DUST FILTER VALVES
YOU CAN SEE OUR THINKING

ENGINEERING ADVANTAGE

SPEED SAVES ENERGY
LONG LIFETIME
MAINTENANCE FRIENDLY
HIGH GRADE MATERIALS
CE-MARK
DESIGNED WITH NEWEST CAD-TECHNOLOGIES

Twist-on®
ONE-PIECE DIAPHRAGM TPE

INTRODUCING THE INNOVATIVE DUST FILTER VALVE
IT HAS BEEN A LONG ROAD FROM THE WORKSHOP FOR ELECTRIC MOTORS ESTABLISHED IN 1933 BY FRIEDRICH BUSCHJOST TO THE GLOBAL PLAYER OF TODAY. WE HAVE BEEN PRODUCING SOLENOID VALVES SINCE 1953. AS A SUBSIDIARY OF IMI WITH ITS GLOBAL OPERATIONS, WE ARE A MARKET LEADER IN PROCESS VALVES.

WE LINK EMPLOYEES ACROSS BORDERS, WE COMBINE PRODUCTS AND KNOW-HOW TO OFFER SOLUTIONS THAT OPTIMIZE THE PRODUCTS AND BUSINESS RESULTS OF OUR CUSTOMERS. WE CALL IT THE „ENGINEERING ADVANTAGE“.

Proximity makes our company fast and flexible. At Buschjost, everything is under one roof: product development with modern laboratories, production, toolmaking and prototyping, fully automatic inspection facilities - in short, everything you need to develop in pioneering directions. 330 employees ensure that all of the processes are perfectly coordinated. Buschjost is known on the market as a leader in technology and innovation and also for setting standards in terms of quality. We see each and every customer as a partner and we operate a very consistent staffing policy.

→ HIGH PERFORMANCE PRODUCTS
Our large, world-class portfolio of fluid and motion control products gives them reliable and powerful technology.

→ EXCEPTIONAL LOCAL SERVICE
Our sales and service teams have a local presence in 75 countries, giving customers access to our technology and expertise, wherever they are.

→ INNOVATION & TECHNICAL EXCELLENCE
Our expertise and specialist teams give them unique solutions which solve their engineering challenges and improve performance.
A number of technologies to clean dust filters effectively and inexpensively are available. One of the most efficient is the air-blasting technique. The basic principle is straightforward. A short, intense pulse of air blasts into the soiled filter element. Dust and loose dirt from the filter fall to the ground and can be removed from there. Following the short cleaning cycle the filter is ready and the filter system can again operate at full capacity.

Filter valves for air-blasting have been developed to allow efficient and inexpensive cleaning. Top priorities in the developers’ requirements specification were to optimise the filter cleaning, reduce air consumption and prolong the valves’ service life. To achieve optimum cleaning with the compressed air pulse, the pressure in the filter has to reach the set point very quickly. This means that the valves must open fully within a few milliseconds. Compared with the previous models, this filter valve series has extremely fast opening times, which are essential for effective, intensive cleaning. The closing mechanism is just as fast as the opening mechanism. This determines the economical operation of a valve. The air pulse must return to zero as quickly as possible, as any minor delay will only consume air and cost money.

**PRODUCT HIGHLIGHTS:**

- HIGH GRADE MATERIALS
- SOLENOID EXCHANGEABLE WITHOUT TOOLS (TWIST-ON®)
- CE-MARK
- OPTIMIZED STRENGTH
- DESIGNED WITH NEWEST CAD-TECHNOLOGIES
- HIGH FLOW RATE
- ONE-PIECE DIAPHRAGM
- USABLE FROM -40 °C ... +140 °C
- HIGH CORROSION RESISTANCE (OPTIONAL)
- EXPLOSION PROOF UP TO HAZARDOUS AREA 1/21 AND TEMPERATURE CLASS T4/ T5
- USABLE FOR LOW PRESSURE- AND VACUUM APPLICATIONS
- INTEGRATED SILENCER
- FROST PROOF SOLENOID SYSTEM
- INTERNATIONAL REGISTRATIONS LIKE GOST-R OR CRN AVAILABLE
Environment
Lime Industry
Pharmaceutical Industry
Primary industry
Coal mining
Chemical Working Industry

Applications
The design of the housing geometry, the control holes and especially the diaphragm seal is impressive. \( K_v \) value is a determining factor of the flow rate and is considerably higher in this valve series. The \( K_v \) value of the G 1½ valve, for example, is approximately 30% higher than that of comparable standard models. Pressure-rise time is crucial in ensuring effective cleaning; the pulse of the valve reaches its maximum after a few milliseconds, letting the valve open around 25% faster than conventional dust filter valves. Reduced pressure rise times and an improved flow rate result in considerably stronger air pulses. This often allows the required operating pressure to be reduced, leading to not insignificant savings in operating costs.

In addition to the flow coefficient value in \( K_v \) and the pressure rise time, the pressure loss in the valve determines the quality and efficiency of a filter valve. The lower the pressure difference between the valve outlet and the pressure of the internal tank when the valve is 100% open, the lower the operating pressure can be. This has a positive effect on the energy balance of the equipment. Here, customers again feel the direct benefits of the use of modern simulation technologies. The pressure drop across the valve can be decreased by approximately 15%. All the valves in the series are equipped with a silencer.
OVERVIEW

- System for Dust Collector
- Operating pressure 0.4 ... 8 bar
- With integrated filter valves
- Aluminium / PA66
- For air
- “A” variable from 70 ... 800 mm
- Fluid temperature -40 ... +140 °C
- “L” maximum length 2.000 mm