Valves for Water & More

Pilot control separated from the medium

High quality materials

Good corrosion resistance

Engineering GREAT Solutions
Engineering GREAT solutions through people, products, innovation and service

IMI Precision Engineering is a world-leader in fluid and motion control. Building close, collaborative relationships with our customers, we gain a deep understanding of their engineering needs and then mobilise our resources and expertise to deliver distinctive products and solutions.

Wherever precision, speed and engineering reliability are essential, our global footprint, problem-solving capability and portfolio of high performance products enables us to deliver GREAT solutions which help customers tackle the world’s most demanding engineering challenges.

> Reliability
We deliver and support our high quality products through our global service network.

> High performance products
Calling on a world-class portfolio of fluid and motion control products including IMI Norgren, IMI Buschjost, IMI FAS, IMI Herion and IMI Maxseal. We can supply these singly, or combined in powerful customised solutions to improve performance and productivity.

> Partnership & Problem Solving
We get closer to our customers to understand their exact challenges.
Water & More

Valves for water & more

Water is one of the most valuable resources on earth and treating and handling clean water responsibly is becoming increasingly crucial for consumers, the economy and governments. At IMI Precision Engineering, we have long operated in the market with awareness of its status as a critical and scarce resource.

Our magnetically driven diaphragm valves, made from brass, stainless steel and plastic, are the ideal choice for this medium and frequently used to channel incoming water or to control flow during the water treatment process.

Moreover, the materials used in the magnetic valves also meet the tightened requirements imposed by the EC Drinking Water Directive of 1 December 2013 with lead content reduced to 10µg/l, while the gasket materials tested in line with KTW recommendations ensure the valves remain ideally suited for deployment in conventional drinking water installations.

Our magnetic valves, developed in-house via a direct-operated approach, control the flow of water and steam in coffee machines, which is crucial for the famous selection of espresso, latte and macchiato drinks you enjoy. During regular servicing, these same valves also dispense cleaning agent and descaler; helping ensure coffee quality is maintained as well as meeting all relevant hygiene standards (Directive on Food). Incidentally, the design of the valve housing and the choice of PPSU for the housing material reduce the calcification risk to such an extent that the maintenance cycle can be extended 2-3 times longer than other comparable valves – tangible added value for our customers.

Further uses of IMI Buschjost valves include control and regulation in industrial settings, e.g. tempering of injection moulding machines up to the production of ultra-pure water for the semi-conductor and pharmaceutical industries. Naturally, conventional shut-off functions within piping are also provided securely and reliably by these magnetically driven diaphragm valves.

Product highlights:

- Good corrosion resistance
- Pilot control separated from the medium (optional)
- Not affected by limescale formation
- Various options available
- Approvals: NSF, KTW, FDA
- Compliance with the EC Drinking Water Directive

Functional compact design

High flow rate

Click-on®

NSF approval

Damped operation

Valves for water & more
## Valves for water treatment

<table>
<thead>
<tr>
<th>Series</th>
<th>Type</th>
<th>Operation</th>
<th>Orifice (mm)</th>
<th>Fluid temp. (Max.)</th>
<th>Pressure range</th>
<th>Material body</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>82610</td>
<td>Seat valves</td>
<td>Directly solenoid actuated</td>
<td>DN 1.5 ... 5</td>
<td>110°C</td>
<td>0 ... 40 bar</td>
<td>Stainless steel (1.4408)</td>
<td>Optimized opening and closing time</td>
</tr>
<tr>
<td>82560</td>
<td>Diaphragm valves</td>
<td>Solenoid actuated, with forced lifting</td>
<td>DN 10</td>
<td>90°C</td>
<td>0 ... 10 bar</td>
<td>Stainless steel (1.4408), PA 66</td>
<td>Compact design by high flow rate</td>
</tr>
<tr>
<td>82730</td>
<td>Diaphragm valves</td>
<td>Indirectly solenoid actuated</td>
<td>DN 8 ... 50</td>
<td>90°C</td>
<td>0.1 ... 16 bar</td>
<td>Stainless steel (1.4408)</td>
<td>Optional: Medium isolated by pilot control</td>
</tr>
<tr>
<td>82590</td>
<td>Diaphragm valves</td>
<td>Solenoid actuated, with forced lifting</td>
<td>DN 8 ... 50</td>
<td>90°C</td>
<td>0 ... 16 bar</td>
<td>Stainless steel (1.4408)</td>
<td>For systems with low or fluctuating pressure</td>
</tr>
<tr>
<td>82080</td>
<td>Seat valves</td>
<td>Directly solenoid actuated</td>
<td>DN 3 ... 8</td>
<td>110°C</td>
<td>0 ... 7 bar</td>
<td>PVDF</td>
<td>Sleeve area insulated via PTFE bellows</td>
</tr>
<tr>
<td>83150</td>
<td>Seat valves</td>
<td>Directly solenoid actuated</td>
<td>DN 2.5 ... 4.5</td>
<td>125°C</td>
<td>0 ... 12 bar</td>
<td>PPSU (Polyphenylsulfone)</td>
<td>For materials in contact with media FDA and WRAS certified</td>
</tr>
<tr>
<td>8590440</td>
<td>Seat valves</td>
<td>Directly solenoid actuated</td>
<td>DN 2.2 ... 2.5</td>
<td>125°C</td>
<td>0 ... 16 bar</td>
<td>PPSU (Polyphenylsulfone)</td>
<td>For materials in contact with media FDA and WRAS certified</td>
</tr>
</tbody>
</table>
# Valves for drinking water applications

<table>
<thead>
<tr>
<th>Series</th>
<th>Type</th>
<th>Operation</th>
<th>Orifice (mm)</th>
<th>Fluid temp. (Max.)</th>
<th>Pressure range</th>
<th>Material body</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>82510</td>
<td>Seat valves</td>
<td>Directly solenoid actuated</td>
<td>DN 1,5 ... 5</td>
<td>90°C</td>
<td>0 ... 40 bar</td>
<td>Brass (CW617N)</td>
<td>Optimized opening and closing time</td>
</tr>
<tr>
<td>82530</td>
<td>Diaphragm valves</td>
<td>Solenoid actuated, with forced lifting</td>
<td>DN 10</td>
<td>90°C</td>
<td>0 ... 10 bar</td>
<td>Brass (CW617N, PA 66)</td>
<td>Compact design by high flow rate</td>
</tr>
<tr>
<td>82400</td>
<td>Diaphragm valves</td>
<td>Indirectly solenoid actuated</td>
<td>DN 8 ... 50</td>
<td>90°C</td>
<td>0,1 ... 16 bar</td>
<td>Brass (CW617N)</td>
<td>Optional: Medium isolated by pilot control</td>
</tr>
<tr>
<td>82540</td>
<td>Diaphragm valves</td>
<td>Solenoid actuated, with forced lifting</td>
<td>DN 8 ... 50</td>
<td>90°C</td>
<td>0 ... 16 bar</td>
<td>Brass (CW617N)</td>
<td>For systems with low or fluctuating pressure</td>
</tr>
<tr>
<td>84070</td>
<td>Diaphragm valves</td>
<td>Indirectly solenoid actuated</td>
<td>DN 12 ... 20</td>
<td>50°C</td>
<td>0,3 ... 10,5 bar</td>
<td>PPO GF 30</td>
<td>High-grade plastic valves</td>
</tr>
<tr>
<td>83150</td>
<td>Seat valves</td>
<td>Directly solenoid actuated</td>
<td>DN 2,5 ... 4,5</td>
<td>125°C</td>
<td>0 ... 12 bar</td>
<td>PPSU (Polyphenylsulfone)</td>
<td>For materials in contact with media</td>
</tr>
<tr>
<td>8590440</td>
<td>Seat valves</td>
<td>Directly solenoid actuated</td>
<td>DN 2,2 ... 2,5</td>
<td>125°C</td>
<td>0 ... 16 bar</td>
<td>PPSU (Polyphenylsulfone)</td>
<td>For materials in contact with media</td>
</tr>
</tbody>
</table>
Special solutions

2/2-way valves
8499984.0000.00000
> Special diaphragm valves DN 8
> Wetted sealing materials
> Drinking water safe
> Compliance with KTW recommendations and DVGW worksheet

2/2-way valves
8499986.8264.XXXXX
> Special bellows valves DN 4,5
> Wetted sealing materials
> Drinking water safe
> Compliance with KTW recommendations and DVGW worksheet
> Sleeve area insulated
> Valves withstand up to 10 bar of counter-pressure

2/2-way valves
8590005.8264.XXXXX
> Special bellows valves DN 3,5
> Vent hole & sleeve area insulated
> Valves withstand up to 10 bar of counter-pressure
> Also available in stainless steel

Operating pressure
-0,9 ... 6 bar

Operating pressure
0 ... 1,5 bar

Operating pressure
0 ... 3 bar
2/2-way valves
8499985.8083.XXXXX
- Special diaphragm valves DN 5
- Wetted sealing materials
- Drinking water-safe
- Compliance with KTW recommendations and DVGW worksheet
- Sleeve area insulated

2/2-way valves
8591003.8476.XXXXX
- Special diaphragm valves DN 25
- Wetted sealing materials
- Drinking water-safe
- Compliance with KTW recommendations and DVGW worksheet
- Protected sleeve area by flat diaphragm

4-fold-valve-manifold
8590380.9840.XXXXX
- Seat valves DN 3,5

Operating pressure
0 ... 0,2 bar

Operating pressure
0 ... 3 bar

Please get in touch to find out more!
Special solutions

2-fold-solenoid-valve-manifold
859XXXX.XXXX.XXXXX
with integrated mixing nozzles
> Seat valves DN 2,5

2/2-way valves
84070XX.9101.XXXXX
> Diaphragm valves DN 12

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2-fold-solenoid-valve-manifold
859XXXX.XXXX.XXXXX
> Bellow valves DN 4,5
> Suitable for slightly aggressive media
> Seat seal FFPM
> Sleeve area insulated

Operating pressure
3 ... 8 bar

Operating pressure
0,1 ... 4,5 bar

Operating pressure
0,3 ... 10,5 bar
Valves with NSF-approval

PRO GF 30

High grade plastic

Valves with NSF-approval
Applications

Beverage dispense

- Coffeemachines
- Drinking water dispenser
- Vending machines
- Cold- & hot water devices and milk warmer
- Softdrink machines
- Cream & ice machines
Water treatment
- Discharge control
- Filtration plants
- Desalination of seawater
- Pumping stations

Water purification
- Treatment
- Ventilation
- Dosing

Usable areas
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