BUSCHJOST®

Angle Seat Valves

IMI

Breakthrough Engineering

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Breakthrough Engineering for a Better World

Norgren is part of global engineering organisation IMI plc. IMI is at the forefront of delivering the solutions we need in a changing world and is focused on creating tremendous value by solving key industry problems in attractive markets and employing the best.

Norgren has a proud history of creating innovative engineering solutions in precise motion control and fluid technology, and we collaborate with our customers across more than 50 countries in critical areas such as Factory Automation, Material Handling, Rail, Energy, Process Control, Life Science and Commercial Vehicles.

From improving speed, productivity, reliability and efficiency of equipment, to generating significant energy and cost savings, or lowering total cost of ownership across many industries, Norgren's high-quality solutions are designed to help customers pursue progress, achieve new goals and overcome problems.

With market-leading industry expertise, we offer the capability, resources, engineering intelligence and global support infrastructure to tackle the largest project demands.

Our world-class portfolio of fluid and motion control products include Norgren, Bimba, Buschjost, FAS, Herion, Kloehn and Maxseal. Supplied either individually or combined into powerful customised solutions to meet customer needs.

Breakthrough engineering you can count on.

Breakthrough Engineering for a Better World


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Part no. Bestell-Nr. 8472400.0000
PA
0-5 bar
www.imi-precision.com
CE

Application fields of angle seat valves

Due to their robust design, pressure actuated angle seat valves are used in a wide variety of applications. Anywhere where a valve is demanded to deal with higher temperatures, aggressive, highly viscous or contaminated mediums a Buschjost angle seat valve is the first choice.

Despite the significant abilities of these valves, their mode of operation is simple: a pressurized neutral control medium such as air, water or nitrogen is filled into the actuator which moves the valve piston up or down thus opening or closing the valve.

In comparison to solenoid valves, pressure actuated angle seat valves demonstrate a distinctly higher closing force, can realize shorter switching cycles, and are approved for use in the Ex-area (area with potentially explosive atmosphere) without further safeguards.

Depending on the environment and the process fluid, the valve body is available in brass (CW617N) and stainless steel (1.4408). The pneumatically operated angle seat valves have a maintenance-free piston actuator.

There are two actuator sizes to select from in synthetic material, and two others in stainless steel / aluminium.

The multi-part, self adjusting packing seals the valve reliably and permanently against the operating fluid, ensuring high durability.

Buschjost angle seat valves make unpleasant water hammering a thing of the past as the medium flow itself is used for a damped closing of the valve. The inclined position of the valve seat to the flow direction allows superior flow characteristics.

When to use an angle seat pilot valve?

- When high flow rates are required
- When neutral pilot fluids like air or water are available
- When using highly viscous fluids – up to 600 mm^2/sec
- When very quick opening and closing time is required
- When using fluid with contamination
- When using water with strong lime
- When back pressure tightness is required
- When using in explosion proof areas

Angle seat valves

Series 84720

Brass body suitable for neutral gases and liquids

Series 84740

Stainless steel body suitable for aggressive gases and liquids

Polymer actuator
PA 66 with glass fibre 30%
Ø 50 mm

Series 84720

Model *1)	Port size *2)	Orifice (mm)	Operating pressure *3) (bar)
8472200.0000.00000	G1/2	15	0 ... 16
8472300.0000.00000	G3/4	20	0 ... 8
8472400.0000.00000	G1	25	0 ... 5

Series 84740

Model *1)	Port size *2)	Orifice (mm)	Operating pressure *3) (bar)
8474200.0000.00000	G1/2	15	0 ... 16
8474300.0000.00000	G3/4	20	0 ... 8
8474400.0000.00000	G1	25	0 ... 5

*1) Without pilot valve
*2) NPT available
*3) For gases and liquid fluids up to 600 mm^2/s (cSt)

Series 84500

Brass body suitable for neutral gases and liquids

Series 84520

Stainless steel body suitable for aggressive gases and liquids

Polymer actuator
PA 66 with glass fibre 30%
Ø 70 mm

Series 84500

Model *1)	Port size *2)	Orifice (mm)	Operating pressure *3) (bar)
8450200.0000.00000	G1/2	15	0 ... 16
8450300.0000.00000	G3/4	20	0 ... 10
8450400.0000.00000	G1	25	0 ... 10
8450500.0000.00000	G1 1/4	32	0 ... 7
8450600.0000.00000	G1 1/2	40	0 ... 4,5
8450700.0000.00000	G2	50	0 ... 3

Series 84520

Model *1)	Port size *2)	Orifice (mm)	Operating pressure *3) (bar)
8452200.0000.00000	G1/2	15	0 ... 16
8452300.0000.00000	G3/4	20	0 ... 10
8452400.0000.00000	G1	25	0 ... 10
8452500.0000.00000	G1 1/4	32	0 ... 7
8452600.0000.00000	G1 1/2	40	0 ... 4,5
8452700.0000.00000	G2	50	0 ... 3

*1) Without pilot valve
*2) NPT available
*3) For gases and liquid fluids up to 600 mm^2/s (cSt)

Series 82180/82580

Brass body suitable for neutral gases and liquids

Series 82380

Stainless steel body suitable for aggressive gases and liquids

Stainless steel and aluminium actuator Ø 70 mm

Series 82180/82580

Model *1)	Port size *3)	Orifice (mm)	Operating pressure *4) (bar)
8218200.0000.00000	G1/2	15	0 ... 16
8218300.0000.00000	G3/4	20	0 ... 10
8218400.0000.00000	G1	25	0 ... 10
8218500.0000.00000	G1 1/4	32	0 ... 7
8218600.0000.00000	G1 1/2	40	0 ... 4,5
8218700.0000.00000	G2	50	0 ... 3
8258200.0000.00000 *2)	G1/2	15	0 ... 10 *5)
8258300.0000.00000 *2)	G3/4	20	0 ... 10 *5)
8258400.0000.00000 *2)	G1	25	0 ... 10 *5)
8258500.0000.00000 *2)	G1 1/4	32	0 ... 10 *5)
8258600.0000.00000 *2)	G1 1/2	40	0 ... 10 *5)
8258700.0000.00000 *2)	G2	50	0 ... 7 *5)

Series 82380

Model *1)	Port size *3)	Orifice (mm)	Operating pressure *4) (bar)
8238200.0000.00000	G1/2	15	0 ... 16
8238300.0000.00000	G3/4	20	0 ... 10
8238400.0000.00000	G1	25	0 ... 10
8238500.0000.00000	G1 1/4	32	0 ... 7
8238600.0000.00000	G1 1/2	40	0 ... 4,5
8238700.0000.00000	G2	50	0 ... 3

*1) Without pilot valve
*2) 0000 = without pilot valve,
0247 = with pilot valve for V d.c.,
0247 = with pilot valve for V a.c.,
xxxxx Please insert voltage and frequency codes
*3) NPT available (not for series 82580)
*4) For gases and liquid fluids up to 600 mm^2/s (cSt)
*5) For gases and liquid fluids up to 400 mm^2/s (cSt)

Series 82280

Brass body suitable for neutral gases and liquids

Series 82480

Stainless steel body suitable for aggressive gases and liquids

Stainless steel and aluminium actuator Ø 125 mm

Series 82280

Model *1)	Port size *2)	Orifice (mm)	Operating pressure *3) (bar)
8228200.0000.00000	G1/2	15	0 ... 25
8228300.0000.00000	G3/4	20	0 ... 25
8228400.0000.00000	G1	25	0 ... 25
8228500.0000.00000	G1 1/4	32	0 ... 16
8228600.0000.00000	G1 1/2	40	0 ... 10
8228700.0000.00000	G2	50	0 ... 10

Series 82480

Model *1)	Port size *2)	Orifice (mm)	Operating pressure *3) (bar)
8248200.0000.00000	G1/2	15	0 ... 40
8248300.0000.00000	G3/4	20	0 ... 40
8248400.0000.00000	G1	25	0 ... 25
8248500.0000.00000	G1 1/4	32	0 ... 16
8248600.0000.00000	G1 1/2	40	0 ... 10
8248700.0000.00000	G2	50	0 ... 10

*1) Without pilot valve
*2) NPT available
*3) For gases and liquid fluids up to 600 mm^2/s (cSt)

Options & Accessories

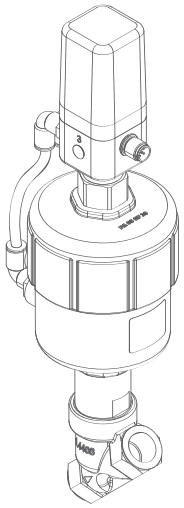
Options

- Normally closed
- Normally open
- Higher operating pressure
- Electrical position indicator with 2 micro switches
- Double acting

Further options on request ...

Accessories

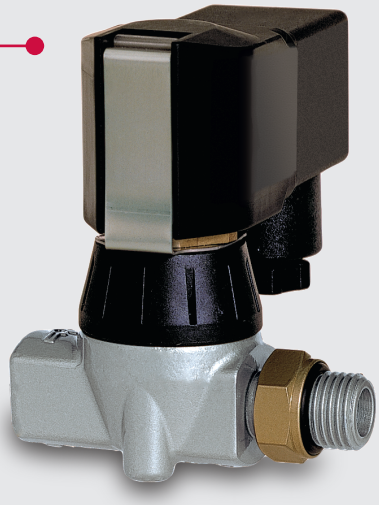
- With or without 3/2-way control valve (see data sheet N/en 5.8.640)
- NAMUR adapter plate for upgrade
- Proportional valve
- Positional control
- Regulating cone



Complementary products

There are a number of recommended options for operating our angle seat pilot valves:

3/2-way pilot valve



Pilot valve for doubleacting actuators

3/2-way pilot valve stainless steel

On multiple valve applications why not consider a valve island from the VM or VS range?

Contact your local sales agent for fur ther details.

Range of applications

Where our product integrates:

- Grinding/milling machine
- Dosing machines
- Surface treatment
- Processing bulk materials
- Packaging
- Injection moulding
- Foaming machines
- Textiles
- Compression moulding for chipboard coating
- Printing technology
- Washing systems
- Cooking boiler systems
- And many more...