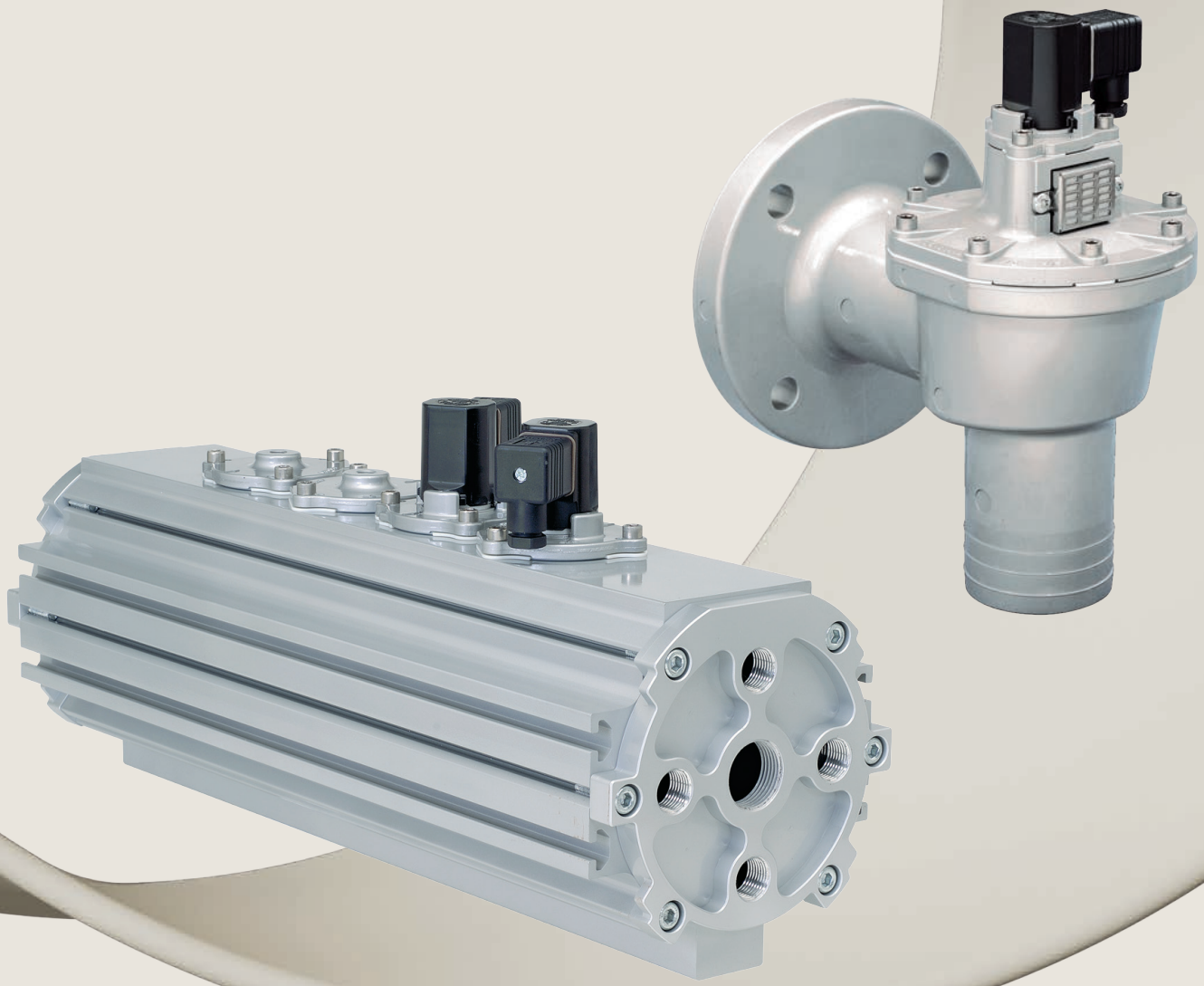
Fluid Control

Our product brands:

IMI Buschjost
IMI FAS
IMI Herion

Filter Technology
Reducing Compressed Air Usage



Breakthrough engineering for a better world

CONTENT

Breakthrough engineering for a better world

We create breakthrough solutions which accelerate the safety, reliability and performance of everyday processes. Our valves and complete system solutions control liquids and gases, enabling machine builders to improve design functionality and keep safety and sustainability at the forefront of innovation.

For over 80 years, we have helped our customers improve the reliability and efficiency of their machines for diverse end markets. Working in close customer partnership, we continuously push the boundaries of technology, offering a wide selection of components and tailored solutions. Meeting equipment manufacturers' needs includes everything from helping provide traceability for consumers, to reducing waste in critical resources and delivering a premium cup of coffee.

Through flexible, scalable and agile innovation, we help our customers solve their current challenges and create competitive advantage for the future.

Breakthrough engineering you can count on.

Filter technology in use

Filter technology includes product filters and dust filter systems. Filter technology originates in product filter systems that filter out the product from a stream of air or gas within manufacturing processes.

Pneumatic conveyor systems (pressure or vacuum systems) contain filter systems that separate the product from the air. Examples here are mill operations and the pharma and cement industry.

The importance of the dust filter system sector has increased over the past few years because of ever more stringent environmental requirements. Air and gases contaminated with dust may only be released into the environment following a filtration process.

In another process, dust filter systems support the reduction of harmful gases, as in the case of desulphurisation. Combustion air sucked in for gas turbines also has to be cleaned of the tiniest solid particles to prevent damage to the turbine blades.

The majority of filter systems are compressed-air cleaning filter systems with textile or cartridge filters. The filter elements are cleaned by blasting them with compressed air.

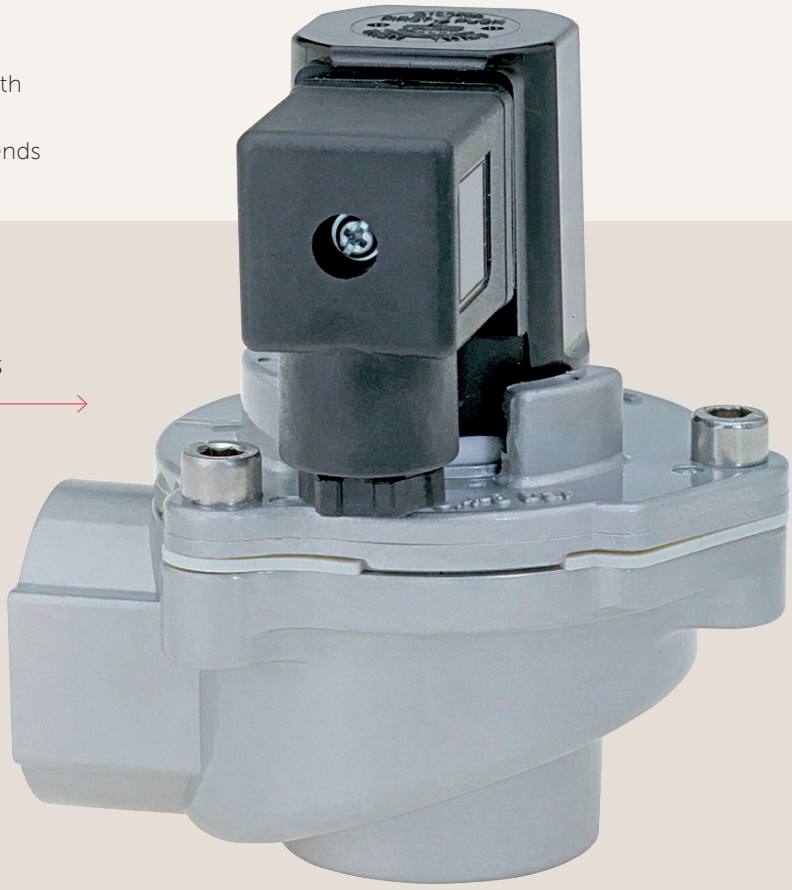
IMI Buschjost filter valves control this compressed air stream from a compressed air reservoir or tank. During the cleaning process, the compressed air stream not only cleans itself but also the secondary air drawn in with it (Venturi and Coandă-effect nozzles).

The choice of valves and storage systems used has a decisive impact on cleaning efficiency. IMI offers optimally designed valve solutions, supported by time-relay controls, differential pressure regulators, test line cleaners and other accessories.

Product Highlights:

- Media temperature –40 °C ... +80 °C
- Operating pressure 0,4 ... 8 bar
- Modular, flexible filter cleaning system
- Designed for the smallest filter systems
- Suitable for pulse cleaning and for flush cleaning with pressurised air
- Pulse duration is very short paying economic dividends

Short reaction times



High pressure peaks

Excellent perfusion

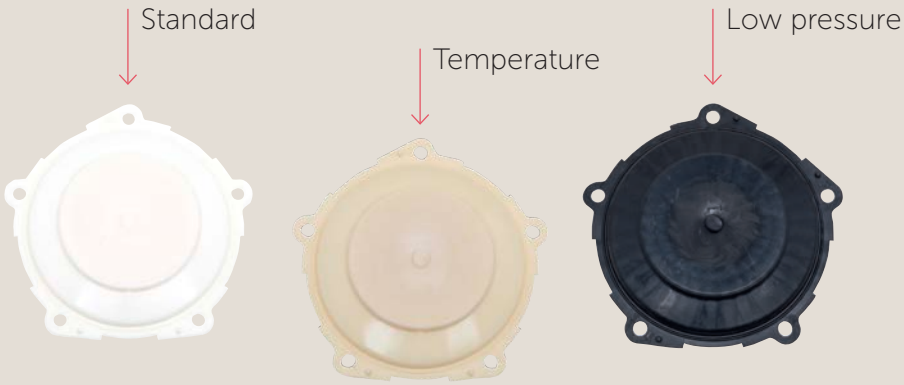
Low dust deposits

Options & Variants

2/2-way valves
Series 82900/82910
- pilot operated
- DN 20 ... 80,
- G3/4 ... 3,
- 3/4 ... 2 1/2 NPT

2/2-way valves
Series 82960/82970
- solenoid pilot operated
- DN 20 ... 80,
- G3/4 ... 3,
- 3/4 ... 2 1/2 NPT

2/2-way valves
Series 83670 single stage
- solenoid pilot operated
- DN 25 ... 40



2/2-way valves
Series 83920
- solenoid pilot operated
- DN 80
- G3

Diaphragms
- Standard
- Temperature
- Low pressure

Control Units

Series 8349500.0000.xxxxx
- Valve controllers for industrial filters
- Number of valves: 1 ... 8

Masterversion

Series 83491xx.0000.xxxxx
- Valve controllers for industrial filters
- Number of valves: 16 (with expansions max. 64)

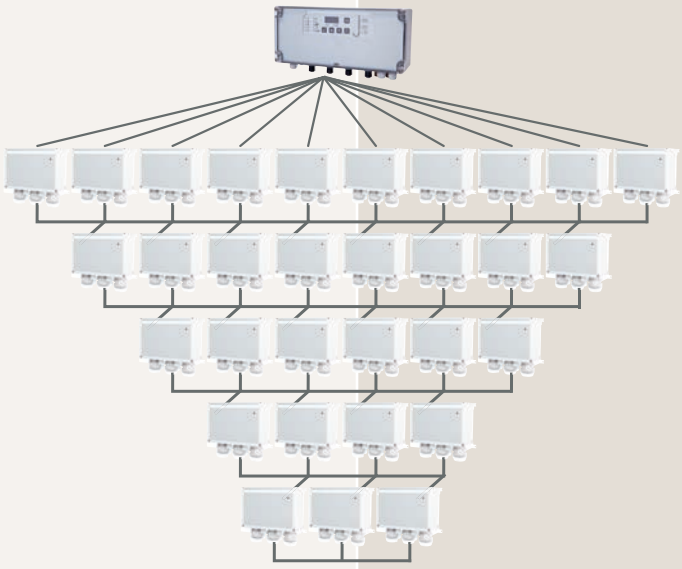
Slaveversion

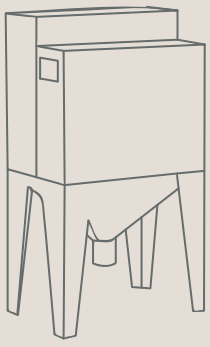
Series 82870
- Internal thread P=G1/8, Z=G1/4
- Protection class:
- Ex II 2 GD c II B T85°C
- Ex I M2c

Pneumatic controllers, pneumatically actuated

Features:

- Up to 512 valves are controlled
- Simple to operate
- Minimized training requirements
- Safety
- International deployable





Up to 576 valves.

Systems for Dust Collectors with integrated Filter Valves

IMI is now offering a particularly compact filter cleaning system from IMI Buschjost with a modular design that can be adapted to customer requirements.

The high quality system solution meets all current guidelines and makes the customers' need to build expensive tanks redundant.

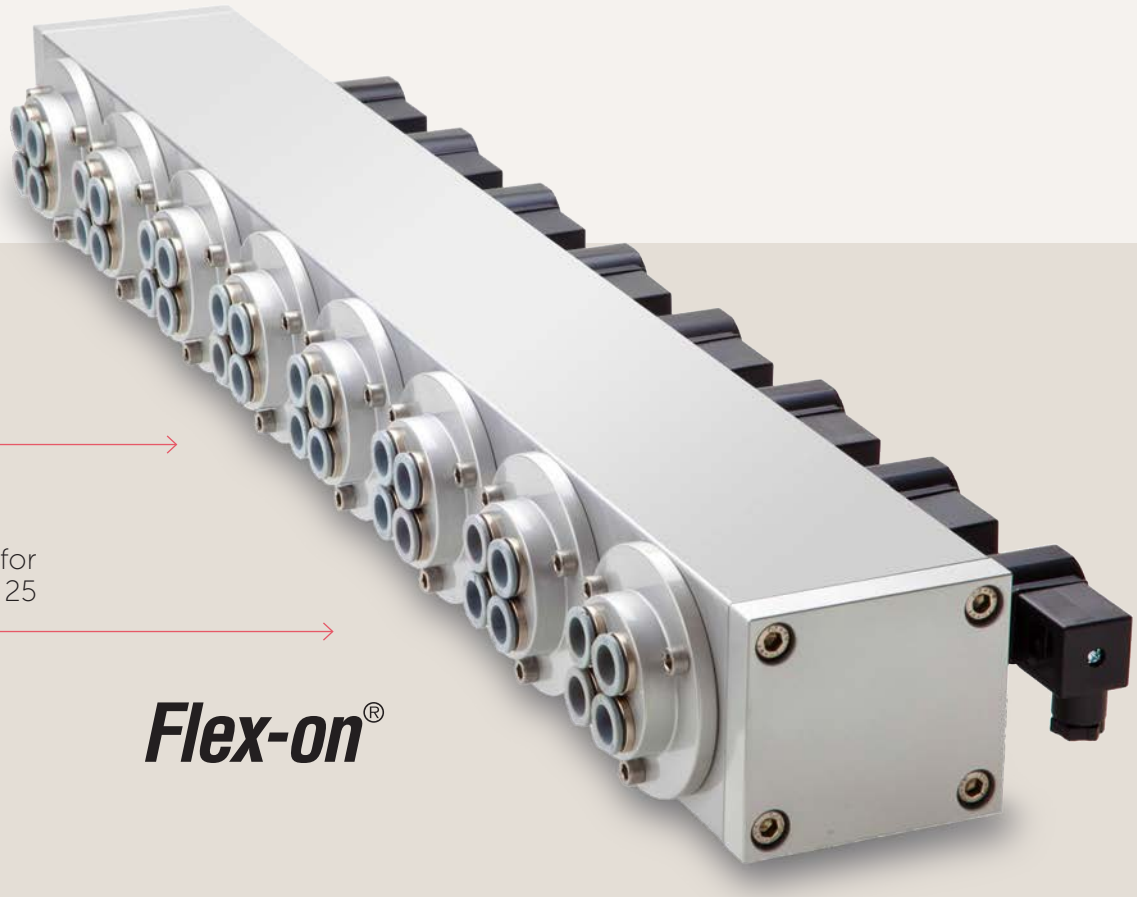
As a matter of fact, filter systems around the world need to become more and more efficient. For this reason IMI extends its IMI Buschjost 6" Flex-on® filter cleaning system by a 3" version that has a smaller footprint but the ability to serve the same range of applications. This tank system is modular, flexible and designed for the smallest filter systems. It allows customers to easily stay abreast of increasing environmental demands.

The compact filter cleaning systems is based on a tank with a maximum length of 2,000 mm and a diameter of 75 mm. Manufactured from aluminium alloy, the smooth surface allows impurities and dust deposits to be removed extremely easily. And unlike steel tanks, the high quality material cannot corrode. But there are even more customer benefits: expensive tank construction can be avoided, with the customer receiving a tailor-made system shortly after drawing approval.

This system is manufactured in high quality at our German production site and delivered with a letter of conformity in accordance with Pressure Equipment Directive (PED), Category 1.

The filter cleaning system is designed for valve sizes up to DN 25. Special valves with a variety of characteristics are also available, allowing the system to be equally suitable for pulse cleaning and for flush cleaning with pressurised air. The filter cleaning system works reliably with no loss of pressure or leakage at media temperatures between −40 °C ... +80 °C.

The operating pressure range is 0.4 and 8 bar. Apart from filter valves and blowpipes, the filter cleaning system can also be equipped with a control box or peripheral devices such as feed and drainage valves, monometer or a measurement line cleaner, depending on the field of use. Integrated filter ventilation valves with high performance diaphragms ensure short reaction times, high pressure peaks and excellent perfusion. Due to the extremely short response times of the diaphragms, the pulse duration is very short, saving expensive pressurised air and quickly paying economic dividends.



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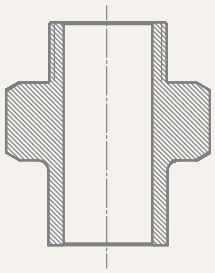
(Example)

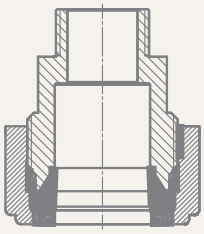
Ø 75 mm for
valves DN 25

Flex-on®

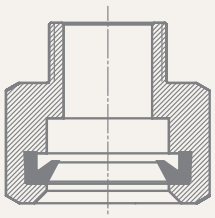
Connections



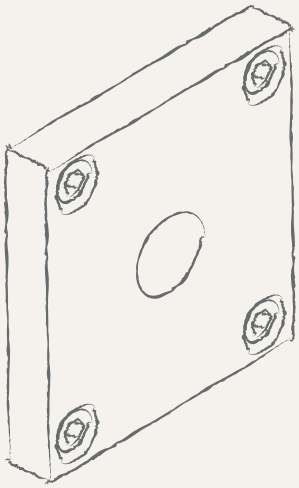
Hose connection



Plug connection



Crimp connection



Filter Cleaning System

- Connection G 1/2 resp. 1/2 NPT (condensate drain, pressure gauge, pressure switch etc.)

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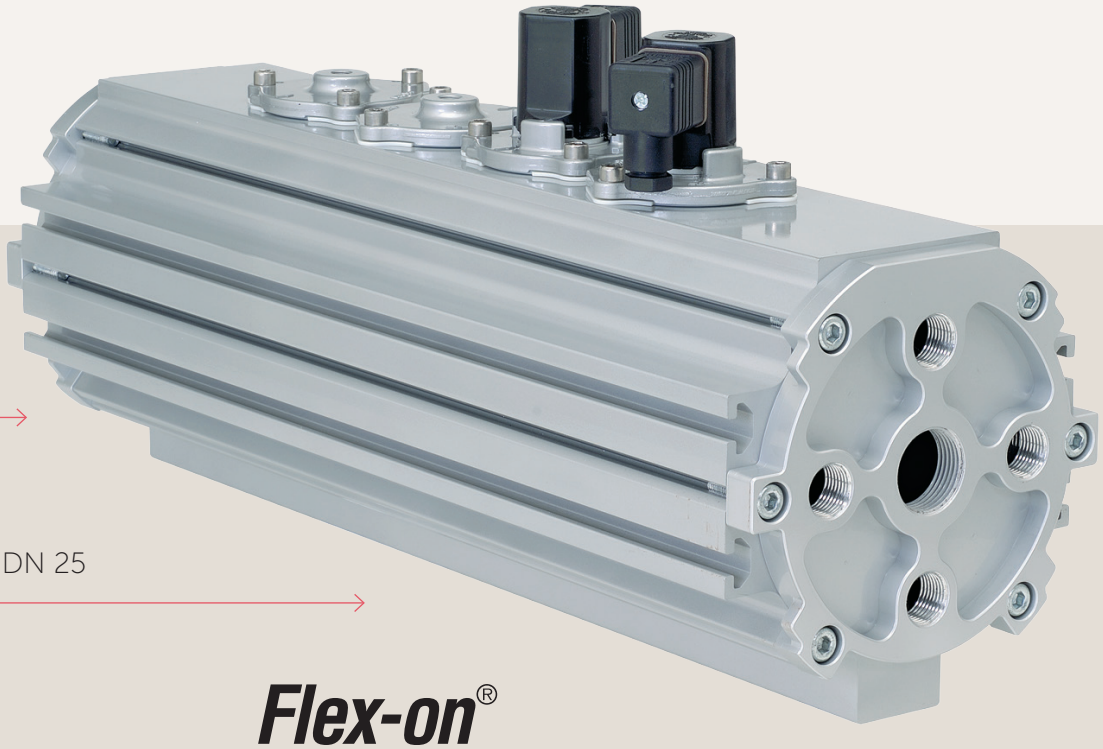
(Example)

Ø 135 mm for valves DN 25



Flex-on®

IMI operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Brazil, China, the Czech Republic, Germany, India, Mexico, Switzerland, the UK and the USA.

Supported by distributors worldwide.

For further information, scan this QR code or visit

www.imiplc.com

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IMI FAS
IMI Herion

Due to our policy of continuous development, IMI reserves the right to change specifications without prior notice.

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IMI