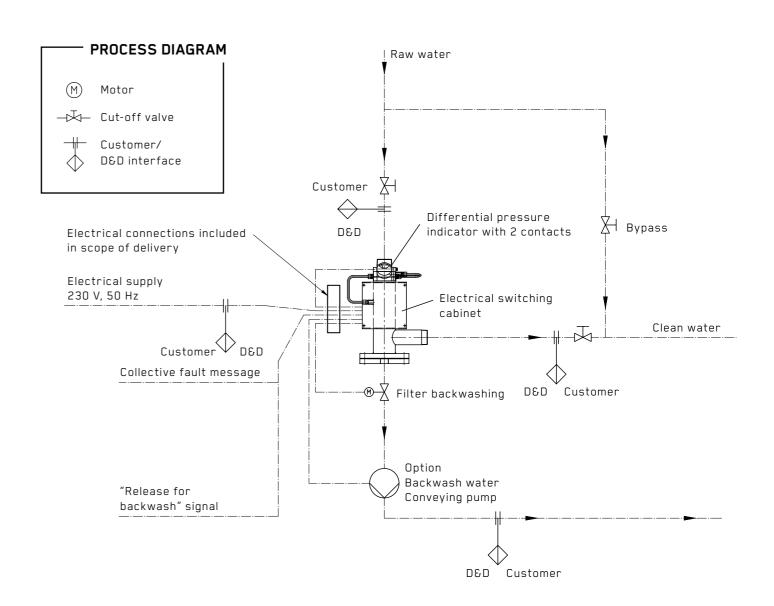
FILTER SIZE

The filter size depends on the throughput capacity, the filter fineness, the acceptable pressure drop, and the degree of contamination of the raw water.

NOW IT'S UP TO YOU

To prepare an offer, we request that you complete the filter project questionnaire and send it to us by e-mail. You can find this at:

www.dds-filter.com/en/downloads/



TECHNICAL INFORMATION

SCOPE OF DELIVERY

- Pressure Equipment Directive (PED)
- ASME*
- Differential pressure measurement
- O Differential pressure as 4-20 mA signal*
- Automatic filter control system
- Backwash with own medium
- Backwash with suction pump*
- * Available at extra cost

- Electrical flushing valve
- Signal exchange with PCS
- Cabling including plug
- Documentation
- Certificates*
- Function test at the manufacturer's factory

08

JET FILTER

POWER?

For higher flow rates, the Jet Filter is the perfect alternative to the JET Filter S. The JET Filter is an inline filter without any moving internal parts. In addition to its very high flow rate, its patented design allows for a high variety of materials and flexible installation in the pipeline.

	FILTER HOUSING
Galvanized steel, steel-coated	Standard design
GFRP, rubberized steel covering, stainless steel	Seawater-resistant design
PP, PE, PVC	Special design

Special designs possible for filter housings and technical specifications. Feel free to contact us! We are happy to advise you.

TECHNICAL DATA	
Flow rate	Max. 25,000 m³/h
Filter fineness	≥ 50 µm
Operating pressure	1.5 to 63 bar
Pressure loss with clean filter	0.1 to 0.3 bar
Flanges	DN 50 to 3,000
Temperature	-10 to +110°C
Automatic cleaning	Yes
Inline design	Yes



SHAPE BETTER VALUES

CLOSER. BETTER. SIMPLER.

We make sure that you get the filter that is perfectly suited to your application. Our engineering office will design the filter to match your operating parameters. This allows us to adapt our product to your specific use.



EXPERIENCED PARTNER

All DANGO & DIENENTHAL filters are handled by our specially qualified and regularly trained staff. Both our mechanical production and assembly departments have extensive expertise.



CERTIFIED TESTING

Our certified quality management system enables seamless monitoring and control of all production steps. This ensures early detection and troubleshooting, allowing us to offer you a high level of quality.



THE TEAM AT YOUR SIDE

If you require staff for training or maintenance at your company, don't hesitate to contact us. Our specially qualified employees will be happy to assist you.



IDEAL PRODUCTION CONDITIONS

We have been producing filters in our factory in Siegen, Germany, since 1941. Our continuously improved, state-of-the-art range of machinery and modern factory buildings provide an environment that is essential for manufacturing high-quality products.

WE ARE HERE TO ASSIST YOU

+49 271 401 4123 Or by e-mail: post@dds-filter.com

Monday-Friday: You can find us at the following address:

8:00 a.m. - 4:00 p.m. (CET) Hagener Str. 103

(except for holidays) 57072 Siegen, Germany

