Filter catalogue

+49 (0) 1802 28 72 45 678

www.imi-precision.com
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SINGLE VALVES
SINGLE VALVES (SINGLE STAGE)
VALVES FOR TANK MOUNTING
FLANGE VERSIONS

SYSTEMS FOR DUST COLLECTORS

MICROCONTROLLER-OPERATED
VALVE CONTROLLERS
VALVE CONTROLLERS
DIFFERENTIAL PRESSURE TRANSDUCERS
DIFFERENTIAL PRESSURE CONTROLLERS
PNEUMATIC CONTROLLERS

PURGE VALVES
PILOT VALVES
PULSE SOLENOIDS
SOLENOIDS
SERVICE KITS
SERVICE KITS SOLENOIDS

GENERAL PURPOSE FILTERS
FILTERS / REGULATORS
PNEUMATIC PRESSURE SWITCHES
IMPACT CYLINDERS
PUSH-IN FITTINGS
COMPRESSION FITTINGS
BSP AND HOSE FITTINGS

TECHNICAL INFORMATION
PRESSURE EQUIPMENT DIRECTIVE (PED)
KEY TO VALVE CATALOGUE NUMBERS
ATEX

GLOSSARY
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.
Applications

FILTER CLEANING SYSTEM

CONTROLLERS

SOLENOID PILOT OPERATED

PNEUMATIC CONTROLLER

REMOTE PILOT OPERATED
For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Applications

COAL LIME WORKS

COAL

STONE

STONE

MINE

MINE

CORNFLAKES

CORNFLAKES

TURBINE

TURBINE

PAINT

PAINT
For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Discover innovative dust collector valves from IMI Buschjost!

Comprehensive expertise, innovative ideas and experience from over 30 years of business activity go into the development and production of our IMI Buschjost dust collector valves.

Our valves and systems are used as part of product filtration, for example, in milling operations or in the pharmaceutical industry. In pneumatic delivery systems, they control processes through which milled material or medicinal products are filtered out of the air stream.

In dust-extraction facilities, filter solutions ensure that contaminated air does not get into atmosphere and pollute the environment. This takes place, for example, by means of the air blasting technique. The filter elements to be cleaned are inflated by a brief but intense pressure surge with the result that dirt and dust particles are released and fall to the floor, from where they are carried away.

To realise an optimum cleaning outcome, the pressure impulse in the filter element must achieve the target value as quickly as possible – the valves therefore have to open fully within a few milliseconds. The closing operation requires similarly rapid reaction times. Only if the air impulse achieves the zero value as quickly as possible, it will be possible to avoid any unnecessary air consumption.

IMI Buschjost dust collector valves are fitted with high-quality TPE diaphragms to achieve the extremely fast opening and closing times. These work without any compression springs, and are reliable, robust and durable. The modified version is even suitable for use in aggressive environments.

No matter whether it is product filtration or dust filtration: We offer you high-quality valves and systems that are individually tailored to your filter system. As the user, you immediately benefit in a number of ways: compared with conventional dust collector valves, IMI Buschjost products impress with their significantly extended service life and maintenance intervals. They also work at higher operating pressures; this in turn has a positive impact on the cleaning outcome. Thanks to the rapid opening and closing times, you save compressed air – and ultimately operating costs.
FILTER HOUSE
<table>
<thead>
<tr>
<th>Page</th>
<th>Fast find guide</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Fast find guide</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>2/2-way valves DN 20 ... 80</td>
<td>8290/82910</td>
</tr>
<tr>
<td>17</td>
<td>2/2-way valves DN 20 ... 80</td>
<td>8290/82910</td>
</tr>
<tr>
<td>20</td>
<td>2/2-way valves DN 40 ... 80 (single stage)</td>
<td>8290/82910</td>
</tr>
<tr>
<td>22</td>
<td>2/2-way valves DN 40 ... 80 (single stage)</td>
<td>8296/82970</td>
</tr>
<tr>
<td>25</td>
<td>2/2-way valves DN 20 ... 40</td>
<td>8330/83310</td>
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<td>32</td>
<td>2/2-way valves DN 25 ... 65</td>
<td>83920</td>
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<td>35</td>
<td>2/2-way valves DN 80 (flange version)</td>
<td>83930</td>
</tr>
<tr>
<td>36</td>
<td>2/2-way valves DN 80 (flange version)</td>
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<tr>
<td>38</td>
<td>2/2-way valves DN 25 ... 40</td>
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<tr>
<td>40</td>
<td>2/2-way valves DN 25 ... 40</td>
<td>83670</td>
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For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.

82900/82910 2/2-way valves DN 20 ... 80 Remote pilot operated

82960/82970 2/2-way valves DN 40 ... 80 Solenoid pilot operated

83300/83310 2/2-way valves DN 20 ... 40 Remote pilot operated

83320 2/2-way valves DN 20 ... 40 Solenoid pilot operated

83930 2/2-way valves DN 25 ... 65 Remote pilot operated

83920 2/2-way valves DN 25 ... 65 Solenoid pilot operated

83640 2/2-way valves DN 25 ... 40 Remote pilot operated

83670 2/2-way valves DN 25 ... 40 Solenoid pilot operated

83640 2/2-way valves DN 40 ... 80 Remote pilot (single stage)

83930 2/2-way valves DN 80 (flange version) Remote pilot operated

83920 2/2-way valves DN 80 (flange version) Solenoid pilot operated
2/2-way valves, remote pilot operated
DN 20 ... 80, G3/4 ... 3, 3/4 ... 2 1/2 NPT

- High flow rate
- Clear, compact design
- One-piece diaphragm
- Easy to maintain

### Technical Data

- **Medium:** Air
- **Switching function:** Normally closed
- **Flow direction:** Determined
- **Mounting position:** Optional
- **Operating pressure:** 0.4 ... 7/8 bar
- **Port size:** G3/4, G1, G1 1/2, G2, G2 1/2, G3, 3/4 NPT, 1 NPT, 1 1/2 NPT, 2 NPT, 2 1/2 NPT
- **Pilot connection:** G1/8 resp. 1/8 NPT
- **Dusty gas temperature:** -20...+85°C (-4 ... 185°F)
- **Cleaning gas temperature:** -40...+85°C (-40 ... 185°F)
- **Ambient temperature:** -20...+85°C (-4 ... 185°F)

### Materials

- **Body:** Aluminium
- **Seat seal:** TPE

### Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Orifice (mm)</th>
<th>Valve length (mm)</th>
<th>Flow kv value *1) (m³/h)</th>
<th>Operating pressure (bar)</th>
<th>Weight (kg)</th>
<th>Model</th>
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<tbody>
<tr>
<td>82900/82910</td>
<td>G3/4</td>
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<td>18</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>0.32</td>
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<td></td>
<td>3/4 NPT</td>
<td>20</td>
<td>95</td>
<td>18</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>0.32</td>
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<tr>
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<td>G1</td>
<td>25</td>
<td>95</td>
<td>22</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>1 NPT</td>
<td>25</td>
<td>95</td>
<td>22</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>G1 1/2</td>
<td>40</td>
<td>135</td>
<td>59</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>0.97</td>
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<td>1 1/2 NPT</td>
<td>40</td>
<td>135</td>
<td>59</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>0.97</td>
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<td>G2</td>
<td>50</td>
<td>170</td>
<td>80</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>1.79</td>
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<td>2 NPT</td>
<td>50</td>
<td>170</td>
<td>80</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>1.79</td>
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<tr>
<td></td>
<td>G2 1/2</td>
<td>65</td>
<td>170</td>
<td>93</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>2.07</td>
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<tr>
<td></td>
<td>2 1/2 NPT</td>
<td>65</td>
<td>170</td>
<td>93</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>2.07</td>
</tr>
<tr>
<td></td>
<td>G3</td>
<td>80</td>
<td>239.5</td>
<td>144</td>
<td>0.4 ... 7</td>
<td>5.8 ... 101</td>
<td>3.7</td>
</tr>
</tbody>
</table>

*1) Cv-value (US) = kv value x 1.2

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
**Option selector**

<table>
<thead>
<tr>
<th>Thread form</th>
<th>Substitute</th>
</tr>
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<tbody>
<tr>
<td>ISO G</td>
<td>0</td>
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<tr>
<td>NPT</td>
<td>1</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
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</thead>
<tbody>
<tr>
<td>3/4</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>1 1/2</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>2 1/2</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Valve options</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>The resource materials and surfaces are free of silicone</td>
<td>33</td>
</tr>
<tr>
<td>Dusty version, without valve body</td>
<td>54</td>
</tr>
</tbody>
</table>

| Dusty gas temperature version |
| -20...+100°C (-4...+212°F) |
| Seat seal TPE, Ambient temperature |
| -40...+85°C (-40...+185°F) |
| Cleaning gas temperature |
| -20...+85°C (-4...+185°F) |

**Dimensions**

<table>
<thead>
<tr>
<th>Port size</th>
<th>B</th>
<th>H</th>
<th>H1</th>
<th>L</th>
<th>L1</th>
<th>T</th>
<th>T1</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>G3/4</td>
<td>80</td>
<td>61,5</td>
<td>39</td>
<td>95</td>
<td>50</td>
<td>16</td>
<td>10</td>
<td>8290300.0000.00000</td>
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<tr>
<td>3/4 NPT</td>
<td>80</td>
<td>61,5</td>
<td>39</td>
<td>95</td>
<td>50</td>
<td>14</td>
<td>10</td>
<td>8291300.0000.00000</td>
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<tr>
<td>G1</td>
<td>80</td>
<td>61,5</td>
<td>39</td>
<td>95</td>
<td>50</td>
<td>18</td>
<td>10</td>
<td>8290400.0000.00000</td>
</tr>
<tr>
<td>1 NPT</td>
<td>80</td>
<td>61,5</td>
<td>39</td>
<td>95</td>
<td>50</td>
<td>17</td>
<td>10</td>
<td>8291400.0000.00000</td>
</tr>
<tr>
<td>G1 1/2</td>
<td>124,5</td>
<td>122</td>
<td>91</td>
<td>135</td>
<td>70</td>
<td>22</td>
<td>10</td>
<td>8290500.0000.00000</td>
</tr>
<tr>
<td>1 1/2 NPT</td>
<td>124,5</td>
<td>122</td>
<td>91</td>
<td>135</td>
<td>70</td>
<td>18</td>
<td>10</td>
<td>8291500.0000.00000</td>
</tr>
<tr>
<td>G2</td>
<td>140</td>
<td>146</td>
<td>104</td>
<td>170</td>
<td>95</td>
<td>25</td>
<td>10</td>
<td>8290600.0000.00000</td>
</tr>
<tr>
<td>2 NPT</td>
<td>140</td>
<td>146</td>
<td>104</td>
<td>170</td>
<td>95</td>
<td>18</td>
<td>10</td>
<td>8291600.0000.00000</td>
</tr>
<tr>
<td>G2 1/2</td>
<td>140</td>
<td>160</td>
<td>115</td>
<td>170</td>
<td>95</td>
<td>25</td>
<td>10</td>
<td>8290700.0000.00000</td>
</tr>
<tr>
<td>2 1/2 NPT</td>
<td>140</td>
<td>160</td>
<td>115</td>
<td>170</td>
<td>95</td>
<td>24</td>
<td>10</td>
<td>8291700.0000.00000</td>
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<tr>
<td>G3</td>
<td>196</td>
<td>176</td>
<td>123,5</td>
<td>239,5</td>
<td>143</td>
<td>33</td>
<td>10</td>
<td>8290800.0000.00000</td>
</tr>
</tbody>
</table>

- Dusty gas temperature version
- Ambient temperature
- Cleaning gas temperature
- Low pressure
- Low temperature version
- Seat seal TPE
- Low temperature version
- Seat seal TPE
- Low temperature version
- Seat seal TPE

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

- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer
- One-piece diaphragm
- Also available for solenoid version low temperature to -40°C (-40°F)

Technical Data

<table>
<thead>
<tr>
<th>Medium</th>
<th>Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switching function</td>
<td>Normally closed</td>
</tr>
<tr>
<td>Flow direction</td>
<td>Determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mounting position:</th>
<th>Optional, preferably solenoid vertical on top</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating pressure:</td>
<td>0,4 ... 7/8 bar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port size</th>
<th>G3/4, G1, G1 1/2, G2, G2 1/2, G3, 3/4 NPT, 1 NPT, 1 1/2 NPT, 2 NPT, 2 1/2 NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot connection:</td>
<td>G1/8 resp. 1/8 NPT</td>
</tr>
<tr>
<td>Dusty gas temperature:</td>
<td>-20...+85°C (-4 ... +185°F)</td>
</tr>
<tr>
<td>Cleaning gas temperature:</td>
<td>-40...+85°C (-40 ... +185°F)</td>
</tr>
<tr>
<td>Ambient temperature:</td>
<td>-20...+85°C (-4 ... +185°F)</td>
</tr>
</tbody>
</table>

Materials

<table>
<thead>
<tr>
<th>Body:</th>
<th>Aluminium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seat seal:</td>
<td>TPE</td>
</tr>
<tr>
<td>Internal parts:</td>
<td>TPU</td>
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Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Orifice (mm)</th>
<th>Valve length (mm)</th>
<th>Flow kv value *1) (m³/h)</th>
<th>Operating pressure (bar)</th>
<th>Weight (kg)</th>
<th>Model</th>
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</thead>
<tbody>
<tr>
<td>G3/4</td>
<td>20</td>
<td>95</td>
<td>18</td>
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<td>5,8 ... 116</td>
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<td>95</td>
<td>18</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>0,50</td>
<td>8297300.8171.xxxxx</td>
</tr>
<tr>
<td>G1</td>
<td>25</td>
<td>95</td>
<td>22</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>0,47</td>
<td>8296400.8171.xxxxx</td>
</tr>
<tr>
<td>1 NPT</td>
<td>25</td>
<td>95</td>
<td>22</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>0,47</td>
<td>8297400.8171.xxxxx</td>
</tr>
<tr>
<td>G1 1/2</td>
<td>40</td>
<td>135</td>
<td>59</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>1,18</td>
<td>8296600.8171.xxxxx</td>
</tr>
<tr>
<td>1 1/2 NPT</td>
<td>40</td>
<td>135</td>
<td>59</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>1,18</td>
<td>8297600.8171.xxxxx</td>
</tr>
<tr>
<td>G2</td>
<td>50</td>
<td>170</td>
<td>80</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>2,02</td>
<td>8296700.8171.xxxxx</td>
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<tr>
<td>2 NPT</td>
<td>50</td>
<td>170</td>
<td>80</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>2,02</td>
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<tr>
<td>G2 1/2</td>
<td>65</td>
<td>170</td>
<td>93</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>2,30</td>
<td>8296800.8171.xxxxx</td>
</tr>
<tr>
<td>2 1/2 NPT</td>
<td>65</td>
<td>170</td>
<td>93</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>2,30</td>
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<td>G3</td>
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<td>0,4 ... 7</td>
<td>5,8 ... 101</td>
<td>3,93</td>
<td>8296900.8171.xxxxx</td>
</tr>
</tbody>
</table>

*1) Cv-value (US) ≈ kv value x 1,2

xxxx Please insert voltage and frequency codes, see page 18

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and use the new improved search function. If you cannot see the option you require please contact us.
82960/82970
2/2-way valves, solenoid pilot operated
DN 20 ... 80, G3/4 ... 3, 3/4 ... 2 1/2 NPT

Option selector

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<table>
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<th>Substitute</th>
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<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>1 1/2</td>
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<tr>
<td>2</td>
<td>7</td>
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<td>2 1/2</td>
<td>8</td>
</tr>
<tr>
<td>3 (only ISO G)</td>
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</table>

<table>
<thead>
<tr>
<th>Valve options</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flange version without valve body</td>
<td>54</td>
</tr>
</tbody>
</table>

- Dusty gas temperature version -20...+100°C (-4...+212°F),
- Seat seal TPE,
- Ambient temperature -40...+85°C (-40...+185°F),
- Cleaning gas temperature -20...+85°C (-4...+185°F)

Additional solenoid systems

<table>
<thead>
<tr>
<th>Voltage and frequency solenoids 8171</th>
<th>Code</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption (Inrush)</th>
<th>Power consumption (Holding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
<td>00</td>
<td>24 V d.c.</td>
<td>12 W</td>
<td>12 W</td>
<td></td>
</tr>
<tr>
<td>024</td>
<td>50</td>
<td>24 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>50</td>
<td>110 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>60</td>
<td>120 V a.c.</td>
<td>60 Hz</td>
<td>23 VA</td>
<td></td>
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<tr>
<td>230</td>
<td>50</td>
<td>230 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
<td></td>
</tr>
</tbody>
</table>

Standard solenoid systems

- Low temperature version -40...+85°C (-40...+185°F),
- Seat seal TPE,
- Ambient temperature -40...+85°C (-40...+185°F),
- Cleaning gas temperature -40...+85°C (-40...+185°F)

Additional solenoid systems for hazardous areas

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX-Protection class</th>
<th>IP protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>II 2G</td>
<td>Ex d mb IIC T4/5 Gb</td>
<td>IP66</td>
<td>468x</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex d mb IIC T13/0°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II 3G</td>
<td>Ex ec IIC T4 Gc</td>
<td>IP65</td>
<td>8176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 3D</td>
<td>Ex ec IIC T13/0°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II 2G</td>
<td>Ex eb mb IIC T4 Gb</td>
<td>IP66</td>
<td>6176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex eb mb IIC T13/0°C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attention!
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Electrical details for all solenoid systems

<table>
<thead>
<tr>
<th>Design</th>
<th>DIN VDE 0580</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage range</td>
<td>±10%</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>100% ED</td>
</tr>
<tr>
<td>Protection class</td>
<td>EN 60529 P65</td>
</tr>
<tr>
<td>Socket</td>
<td>Form A acc. to DIN EN 175301-803 (included)</td>
</tr>
</tbody>
</table>

According to DIN VDE 0580 at a solenoid temperature of +20°C, at operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.
82960/82970
2/2-way valves, solenoid pilot operated
DN 20 ... 80, G3/4 ... 3, 3/4 ... 2 1/2 NPT

Dimensions

G3/4 ... 1
3/4 ... 1 NPT

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.

<table>
<thead>
<tr>
<th>Port size R</th>
<th>B</th>
<th>H</th>
<th>H1</th>
<th>L</th>
<th>L1</th>
<th>T</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>G3/4</td>
<td>80</td>
<td>105,5</td>
<td>83</td>
<td>95</td>
<td>50</td>
<td>16</td>
<td>8296300.8171xxxxx</td>
</tr>
<tr>
<td>3/4 NPT</td>
<td>80</td>
<td>105,5</td>
<td>83</td>
<td>95</td>
<td>50</td>
<td>14</td>
<td>8297300.8171xxxxx</td>
</tr>
<tr>
<td>G1</td>
<td>80</td>
<td>105,5</td>
<td>83</td>
<td>95</td>
<td>50</td>
<td>18</td>
<td>8296400.8171xxxxx</td>
</tr>
<tr>
<td>1 NPT</td>
<td>80</td>
<td>105,5</td>
<td>83</td>
<td>95</td>
<td>50</td>
<td>17</td>
<td>8297400.8171xxxxx</td>
</tr>
<tr>
<td>G1 1/2</td>
<td>124,5</td>
<td>166</td>
<td>136</td>
<td>135</td>
<td>70</td>
<td>22</td>
<td>8296600.8171xxxxx</td>
</tr>
<tr>
<td>1 1/2 NPT</td>
<td>124,5</td>
<td>166</td>
<td>136</td>
<td>135</td>
<td>70</td>
<td>18</td>
<td>8297600.8171xxxxx</td>
</tr>
<tr>
<td>G2</td>
<td>140</td>
<td>190,5</td>
<td>149</td>
<td>170</td>
<td>96,5</td>
<td>25</td>
<td>8296700.8171xxxxx</td>
</tr>
<tr>
<td>2 NPT</td>
<td>140</td>
<td>190,5</td>
<td>149</td>
<td>170</td>
<td>96,5</td>
<td>18</td>
<td>8297700.8171xxxxx</td>
</tr>
<tr>
<td>G2 1/2</td>
<td>140</td>
<td>205,5</td>
<td>160</td>
<td>170</td>
<td>96,5</td>
<td>25</td>
<td>8296800.8171xxxxx</td>
</tr>
<tr>
<td>2 1/2 NPT</td>
<td>140</td>
<td>205,5</td>
<td>160</td>
<td>170</td>
<td>96,5</td>
<td>24</td>
<td>8297800.8171xxxxx</td>
</tr>
<tr>
<td>G3</td>
<td>196</td>
<td>221</td>
<td>169</td>
<td>239,5</td>
<td>143</td>
<td>33</td>
<td>8296900.8171xxxxx</td>
</tr>
</tbody>
</table>
82900/82910, single stage

2/2-way valves, remote pilot operated
DN 40 ... 80, G1 1/2 ... 3, 1 1/2 ... 2 1/2 NPT

- High flow rate
- All internal components captive
- Clear, compact design
- One-piece diaphragm

Technical Data

Medium:
Air
Swapping function:
Normally closed
Flow direction:
Determined
Mounting position:
Optional
Operating pressure:
0,4 ... 7/8 bar
Port size:
G1 1/2, G2, G2 1/2, G3,
1 1/2 NPT, 2 NPT, 2 1/2 NPT
Pilot connection:
G1/8 resp. 1/8 NPT
Dusty gas temperature:
-20...+85°C (-4 ... +185°F)
Cleaning gas temperature:
-40...+85°C (-40 ... +185°F)
Ambient temperature:
-20...+80°C (-4 ... +185°F)

Materials

Body:
Aluminium
Seat seal:
TPE
Internal parts:
TPU

Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Orifice (mm)</th>
<th>Valve length (mm)</th>
<th>Flow kv value *1) (m³/h)</th>
<th>Operating pressure (bar)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>G1 1/2</td>
<td>40</td>
<td>135</td>
<td>59</td>
<td>0,4 ... 8</td>
<td>1,18</td>
<td>8290690.0000.0000</td>
</tr>
<tr>
<td></td>
<td>1 1/2 NPT</td>
<td>40</td>
<td>135</td>
<td>59</td>
<td>0,4 ... 8</td>
<td>1,18</td>
<td>8291690.0000.0000</td>
</tr>
<tr>
<td></td>
<td>G2</td>
<td>50</td>
<td>169</td>
<td>80</td>
<td>0,4 ... 8</td>
<td>2,02</td>
<td>82907690.0000.0000</td>
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<tr>
<td></td>
<td>2 NPT</td>
<td>50</td>
<td>169</td>
<td>80</td>
<td>0,4 ... 8</td>
<td>2,02</td>
<td>8291790.0000.0000</td>
</tr>
<tr>
<td></td>
<td>G2 1/2</td>
<td>65</td>
<td>169</td>
<td>93</td>
<td>0,4 ... 8</td>
<td>2,30</td>
<td>82909890.0000.0000</td>
</tr>
<tr>
<td></td>
<td>2 1/2 NPT</td>
<td>65</td>
<td>169</td>
<td>93</td>
<td>0,4 ... 8</td>
<td>2,30</td>
<td>8291890.0000.0000</td>
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<tr>
<td></td>
<td>G3</td>
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<td>239,5</td>
<td>172</td>
<td>0,4 ... 7</td>
<td>3,50</td>
<td>8290990.0000.0000</td>
</tr>
</tbody>
</table>

*1) Cv-value (US) = kv value x 1.2

Option selector

829★★★★.0000.0000

<table>
<thead>
<tr>
<th>Thread form</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO G</td>
<td>6</td>
</tr>
<tr>
<td>NPT</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/2</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>2 1/2</td>
<td>8</td>
</tr>
<tr>
<td>3 (only ISO G)</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Valve options</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flange version without valve body</td>
<td>xx</td>
</tr>
<tr>
<td>Dusty gas temperature version</td>
<td>-20...+100°C (-4...+212°F), Seat seal TPE</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>-40...+85°C (-40...+185°F), Cleaning gas temperature</td>
</tr>
<tr>
<td>Dusty gas temperature version</td>
<td>-20...+140°C (-4...+284°F), Seat seal TPE</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>-40...+85°C (-40...+185°F), Cleaning gas temperature</td>
</tr>
</tbody>
</table>

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
82900/82910, single stage
2/2-way valves, remote pilot operated
DN 40 ... 80, G1 1/2 ... 3, 1 1/2 ... 2 1/2 NPT

Dimensions

G1 1/2 ... 3
1 1/2 ... 2 1/2 NPT

Port size R | Pilot connection | B | H | H1 | L | L1 | T | T1 | Model
--- | --- | --- | --- | --- | --- | --- | --- | --- | ---
G1 1/2 | G1/8 | 124,5 | 91 | 60 | 135 | 70 | 22 | 9 | 8290690.0000.0000
1 1/2 NPT | 1/8 NPT | 124,5 | 91 | 60 | 135 | 70 | 18 | 9 | 8291690.0000.0000
G2 | G1/4 | 140 | 117,5 | 73 | 170 | 95 | 25 | 9 | 8290790.0000.0000
2 NPT | 1/4 NPT | 140 | 117,5 | 73 | 170 | 95 | 25 | 9 | 8291790.0000.0000
G2 1/2 | G1/4 | 140 | 132 | 84 | 170 | 95 | 25 | 9 | 8290890.0000.0000
2 1/2 NPT | 1/4 NPT | 140 | 132 | 84 | 170 | 95 | 24 | 9 | 8291890.0000.0000
G3 | G1/4 | 196 | 141 | 88,5 | 239,5 | 143 | 33 | 9 | 8290990.0000.0000

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
**82960/82970, single stage**

2/2-way valves, solenoid pilot operated
DN 40 ... 80, G1 1/2 ... 3, 1 1/2 ... 2 1/2 NPT

- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer
- One-piece diaphragm

**Technical Data**

**Medium:**
- Air

**Switching function:**
- Normally closed

**Flow direction:**
- Determined

**Mounting position:**
- Optional, preferably solenoid vertical on top

**Port size:**
- G1 1/2, G2, G2 1/2, G3, 1 1/2 NPT, 2 NPT, 2 1/2 NPT

**Operating pressure:**
- 0,4 ... 7/8 bar

**Pilot connection:**
- G1/8 resp. 1/8 NPT

**Dusty gas temperature:**
- -20 ... +85°C (-4 ... +185°F)

**Cleaning gas temperature:**
- -40 ... +85°C (-40 ... +185°F)

**Ambient temperature:**
- -20 ... +85°C (-4 ... +185°F)

**Materials**

**Body:**
- Aluminium

**Seat seal:**
- TPE

**Internal parts:**
- TPU

---

### Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Orifice (mm)</th>
<th>Valve length (mm)</th>
<th>Flow kv value *1)</th>
<th>Operating pressure (bar)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPAZ</td>
<td>G1 1/2</td>
<td>40</td>
<td>135</td>
<td>59</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>1.18</td>
</tr>
<tr>
<td></td>
<td>1 1/2 NPT</td>
<td>50</td>
<td>169</td>
<td>80</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>2.02</td>
</tr>
<tr>
<td></td>
<td>2 NPT</td>
<td>65</td>
<td>169</td>
<td>93</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>2.30</td>
</tr>
<tr>
<td></td>
<td>2 1/2 NPT</td>
<td>80</td>
<td>239,5</td>
<td>172</td>
<td>0.4 ... 7</td>
<td>5.8 ... 101</td>
<td>3.50</td>
</tr>
<tr>
<td></td>
<td>G3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Please insert voltage and frequency codes, see page 23

*1) Cv-value (US) = kv value x 1.2
82960/82970, single stage
2/2-way valves, solenoid pilot operated
DN 40 ... 80, G1 1/2 ... 3, 1 1/2 ... 2 1/2 NPT

Option selector

<table>
<thead>
<tr>
<th>Thread form</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO G</td>
<td>6</td>
</tr>
<tr>
<td>NPT</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/2</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>2 1/2</td>
<td>8</td>
</tr>
<tr>
<td>3 (only ISO G)</td>
<td>9</td>
</tr>
</tbody>
</table>

Standard solenoid systems

Voltage and frequency solenoids 8171 *2)

<table>
<thead>
<tr>
<th>Code</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
<td>24 V d.c.</td>
<td>00</td>
<td>12 W</td>
<td>12 W</td>
</tr>
<tr>
<td>024</td>
<td>24 V a.c.</td>
<td>50</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>110</td>
<td>110 V a.c.</td>
<td>50</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>120</td>
<td>120 V a.c.</td>
<td>60</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>230</td>
<td>230 V a.c.</td>
<td>50</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
</tbody>
</table>

Additional solenoid systems for hazardous areas

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX-Protection class</th>
<th>IP Protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>II 3G</td>
<td>Ex ec IIC T4 Gc</td>
<td>8176</td>
<td>IP65</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 3D</td>
<td>Ex tc IIC T130°C Dc</td>
<td>8186</td>
<td>IP66</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2G</td>
<td>Ex eb mb IIC T4 Gb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex mb tb IIB T135°C Db</td>
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<td></td>
<td></td>
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</tbody>
</table>

Attention!

The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Additional solenoid systems

<table>
<thead>
<tr>
<th>Option</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse solenoid</td>
<td>8821</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
</tbody>
</table>

According to DIN VDE 0580 at a solenoid temperature of +20°C.
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.
82960/82970, single stage
2/2-way valves, solenoid pilot operated
DN 40 ... 80, G1 1/2 ... 3, 1 1/2 ... 2 1/2 NPT

**Dimensions**

<table>
<thead>
<tr>
<th>Port size R</th>
<th>B</th>
<th>H</th>
<th>H1</th>
<th>L</th>
<th>L1</th>
<th>T</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1 1/2</td>
<td>124,5</td>
<td>136</td>
<td>105</td>
<td>135</td>
<td>70</td>
<td>22</td>
<td>8296690.8171.xxxx</td>
</tr>
<tr>
<td>1 1/2 NPT</td>
<td>124,5</td>
<td>136</td>
<td>105</td>
<td>135</td>
<td>70</td>
<td>18</td>
<td>8297690.8171.xxxx</td>
</tr>
<tr>
<td>G2</td>
<td>140</td>
<td>156</td>
<td>118,5</td>
<td>170</td>
<td>95</td>
<td>25</td>
<td>8296790.8171.xxxx</td>
</tr>
<tr>
<td>2 NPT</td>
<td>140</td>
<td>156</td>
<td>118,5</td>
<td>170</td>
<td>95</td>
<td>18</td>
<td>8297790.8171.xxxx</td>
</tr>
<tr>
<td>G2 1/2</td>
<td>140</td>
<td>177</td>
<td>129</td>
<td>170</td>
<td>95</td>
<td>25</td>
<td>8296890.8171.xxxx</td>
</tr>
<tr>
<td>2 1/2 NPT</td>
<td>140</td>
<td>177</td>
<td>129</td>
<td>170</td>
<td>95</td>
<td>24</td>
<td>8297890.8171.xxxx</td>
</tr>
<tr>
<td>G3</td>
<td>196</td>
<td>186,5</td>
<td>134</td>
<td>239,5</td>
<td>143</td>
<td>33</td>
<td>8296990.8171.xxxx</td>
</tr>
</tbody>
</table>

Solenoid rotatable 3 x 120°
Socket turnable 4 x 90°
(Socket included)

For further information, visit www.imi-precision.com
and use the new improved search function. If you cannot see the option you require please contact us.
83300/83310
2/2-way valves, remote pilot operated
DN 20 ... 40, G3/4 ... 1 1/2, 3/4 ... 1 1/2 NPT

- High flow rate
- Clear, compact design
- One-piece diaphragm

**Technical Data**

**Medium:**
Air

**Switching function:**
Normally closed

**Flow direction:**
Determined

**Mounting position:**
Optional

**Operating pressure:**
0,4 ... 8 bar

**Port size:**
G3/4, G1, G1 1/2, 3/4 NPT, 1 NPT, 1 1/2 NPT

**Pilot connection:**
G1/8 resp. 1/8 NPT

**Dusty gas temperature:**
-40...+85°C (-40 ... +185°F)

**Cleaning gas temperature:**
-40...+85°C (-40 ... +185°F)

**Ambient temperature:**
-40...+85°C (-40 ... +185°F)

**Technical data - standard models**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Orifice (mm)</th>
<th>Valve length (mm)</th>
<th>Flow kv value *1) (m³/h)</th>
<th>Operating pressure (bar)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>G3/4</td>
<td>20</td>
<td>95</td>
<td>18</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>0,70</td>
<td>8330300.0000.00000</td>
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<tr>
<td>3/4 NPT</td>
<td>20</td>
<td>95</td>
<td>18</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>0,70</td>
<td>8331300.0000.00000</td>
</tr>
<tr>
<td>G1</td>
<td>25</td>
<td>95</td>
<td>22</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>0,80</td>
<td>8330400.0000.00000</td>
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<tr>
<td>1 NPT</td>
<td>25</td>
<td>95</td>
<td>22</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>0,80</td>
<td>8331400.0000.00000</td>
</tr>
<tr>
<td>G1 1/2</td>
<td>40</td>
<td>135</td>
<td>59</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>2,90</td>
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<tr>
<td>1 1/2 NPT</td>
<td>40</td>
<td>135</td>
<td>59</td>
<td>0,4 ... 8</td>
<td>5,8 ... 116</td>
<td>2,90</td>
<td>8336800.0000.00000</td>
</tr>
</tbody>
</table>

*1) Cv-value (US) = kv value x 1,2

**Materials**

**Body:**
Stainless steel (1.4406)

**Seat seal:**
TPE
83300/83310
2/2-way valves, remote pilot operated
DN 20 ... 40, G3/4 ... 1 1/2, 3/4 ... 1 1/2 NPT

Option selector

<table>
<thead>
<tr>
<th>Thread form</th>
<th>Substitute</th>
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<tbody>
<tr>
<td>ISO G</td>
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<tr>
<td>NPT</td>
<td>1</td>
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<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
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</thead>
<tbody>
<tr>
<td>3/4</td>
<td>3</td>
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<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>1 1/2</td>
<td>6</td>
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Valve options

<table>
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<tr>
<th>Substitute</th>
<th>Flange version</th>
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<tr>
<td></td>
<td>without valve body</td>
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<tr>
<td></td>
<td>Dusty gas temperature version</td>
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<tr>
<td></td>
<td>-20 ... 140°C</td>
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<tr>
<td></td>
<td>(-4 ... +284°F)</td>
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<tr>
<td></td>
<td>Seat seal TPE</td>
</tr>
<tr>
<td></td>
<td>Ambient temperature</td>
</tr>
<tr>
<td></td>
<td>-40 ... +85°C</td>
</tr>
<tr>
<td></td>
<td>(-40 ... +185°F)</td>
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<tr>
<td></td>
<td>Cleaning gas temperature</td>
</tr>
<tr>
<td></td>
<td>-20 ... +85°C</td>
</tr>
<tr>
<td></td>
<td>(-4 ... +185°F)</td>
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<tr>
<td></td>
<td>Dusty gas temperature version</td>
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<tr>
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<td>-20 ... 140°C</td>
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<td>(-4 ... +284°F)</td>
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<td>Seat seal TPE</td>
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<td>Ambient temperature</td>
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<tr>
<td></td>
<td>-40 ... +85°C</td>
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<td>(-40 ... +185°F)</td>
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<td></td>
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<td>-20 ... 140°C</td>
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<td>Seat seal TPE</td>
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<td>Ambient temperature</td>
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<tr>
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<td>-40 ... +85°C</td>
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<td>(-40 ... +185°F)</td>
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<td></td>
<td>Cleaning gas temperature</td>
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<tr>
<td></td>
<td>-20 ... +85°C</td>
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<tr>
<td></td>
<td>(-4 ... +185°F)</td>
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<tr>
<td></td>
<td>Low temperature version</td>
</tr>
<tr>
<td></td>
<td>-40 ... +85°C</td>
</tr>
<tr>
<td></td>
<td>(-40 ... +185°F)</td>
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<td>Seat seal TPE</td>
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<td>Ambient temperature</td>
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<td>-40 ... +85°C</td>
</tr>
<tr>
<td></td>
<td>(-40 ... +185°F)</td>
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<tr>
<td></td>
<td>Cleaning gas temperature</td>
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<tr>
<td></td>
<td>-40 ... +85°C</td>
</tr>
<tr>
<td></td>
<td>(-40 ... +185°F)</td>
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</tbody>
</table>

Dimensions

G3/4 ... 1
3/4 ... 1 NPT

G1 1/2
1 1/2 NPT

Dimensions

Port size R B H H1 L L1 T T1 Model

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
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<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>G3/4</td>
<td>80</td>
<td>61.5</td>
<td>39</td>
<td>95</td>
<td>50</td>
<td>16</td>
<td>10</td>
<td>8330300.0000.00000</td>
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<tr>
<td>3/4 NPT</td>
<td>80</td>
<td>61.5</td>
<td>39</td>
<td>95</td>
<td>50</td>
<td>14</td>
<td>10</td>
<td>8331300.0000.00000</td>
</tr>
<tr>
<td>G1</td>
<td>80</td>
<td>61.5</td>
<td>39</td>
<td>95</td>
<td>50</td>
<td>18</td>
<td>10</td>
<td>8330400.0000.00000</td>
</tr>
<tr>
<td>1 NPT</td>
<td>80</td>
<td>61.5</td>
<td>39</td>
<td>95</td>
<td>50</td>
<td>17</td>
<td>10</td>
<td>8331400.0000.00000</td>
</tr>
<tr>
<td>G1 1/2</td>
<td>124.5</td>
<td>122</td>
<td>91</td>
<td>135</td>
<td>70</td>
<td>22</td>
<td>10</td>
<td>8330600.0000.00000</td>
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<tr>
<td>1 1/2 NPT</td>
<td>124.5</td>
<td>122</td>
<td>91</td>
<td>135</td>
<td>70</td>
<td>18</td>
<td>10</td>
<td>8331600.0000.00000</td>
</tr>
</tbody>
</table>

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
83320
2/2-way valves, solenoid pilot operated
DN 20 ... 40, G3/4 ... 1 1/2

- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer
- One-piece diaphragm

Technical Data

| Medium: | Air |
| Switching function: | Normally closed |
| Flow direction: | Determined |
| Mounting position: | Optional, preferably solenoid vertical on top |
| Port size: | G3/4, G1, G1 1/2 |
| Operating pressure: | 0.4 ... 8 bar |
| Pilot connection: | G1/8 resp. 1/8 NPT |
| Dusty gas temperature: | -20 ... +85°C (-4 ... +185°F) |
| Cleaning gas temperature: | -40 ... +85°C (-40 ... +185°F) |
| Ambient temperature: | -20 ... +85°C (-4 ... +185°F) |

Materials

- Body: Stainless steel 1.4406
- Seat seal: TPE
- Internal parts: TPU

Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Orifice (mm)</th>
<th>Valve length (mm)</th>
<th>Flow kv value *1) (m³/h)</th>
<th>Operating pressure (bar)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G3/4</td>
<td>20</td>
<td>95</td>
<td>18</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td>G1</td>
<td>25</td>
<td>95</td>
<td>22</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>1.01</td>
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<tr>
<td></td>
<td>G1 1/2</td>
<td>40</td>
<td>135</td>
<td>59</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>3.11</td>
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</tbody>
</table>

*1) Cv-value (US) ≈ kv value x 1.2

Please insert voltage and frequency codes, see page 28
83320
2/2-way valves, solenoid pilot operated
DN 20 ... 40, G3/4 ... 1 1/2

Option selector

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
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<td>3/4</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>1 1/2</td>
<td>6</td>
</tr>
</tbody>
</table>

Standard solenoid systems

Voltage and frequency solenoids 8171 (*2)

<table>
<thead>
<tr>
<th>Code Voltage</th>
<th>Code Frequency</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
<td>00</td>
<td>24 V d.c.</td>
<td>-</td>
<td>12 W</td>
<td>12 W</td>
</tr>
<tr>
<td>024</td>
<td>50</td>
<td>24 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>110</td>
<td>50</td>
<td>110 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>120</td>
<td>60</td>
<td>120 V a.c.</td>
<td>60 Hz</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>230</td>
<td>50</td>
<td>230 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
</tbody>
</table>

(*2) * coil only

Additional solenoid systems for hazardous areas

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX-Protection class</th>
<th>IP protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>II 2G</td>
<td>Ex d mb IIC T4/75 Gb</td>
<td>IP66</td>
<td>468x</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex tb IIC T130°C C</td>
<td>195°C Db</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II 3G</td>
<td>Ex ec IIC T4 Gc</td>
<td>IP65</td>
<td>8176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 3D</td>
<td>Ex tb IIC T130°C DC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II 2G</td>
<td>Ex eb mb IIC T4 Gb</td>
<td>IP66</td>
<td>6176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex mb tb IIC T135°C Db</td>
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<td></td>
<td></td>
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</tbody>
</table>

Attention!
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Additional solenoid systems

<table>
<thead>
<tr>
<th>Option</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low temperature</td>
<td>9151</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
</tbody>
</table>

According to DIN VDE 0580 at a solenoid temperature of +20°C.
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.
83320
2/2-way valves, solenoid pilot operated
DN 20 ... 40, G3/4 ... 1 1/2

Dimensions

<table>
<thead>
<tr>
<th>Port size R</th>
<th>B</th>
<th>H</th>
<th>H1</th>
<th>L</th>
<th>L1</th>
<th>T</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>G3/4</td>
<td>80</td>
<td>105.5</td>
<td>83</td>
<td>95</td>
<td>50</td>
<td>18</td>
<td>8332300.8171.xxxxx</td>
</tr>
<tr>
<td>G1</td>
<td>80</td>
<td>105.5</td>
<td>83</td>
<td>95</td>
<td>50</td>
<td>18</td>
<td>8332400.8171.xxxxx</td>
</tr>
<tr>
<td>G1 1/2</td>
<td>124.5</td>
<td>166</td>
<td>138</td>
<td>135</td>
<td>70</td>
<td>22</td>
<td>8332600.8171.xxxxx</td>
</tr>
</tbody>
</table>

Solenoid rotatable 3 x 120°
Socket turnable 4 x 90°
(Socket included)
Silencer

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
2/2-way valves, remote pilot operated valve for cleaning dust filters. For tank mounting with blow tube DN 25 ... 65

- High flow rate
- Clear, compact design

**Technical Data**

**Medium:** Neutral gases
**Switching function:** Normally closed
**Flow direction:** Determined
**Mounting position:** Optional
**Operating pressure:** 0,4 ... 8 bar
**Port size:** DN 25, DN 40, DN 50, DN 65
**Differential pressure:** 0,4 bar required
**Control port:** G1/8

- Dusty gas temperature: -20 ... +85°C [-4 ... +185°F]
- Cleaning gas temperature: -40 ... +85°C [-40 ... +185°F]
- Ambient temperature: -20 ... +85°C [-4 ... +185°F]

**Technical data - standard models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow kv value (^1) (m(^3)/h)</th>
<th>Operating pressure (bar)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>28</td>
<td>0,4 ... 8</td>
<td>0,26</td>
<td>8393400.0000.0000</td>
</tr>
<tr>
<td>40</td>
<td>74</td>
<td>0,4 ... 8</td>
<td>0,90</td>
<td>8393600.0000.0000</td>
</tr>
<tr>
<td>50</td>
<td>104</td>
<td>0,4 ... 8</td>
<td>1,60</td>
<td>8393700.0000.0000</td>
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<tr>
<td>65</td>
<td>121</td>
<td>0,4 ... 8</td>
<td>2</td>
<td>8393800.0000.0000</td>
</tr>
</tbody>
</table>

\(^1\) Cv-value (US) = kv value x 1,2

**Materials**

- **Body:** Aluminium
- **Seat seal:** TPE
- **Blow tube:** Aluminium
- **Adapter:** Aluminium

**Symbol Orifice (mm) Flow kv value \(^1\) (m\(^3\)/h) Operating pressure (bar) Operating pressure (psi) Weight (kg) Model**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Orifice (mm)</th>
<th>Flow kv value (^1) (m(^3)/h)</th>
<th>Operating pressure (bar)</th>
<th>Operating pressure (psi)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>25</td>
<td>28</td>
<td>0,4 ... 8</td>
<td>0,8 ... 116</td>
<td>0,26</td>
<td>8393400.0000.0000</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>74</td>
<td>0,4 ... 8</td>
<td>0,8 ... 116</td>
<td>0,90</td>
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<tr>
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<td>50</td>
<td>104</td>
<td>0,4 ... 8</td>
<td>0,8 ... 116</td>
<td>1,60</td>
<td>8393700.0000.0000</td>
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<tr>
<td></td>
<td>65</td>
<td>121</td>
<td>0,4 ... 8</td>
<td>0,8 ... 116</td>
<td>2</td>
<td>8393800.0000.0000</td>
</tr>
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</table>

**Outside dim. of tank/profile (mm) Model Plus Connection kit**

<table>
<thead>
<tr>
<th>Outside dim. of tank/profile (mm)</th>
<th>Model</th>
<th>Plus</th>
<th>Connection kit</th>
</tr>
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<tbody>
<tr>
<td>70</td>
<td>DN 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>DN 40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>140</td>
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[IMI Precision Engineering]
83930

2/2-way valves, remote pilot operated valve for cleaning dust filters. For tank mounting with blow tube DN 25 ... 65

**Dimensions**

<table>
<thead>
<tr>
<th>Orifice</th>
<th>ØC</th>
<th>ØD</th>
<th>ØE</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>T</th>
<th>Model</th>
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<tr>
<td>25</td>
<td>125</td>
<td>50,5</td>
<td>48,6</td>
<td>30</td>
<td>81</td>
<td>84</td>
<td>10</td>
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<tr>
<td>40</td>
<td>116</td>
<td>60,3</td>
<td>61</td>
<td>60</td>
<td>118</td>
<td>89</td>
<td>10</td>
<td>65</td>
</tr>
<tr>
<td>50</td>
<td>116</td>
<td>74</td>
<td>77</td>
<td>74</td>
<td>118</td>
<td>89</td>
<td>10</td>
<td>80</td>
</tr>
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<td>65</td>
<td>200</td>
<td>116</td>
<td>61</td>
<td>60</td>
<td>118</td>
<td>89</td>
<td>10</td>
<td>90</td>
</tr>
</tbody>
</table>

Maximum torque 50 Nm for DN 25 adapter; maximum torque 100 Nm for DN 40 adapter

**Other adapters**

<table>
<thead>
<tr>
<th>Orifice</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>P</th>
<th>R</th>
<th>S</th>
<th>ØT</th>
<th>V</th>
<th>W</th>
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<tbody>
<tr>
<td>Female thread 25</td>
<td>G1</td>
<td>6x6, 65</td>
<td>15</td>
<td>62</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Female thread 40</td>
<td>G1 1/2</td>
<td>6x6, 65</td>
<td>23</td>
<td>81</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Male thread 25</td>
<td>G1</td>
<td>6x6, 65</td>
<td>-</td>
<td>-</td>
<td>17</td>
<td>62</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Male thread 40</td>
<td>G1 1/2</td>
<td>6x6, 65</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>81</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hose connection 25</td>
<td>-</td>
<td>6x6, 65</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>33,7</td>
<td>24</td>
<td>66</td>
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<tr>
<td>Hose connection 40</td>
<td>-</td>
<td>6x6, 65</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>48,3</td>
<td>40</td>
<td>91</td>
</tr>
</tbody>
</table>

For further information, visit [www.imi-precision.com](http://www.imi-precision.com) and use the new improved search function. If you cannot see the option you require please contact us.
83920

2/2-way valves, solenoid pilot operated valve for cleaning dust filters. For tank mounting with blow tube DN 25 ... 65

- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer

### Technical Data

- **Medium:** Neutral gases
- **Type:** Diaphragm valve requiring differential pressure
- **Switching function:** Normally closed
- **Flow direction:** Determined
- **Mounting position:** Optional, preferably solenoid vertical on top

#### Operating pressure:
0,4 ... 8 bar (5,8 ... 116 psi)

#### Port size:
DN 25, DN 40, DN 50, DN 65

#### Differential pressure:
0,4 bar (5,8 psi) required

#### Control port:
G1/8

- **Dusty gas temperature:** -20...+85°C (-4 ... +185°F)
- **Cleaning gas temperature:** -40...+85°C (-40 ... +185°F)
- **Ambient temperature:** -20...+85°C (-4 ... +185°F)

### Materials

- **Body:** Aluminium
- **Seat seal:** TPE
- **Seals:** TPU
- **Blow tube:** Aluminium
- **Adapter:** Aluminium

### Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Orifice (mm)</th>
<th>Flow kv value *1) (m³/h)</th>
<th>Operating pressure (bar)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>28</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>0.47</td>
<td>8392400.8171.xxxxx</td>
</tr>
<tr>
<td>40</td>
<td>74</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>1.10</td>
<td>8392600.8171.xxxxx</td>
</tr>
<tr>
<td>50</td>
<td>104</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>1.60</td>
<td>8392700.8171.xxxxx</td>
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<tr>
<td>65</td>
<td>121</td>
<td>0.4 ... 8</td>
<td>5.8 ... 116</td>
<td>2</td>
<td>8392800.8171.xxxxx</td>
</tr>
</tbody>
</table>

*1) Cv-value (US) = kv value x 1.2

---

***Please insert voltage and frequency codes, see page 33***
83920

2/2-way valves, solenoid pilot operated valve for cleaning dust filters. For tank mounting with blow tube DN 25 ... 65

<table>
<thead>
<tr>
<th>Model</th>
<th>Plus</th>
<th>Connection kit</th>
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<tbody>
<tr>
<td>DN 25</td>
<td>Hose connector</td>
<td>Female thread</td>
</tr>
<tr>
<td>DN 40</td>
<td>839200.8171.xxxx</td>
<td>-</td>
</tr>
</tbody>
</table>

- 70
- 100
- 120
- 140
- 160
- 180
- 200

Kit not required for use without connection pipe. Please then just give order-no. for DN 25 or 40 connection. DN 50 and DN 65 - tube and connection on request.

Option selector

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>50</td>
<td>7</td>
</tr>
<tr>
<td>60</td>
<td>8</td>
</tr>
</tbody>
</table>

Standard solenoid systems

Voltage and frequency solenoids 8171 *2)

<table>
<thead>
<tr>
<th>Code</th>
<th>Voltage</th>
<th>Code</th>
<th>Frequency</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption Inrush</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
<td>00</td>
<td>24 V d.c.</td>
<td>12 W</td>
<td>12 W</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024</td>
<td>50</td>
<td>24 V a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>00</td>
<td>110 V a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>60</td>
<td>120 V a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>50</td>
<td>230 V a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Additional solenoid systems for hazardous areas

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX-Protection class</th>
<th>IP-protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>II 2G</td>
<td>Ex eb mb IIC T6...T4 Gb</td>
<td>IP66</td>
<td>42xx</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex tb IIC T130°C Db</td>
<td>IP66</td>
<td>466x</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2G</td>
<td>Ex eb mb IIC T4/75 Gb</td>
<td>IP66</td>
<td>6176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex tb IIC T130°C C1</td>
<td>IP66</td>
<td>6176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2G</td>
<td>Ex mb IIC T4 Gc</td>
<td>IP65</td>
<td>8176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex lb IIC T130°C Dc</td>
<td>IP65</td>
<td>8176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
</tbody>
</table>

Attention!
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Voltage and frequency codes xx

- Voltage codes xxx

Option selector

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>50</td>
<td>7</td>
</tr>
<tr>
<td>60</td>
<td>8</td>
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</tbody>
</table>

Standard solenoid systems

Voltage and frequency solenoids 8171 *2)

<table>
<thead>
<tr>
<th>Code</th>
<th>Voltage</th>
<th>Code</th>
<th>Frequency</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption Inrush</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
<td>00</td>
<td>24 V d.c.</td>
<td>12 W</td>
<td>12 W</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>024</td>
<td>50</td>
<td>24 V a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>00</td>
<td>110 V a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>60</td>
<td>120 V a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>50</td>
<td>230 V a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td></td>
<td></td>
<td></td>
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</table>

Additional solenoid systems for hazardous areas

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX-Protection class</th>
<th>IP-protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
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</thead>
<tbody>
<tr>
<td>II 2G</td>
<td>Ex eb mb IIC T6...T4 Gb</td>
<td>IP66</td>
<td>42xx</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex tb IIC T130°C Db</td>
<td>IP66</td>
<td>466x</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2G</td>
<td>Ex eb mb IIC T4/75 Gb</td>
<td>IP66</td>
<td>6176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex tb IIC T130°C C1</td>
<td>IP66</td>
<td>6176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2G</td>
<td>Ex mb IIC T4 Gc</td>
<td>IP65</td>
<td>8176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex lb IIC T130°C Dc</td>
<td>IP65</td>
<td>8176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
</tbody>
</table>

Attention!
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Voltage and frequency codes xx

- Voltage codes xxx

Option selector

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
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<tbody>
<tr>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>50</td>
<td>7</td>
</tr>
<tr>
<td>60</td>
<td>8</td>
</tr>
</tbody>
</table>
83920

2/2-way valves, solenoid pilot operated valve for cleaning dust filters. For tank mounting with blow tube DN 25 ... 65

### Dimensions

**DN 25**

- Female thread 25 G1 6k, 65
- Male thread 25 G1 6k, 65
- Hose connection 25 6k, 65

**DN 40 ... 65**

- Female thread 40 G1 1/2 6k, 65
- Male thread 40 G1 1/2 6k, 65
- Hose connection 40 6k, 65

Maximum torque 50 Nm for DN 25 adapter; maximum torque 100 Nm for DN 40 adapter

### Orifice (mm) B ø C ø D ø E F G H ø T Model

<table>
<thead>
<tr>
<th>Orifice (mm)</th>
<th>B</th>
<th>ø C</th>
<th>ø D</th>
<th>ø E</th>
<th>Ø F</th>
<th>G</th>
<th>H</th>
<th>ø T</th>
<th>Model</th>
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<tbody>
<tr>
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<td>125</td>
<td>56,5</td>
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<td>48,6</td>
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<td>81</td>
<td>129</td>
<td>65</td>
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<tr>
<td>50</td>
<td>200</td>
<td>61</td>
<td>60,3</td>
<td>60</td>
<td>60</td>
<td>118</td>
<td>135</td>
<td>80</td>
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<tr>
<td>65</td>
<td>200</td>
<td>77</td>
<td>76</td>
<td>70</td>
<td>70</td>
<td>145</td>
<td>145</td>
<td>95</td>
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</tbody>
</table>

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.

Online at www.imi-precision.com
83930 flange version
2/2-way valves, remote pilot operated
DN 80

- High flow rate
- All internal components captive
- Clear, compact design
- Integrated silencer

Technical Data

Medium: Air
Switching function: Normally closed
Flow direction: Determined
Mounting position: Optional
Operating pressure: 0.4 ... 8 bar (5.8 ... 116 psi)
Port size: DN 80
Differential pressure: 0.4 bar required
Pilot connection: G1/4
Dusty gas temperature: -20 ... +85°C [-4 ... +185°F]
Cleaning gas temperature: -40 ... +85°C [-40 ... +185°F]
Ambient temperature: -20 ... +85°C [-4 ... +185°F]

Materials

Body: Aluminium
Seat seal: TPE
Seals: TPU

Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Orifice (mm)</th>
<th>Valve length (mm)</th>
<th>Flow kv value *1) (m³/h)</th>
<th>Operating pressure (bar)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>80</td>
<td>239.5</td>
<td>218</td>
<td>0.4 ... 8</td>
<td>3.10</td>
<td>8393900.0000.00000</td>
</tr>
</tbody>
</table>

*1) Cv-value (US) = kv value x 1.2

Dimensions

8393000.0000.00000

83930 flange version

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
83920 flange version
2/2-way valves, solenoid pilot operated
DN 80

- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer

Technical Data

Medium: Air
Switching function: Normally closed
Flow direction: Determined
Mounting position: Optional, preferably solenoid vertical on top
Operating pressure: 0.4 .. 8 bar (5.8 .. 116 psi)
Port size: DN 80
Differential pressure: 0.4 bar required
Dusty gas temperature:
-20 .. +85°C (-4 .. +185°F)
Cleaning gas temperature:
-40 .. +85°C (-40 .. +185°F)
Ambient temperature:
-20 .. +85°C (-4 .. +185°F)

Materials

Body: Aluminium
Seat seal: TPE
Seals: TPU

Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Orifice (mm)</th>
<th>Valve length (mm)</th>
<th>Flow kv value *1) (m³/h)</th>
<th>Operating pressure (bar)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80</td>
<td>239.5</td>
<td>218</td>
<td>0.4 ... 8</td>
<td>3.40</td>
<td>8392900.8171.xxxxx</td>
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</tbody>
</table>

*1) Cv-value (US) = kv value x 1.2

Option selector

<table>
<thead>
<tr>
<th>Thread form</th>
<th>Substitute</th>
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</thead>
<tbody>
<tr>
<td>ISO G</td>
<td>6</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Valve options</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dusty gas temperature version -20 .. +100°C (-4 .. +212°F); Seat seal TPE; Ambient temperature -40 .. +85°C (-40 .. +185°F); Cleaning gas temperature -20 .. +85°C (-4 .. +185°F)</td>
<td>62</td>
</tr>
</tbody>
</table>

8392900.8171.xxxxx

Frequency Substitute
See table frequency codes xx

Voltage Substitute
See table voltage codes xx

Valve options Substitute
Dusty gas temperature version -20 .. +140°C (-4 .. +284°F); Seat seal TPE; Ambient temperature -40 .. +85°C (-40 .. +185°F); Cleaning gas temperature -20 .. +85°C (-4 .. +185°F)

Low temperature version -40 .. +85°C (-40 .. +185°F); Seat seal TPE; Ambient temperature -40 .. +85°C (-40 .. +185°F); Cleaning gas temperature -40 .. +85°C (-40 .. +185°F)
83920
2/2-way valves, solenoid pilot operated
DN 80

Dimensions

Standard solenoid systems

Voltage and frequency solenoids 8171 *2)

<table>
<thead>
<tr>
<th>Code</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
<td>24 V d.c.</td>
<td>50 Hz</td>
<td>12 W</td>
<td>12 W</td>
</tr>
<tr>
<td>110</td>
<td>110 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>230</td>
<td>120 V a.c.</td>
<td>60 Hz</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
</tbody>
</table>

*2) Coil only

Additional solenoid systems for hazardous areas

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX Protection class</th>
<th>IP-protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>II 2G</td>
<td>Ex eb mb IC T6...T4 Gb</td>
<td>IP66</td>
<td>42xx</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2G</td>
<td>Ex eb mb IC T4/7 Gb</td>
<td>IP66</td>
<td>468x</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
</tbody>
</table>

Attention!
The conditions imposed on the ATEX approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Additional solenoid systems

<table>
<thead>
<tr>
<th>Option</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solenoid version for low temperature min. -40°C</td>
<td>9151</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
</tbody>
</table>

According to DIN VDE 0580 at a solenoid temperature of +20°C.
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

Online at www.imi-precision.com
83640
2/2-way valves, remote pilot operated
DN 25 ... 40

- High flow rate
- Clear, compact design
- One-piece diaphragm
- Simple mounting

Technical Data

Medium:
Air

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional

Operating pressure:
0.4 ... 8 bar (5.8 ... 116 psi)

Port size:
DN 25, DN 40

Pilot connection:
G1/8

Dusty gas temperature:
-20 ... +85°C [-4 ... +185°F]

Cleaning gas temperature:
-40 ... +85°C [-40 ... +185°F]

Ambient temperature:
-20 ... +85°C [-4 ... +185°F]

Materials

Body:
Aluminium

Seat seal:
TPE

Note:
Control via separate pilot valve or pilot controller.

Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Orifice (mm)</th>
<th>Flow kv value *1) (m³/h)</th>
<th>Operating pressure (bar) (psi)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>25</td>
<td>22</td>
<td>0.4 ... 8 (5.8 ... 116)</td>
<td>0.70</td>
<td>8364400.0000.0000</td>
</tr>
<tr>
<td>P</td>
<td>40</td>
<td>59</td>
<td>0.4 ... 8 (5.8 ... 116)</td>
<td>1.85</td>
<td>8364600.0000.0000</td>
</tr>
</tbody>
</table>

*1) Cv-value (US) = kv value x 1.2

Option selector

<table>
<thead>
<tr>
<th>Orifice (mm)</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>6</td>
</tr>
</tbody>
</table>

Valve options

Dusty gas temperature version
-20 ... +140°C
(-4 ... +284°F),
Seat seal TPE,
Ambient temperature
-40 ... +85°C
(-40 ... +185°F),
Cleaning gas temperature
-40 ... +85°C
(-40 ... +185°F)

Low temperature version
-40 ... +85°C
(-40 ... +185°F),
Seat seal TPE,
Ambient temperature
-40 ... +85°C
(-40 ... +185°F),
Cleaning gas temperature
-40 ... +85°C
(-40 ... +185°F)

Pilot connection 1/8 NPT

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
83640
2/2-way valves, remote pilot operated
DN 25 ... 40

Dimensions

DN 25

DN 40

Compressed air tank

<table>
<thead>
<tr>
<th>Orifice (mm)</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>59</td>
</tr>
<tr>
<td>40</td>
<td>83</td>
</tr>
</tbody>
</table>

- Pilot connection G1/8
- Gland
83670
2/2-way valves, solenoid pilot operated
DN 25 ... 40

- High flow rate
- Clear, compact design
- One-piece diaphragm

Technical Data

Medium:
Air

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional, preferably solenoid vertical on top

Operating pressure:
0,4 ... 8 bar (5,08 ... 116 psi)

Port size:
DN 25, DN 40

Pilot connection:
G1/8

Dusty gas temperature:
-20 ... +85°C (-4 ... +185°F)

Cleaning gas temperature:
-40 ... +85°C (-40 ... +185°F)

Ambient temperature:
-20 ... +85°C (-4 ... +185°F)

Materials

Body:
Aluminium

Seat seal:
TPE

Internal parts:
TPU

Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Orifice (mm)</th>
<th>Flow kv value *1) (m³/h)</th>
<th>Operating pressure (bar) (psi)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25</td>
<td>22</td>
<td>0,4 ... 8, 5,8 ... 116, 0,90</td>
<td>8367400.8171.xxxxx</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>59</td>
<td>0,4 ... 8, 5,8 ... 116, 2,10</td>
<td>8367600.8171.xxxxx</td>
<td></td>
</tr>
</tbody>
</table>

*1) Cv-value (US) = kv value x 1,2

xxx Please insert voltage and frequency codes, see page 41
83670
2/2-way valves, solenoid pilot operated
DN 25 ... 40

Option selector

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>6</td>
</tr>
</tbody>
</table>

Standard solenoid systems

Voltage and frequency solenoids 8171 **(2)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Frequency</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
<td>00</td>
<td>24 V d.c.</td>
<td>-</td>
<td>12 W</td>
<td>12 W</td>
</tr>
<tr>
<td>024</td>
<td>50</td>
<td>24 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>110</td>
<td>60</td>
<td>110 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>230</td>
<td>50</td>
<td>230 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
</tbody>
</table>

Additional solenoid systems for hazardous areas

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX-protection class</th>
<th>IP-protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>II 2G</td>
<td>Ex eb mb IC T6...T4 Gb Ex tb IC T130°C Db</td>
<td>IP66</td>
<td>42ex</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex eb mb IC T6...T4 Gb Ex tb IC T130°C Db</td>
<td>IP66</td>
<td>468x</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
</tbody>
</table>

Attention

The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Additional solenoid systems

<table>
<thead>
<tr>
<th>Option</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solenoid version for low temperature min. -40°C</td>
<td>9151</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
</tbody>
</table>
83670
2/2-way valves, solenoid pilot operated
DN 25 ... 40

Dimensions

DN 25

DN 40

Orifice (mm) | E
---|---
25 | 59
40 | 83

Compressed air tank

Solenoid rotatable 3 x 120°
Socket turnable 4 x 90°
(Socket included)

Silencer
2/2-way valve 8499484.8171.xxxxx
- Special dust collector valve with flange connection and o-ring seal at the valve inlet
- Valve outlet designed as a 75-mm hose connection
- Simple assembly and dismantling of the dust collector valve
- Optimised flow characteristics

2/2-way valve 8491445.8001.xxxxx
- Special dust collector valve with flange connection and o-ring seal at the valve inlet
- Valve outlet designed as plug-in connector for 45.3 mm pipe diameter
- Simple assembly and dismantling of the dust collector valve
- Optimised flow characteristics
- Incl. TPE diaphragm
We deliver GREAT solutions for our customers tackling the world’s most demanding engineering challenges.

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
# Systems

## Products

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td><strong>Fast find guide</strong></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Systems for dust collectors Ø 220 mm</td>
<td>8587xxx</td>
</tr>
<tr>
<td>53</td>
<td>Systems for dust collectors Ø 135 mm</td>
<td>8589xxx</td>
</tr>
<tr>
<td>56</td>
<td>Systems for dust collectors Ø 75 mm</td>
<td>8588xxx</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Diameter (mm)</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>8587xxx</td>
<td>Systems for dust collectors</td>
<td>Ø 220</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8588xxx</td>
<td>Systems for dust collectors</td>
<td>Ø 135</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8589xxx</td>
<td>Systems for dust collectors</td>
<td>Ø 75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, visit [www.imi-precision.com](http://www.imi-precision.com) and use the new improved search function. If you cannot see the option you require, please contact us.
8587xxx
Systems for dust collectors with integrated dust collector valves Ø 220 mm diameter for DN 40 ... 65 valves

- Filter cleaning system Flex-on®
- Distance and number of valves selectable
- Different blow-tube connections, available include pipe, thread, flange socket, etc.
- Integrated dust collector valve with TPE diaphragm
- For rapid response, high peak pressures and very good flow rates
- Pilot/solenoid actuated valve

Technical Data

Medium:
Air
Mounting position:
Optional
Diameter:
Ø 220 mm
Working pressure:
0.4 ... 8 bar (pulsating)
Dusty gas temperature:
-20 ... +85°C (-4 ... +176°F)
Coil gas temperature:
-20 ... +85°C (-4 ... +176°F)
Ambient temperature:
-20 ... +85°C (-4 ... +176°F)
Volume:
0.38 dm³ / cm of tank length

Materials

Body:
Aluminium/PA66
Seat seal:
TPE
Pilot seal:
TPU

Additional solenoid systems for hazardous areas

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX-Protection class</th>
<th>IP-protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>II 3G</td>
<td>Ex ec IIC T4 Gc</td>
<td>IP65</td>
<td>8176</td>
<td>24 V DC, 110 V AC, 230 V AC</td>
</tr>
<tr>
<td>II 3D</td>
<td>Ex IIC T130°C DC</td>
<td>IP65</td>
<td>6176</td>
<td>24 V DC, 110 V AC, 230 V AC</td>
</tr>
<tr>
<td>II 2G</td>
<td>Ex eb mB T4 Gb</td>
<td>IP66</td>
<td>6176</td>
<td>24 V DC, 110 V AC, 230 V AC</td>
</tr>
</tbody>
</table>

Attention!
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Technical data - standard models

Further information
Please contact a member of our sales team to check the model number.

Standard solenoid systems

<table>
<thead>
<tr>
<th>Voltage and frequency solenoid 8171 *)</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code Voltage</td>
<td>Code Frequency</td>
<td>Voltage</td>
<td>-</td>
<td>12 W</td>
</tr>
<tr>
<td>024</td>
<td>00</td>
<td>24 V d.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
</tr>
<tr>
<td>100</td>
<td>50</td>
<td>100 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
</tr>
<tr>
<td>120</td>
<td>60</td>
<td>120 V a.c.</td>
<td>60 Hz</td>
<td>23 VA</td>
</tr>
<tr>
<td>230</td>
<td>50</td>
<td>230 V a.c.</td>
<td>50 Hz</td>
<td>23 VA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Voltage and frequency solenoid 8001</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code Voltage</td>
<td>Code Frequency</td>
<td>Voltage</td>
<td>-</td>
<td>12 W</td>
</tr>
<tr>
<td>024</td>
<td>00</td>
<td>24 V d.c.</td>
<td>50 Hz</td>
<td>20 VA</td>
</tr>
<tr>
<td>100</td>
<td>50</td>
<td>110 V a.c.</td>
<td>50 Hz</td>
<td>20 VA</td>
</tr>
<tr>
<td>120</td>
<td>60</td>
<td>120 V a.c.</td>
<td>60 Hz</td>
<td>20 VA</td>
</tr>
<tr>
<td>230</td>
<td>50</td>
<td>230 V a.c.</td>
<td>50 Hz</td>
<td>20 VA</td>
</tr>
</tbody>
</table>

*) coil only

Electrical details for all solenoid systems

- Design: DIN VDE 0580
- Voltage range: ±10%
- Duty cycle: 100% ED
- Protection class: EN 60529 IP65
- Socket: Form A acc. to DIN EN 175301-833 (included)

According to DIN VDE 0580 at a solenoid temperature of +20°C.
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.

Online at www.imi-precision.com
Systems for dust collectors with integrated dust collector valves
Ø 220 mm diameter for DN 40 ... 65 valves

<table>
<thead>
<tr>
<th>Medium</th>
<th>Minimum grid dimensions</th>
<th>Pressure range</th>
<th>Temperature (°C)</th>
<th>Material</th>
<th>Approvals</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø 220</td>
<td>for DN 40</td>
<td>120 mm</td>
<td>0.4 ... 8 bar</td>
<td>-20 ... +85</td>
<td>Body: Aluminium Seat seal: TPE Seals: TPU</td>
<td>✚</td>
</tr>
<tr>
<td>ø 220</td>
<td>for DN 50</td>
<td>150 mm</td>
<td>0.4 ... 8 bar</td>
<td>-20 ... +85</td>
<td>Body: Aluminium Seat seal: TPE Seals: TPU</td>
<td>✚</td>
</tr>
<tr>
<td>ø 220</td>
<td>for DN 65</td>
<td>150 mm</td>
<td>0.4 ... 8 bar</td>
<td>-20 ... +85</td>
<td>Body: Aluminium Seat seal: TPE Seals: TPU</td>
<td>✚</td>
</tr>
</tbody>
</table>

Dimensions
DN 50 ... 65 Solenoid actuated valve

*2) Min. 150 mm, but max. to customer requirement
L Individual length of the filter cleaning system up to max. 3 m completely mounted (further dimensions on request)
8587xxx

Systems for dust collectors with integrated dust collector valves
Ø 220 mm diameter for DN 40 ... 65 valves

**Dimensions**

DN 50 ... 65 pilot actuated valve

*3) Min. 150 mm, but max. to customer requirement
L Individual length of the filter cleaning system up to max. 3 m completely mounted (further dimensions on request)
8587xxx
Systems for dust collectors with integrated dust collector valves
Ø 220 mm diameter for DN 40 valves

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.

<table>
<thead>
<tr>
<th>Orifice (mm)</th>
<th>ø E</th>
<th>F</th>
<th>G</th>
<th>ø K</th>
<th>L</th>
<th>M</th>
<th>ø N</th>
<th>ø P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female thread</td>
<td>50</td>
<td>G21/4</td>
<td>48</td>
<td>-</td>
<td>-</td>
<td>85</td>
<td>-</td>
<td>G2</td>
</tr>
<tr>
<td>Female thread</td>
<td>65</td>
<td>G21/4</td>
<td>48</td>
<td>-</td>
<td>-</td>
<td>80</td>
<td>-</td>
<td>G21/2</td>
</tr>
<tr>
<td>Male thread</td>
<td>50</td>
<td>G21/4</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>80</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Male thread</td>
<td>65</td>
<td>G21/4</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>80</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tube push-in connection</td>
<td>50</td>
<td>G21/4</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>80</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tube push-in connection</td>
<td>65</td>
<td>G21/4</td>
<td>48</td>
<td>-</td>
<td>-</td>
<td>90</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hose connection</td>
<td>50</td>
<td>G21/4</td>
<td>48</td>
<td>115</td>
<td>48</td>
<td>80</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Hose connection</td>
<td>65</td>
<td>G21/4</td>
<td>48</td>
<td>115</td>
<td>58</td>
<td>80</td>
<td>60</td>
<td>70</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Orifice (mm)</th>
<th>R</th>
<th>S</th>
<th>T</th>
<th>V</th>
<th>W</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female thread</td>
<td>50</td>
<td>43</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Female thread</td>
<td>65</td>
<td>35</td>
<td>100</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Male thread</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>G2</td>
</tr>
<tr>
<td>Male thread</td>
<td>65</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>G21/2</td>
</tr>
<tr>
<td>Tube push-in connection</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>61</td>
<td>35</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tube push-in connection</td>
<td>65</td>
<td>-</td>
<td>-</td>
<td>71</td>
<td>43</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hose connection</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hose connection</td>
<td>65</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

DN 50 can only be ordered in conjunction with adapter.
8587xxx
Systems for dust collectors with integrated dust collector valves
Ø 220 mm diameter for DN 40 valves

Dimensions
DN 40 Solenoid actuated valve

*4) Min. 120 mm, but max. to customer requirement
L Individual length of the filter cleaning system up to max. 3 m completely mounted (further dimensions on request)
8587xxx
Systems for dust collectors with integrated dust collector valves
Ø 220mm diameter for DN 40 valves

- Dimensions

DN 40 pilot actuated valve

* Min. 120 mm, but max. to customer requirement
L Individual length of the filter cleaning system up to max. 3 m completely mounted (further dimensions on request)

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Systems for dust collectors with integrated dust collector valves Ø 135 mm diameter for DN 25 valves

- Filter cleaning system Flex-on®
- Choice of virtually any number of valves at spacing of at least 75 mm
- Different blow-tube connections available include pipe, thread, flange socket, etc.
- Integrated dust collector valve with TPE diaphragm
- For rapid response, high peak pressures and very good flow rates
- Pilot/solenoid actuated valve

Technical Data

Medium: Air
Mounting position: Optional
Diameter: Ø 135 mm
Working pressure: 0.4 ... 8 bar (pulsating)
Dusty gas temperature: -20 ... +80°C (-4 ... +176°F)
Coil gas temperature: -20 ... +80°C (-4 ... +176°F)
Ambient temperature: -20 ... +80°C (-4 ... +176°F)
Volume: 0.14 dm³/cm of tank length
Minimum spacing: 75 mm

Materials

Body: Aluminium/PA66
Seat seal: TPE
Pilot seal: TPU

Technical data - standard models

Further information
Please contact a member of our sales team to check the model number.

Standard solenoid systems

<table>
<thead>
<tr>
<th>Voltage and frequency solenoid 8171</th>
<th>Code Voltage</th>
<th>Code Frequency</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
<td>00</td>
<td>24 V d.c.</td>
<td>-</td>
<td></td>
<td>12 W</td>
<td>12 W</td>
</tr>
<tr>
<td>024</td>
<td>50</td>
<td>24 V a.c.</td>
<td>50 Hz</td>
<td></td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>110</td>
<td>50</td>
<td>110 V a.c.</td>
<td>50 Hz</td>
<td></td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>120</td>
<td>60</td>
<td>120 V a.c.</td>
<td>60 Hz</td>
<td></td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
<tr>
<td>230</td>
<td>50</td>
<td>230 V a.c.</td>
<td>50 Hz</td>
<td></td>
<td>23 VA</td>
<td>16 VA</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Voltage and frequency solenoid 8001</th>
<th>Code Voltage</th>
<th>Code Frequency</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
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<td>230</td>
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<td>230 V a.c.</td>
<td>50 Hz</td>
<td></td>
<td>23 VA</td>
<td>16 VA</td>
</tr>
</tbody>
</table>

Additional solenoid systems for hazardous areas

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX-Protection class</th>
<th>IP-protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>II 3G</td>
<td>Ex ec IIC T4 Gc</td>
<td>IP65</td>
<td>8176</td>
<td>24 V DC, 110 V AC, 230 V AC</td>
</tr>
<tr>
<td>II 3D</td>
<td>Ex ec IIC T1130°C DC</td>
<td>IP65</td>
<td>8176</td>
<td>24 V DC, 110 V AC, 230 V AC</td>
</tr>
<tr>
<td>II 2G</td>
<td>Ex eb mb IIC T4 Gb</td>
<td>IP66</td>
<td>6176</td>
<td>24 V DC, 110 V AC, 230 V AC</td>
</tr>
<tr>
<td>II 2D</td>
<td>Ex eb mb IIC T1135°C Db</td>
<td>IP66</td>
<td>6176</td>
<td>24 V DC, 110 V AC, 230 V AC</td>
</tr>
</tbody>
</table>

Attention!
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Electrical details for all solenoid systems

<table>
<thead>
<tr>
<th>Design</th>
<th>DIN VDE 0580</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage range</td>
<td>±10%</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>100% ED</td>
</tr>
<tr>
<td>Protection class</td>
<td>EN 60529 P65</td>
</tr>
<tr>
<td>Socket</td>
<td>Form A acc. to DIN EN 175301-803 (included)</td>
</tr>
</tbody>
</table>

According to DIN VDE 0580 at a solenoid temperature of +20°C, at operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.
**8589xxx**

Systems for dust collectors with integrated dust collector valves

Ø 135 mm diameter for DN 25 valves

---

**Dimensions**

Pilot actuated valve

---

Examples for mounting parts

---

* Min. 75 mm, but max. to customer requirement
L Individual length of the filter cleaning system up to max. 1.2 m (completely mounted, further dimensions on request)

---

**Connection**

G1/2 or 1/2 NPT
- Condensate drain
- Pressure gauge
- Pressure switch
- Reading point

**Connection**

G1, G1/2 or G3/4 resp. 1 NPT, 1/2 NPT or 3/4 NPT
- Compressed air supply
- Input solenoid valve
- Pilot connection G1/8 resp. 1/8 NPT
- Connection thread G1 for adapters

**Connection**

G1, G1/2 or G3/4 resp. 1 NPT, 1/2 NPT or 3/4 NPT
- Compressed air supply
- Input solenoid valve
- Pilot connection G1/8 resp. 1/8 NPT
- Connection thread G1 for adapters

---

**Hose connection**

**Plug connection**

**Crimp connection**

---

For further information, visit [www.imi-precision.com](http://www.imi-precision.com) and use the new improved search function. If you cannot see the option you require please contact us.
8589xxx
Systems for dust collectors with integrated dust collector valves
Ø 135 mm diameter for DN 25 valves

Dimensions

Solenoid actuated valve

*L* Min. 75 mm, but max. to customer requirement.
L Individual length of the filter cleaning system up to max. 1.2 m completely mounted (further dimensions on request)

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
8588xxx
Systems for dust collectors with integrated dust collector valves
Ø 75 mm diameter for DN 25 valves

- Filter cleaning system Flex-on®
- Choice of virtually any number of valves at spacing of at least 75 mm
- Different blow-tube connections available include pipe, thread, flange socket, etc.
- Integrated dust collector valve with TPE diaphragm
- For rapid response, high peak pressures and very good flow rates
- Pilot/Solenoid actuated valve

Technical Data
Medium: Air
Mounting position: Optional
Diameter: Ø 135 mm
Working pressure: 0.4 ... 8 bar (pulsating)
Dusty gas temperature: -20 ... +80°C (-4 ... +176°F)
Coil gas temperature: -20 ... +80°C (-4 ... +176°F)
Ambient temperature: -20 ... +80°C (-4 ... +176°F)
Volume: 0.45 dm³/cm of tank length
Minimum spacing: 90 mm

Materials
Body: Aluminium/PA66
Seat seal: TPE
Pilot seal: TPU

Further information
Please contact a member of our sales team to check the model number.

Technical data - standard models

Standard solenoid systems

<table>
<thead>
<tr>
<th>Voltage and frequency</th>
<th>Code</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Code Frequency</td>
<td>Power consumption</td>
<td>Holding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>024 00 24 V d.c.</td>
<td>0711</td>
<td>12 W</td>
<td>12 W</td>
<td></td>
<td></td>
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<tr>
<td>024 50 24 V a.c.</td>
<td>0711</td>
<td>23 VA</td>
<td>16 VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110 50 110 V a.c.</td>
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<td>120 60 120 V a.c.</td>
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<td>024 00 24 V d.c.</td>
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<td>024 50 24 V a.c.</td>
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<td>20 VA</td>
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</table>

According to DIN VDE 0580 at a solenoid temperature of +20°C.
At operating state temperature the input power of a coil decreases by up to ca. 35% due to physical reasons.
8588xxx

Systems for dust collectors with integrated dust collector valves
Ø 75 mm diameter for DN 25 valves

Dimensions

Pneumatic actuated valve

---

*2) Min. 75 mm, but max. to customer requirement
L Individual length of the filter cleaning system up to max. 1.2 m
completely mounted (further dimensions on request)
Systems for dust collectors with integrated dust collector valves
Ø 75 mm diameter for DN 25 valves

Dimensions
Solenoid actuated valve

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L Individual length of the filter cleaning system up to max. 1.2 m completely mounted (further dimensions on request)
## Controllers

<table>
<thead>
<tr>
<th>Page</th>
<th>Fast find guide</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>Fast find guide</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>Microcontroller-operated valve controllers</td>
<td>83490xx.0000.xxxxx</td>
</tr>
<tr>
<td>66</td>
<td>Valve controllers for industrial filters</td>
<td>83491xx.0000.xxxxx</td>
</tr>
<tr>
<td>67</td>
<td>Valve controllers for industrial filters</td>
<td>834950x.8274.xxxxx</td>
</tr>
<tr>
<td>68</td>
<td>Master controller</td>
<td>83492xx.0000.xxxxx</td>
</tr>
<tr>
<td>69</td>
<td>Master controller</td>
<td>8349200.0000.xxxxx</td>
</tr>
<tr>
<td>70</td>
<td>Valve controllers for industrial filters</td>
<td>8349500.0000.xxxxx</td>
</tr>
<tr>
<td>71</td>
<td>Differential pressure measuring transducers</td>
<td>8349900.0000.00000</td>
</tr>
<tr>
<td>72</td>
<td>Differential pressure controllers</td>
<td>834990x.0000.xxxxx</td>
</tr>
<tr>
<td>73</td>
<td>Differential pressure controllers</td>
<td>834991x.0000.00000</td>
</tr>
<tr>
<td>74</td>
<td>Differential pressure controllers with integrated measuring hose cleaning</td>
<td>834992x.0000.00000</td>
</tr>
<tr>
<td>75</td>
<td>Pneumatic controllers</td>
<td>82870</td>
</tr>
</tbody>
</table>
FAST FIND GUIDE

**CONTROLLERS**

8349000.0000.xxxxx
Microcontroller-operated valve controllers Casing version

Page 66

8349010.0000.xxxxx
Microcontroller-operated valve controllers Standard rail support

Page 65

8349110.00000.xxxxx
Valve controllers for industrial filters Master-Version without ∆p

Page 66

8349120.0000.xxxxx
Valve controllers for industrial filters Master-Version prepared for ∆p

Page 66

8349150.0000.02400
Valve controllers for industrial filters Slave-Version

Page 66

834950x.8274.xxxxx
Valve controllers for industrial filters Master-Version with ∆p

Page 67

8349500.0000.xxxxx
Valve controllers for industrial filters Master-Version with ∆p

Page 67

8349900.0000.00000
Differential pressure measuring transducers

Page 71

834990x.0000.xxxxx
Differential pressure controllers 0 ... 25/50/100 mbar

Page 72

834991x.0000.00000
Differential pressure controllers 0 ... 35/90/450 mbar

Page 73

834992x.0000.00000
Differential pressure controllers with integrated measuring hose cleaning 0 ... 35/90/450 mbar

Page 74

82870
Pneumatically actuated Pneumatic controllers with ATEX approval

Page 75

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Example:

**Single unit**
Valve controller for industrial filters
Master-Version prepared for Δp
Max. 16 outputs

**Extension unit**
Valve controller for industrial filters
Slave-Version
Max. 16 outputs

Accessories
Differential pressure measuring transducer
8349100.0000.0000

8349110 without Δp
8349120 prepared for Δp
8349150 Slave-Version
Example:

**Extension unit**
Valve controller for industrial filters
Slave-Version
Max. 16 outputs

**Accessories**
Differential pressure measuring transducer
8349900.0000.00000

**Example:**

- 8349110 without Δp
- 8349120 prepared for Δp
- 8349150 Slave-Version
Example:

8349110 without Δp
8349120 prep. for Δp
8349150 Slave-Version
OVERVIEW CONTROLLERS

Example:

Single unit
Differential pressure controller with integrated measuring hose cleaning
0 ... 0/35/90/450 mbar

CONTROLLERS

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Microcontroller-operated valve controllers

- For the cycle control of electromagnetic valves in industrial dust filter systems
- Flexible design concept: Casing version or standard rail support

Technical Data

Power supply: 100 ... 240 V AC, 50 - 60 Hz or 24 V d.c. ± 10 %.
Current consumption: 30 VA
Operating temperature: -20 ... +50 °C (–4 ... 122°F)
Ex area: -20 ... +40 °C (–4 ... 104°F)
Valve outputs: 8
Displays: LED
1 x green „Operation“
1 x yellow „Cleaning“
8 x red assigned to the valves
Control elements:
Start-button
Set cycles are executed
Test-button
The next valve is cleaned
Rotary selector switch
Number of valves
1 ... 8 Cycle setting
Potentiometer
Pulse setting, pulse setting

Versions:
- Dust-proof plastic casing with transparent cover
- Installation on standard rail support
- DPCB with collar sleeves for assembly with M4 screws

Electrical connection:
Push-in spring clamp terminals

Valve current:
1 A at a pulse time >1 s and as a pause > the pulse time, output short-circuit-proof

Approval:
x I 3D Ex tc IIIC T135°C DC, IP65

Measurements:
180 x 130 x 78 mm

Technical data - standard models

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
<th>Model voltage in 24 V d.c.</th>
<th>Model voltage in 230 V a.c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing version *1)</td>
<td>8349000.0000.02400 *1)</td>
<td>8349000.0000.23059 *1)</td>
<td></td>
</tr>
<tr>
<td>Standard rail support</td>
<td>8349010.0000.02400</td>
<td>8349010.0000.23059</td>
<td></td>
</tr>
</tbody>
</table>

*1) see approval

Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection set with:</td>
<td>1700933.0000.00000</td>
</tr>
<tr>
<td>1 x cable gland M25</td>
<td></td>
</tr>
<tr>
<td>2 x cable gland M32</td>
<td></td>
</tr>
<tr>
<td>Incl. multiple sealing inserts and sealing bolts</td>
<td></td>
</tr>
</tbody>
</table>
83491xx.0000.xxxxx
Valve controllers for industrial filters

- Solenoid valve controller for the time- or differential pressure-dependent control of solenoid valves in industrial dust extraction technology
- Up to 64 valves are controlled with the base unit and three expansion units
- The valves are activated sequentially and are not chamber-oriented
- They are monitored for excess current and interruption

Technical Data

**Power supply:**
- 100 ... 240 V a.c.
- 50 - 60 Hz or 24 V d.c.

**Current consumption:**
- 30 VA

**Operating temperature:**
- -20 ... +50 °C (-4 ... 122°F)
- Ex area 22:
- -20 ... +40 °C (-4 ... 104°F)

**Valve outputs:**
- 16 (with extensions max. 64)

**Displays:**
- 7-segment display
- 3-digit, 14 mm height, white

**Control elements:**
- 5 function keys

**Versions:**
- 0 valves, control unit only without analogue input
- 16 valves without analogue input
- 0 valves, control unit only with analogue input
- 16 valves with analogue input
- Extension unit: 16 valves

**Electrical connection:**
- Push-in-spring clamp terminals

**Valve current:**
- 1 A

**Analogue input:**
- 4 ... 20 mA
- Incl. sensor supply

**Digital input:**
- Start, recleaning and fault acknowledgement

**Relay output:**
- 1 change-over contact
- Contact load 250 V AC, 5 A

**Interfaces:**
- RJ10 for PC configuration

**Approval:**
- II 3D Ex tc IIIC T135°C DC IP65

**Measurements:**
- 231 x 125 x 90 mm

#### Technical data - standard models

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
<th>Input voltage in 24 V d.c.</th>
<th>Model</th>
<th>Input voltage in 100 ... 240 V a.c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master-Version without Δp and without valve outputs</td>
<td>8349100.0000.02400</td>
<td></td>
<td>8349100.0000.23059</td>
<td></td>
</tr>
<tr>
<td>Master-Version without Δp</td>
<td>8349110.0000.02400</td>
<td></td>
<td>8349110.0000.23059</td>
<td></td>
</tr>
<tr>
<td>Master-Version prepared for Δp</td>
<td>8349120.0000.02400</td>
<td></td>
<td>8349120.0000.23059</td>
<td></td>
</tr>
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<tr>
<td>Slave-Version</td>
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</table>

#### Accessories

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<thead>
<tr>
<th>Description</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection set</td>
<td>3 × M32 × 1.5 with multiple sealing insert for 6 lines</td>
</tr>
<tr>
<td></td>
<td>3 × M16 × 1.5 for supply and communication</td>
</tr>
<tr>
<td>Connection cable for extension unit</td>
<td>On request</td>
</tr>
</tbody>
</table>
834950x.8274.xxxxx
Valve controllers for industrial filters

- Solenoid valve control for solenoid valves in industrial dust removal technology according to a time control or a differential pressure limit
- Controls up to 8 valves
- Valves are activated in sequence and monitored for overcurrent or disruption
- Differential pressure is measured directly by the control system, an external sensor is therefore unnecessary

Technical Data

Power supply: 100 ... 240 V a.c., 50 - 60 Hz or 24 V d.c.
Current consumption: 30 VA
Operating temperature: -20 ... +50 °C (-4 ... 122°F)
Ex area 22: -20 ... +40 °C (-4 ... 104°F)
Valve outlets: Max. 8
Displays: 7-segment display
3-digit, 14 mm height, white
Control elements: 5 function keys
Settings: Pulse and pause duration, number of valves, special cleaning cycles and full or partial cycle, p-measurement range, high and special cleaning threshold
Electrical connection: Push-in-spring clamp terminals
Valve current: 1 A

Analogue input: 4 ... 20 mA
Digital input: Start, re-cleaning, enable
Relay output: 1 x change-over contact, Contact load 250 V AC, 5 A
Interfaces: RJ10 for PC-configuration
Measuring range: Max. 40 mbar (100 resp. 500 mbar on request)
Dust removal: Time-controlled without p-evaluation or automatic via integrated p-measurement
Special cleaning: Start via tactile contact or adjustable differential pressure threshold
Approval: Ii II 3D Ex tc IIIC T135°C DC
Measurements: 271 x 170 x 120 mm

Technical data - standard models

<table>
<thead>
<tr>
<th>Number of valves</th>
<th>Description</th>
<th>Model</th>
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</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Input voltage in 24 V d.c.</td>
<td>Input voltage in 230 V a.c.</td>
</tr>
<tr>
<td>2</td>
<td>Master-Version with ∆p</td>
<td>8349502.8274.02400</td>
<td>8349502.8274.23050</td>
</tr>
<tr>
<td>3</td>
<td>Master-Version with ∆p</td>
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<tr>
<td>4</td>
<td>Master-Version with ∆p</td>
<td>8349504.8274.02400</td>
<td>8349504.8274.23050</td>
</tr>
<tr>
<td>5</td>
<td>Master-Version with ∆p</td>
<td>8349505.8274.02400</td>
<td>8349505.8274.23050</td>
</tr>
<tr>
<td>6</td>
<td>Master-Version with ∆p</td>
<td>8349506.8274.02400</td>
<td>8349506.8274.23050</td>
</tr>
<tr>
<td>7</td>
<td>Master-Version with ∆p</td>
<td>8349507.8274.02400</td>
<td>8349507.8274.23050</td>
</tr>
<tr>
<td>8</td>
<td>Master-Version with ∆p</td>
<td>8349508.8274.02400</td>
<td>8349508.8274.23050</td>
</tr>
</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable glands 3 x M32 and 2 x M16 incl. multiple sealing insert</td>
<td>1700934.0000.0000</td>
</tr>
<tr>
<td>Connection cable for extension unit</td>
<td>On request</td>
</tr>
</tbody>
</table>
Technical Data

- **Power supply:** 24 V DC, galvanically isolated
- **Operating temperature:** -10 ... +55 °C (14 ... 131°F)
- **Valve outputs:** 12
- **Displays:** Graphic LC-Display
  - Resolution: 128 x 64 Pixel
  - Display size: 66 x 33 mm
  - Colour: yellow-green
  - Brightness and contrast can be set
- **LED:**
  - 1 green „Operation“
  - 1 x yellow „Cleaning active“
  - 1 x red „Alarm“
- **Control elements:**
  - 8 function buttons, Cursorblock
  - Time Clock
  - Optional
- **Processor:** Fujitsu MB96F348
  - 544 kB Flash / 280 kB RAM
  - 1 MB for parameters and data
- **Interfaces:**
  - CAN-interface: galvanically isolated, 50 kBit/s
  - USB-Device:
    - Type B, for program updates and PC communication
- **Inputs:**
  - 5 digital inputs: Galvanically separated
  - 2 Analog input: 4 ... 20 mA
- **Outputs:**
  - 4 Digital output: 24 V DC, 1 A, short-circuit proof
- **Housing:**
  - Switch panel housing
- **Electrical connection:**
  - Screw-plug clamps
- **Safety class:**
  - IP65 front, IP20 rear side
- **Dimensions:**
  - 196 x 126 x 45 mm

### Technical data - standard models

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
<th>Input voltage in 24 V d.c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master without ∆dp and valve outputs</td>
<td>8349200.0000.23059</td>
<td></td>
</tr>
<tr>
<td>Slave for 12 valves</td>
<td>8349250.0000.02400</td>
<td></td>
</tr>
</tbody>
</table>

### Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th></th>
</tr>
</thead>
</table>
Technical Data

**Power supply:**
24 V DC, galvanically isolated

**Operating temperature:**
-10 ... +55 °C (14 ... 131°F)

**Valve outputs:**
12

**Displays:**
Graphic LC-Display:
Resolution: 128 x 64 Pixel
Display size: 66 x 33 mm
Colour: yellow-green
Brightness and contrast can be set
LED:
1 green „Operation”
1 x yellow „Cleaning aktive”
1 x red „Alarms”

**Control elements:**
8 function buttons, Cursorblock
Time Clock
Optional

**Processor:**
Fujitsu MB96F348
544 kB Flash / 280 kB RAM
1 MB for parameters and data

**Interfaces:**
CAN-interface:
galvanically isolated, 50 kBit/s

**USB-Device:**
Type B, for program updates
and PC communication

**Inputs:**
5 digital inputs:
Galvanically separated
2 Analog input:
4 ... 20 mA

**Outputs:**
4 Digital output:
24 V DC, 1 A, short-circuit proof

**Housing:**
Switch panel housing

**Electrical connection:**
Screw-plug clamps

**Safety class:**
IP65 front, IP20 rear side

**Dimensions:**
196 x 126 x 45 mm

---

### Technical data - standard models

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
<th>Input voltage in 24 V d.c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master without Δp and valve outputs</td>
<td>8349200.0000.23059</td>
<td></td>
</tr>
<tr>
<td>Slave for 12 valves</td>
<td>8349250.0000.02400</td>
<td></td>
</tr>
</tbody>
</table>

### Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On demand</td>
<td></td>
</tr>
</tbody>
</table>
CONTROLLERS

For further information, visit [www.imi-precision.com](http://www.imi-precision.com) and use the new improved search function. If you cannot see the option you require please contact us.

Valve controllers for industrial filters

- Solenoid valve control for solenoid valves in industrial dust removal technology according to a time control or a differential pressure limit
- Controls up to 6 valves
- Valves are activated in sequence and monitored for overcurrent or disruption
- Differential pressure is measured directly by the control system, an external sensor is therefore unnecessary

Technical Data

Power supply: 100 ... 240 V AC, 50 - 60 Hz or 24 V d.c.
Current consumption: 30 VA
Operating temperature: -20 ... +50°C (-4 ... 122°F)
Ex area 22: -20 ... +40°C (-4 ... 104°F)
Valve outlets: Max. 8
Displays: 7-segment display
3-digit, 14 mm height, white
Control elements: 5 function keys
Settings: Pulse and pause duration, number of valves, special cleaning cycles and full or partial cycle, p-measurement range, high and special cleaning threshold
Electrical connection: Push-in-spring clamp terminals
Valve current: 1 A

Analogue input: 4 ... 20 mA
Digital input: Start, re-cleaning, enable
Relay output: 1 x change-over contact, Contact load 250 V AC, 5 A
Interfaces: RJ10 for PC-configuration
Measuring range: Max. 40 mbar
(Dust removal: Time-controlled without p-evaluation or automatic via integrated p-measurement)
Special cleaning: Start via tactile contact or adjustable differential pressure threshold
Approval:

Technological data - standard models

<table>
<thead>
<tr>
<th>Description</th>
<th>Description</th>
<th>Model Input voltage in 24 V d.c.</th>
<th>Model Input voltage in 230 V a.c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-8</td>
<td>Master-Version with ∆p</td>
<td>8349500.0000.02400</td>
<td>8349500.0000.23050</td>
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</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable glands</td>
<td>1700934.0000.00000</td>
</tr>
<tr>
<td>2 x M32 with multiple sealing insert for 6 cables with 6mm diameter and 3 x M16 for supply and communication</td>
<td>1700934.0000.00000</td>
</tr>
</tbody>
</table>
8349900.0000.0000
Differential pressure measuring transducers
for controller 83499120.0000.xxxxx

- The differential pressure measuring transducer is a universal measuring transducer for small and medium pressures
- By fitting it with various pressure sensors, measuring ranges between 2.5 and 1000 mbar can be realised
- Two connection cables are used for the power supply
- The operating state is indicated with an LED

Technical Data

Power supply: $U_b = 10 \ldots 36 \text{ V d.c.}$ (auxiliary energy)
Ambient temperature: $-20 \ldots +50\degree C (-4 \ldots 122\degree F)$
  Ex area 22: $-20 \ldots +40\degree C (-4 \ldots 104\degree F)$
Measuring systems: Semi-conductor sensor
Medium: Air as well as dry, non-aggressive gases
Measuring range: $0 \ldots 1000 \text{ mbar}$
Analogue output: $4 \ldots 20 \text{ mA}$

Pressure connection: Quick action coupling for 6 mm outer diameter
Max. admissible load: $R_p > (U_b - 9 \text{ V})/0.02 \text{ A}$
Electrical connection: Push-in-spring clamp terminals
Approval:
- $\text{Ex II 3D Ex tc} \text{ IIC T135°C DC}$
- $\text{Ex II 3G Ex nR IIC T4 Gc}$
Measuring: $113 \times 80 \times 60 \text{ mm}$

Technical data - standard models

<table>
<thead>
<tr>
<th>Measuring range (mbar)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 \ldots 50</td>
<td>8349900.0000.0000</td>
</tr>
</tbody>
</table>
Differential pressure controllers

- The differential pressure controller is a universal measuring transducer especially for small differential pressures (<100 mbar).
- The actual differential pressure is indicated digitally with 4-digits.
- The device has two switching thresholds for monitoring and control purposes.
- An additional threshold is used for monitoring a maximum differential pressure.

### Technical Data

**Power supply:**
- 230 V a.c., 50 ... 60 Hz, ±10%
- 24 V d.c., -10% / +50%
**Power consumption:**
< 3 VA
**Ambient temperature:**
-10 ... +50 °C (14 ... 122°F)
**Measuring system:**
Semi-conductor sensor
**Medium:**
- Air as well as dry, non-aggressive gases
**Measuring range:**
- 0 ... 25/50/100 mbar
**Pressure connection:**
Pipe connection G1/4 inside thread
Option: 4 mm, 6 mm hose nipple
**Analogue output:**
0(4) ... 20 mA
**Pressure connection:**
Pipe connection G1/4 inside, hose nipple

### Technical data - standard models

<table>
<thead>
<tr>
<th>Measuring range (mbar)</th>
<th>Model Inlet voltage in 24 V d.c.</th>
<th>Model Inlet voltage in 230 V a.c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 ... 25</td>
<td>8349900.0000.02400</td>
<td>8349900.0000.23059</td>
</tr>
<tr>
<td>0 ... 50</td>
<td>8349901.0000.02400</td>
<td>8349901.0000.23059</td>
</tr>
<tr>
<td>0 ... 100</td>
<td>8349902.0000.02400</td>
<td>8349902.0000.23059</td>
</tr>
<tr>
<td>0 ... 500</td>
<td>8349903.0000.02400</td>
<td>8349903.0000.23059</td>
</tr>
</tbody>
</table>

**Relay switching outputs:**
- 1 change-over contact for cleaning
  - Contact rating 250 V a.c., 5 A resp. 110 V d.c., 1 A
- 1 change-over contact for Δp-Alarm
  - Contact rating 250 V a.c., 5 A resp. 110 V d.c., 1 A
**Accuracy:**
- Basic accuracy ± 1% of end value
- Temperature drift ±0,05%/K of end value
**Electrical connections:**
- Spring clamp terminals, 1.0 mm² finely stranded, 1.5 mm² single stranded
**Approval:**
- II 3D Ex tc IIC T135°C DC IP65
**Measuring:**
- 122 x 120 x 55 mm
Technical Data

Power supply:
100 ... 240 V a.c.,
50 ... 60 Hz,
±10%
24 V DC, ±10%

Power consumption:
<5 VA

Ambient temperature:
-20 ... +50°C (-4 ... 122°F)

Medium:
Air as well as dry,
non-aggressive gases

Displays:
7-segment display
3-digit, 14 mm height, red

Measuring range:
0 ... 35/90/450 mbar

Analogue output:
4 ... 20 mA, galvanically isolated

Measuring tube connection:
Ø 6 mm (quick connector)

Approval:
IIC Ex d IIIC T135°C DC IP65

Measuring:
130 x 130 x 60 mm

Technical Data - standard models

<table>
<thead>
<tr>
<th>Measuring range (mbar)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 ... 35</td>
<td>8349910.0000.0000</td>
</tr>
<tr>
<td>0 ... 90</td>
<td>8349912.0000.0000</td>
</tr>
<tr>
<td>0 ... 450</td>
<td>8349913.0000.0000</td>
</tr>
</tbody>
</table>
Differential pressure controller with integrated measuring hose cleaning

- Differential pressure controller for differential pressure ranges of 35, 90 or 450 mbar
- Incorrect measurement is prevented thanks to the integrated measuring hose cleaning
- The compact “2-in-1-device” facilitates the installation and doesn’t need an adjustment between differential pressure controller and a separate measuring hose cleaning
- The wide-range power supply (100 ... 240 V a.c.) of the differential pressure controller enables worldwide using
- To adjust the controller there is a keypad directly on the device

### Technical Data

<table>
<thead>
<tr>
<th>Measuring range (mbar)</th>
<th>Typ Inlet voltage in 100 ... 240 V a.c., 24 V d.c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 ... 35</td>
<td>8349920.0000.00000</td>
</tr>
<tr>
<td>0 ... 90</td>
<td>8349922.0000.00000</td>
</tr>
<tr>
<td>0 ... 450</td>
<td>8349923.0000.00000</td>
</tr>
</tbody>
</table>

### Measuring range:
- 0 ... 35/90/450 mbar

### Analogue output:
- 4 ... 20 mA, galvanically isolated

### Measuring hose connection:
- Ø 6 mm and compressed air
- Ø 8 mm with quick connectors

### Approval:
- Ex II 3D Ex tc IIC T135°C DC IP65

### Measuring:
- 200 x 150 x 100 mm

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82870
Pneumatic controllers, pneumatically actuated
Internal thread P = G1/8, Z = G1/4

- Compact design
- Switching time and interval adjustable
- Fully pneumatic controller, suitable for robust operation
- Ideal for use in hazardous zones

Technical Data

Fluid (control section):
Filtered air – compressed air supply via conditioning unit with a 5 ... 10 μm filter, without oiler (for unpurified compressed air we recommend an additional 50 ... 75 μm primary filter)

Reproducibility:
±5%

Mounting position:
Optional

Interval:
Adjustable 2 ... 200 s, set on about 10 s in factory

Pulse time:
Adjustable 30 ... 1,000 ms, approx ca. 200 ms

Temperature range:
0 ... +70 °C (+32 ... +158°F),
–25 ... +70 °C (-13 ... +158°F)
for dry air

Ambient temperature:
–20 ... +40°C (-4 ... +104°F)

Protection class:
II 2GD c IIB T85°C
I M2c

Materials

Body:
Grey cast iron

Technical data - standard models

Wiper arm (valve venting) operated by spring return in the cylinder

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Number of control ports *1)</th>
<th>Control section Pressure port P</th>
<th>Operating pressure Control section (bar)</th>
<th>Operating pressure Control port Z (bar)</th>
<th>Operating pressure Operating section (psi)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>G1/8</td>
<td>2 ... 8</td>
<td>G1/4</td>
<td>0.5 ... 8</td>
<td>7.25 ... 116</td>
<td>7.8</td>
<td>8287054.0000.00000</td>
</tr>
<tr>
<td>12</td>
<td>G1/8</td>
<td>2 ... 8</td>
<td>G1/4</td>
<td>0.5 ... 8</td>
<td>7.25 ... 116</td>
<td>7.8</td>
<td>8287154.0000.00000</td>
</tr>
<tr>
<td>14</td>
<td>G1/8</td>
<td>2 ... 8</td>
<td>G1/4</td>
<td>0.5 ... 8</td>
<td>7.25 ... 116</td>
<td>7.8</td>
<td>8287254.0000.00000</td>
</tr>
<tr>
<td>16</td>
<td>G1/8</td>
<td>2 ... 8</td>
<td>G1/4</td>
<td>0.5 ... 8</td>
<td>7.25 ... 116</td>
<td>10.9</td>
<td>8287354.0000.00000</td>
</tr>
<tr>
<td>20</td>
<td>G1/8</td>
<td>2 ... 8</td>
<td>G1/4</td>
<td>0.5 ... 8</td>
<td>7.25 ... 116</td>
<td>10.9</td>
<td>8287554.0000.00000</td>
</tr>
</tbody>
</table>

*1) Control ports not required have to be sealed with a plug

Option selector

<table>
<thead>
<tr>
<th>Number of control ports *1)</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>20</td>
<td>5</td>
</tr>
</tbody>
</table>

Valve options Substitute

Units with 18 control ports available On request

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.

IMI BUSCHJOST

IMI Precision Engineering
82870

Pneumatic controllers, pneumatically actuated
Internal thread P = G1/8, Z = G1/4

● Dimensions

<table>
<thead>
<tr>
<th>Number of control ports *1)</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>95</td>
<td>115</td>
<td>167</td>
<td>150</td>
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<tr>
<td>12</td>
<td>100</td>
<td>115</td>
<td>167</td>
<td>150</td>
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<td>14</td>
<td>100</td>
<td>115</td>
<td>167</td>
<td>150</td>
<td>8287254.0000.00000</td>
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<tr>
<td>16</td>
<td>140</td>
<td>125</td>
<td>170</td>
<td>180</td>
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</tr>
<tr>
<td>20</td>
<td>140</td>
<td>125</td>
<td>170</td>
<td>180</td>
<td>8287554.0000.00000</td>
</tr>
</tbody>
</table>

*1) Interval-adjustment
Silencer
Control port G1/4
Dot indicates the position of the wiper arm

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
### Products

<table>
<thead>
<tr>
<th>Page</th>
<th>Fast find guide</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>78</td>
<td>Fast find guide</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>Purge valves</td>
<td>8493571.8821.xxxxx</td>
</tr>
<tr>
<td>81</td>
<td>2/2-way valve DN 3.2 &amp; 3.6 (pilot valves)</td>
<td>849xxxx.827x.xxxxx</td>
</tr>
<tr>
<td>83</td>
<td>ETM pulse solenoids</td>
<td>0000000.8821.xxxxx</td>
</tr>
<tr>
<td>85</td>
<td>Solenoids 817x</td>
<td>0000000.817x.xxxxx</td>
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<tr>
<td>87</td>
<td>Solenoids 80xx</td>
<td>0000000.80xx.xxxxx</td>
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<td>89</td>
<td>Solenoids 915x</td>
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<td>Solenoids 8176</td>
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<td>Solenoids 428x</td>
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<tr>
<td>99</td>
<td>Solenoids 468x</td>
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<tr>
<td>101</td>
<td>Service kits for 82900/82910, 82960/82970, 83300/83310, 83320</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>Service kits for 83920, 83930</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>Service kits solenoid for 82960/82970, 83320, 83920</td>
<td></td>
</tr>
<tr>
<td>Part Number</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>8493571.8821</td>
<td>Purge valves for use with a differential pressure regulator</td>
<td>79</td>
</tr>
<tr>
<td>849xxxx.827x</td>
<td>2/2-way valves DN 3.2 ... DN 3.6 Solenoid pilot operated</td>
<td>81</td>
</tr>
<tr>
<td>0000000.8821</td>
<td>ETM pulse solenoids</td>
<td>83</td>
</tr>
<tr>
<td>0000000.817x</td>
<td>Solenoids</td>
<td>85</td>
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<td>0000000.80xx</td>
<td>Solenoids</td>
<td>87</td>
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<td>0000000.6170</td>
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</tr>
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<td>0000000.8026</td>
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<td>0000000.6200</td>
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<td>0000000.382x</td>
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<td>95</td>
</tr>
<tr>
<td>0000000.428x</td>
<td>Solenoids for 16 mm sleeve diameter</td>
<td>97</td>
</tr>
<tr>
<td>0000000.468x</td>
<td>Solenoids for 16 mm sleeve diameter</td>
<td>99</td>
</tr>
<tr>
<td>SKS™ for 82900/82910</td>
<td>2/2-way valves DN 20 ... DN 80 Remote pilot operated</td>
<td>101</td>
</tr>
<tr>
<td>SKS™ for 83300/83310</td>
<td>2/2-way valves DN 20 ... DN 80 Solenoid pilot operated</td>
<td>101</td>
</tr>
<tr>
<td>SKS™ for 82960/82970</td>
<td>2/2-way valves DN 80 (flange version) Remote pilot operated</td>
<td>103</td>
</tr>
<tr>
<td>SKS™ for 82960/82970</td>
<td>2/2-way valves DN 80 (flange version) Solenoid pilot operated</td>
<td>103</td>
</tr>
<tr>
<td>SKS™ for 83920</td>
<td>2/2-way valves DN 25 ... DN 65 Pilot operated solenoid valve</td>
<td>102</td>
</tr>
<tr>
<td>SKS™ for 83920</td>
<td>2/2-way valves DN 25 ... DN 65 Pilot operated solenoid valve</td>
<td>102</td>
</tr>
</tbody>
</table>

*1) Service kits
*2) Service kits Solenoid
Purge valves for use with a differential pressure regulator

- High flow rate
- Clear, compact design
- One-piece diaphragm
- Easy to maintain

### Technical Data

- **Flow direction:** Fixed
- **Mounting position:** Optional, preferably solenoid vertical on top
- **Temperatures:** Depending on the complete valve
- **Sum of fluid- and ambient temperature:** Max. +100°C

### Materials

- **Body:** Brass
- **Seat seal:** NBR, reinforced fabric diaphragm

### Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port P</th>
<th>Regulator port</th>
<th>Filter port</th>
<th>Operating pressure (bar)</th>
<th>Differential pressure between measuring lines (bar)</th>
<th>Pulse duration (Sec.)</th>
<th>Interval (Sec./Min.)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G1/4</td>
<td>G1/8</td>
<td>G1/8</td>
<td>2 ... 8</td>
<td>Max. 0,2</td>
<td>0,05 ... 10</td>
<td>17 ... 120</td>
<td>8493571.8821.xxxxx</td>
</tr>
</tbody>
</table>

### Standard solenoid systems

#### Voltage and frequency solenoid 8821

<table>
<thead>
<tr>
<th>Code Voltage</th>
<th>Voltage Frequency</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption brush</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
<td>00</td>
<td>24 V d.c.</td>
<td>-</td>
<td>10 W</td>
<td>10 W</td>
</tr>
<tr>
<td>110</td>
<td>50</td>
<td>110 V a.c.</td>
<td>50 Hz</td>
<td>11 VA</td>
<td>11 VA</td>
</tr>
<tr>
<td>120</td>
<td>60</td>
<td>120 V a.c.</td>
<td>60 Hz</td>
<td>11 VA</td>
<td>11 VA</td>
</tr>
<tr>
<td>230</td>
<td>50</td>
<td>230 V a.c.</td>
<td>50 Hz</td>
<td>50 VA</td>
<td>24 VA</td>
</tr>
</tbody>
</table>

#### Electrical details for all solenoid systems

<table>
<thead>
<tr>
<th>Design</th>
<th>DIN VDE 0580</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage range</td>
<td>±10%</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>100% ED</td>
</tr>
<tr>
<td>Protection class</td>
<td>EN 60559 IP65</td>
</tr>
</tbody>
</table>

According to DIN VDE 0580.
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.
8493571.8821.xxxxx
Purge valves for use with a differential pressure regulator

**Wiring**

Length of line between:
- Differential pressure regulator/purge valve min. 1 m/max. 3 m
- Purge valve/filter max. 10 m

![Wiring Diagram]

**Dimensions**

![Dimensions Diagram]

**Operation**

In filter systems coping with high dust levels the measuring lines to the differential pressure regulator can become blocked. The purge valve enables you to avoid this. Both measuring lines are cleared by short blasts of compressed air controlled by the solenoid valve. The dusty and clean air lines routed via the purge valve to the differential pressure regulator. The cleaning air is supplied via port P.

With short pulses and long intervals the pulse solenoid controls the valve which admits cleaning air into both measuring lines. Prior to the blast of air both measuring lines to the differential pressure regulator are safely shut off by nozzles that can be switched. The measuring line is only opened after the pressure has been reduced. The differential pressure regulator's display remains unchanged during the cleaning process.
2/2-way valves, solenoid pilot operated
ND 3.2 & ND 3.6

- High flow rate
- Simple, compact design
- Solenoid 8270 interchangeable without tools
- Silencer available
- Frost proof because of pressure-free core tube
- Click-on®

**Technical Data**

**Medium:**
Air

**Switching function:**
Normally closed

**Flow direction:**
Determined

**Mounting position:**
Optional, preferably solenoid vertical on top

**Operating pressure:**
0.4 .. 7.8 bar

**Orifice:**
ND 3.2 & ND 3.6

**Temperatures:**
Depending on the complete valve

**Materials**

**Body:**
Brass/plastic/stainless steel

**Seat seal:**
TPU

**Internal parts:**
1.4105, 1.4310

---

### Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Orifice</th>
<th>Material</th>
<th>Hose connection</th>
<th>Flow kv value *1</th>
<th>Operating pressure</th>
<th>Weight</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,6</td>
<td>Brass</td>
<td>B</td>
<td>8</td>
<td>0.37</td>
<td>0.4 .. 7</td>
<td>0.22</td>
<td>8497503.8270.xxxxx</td>
</tr>
<tr>
<td>3,6</td>
<td>Brass</td>
<td>B</td>
<td>6</td>
<td>0.30</td>
<td>0.4 .. 7</td>
<td>0.22</td>
<td>8497661.8270.xxxxx</td>
</tr>
<tr>
<td>3,2</td>
<td>Plastic</td>
<td>B</td>
<td>8</td>
<td>0.37</td>
<td>1.5 .. 7.5</td>
<td>0.15</td>
<td>8498320.8274.xxxxx</td>
</tr>
<tr>
<td>3,2</td>
<td>Plastic</td>
<td>B</td>
<td>6</td>
<td>0.30</td>
<td>1.5 .. 7.5</td>
<td>0.15</td>
<td>8498543.8274.xxxxx</td>
</tr>
<tr>
<td>3,6</td>
<td>Stainless steel</td>
<td>G1/8</td>
<td>0.37</td>
<td>0.4 .. 7</td>
<td>0.30</td>
<td>8498766.8270.xxxxx</td>
<td></td>
</tr>
</tbody>
</table>

*1) Cv-value (US) = kv value x 1.2

---

### Standard solenoid systems

**Voltage and frequency solenoid 8270/8271**

<table>
<thead>
<tr>
<th>Code Voltage</th>
<th>Code Frequency</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Power consumption</th>
<th>Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>024</td>
<td>00</td>
<td>24 V d.c.</td>
<td>-</td>
<td>25 W</td>
<td>25 W</td>
</tr>
</tbody>
</table>

**Electrical details for all solenoid systems**

- **Design:** DIN VDE 0580
- **Voltage range:** ±10%
- **Duty cycle:** 25% ED, cycle time <=1 Sec.
- **Protection class:** EN 60529 IP65
- **Socket:** 8270: Form A acc. to DIN EN 175301-803 IP65
  8271: Form B: 6.3 x 0.8

According to DIN VDE 0580 at a solenoid temperature of +20°C. At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.
849xxxx.827x.xxxxx
2/2-way valves, solenoid pilot operated
ND 3,2 & ND 3,6

**Dimensions**

- **Metal execution (solenoid 8270)**
- **Plastic execution (solenoid 8271)**

For further information, visit [www.imi-precision.com](http://www.imi-precision.com) and use the new improved search function. If you cannot see the option you require please contact us.

[Dimensions diagram with annotations]
ETM pulse solenoids, for cyclical actuation of IMI Buschjost valves with 13 mm sleeve diameter

- Compact and robust design
- Easily commissioned
- Flexible timing adjustment
- Universal solenoid

## Technical Data

**Switching current, external:**
Max.: 1 A
(Using (N) or (-) terminal)

**Terminals:**
Screw type, max.
cross-sectional area 2.5 mm²

**Cable gland:**
PG 13.5

**Permissible relative humidity:**
Max.: 95%

**Protection:**
IP65 acc. to EN 60529,
Inlet of PG cable gland must face vertically downwards

**Temperatures:**
Depending on the complete valve
Sum of medium and ambient temperature: +100°C

**Puls duration (impulse):**
0.05 ... 1.00 s
Short time range S1 = 0

0.5 ... 10.0 s
Long time range S1 = 1

**Break duration, standard (Pause):**
17.0 ... 360 s
Short time range S3 = 0

5.6 ... 120 min
Long time range S3 = 1

**Setting tolerance:**
± 5% of limit

**Reproducibility:**
± 1% of limit

**Normen:**
EMC interference:
EN 61000-6-3:2007
EMC interference immunity:
EN 61000-6-2:2006
Design acc. to:
DIN VDE 0580

---

### Technical features

Actuating solenoid with built-in electronic timer. Two potentiometers and two slide switches in the terminal box allow flexible adjustment of pulse and interval duration. When the power is switched on, there is a delay of about 1.5 s before the valve is opened for a preset pulse duration. This is followed by a break. The durations involved are generated by a microcontroller. The power supply may be interrupted to carry out an operating test without waiting for the break. The (N) terminal can be used to operate the built-in solenoid independently of the cycle set, or to operate an external “reference solenoid” in parallel with the internal coil.

The 110/120/230 V version’s solenoid coil is operated by means of an integral bridge rectifier. In this case external solenoids can only be supplied with power using an additional rectifier.


---

### Technical data - standard models

<table>
<thead>
<tr>
<th>Port size</th>
<th>Supply voltage (V)</th>
<th>Voltage range (%)</th>
<th>Frequency (m³/h)</th>
<th>Power consumption Inrush (W)</th>
<th>Holding (W)</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>d.c.</td>
<td>24</td>
<td>± 10</td>
<td>-</td>
<td>10</td>
<td>10</td>
<td>0.65</td>
<td>0000000.8821.02400</td>
</tr>
<tr>
<td>a.c.</td>
<td>110</td>
<td>± 10</td>
<td>50</td>
<td>11 VA</td>
<td>11 VA</td>
<td>0.65</td>
<td>0000000.8821.11050</td>
</tr>
<tr>
<td>a.c.</td>
<td>120</td>
<td>± 10</td>
<td>60</td>
<td>11 VA</td>
<td>11 VA</td>
<td>0.65</td>
<td>0000000.8821.12060</td>
</tr>
<tr>
<td>a.c.</td>
<td>230</td>
<td>± 10</td>
<td>50</td>
<td>50 VA</td>
<td>24 VA</td>
<td>0.65</td>
<td>0000000.8821.23050</td>
</tr>
</tbody>
</table>

Solenoid 8821 = 13 mm sleeve diameter
Solenoid 8820 = 16 mm sleeve diameter

For test purposes, e.g. when commissioning, slide switch S2 can be used to select a test mode with a much shorter break. Switching from Test ON to Test OFF and reverse only effective after power switched off and on again!

**Break duration in test mode:**

<table>
<thead>
<tr>
<th>Break duration in test mode:</th>
<th>S2 = 1, S3 = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05 s</td>
<td>1.00 s</td>
</tr>
<tr>
<td>937.5 ms</td>
<td>20.0 s</td>
</tr>
</tbody>
</table>

**CAUTION:** This mode may only be used briefly (for up to 10 minutes), since with an unfavourable setting it can lead to overheating of the solenoid coil burning out the electronics.
ETM pulse solenoids, for cyclical actuation of IMI Buschjost valves with 13 mm sleeve diameter

**Connection/operation**

Two functions can be implemented by means of this terminal:
Operation of an external load (indicator light, external solenoid, etc). The wiring required must be provided in a separate housing.

**IMPORTANT:** Note that the maximum permissible current of 1 A must not be exceeded through the (N) or (-) terminal. In the case of the 110/120 V a.c. version, an external load must be operated using an external rectifier.

Independent operation of the solenoid, without affecting the timing already set. This function bridges the internal electronic switch.

---

**Terminal assignment**

<table>
<thead>
<tr>
<th>a.c. versions</th>
<th>d.c. versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>Phase +</td>
</tr>
<tr>
<td>N</td>
<td>Neutral Earth (PE) –</td>
</tr>
<tr>
<td>(N)</td>
<td>Switching output (see note) –</td>
</tr>
</tbody>
</table>

Note: The Earth (PE) connection is not required if the 24 V pulse solenoid is supplied via insulating transformer.

**Installation & commissioning**

Install the pulse solenoid in an easily accessible location, taking account of the permissible medium and ambient temperatures. Permanent IP65 protection is only achieved with the cable gland facing vertically downwards.

A hood or similar shield must be used to protect pulse solenoids installed outdoors against direct sunlight and rain. Make the electrical connection in accordance with local regulations and accepted practice. To avoid any electric shock hazard, the switches and potentiometers may only be adjusted with the pulse solenoid disconnected from the power.

---

**Dimensions**

**CAUTION!**
The maximum permissible operating temperatures depend on the pulse solenoid's technical data. Ø a = 13 mm or 16 mm core tube diameter.

Mounting bushing only to core tube 13 mm.
Solenoids

- Compact design
- Large ambient temperature range
- Available in an explosion-proof design following EU Directive 2014/34/EU

### Technical Data

**Design acc. to:**
DIN VDE 0580

**Voltage range:**
±10%

**Duty cycle (ED):**
100%

**Protection class:**
EN 60529 IP65

**Temperatures:**
Depending on the complete valve

**Equipment:**
- Solenoid 8170
- Pin terminal EN 175301-803A *1)
- Solenoid 8171
- Socket EN 175301-803A
- Cable gland diameter range Ø 5 ... 10 mm

### Materials

**Body:**
Duroplast

### Technical data - standard models

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Power consumption</th>
<th>Supply voltage</th>
<th>Frequency</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inrush</td>
<td>Holding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.c.</td>
<td>12 W</td>
<td>12 W</td>
<td>24 V</td>
<td>-</td>
</tr>
<tr>
<td>a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td>230 V</td>
<td>50 Hz</td>
</tr>
<tr>
<td>A.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td>110 V</td>
<td>50 Hz</td>
</tr>
<tr>
<td>d.c.</td>
<td>12 W</td>
<td>12 W</td>
<td>24 V</td>
<td>-</td>
</tr>
<tr>
<td>a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td>230 V</td>
<td>50 Hz</td>
</tr>
<tr>
<td>a.c.</td>
<td>23 VA</td>
<td>16 VA</td>
<td>110 V</td>
<td>50 Hz</td>
</tr>
</tbody>
</table>

*1) Without socket

### Optional solenoids

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX-Protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>I 3G</td>
<td>Ex ec IIC T4 Gc</td>
<td>8176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>I 3D</td>
<td>Ex ec IIC T130°C Dc</td>
<td>8176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>I 2G</td>
<td>Ex eb mb IIC T4 Gb</td>
<td>8176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>I 2 D</td>
<td>Ex mb tb IIIB T135°C Db</td>
<td>8176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
</tbody>
</table>

Attention!
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.
Solenoids

Dimensions

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Solenoids

- Compact design
- Large ambient temperature range
- Available in an explosion-proof design following EU Directive 2014/34/EU

**Technical Data**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Power consumption</th>
<th>Supply voltage</th>
<th>Frequency</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inrush</td>
<td>Holding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.c.</td>
<td>12 W</td>
<td>12 W</td>
<td>24 V</td>
<td></td>
</tr>
<tr>
<td>a.c.</td>
<td>20 VA</td>
<td>16 VA</td>
<td>230 V</td>
<td>50 Hz</td>
</tr>
<tr>
<td>a.c.</td>
<td>20 VA</td>
<td>16 VA</td>
<td>110 V</td>
<td>50 Hz</td>
</tr>
<tr>
<td>d.c.</td>
<td>12 W</td>
<td>12 W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.c.</td>
<td>20 VA</td>
<td>16 VA</td>
<td>230 V</td>
<td>50 Hz</td>
</tr>
<tr>
<td>a.c.</td>
<td>20 VA</td>
<td>16 VA</td>
<td>110 V</td>
<td>50 Hz</td>
</tr>
</tbody>
</table>

**Equipment:**

- Solenoid 8000
- Pin terminal EN 175301-803A *1)
- Solenoid 8001
- Socket EN 175301-803A
- Cable gland diameter range Ø 5 ... 10 mm

**Technical data - standard models**

**Optional solenoids**

**Materials**

- Body: Duroplast

---

Attention!
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

---

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
xxxxxx.80xx.xxxxxx
Solenoids

- Dimensions

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Solenoids

- The solenoids (Click-on®) can be easily installed
- Large ambient temperature range
- The solenoid system is closed at the top
- Approvals:
  - Available in an explosion-proof design following EU Directive 2014/34/EU
  - Coil only

Technical Data

Design acc. to:
DIN VDE 0590

Voltage range: ±10%

Duty cycle (ED):
100%

Protection class:
EN 60529 IP60 in conjunction with Socket Form A acc. to DIN EN 175301-803 IP65

Inspection:
₁, only for coil to max. 250 V a.c. -25 ... +50°C

Ambient temperature
Solenoid coils for higher temperatures on request!

Temperatures:
Depending on the complete valve

Equipment:
Solenoid 9150
Pin terminal
EN 175301-803A *1)
Solenoid 9151
Socket EN 175301-803A
Cable gland diameter range Ø 5 ... 10 mm

Materials

Body:
Duroplast

Technical data - standard models

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Power consumption</th>
<th>Supply voltage</th>
<th>Frequency</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inrush</td>
<td>Holding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.c.</td>
<td>18 W</td>
<td>18 W</td>
<td>24 V</td>
<td>-</td>
</tr>
<tr>
<td>a.c.</td>
<td>45 VA</td>
<td>35 VA</td>
<td>-</td>
<td>50 Hz</td>
</tr>
<tr>
<td>a.c.</td>
<td>45 VA</td>
<td>35 VA</td>
<td>-</td>
<td>50 Hz</td>
</tr>
<tr>
<td>d.c.</td>
<td>18 W</td>
<td>18 W</td>
<td>24 V</td>
<td>-</td>
</tr>
<tr>
<td>a.c.</td>
<td>45 VA</td>
<td>35 VA</td>
<td>-</td>
<td>50 Hz</td>
</tr>
<tr>
<td>a.c.</td>
<td>45 VA</td>
<td>35 VA</td>
<td>-</td>
<td>50 Hz</td>
</tr>
</tbody>
</table>

*1) Without socket

Optional solenoids

Additional solenoid systems for hazardous areas

<table>
<thead>
<tr>
<th>ATEX category</th>
<th>ATEX-Protection class</th>
<th>Solenoid</th>
<th>Standard voltages</th>
</tr>
</thead>
<tbody>
<tr>
<td>I 3G</td>
<td>Ex eb mb IIC T4 Gb</td>
<td>9176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>I 3D</td>
<td>Ex ec IIC T4 Gc</td>
<td>9176</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>I 2G</td>
<td>Ex eb mb IIC T4 Gb</td>
<td>9126 *3)</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
<tr>
<td>I 2D</td>
<td>Ex ec IIC T4 Gb</td>
<td>9126 *3)</td>
<td>24 V d.c., 110 V a.c., 230 V a.c.</td>
</tr>
</tbody>
</table>

Attention!
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

*3) from G1 1/4 / 1 1/4 NPT (16 bar)
Solenoids

Dimensions

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Solenoids

- Compact design
- Large ambient temperature range
- Available in an explosion-proof design following EU Directive 2014/34/EU

**Technical Data**

<table>
<thead>
<tr>
<th>Protection class:</th>
<th>IP65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable gland:</td>
<td>PG3</td>
</tr>
<tr>
<td>Cable diameter:</td>
<td>Ø 4,5 ... 7 mm</td>
</tr>
<tr>
<td>Cable:</td>
<td>T_{permisss} ≥ 88°C</td>
</tr>
<tr>
<td>Conductor cross section:</td>
<td>Max. 1,5 mm²</td>
</tr>
<tr>
<td>Fastening:</td>
<td>Nut</td>
</tr>
<tr>
<td>Tube diameter:</td>
<td>Ø = 16 mm</td>
</tr>
<tr>
<td>Weight:</td>
<td>m = 0,8 kg</td>
</tr>
<tr>
<td>ATEX-marking:</td>
<td>II 3G Ex ec IIC T4 Gc</td>
</tr>
<tr>
<td></td>
<td>II 3D Ex tc IIIC T130°C Dc</td>
</tr>
</tbody>
</table>

**Materials**

| Body:   | Duroplast |

**Technical data - standard models**

<table>
<thead>
<tr>
<th>Type</th>
<th>Power consumption</th>
<th>T_{amb} min. -20°C</th>
<th>T_{amb} (°C)</th>
<th>T_{amb} max.(°C)</th>
<th>Temperature class</th>
<th>U_{max} (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inrush Holding</td>
<td></td>
<td>T_{g}</td>
<td>T_{g} max.(°C)</td>
<td>Gas Dust</td>
<td></td>
</tr>
<tr>
<td>8176</td>
<td>12 WA</td>
<td>65</td>
<td>65</td>
<td>≤ 100</td>
<td>T4 T130°C</td>
<td>12 ... 250 ±10% DC</td>
</tr>
<tr>
<td>8176</td>
<td>23 VA</td>
<td>65</td>
<td>65</td>
<td>≤ 100</td>
<td>T4 T130°C</td>
<td>12 ... 250 ±10% AC</td>
</tr>
</tbody>
</table>

For further information, visit [www.imi-precision.com](http://www.imi-precision.com) and use the new improved search function. If you cannot see the option you require please contact us.
Solenoids

- Category II
- ATEX and IECEx approvals
- Cover can be rotated 180°
- Simple installation with spring-loaded terminals
- Twist on®

**Technical Data**

**Protection class:**
IP66

**Cable gland:**
M16 x 1.5

**Cable diameter:**
Ø 7...9 mm \(T_{\text{amb}} \text{min.} = -20^\circ\text{C}\)
Ø 5...9 mm \(T_{\text{amb}} \text{min.} = -40^\circ\text{C}\)

**Cable:**
\[T_{\text{perm}}\text{max} \leq 85^\circ\text{C}\]

**Conductor cross section:**
0,08 ... 2,5 mm²

**Fastening:**
Twist-on®

**Tube diameter:**
Ø = 11,4 mm

**Weight:**
m = 0,25 kg

**Type examination certificate:**
PTZ 16 ATEX 0011 X
IECEx PTZ 17.0001X

**ATEX-marking:**
II 2G Ex eb mb IIC T4 - T3 Gb
II 2D Ex mb tb III B T135°C - T140°C
ATEX Zone 1/21

**Materials**

**Body:**
Duroplast

---

### Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>(P_{\text{max}}) (W)</th>
<th>(T_{\text{max}}) (°C)</th>
<th>(T_{\text{max}}\text{ max.}(\circ\text{C}))</th>
<th>Temperature class</th>
<th>(U_{\text{max}}) (V AC/ V DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6170</td>
<td>12</td>
<td>40</td>
<td>(\leq 80)</td>
<td>Gas</td>
<td>T3</td>
</tr>
<tr>
<td>6173</td>
<td>9</td>
<td>80</td>
<td>(\leq 80)</td>
<td>Gas</td>
<td>T3</td>
</tr>
<tr>
<td>6176</td>
<td>9</td>
<td>50</td>
<td>(\leq 80)</td>
<td>Gas</td>
<td>T4</td>
</tr>
<tr>
<td>6179</td>
<td>7</td>
<td>60</td>
<td>(\leq 80)</td>
<td>Gas</td>
<td>T4</td>
</tr>
</tbody>
</table>
Solenoids

- Compact design
- Large ambient temperature range
- Available in an explosion-proof design following EU Directive 2014/34/EU

Technical Data

Protection class: IP65

Cable gland: PG 9

Cable diameter: Ø 7 ... 9 mm (T_{\text{amb}} \text{ min} = -25°C)

Cable: T_{\text{permisable}} > 85°C

Conductor cross section: max. 1.5 mm²

Fastening: 4 Screws

Tube diameter: Ø = 11.4 mm

Weight: m = 0.22 kg

ATEX-marking:
II 3G Ex ec IIC T4 Gc
II 3D Ex tc IIC T130°C Dc
ATEX Zone 2/22

Materials

Body: Duroplast

Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>Power consumption</th>
<th>T_{\text{amb min. -25°C}}</th>
<th>T_{\text{inrush}} (°C)</th>
<th>T_{\text{holding}} (°C)</th>
<th>T_{\text{max.}} (°C)</th>
<th>U_{\text{nom}} (V)</th>
<th>Temperature class</th>
<th>U_{\text{max}} (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8026</td>
<td>12 W</td>
<td>-25°C</td>
<td>12 W</td>
<td>50</td>
<td>≤ 110</td>
<td>T4</td>
<td>T130°C</td>
<td>12 ... 250 ±10% AC</td>
</tr>
<tr>
<td>8026</td>
<td>23 VA</td>
<td>-25°C</td>
<td>16 VA</td>
<td>50</td>
<td>≤ 110</td>
<td>T4</td>
<td>T130°C</td>
<td>12 ... 250 ±10% DC</td>
</tr>
</tbody>
</table>
Solenoid

- Category II
- ATEX and IECEx approvals
- Cover can be rotated 180°
- Simple installation with spring-loaded terminals

Technical Data

Protection class:
IP66

Cable gland:
M16 x 1.5

Cable diameter:
Ø 7 ... 9 mm (T\text{amb} min. = -20°C)
Ø 5 ... 9 mm (T\text{amb} min. = -40°C)

Cable:
T\text{perm.} ≥ 85°C

Conductor cross section:
0.08 ... 2.5 mm²

Fastening:
4 Screws

Tube diameter:
Ø = 11.4 mm

Weight:
m = 0.26 kg

Type examination certificate:
PTZ 16 ATEX 0011 X
IECEx PTZ 17.0001X

ATEX-marking:
II 2G Ex e IIC T4 - T3 Gb
II 2D Ex mb tb IIIB T135°C - T150°C

Materials

Body:
Duroplast

Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>P\text{max} (W)</th>
<th>T\text{amb} min. -20°C</th>
<th>T\text{amb} min. -40°C</th>
<th>T\text{nom} (°C)</th>
<th>T\text{nom max} (°C)</th>
<th>Temperature class</th>
<th>U\text{max} (V AC/ V DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6200</td>
<td>12</td>
<td>40</td>
<td>≤ 80</td>
<td>T3</td>
<td>T150°C</td>
<td>12 ... 250 ±10%</td>
<td></td>
</tr>
<tr>
<td>6202</td>
<td>12</td>
<td>40</td>
<td>≤ 80</td>
<td>T3</td>
<td>T150°C</td>
<td>12 ... 250 ±10%</td>
<td></td>
</tr>
<tr>
<td>6203</td>
<td>9</td>
<td>60</td>
<td>≤ 80</td>
<td>T4</td>
<td>T135°C</td>
<td>12 ... 250 ±10%</td>
<td></td>
</tr>
<tr>
<td>6206</td>
<td>9</td>
<td>45</td>
<td>≤ 80</td>
<td>T4</td>
<td>T135°C</td>
<td>12 ... 250 ±10%</td>
<td></td>
</tr>
<tr>
<td>6209</td>
<td>7</td>
<td>60</td>
<td>≤ 80</td>
<td>T4</td>
<td>T135°C</td>
<td>12 ... 250 ±10%</td>
<td></td>
</tr>
</tbody>
</table>

Online at www.imi-precision.com

For further information, visit www.imi-precision.com
and use the new improved search function. If you cannot see the option you require please contact us.
Solenoids

- Compact design
- Large ambient temperature range
- Approvals:
  - USA – FM approved
  - Canada – CSA certified
- The solenoid has a sleeve diameter of 16 mm.
- 1/2 Conduit
- Flying leads

**Technical Data**

- **Voltage range:** ±10%
- **Duty cycle (ED):** 100%
- **Protection class:** EN 60529 P65
- **Inspection:** FM (File No. 2Z2A6.AE),
  - (File No. LR 57643-6)
- **Temperatures:** Depending on the complete valve

**Equipment:**
- Solenoid 3826
  - Flying leads 3 x 450 mm
- Solenoid 3827 *1)
  - Flying leads 3 x 450 mm

**Technical data - standard models**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Power consumption</th>
<th>Supply voltage</th>
<th>Frequency</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inrush</td>
<td>Holding</td>
<td>24 V</td>
<td>-</td>
</tr>
<tr>
<td>d.c.</td>
<td>13 W</td>
<td>13 W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.c.</td>
<td>15 VA</td>
<td>15 VA</td>
<td>120 V</td>
<td>40 ... 60 Hz</td>
</tr>
</tbody>
</table>

*1) With rectifier

**Option selector**

0000000.382.****

- **Frequency Substitute**
  - See table frequency codes: xx
- **Voltage Substitute**
  - See table Voltage codes: xxx
- **Solenoid options Substitute**
  - With 1/2 - 14 NPT female thread and 460 mm flying leads
  - Protection class acc. to ANSI/NEMA
  - Solenoids in temperature class T3C (160°C) are usable in Ex-areas.
  - Ambient temperature -20 ... +60°C

Or a.c. with integrated rectifier

(Informationen see solenoid 3826)

**Materials**

- **Body:** Duroplast

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Solenoids

Dimensions

- Dimensions

Dimensions

Solenoids

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Solenoids

- Compact design
- Large ambient temperature range
- The solenoid has a sleeve diameter of 16 mm

Technical Data

Protection class: IP65
Cable gland: M20 x 1,5
Cable: T \text{ambient} > 88°C
Conductor cross section: Max. 4 mm²
Fastening: Nut
Tube diameter: Ø = 16 mm
Weight: m = 0,8 kg
Type examination certificate: KEMA 98ATEX4452 X
ATEX-marking:
II 2G Ex eb IIC T4 - T6 Gb
II 2D Ex tb IIC T130°C Db

Materials

Body: Polymer

Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>P \text{min} (W)</th>
<th>T \text{min} max. (°C)</th>
<th>T \text{min} max. (°C)</th>
<th>Temperature class</th>
<th>U \text{min} (V AC/ V DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4260/4261</td>
<td>4/5</td>
<td>80/55</td>
<td>80/55</td>
<td>T4/T6</td>
<td>24 … 230 ±10%</td>
</tr>
<tr>
<td>4270/4271</td>
<td>8/9</td>
<td>65/55</td>
<td>65/55</td>
<td>T4/T5</td>
<td>24 … 230 ±10%</td>
</tr>
<tr>
<td>4280/4281</td>
<td>11/13</td>
<td>65/55</td>
<td>50/40</td>
<td>T4/T5</td>
<td>24 … 230 ±10%</td>
</tr>
</tbody>
</table>
Dimensions

- Cable gland M20x1,5 not included in the delivery scope of the solenoid

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Solenoids

- Compact design
- Large ambient temperature range
- The solenoid has a sleeve diameter of 16 mm

### Technical Data

**Protection class:** IP66

**Cable gland:** M20 x 1,5/ 1/2 … 14 NPT

**Cable diameter:**
- Ø 10 … 14 mm
- Ø 5 … 9 mm

**Cable:**
- $T_{\text{perm}} \leq 95^\circ C$

**Conductor cross section:**
- Max. 4,0 mm²

**Fastening:**
- Nut

**Tube diameter:**
- Ø = 16 mm

**Weight:**
- $m = 0,8$ kg

**Type examination certificate:**
- PTB 02 ATEX 2085 X

**ATEX-marking:**
- II 2G Ex d IIC T4/T6 Gb
- II 2D Ex tb IIC T130/ T180°C Db

### Materials

**Body:** Steel

---

**Technical data - standard models**

<table>
<thead>
<tr>
<th>Type</th>
<th>$P_{\text{max}}$ (W/VA)</th>
<th>$T_{\text{amb}}$ °C</th>
<th>$T_{\text{max}}$ °C</th>
<th>Temperature class</th>
<th>$U_{\text{max}}$ (V AC/ V DC)</th>
</tr>
</thead>
</table>
| 4660/4662 | 4/5 | 80/55 | 80/55 | T4/T6 | T130°C | 24 … 230 ±10% AC
| 4670 … 4673 | 8/9 | 70/40 | 70/40 | T4/T6 | T130°C | 24 … 230 ±10% AC
| 4680 … 4683 | 11/13 | 50/40 | 50/40 | T4/T5 | T130°C | 24 … 230 ±10% AC

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Solenoids

Dimensions

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
## Service kits (SK)

### Series 82900/82910

<table>
<thead>
<tr>
<th>Type Valve</th>
<th>Orifice (mm)</th>
<th>Connection Size</th>
<th>Type Service kit</th>
<th>Contents Service kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>8290300.0000</td>
<td>20</td>
<td>G3/4</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8290300.0000</td>
<td>20</td>
<td>3/4 NPT</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8290400.0000</td>
<td>25</td>
<td>G1</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8290400.0000</td>
<td>25</td>
<td>1 NPT</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8290600.0000</td>
<td>40</td>
<td>G1 1/2</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8290600.0000</td>
<td>40</td>
<td>1 1/2 NPT</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8290700.0000</td>
<td>50</td>
<td>G2</td>
<td>1268274</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8290700.0000</td>
<td>50</td>
<td>2 NPT</td>
<td>1268274</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8290800.0000</td>
<td>65</td>
<td>G2 1/2</td>
<td>1268274</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8291800.0000</td>
<td>65</td>
<td>2 1/2 NPT</td>
<td>1268274</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8290900.0000</td>
<td>80</td>
<td>G3</td>
<td>1701615</td>
<td>1 x diaphragm, 1 x diaphragm DN 80, 1 x silencer</td>
</tr>
</tbody>
</table>

### Series 82960/82970

<table>
<thead>
<tr>
<th>Type Valve</th>
<th>Orifice (mm)</th>
<th>Connection Size</th>
<th>Type Service kit</th>
<th>Contents Service kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>8296000.8171</td>
<td>20</td>
<td>G3/4</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8296100.8171</td>
<td>20</td>
<td>3/4 NPT</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8296200.8171</td>
<td>25</td>
<td>G1</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8296200.8171</td>
<td>25</td>
<td>1 NPT</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8296300.8171</td>
<td>40</td>
<td>G1 1/2</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8296300.8171</td>
<td>40</td>
<td>1 1/2 NPT</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8296400.8171</td>
<td>50</td>
<td>G2</td>
<td>1268274</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8296400.8171</td>
<td>50</td>
<td>2 NPT</td>
<td>1268274</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8296500.8171</td>
<td>65</td>
<td>G2 1/2</td>
<td>1268274</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8296500.8171</td>
<td>65</td>
<td>2 1/2 NPT</td>
<td>1268274</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8296600.8171</td>
<td>80</td>
<td>G3</td>
<td>1701615</td>
<td>1 x diaphragm, 1 x diaphragm DN 80, 1 x silencer</td>
</tr>
</tbody>
</table>

### Series 83300/83310

<table>
<thead>
<tr>
<th>Type Valve</th>
<th>Orifice (mm)</th>
<th>Connection Size</th>
<th>Type Service kit</th>
<th>Contents Service kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>8330300.0000</td>
<td>20</td>
<td>G3/4</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8331300.0000</td>
<td>20</td>
<td>3/4 NPT</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8334000.0000</td>
<td>25</td>
<td>G1</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8334000.0000</td>
<td>25</td>
<td>1 NPT</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8336000.0000</td>
<td>40</td>
<td>G1 1/2</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>8336000.0000</td>
<td>40</td>
<td>1 1/2 NPT</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
</tbody>
</table>

### Series 83320

<table>
<thead>
<tr>
<th>Type Valve</th>
<th>Orifice (mm)</th>
<th>Connection Size</th>
<th>Type Service kit</th>
<th>Contents Service kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>8332300.8171</td>
<td>20</td>
<td>G3/4</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8332400.8171</td>
<td>25</td>
<td>G1</td>
<td>1261253</td>
<td>Diaphragm</td>
</tr>
<tr>
<td>8332600.8171</td>
<td>40</td>
<td>G1 1/2</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
</tbody>
</table>
## Service kits (SK)

### Series 83920

<table>
<thead>
<tr>
<th>Outside dim. of tank-/profile (mm)</th>
<th>Type DN 25</th>
<th>Type DN 40</th>
<th>Type Service kit</th>
<th>Contents Service kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td></td>
<td>8392400.</td>
<td>—</td>
<td>1261253 Diaphragm</td>
</tr>
<tr>
<td>100</td>
<td>8171.</td>
<td>00000</td>
<td>8392600.</td>
<td>1261402 1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>120</td>
<td>8392400.</td>
<td>8171.</td>
<td>00000</td>
<td>1261253 Diaphragm</td>
</tr>
<tr>
<td>140</td>
<td>—</td>
<td>8392600.</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>160</td>
<td>8171.</td>
<td>00000</td>
<td>8392600.</td>
<td>1261402 1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>180</td>
<td>—</td>
<td>8392600.</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
<tr>
<td>200</td>
<td>—</td>
<td>8392600.</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
</tr>
</tbody>
</table>

### Series 83930

<table>
<thead>
<tr>
<th>Outside dim. of tank-/profile (mm)</th>
<th>Type DN 25</th>
<th>Type DN 40</th>
<th>Type Service kit</th>
<th>Contents Service kit</th>
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<tbody>
<tr>
<td>70</td>
<td></td>
<td>8393400.</td>
<td>—</td>
<td>1261253 Diaphragm</td>
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<tr>
<td>100</td>
<td>8171.</td>
<td>00000</td>
<td>8393600.</td>
<td>1261402 1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
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<tr>
<td>120</td>
<td>8393400.</td>
<td>8171.</td>
<td>00000</td>
<td>1261253 Diaphragm</td>
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<tr>
<td>140</td>
<td>—</td>
<td>8393600.</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
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<tr>
<td>160</td>
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<td>1261402 1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
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<tr>
<td>180</td>
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<td>8393600.</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
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<tr>
<td>200</td>
<td>—</td>
<td>8393600.</td>
<td>1261402</td>
<td>1 x diaphragm, 1 x diaphragm DN 20, 1 x silencer</td>
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</table>
## Service kits solenoid (SKS)

### Series 82960/82970

<table>
<thead>
<tr>
<th>Type Valve</th>
<th>Orifice (mm)</th>
<th>Connection Size</th>
<th>Type Solenoid system 8171</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>8296300.xxxx</td>
<td>20</td>
<td>G3/4</td>
<td>8298000.8171.xxxxx</td>
<td>1 x core, 2 x pressure spring, 1 x silencer, 1 x solenoid, 1 x socket</td>
</tr>
<tr>
<td>8297300.xxxx</td>
<td>20</td>
<td>3/4 NPT</td>
<td>8298000.8171.xxxxx</td>
<td>1 x core, 2 x pressure spring, 1 x silencer, 1 x solenoid, 1 x socket</td>
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<tr>
<td>8296400.xxxx</td>
<td>25</td>
<td>G1</td>
<td>8298000.8171.xxxxx</td>
<td>1 x core, 2 x pressure spring, 1 x silencer, 1 x solenoid, 1 x socket</td>
</tr>
<tr>
<td>8297400.xxxx</td>
<td>25</td>
<td>1 NPT</td>
<td>8298000.8171.xxxxx</td>
<td>1 x core, 2 x pressure spring, 1 x silencer, 1 x solenoid, 1 x socket</td>
</tr>
<tr>
<td>8296600.xxxx</td>
<td>40</td>
<td>G1 1/2</td>
<td>8298000.8171.xxxxx</td>
<td>1 x core, 2 x pressure spring, 1 x silencer, 1 x solenoid, 1 x socket</td>
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<tr>
<td>8297600.xxxx</td>
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<td>1 1/2 NPT</td>
<td>8298000.8171.xxxxx</td>
<td>1 x core, 2 x pressure spring, 1 x silencer, 1 x solenoid, 1 x socket</td>
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<tr>
<td>8297700.xxxx</td>
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<td>G2</td>
<td>8298000.8171.xxxxx</td>
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<tr>
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<tr>
<td>8298700.xxxx</td>
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<tr>
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### Series 82960/82970

<table>
<thead>
<tr>
<th>Type Valve</th>
<th>Orifice (mm)</th>
<th>Connection Size</th>
<th>Type Solenoid system 8001</th>
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<td>1 x core, 1 x pressure spring, 1 x silencer, 1 x solenoid, 1 x socket</td>
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<tr>
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<td>65</td>
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<tr>
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### Series 83320

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<thead>
<tr>
<th>Type Valve</th>
<th>Orifice (mm)</th>
<th>Connection Size</th>
<th>Type Solenoid system 8171</th>
<th>Contents</th>
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### Series 83920

<table>
<thead>
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<th>Type Solenoid system 8171</th>
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<td>1 x core, 1 x pressure spring, 1 x silencer, 1 x solenoid, 1 x socket</td>
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Products

<table>
<thead>
<tr>
<th>Page</th>
<th>Fast find guide</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td><strong>Fast find guide</strong></td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>General purpose filters</td>
<td>F18</td>
</tr>
<tr>
<td>109</td>
<td>Filters/regulators</td>
<td>B72G</td>
</tr>
<tr>
<td>114</td>
<td>Filters/regulators</td>
<td>B84G</td>
</tr>
<tr>
<td>122</td>
<td>Filters/regulators</td>
<td>B64G, B68G</td>
</tr>
<tr>
<td>128</td>
<td>Pneumatic pressure switches</td>
<td>18D</td>
</tr>
<tr>
<td>132</td>
<td>Pneumatic pressure switches</td>
<td>51D</td>
</tr>
<tr>
<td>135</td>
<td>Impact cylinders</td>
<td>SPCH/080003/X</td>
</tr>
<tr>
<td>138</td>
<td>Push-in fittings, metric Ø 4 ... 16 mm</td>
<td>Pneufit® C</td>
</tr>
<tr>
<td>141</td>
<td>Compression fittings Ø 6 ... 42 mm</td>
<td>82A series</td>
</tr>
<tr>
<td>143</td>
<td>Compression fittings Ø 1/8 ... 2”</td>
<td>83A series</td>
</tr>
<tr>
<td>145</td>
<td>BSP and hose fittings M5, 1/8 … 1”</td>
<td>15 / 16 series</td>
</tr>
</tbody>
</table>
FAST FIND GUIDE

● Air Preparation (FRL)

F18
General purpose filters
G1 1/2 & G2
Page 107

B72G
Excelon® 72
Filters/regulators, G1/4, 3/8
Page 109

B84G
Excelon® Plus modular system
Filters/regulators, G3/8 ... 3/8
Page 114

B64G, B68G
Olympian Plus-in system
Filters / regulators, G1/4 ... 1 1/2
Page 122

● Pressure Switches

18D
Pneumatic pressure switches
Electromechanically actuated,
–1 ... 30 bar G1/4, 1/4 NPT and flange
Page 128

51D
Pneumatic pressure switches
Electromechanically actuated,
–1 ... 10 bar G3/8
Page 132

● Cylinders

SPCH/080003/X
Impact cylinders
0 ... 120 Joule
Page 135

● Fittings

Pneufit® C
Push-in fittings, metric
Ø 4 ... 16 mm O/D tube
Page 138

82A series
Aluminium (light weight)
compression fittings
Ø 6 ... 42 mm
Page 141

83A series
Aluminium (light weight)
compression fittings Ø 1/8 ... 2"
Nominal pipe size,
BSPP and BSPT thread
Page 143

15 / 16 Series
BSP and hose fittings
M5, 1/8 ... 1"
Page 145
F18
General purpose filters
G1 1/2 & G2

- Direct ported filter with high water removal efficiency
- Highly visible, prismatic liquid level indicator lens
- High flow with minimal pressure drop
- Optional visual service life indicator turns from green to red when the filter element needs to be cleaned or replaced
- Optional electrical service indicator also available

Technical Data

**Medium:**
Compressed air

**Max. operating pressure:**
17 bar

**Particle removal:**
40 µm standard, 5 µm optional

**Flow:**
See below

**Port size:**
G1 1/2, G2

**Drain:**
Manual or automatic

**Automatic drain operating conditions:**
- Drain closes when bowl pressure: > 0.3 bar
- Drain opens when bowl pressure: ≤ 0.2 bar
- Minimum air flow required to close drain: 1 dm³/s

**Fluid/Ambient temperature:**
-34 ... +80°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C.

Materials

**Body, intermediate body and bowl:**
Aluminum

**Liquid level indicator:**
Transparent nylon

**Filter element:**
Sintered bronze

**Elastomers:**
Neoprene and nitrile

---

### Technical Data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Filter element (µm)</th>
<th>Flow *1) (dm³/s)</th>
<th>Drain</th>
<th>Bowl</th>
<th>Weight (kg)</th>
<th>Model</th>
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</thead>
<tbody>
<tr>
<td>![ ]</td>
<td>G1 1/2</td>
<td>40</td>
<td>765</td>
<td>Manual</td>
<td>Metal</td>
<td>6.7</td>
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<td>40</td>
<td>765</td>
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<td>Metal</td>
<td>6.6</td>
<td>F18-C00-M3DG</td>
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<td>40</td>
<td>765</td>
<td>Automatic</td>
<td>Metal</td>
<td>6.7</td>
<td>F18-B00-A3DG</td>
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<tr>
<td>![ ]</td>
<td>G2</td>
<td>40</td>
<td>765</td>
<td>Automatic</td>
<td>Metal</td>
<td>6.6</td>
<td>F18-C00-A3DG</td>
</tr>
</tbody>
</table>

*1) Typical flow with a 40 µm element at 6.3 bar inlet pressure and 0.5 bar pressure drop.

---

### Option selector

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
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</thead>
<tbody>
<tr>
<td>1 1/2</td>
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</tr>
<tr>
<td>2</td>
<td>G</td>
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<table>
<thead>
<tr>
<th>Service life indicator</th>
<th>Substitute</th>
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<tbody>
<tr>
<td>Without</td>
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<tr>
<td>With (pneumatic)</td>
<td>1</td>
</tr>
<tr>
<td>With (electrical)</td>
<td>4</td>
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<table>
<thead>
<tr>
<th>Drain</th>
<th>Substitute</th>
</tr>
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<tbody>
<tr>
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<td>A</td>
</tr>
<tr>
<td>Manual, 1/4 turn</td>
<td>M</td>
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<table>
<thead>
<tr>
<th>Thread</th>
<th>Substitute</th>
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<tbody>
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<td>PTF</td>
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<td>ISO G</td>
<td>G</td>
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<table>
<thead>
<tr>
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<th>Substitute</th>
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<td>5 µm</td>
<td>1</td>
</tr>
<tr>
<td>40 µm</td>
<td>3</td>
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</tbody>
</table>
F18
General purpose filters
G1 1/2 & G2

Flow characteristics

![Pressure drop vs. Air flow graph](image)

- **Pressure drop** vs. **Air flow**
  - Inlet pressure: 10 bar

Accessories

- **Service life indicator (pneumatic)**
  - 5797-50
- **Service life indicator (electrical)**
  - 4020-51

Service kit

- **Service kit, automatic drain**
  - F18-100A (40 µm)
  - F18-100A (5) (5 µm)

Dimensions

![Diagram of F18 filter](image)

- **Dimensions**
  - 1/8”
  - 209
  - 307
  - 384
  - 384

- **584”**
  - **Min. clearance required to remove intermediate body and bowl**
  - **Service indicator optional**

For further information, visit [www.imi-precision.com](http://www.imi-precision.com) and use the new improved search function. If you cannot see the option you require please contact us.
**B72G**

**Excelon® 72**

Filters / regulators, 1/4, 3/8 (G and PTF)

- Excelon® design allows in-line installation or modular installation with other Excelon® products
- High efficiency water and particle removal
- Quick release bayonet bowl
- Push to lock adjusting knob with tamper resistant accessory

### Technical Data

**Medium:**
Compressed air only

**Max. inlet pressure:**
10 bar (transparent bowl)

**Pressure range:**
- 0.3 ... 10 bar (4 ... 145 psi) standard
- 0.3 ... 4 bar (4 ... 58 psi) optional
- 0.3 ... 2 bar (4 ... 29 psi) optional

**Filter element:**
- 40 µm standard, 5 µm optional

**Port size:**
- G1/4, G3/8, 1/4 PTF, 1/8 PTF

**Gauge port:**
- Rc 1/8 with ISO G main ports
- 1/8 PTF with PTF main port

**Drain:**
- Manual, automatic or semi-automatic

**Relieving:**
Standard

**Fluid/Ambient temperature:**
- –34 … +50°C (-29 … +122°F) (transparent bowl)
- –34 … +65°C (-29 … +122°F) (metal bowl)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

### Materials

**Body:**
Zinc alloy

**Bonnet:**
Acetal

**Valve:**
PP and TPV

**Transparent bowl:**
PC

**Metal bowl:**
Zinc alloy

**Liquid level indicator lens (metal bowl):**
Transparent PA

**Filter element:**
Sintered PP

**Elastomers:**
CR & NBR

---

#### Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Size</th>
<th>Drain</th>
<th>Pressure range (bar)</th>
<th>Pressure range (psi)</th>
<th>Filter element (µm)</th>
<th>Adjustment</th>
<th>Bowl</th>
<th>Weight (kg)</th>
<th>Model</th>
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<tbody>
<tr>
<td>G1/4</td>
<td>Basis</td>
<td>Manual</td>
<td>0.3 ... 10</td>
<td>4 ... 145</td>
<td>40</td>
<td>Knob</td>
<td>PC (transparent)</td>
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<td>B72G-2GK-QT3-RMN</td>
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<td>G3/8</td>
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<td>Manual</td>
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<td>4 ... 145</td>
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<td>Knob</td>
<td>PC (transparent)</td>
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<td>Basis</td>
<td>Automatic</td>
<td>0.3 ... 10</td>
<td>4 ... 145</td>
<td>40</td>
<td>Knob</td>
<td>PC (transparent)</td>
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<thead>
<tr>
<th>Feature</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port size</td>
<td>1/4</td>
</tr>
<tr>
<td></td>
<td>3/8</td>
</tr>
<tr>
<td>Threads</td>
<td>PTF</td>
</tr>
<tr>
<td></td>
<td>ISO G (Standard)</td>
</tr>
<tr>
<td>Drain</td>
<td>Manual (standard)</td>
</tr>
<tr>
<td></td>
<td>Semi automatic</td>
</tr>
<tr>
<td></td>
<td>Auto drain (standard)</td>
</tr>
<tr>
<td>Bowl</td>
<td>Transparent without guard (Standard)</td>
</tr>
<tr>
<td></td>
<td>Metal with liquid indicator</td>
</tr>
<tr>
<td></td>
<td>Long metal with liquid indicator (automatic drain)</td>
</tr>
<tr>
<td></td>
<td>Long transparent (automatic drain)</td>
</tr>
<tr>
<td></td>
<td>Long transparent with guard</td>
</tr>
<tr>
<td>Gauge</td>
<td>G</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Pressure range</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>M</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Element</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

*1) Supplied in long bowl options only

*2) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.
B72G
Excelon® 72
Filters / regulators, 1/4, 3/8 (G and PTF)

● Accessorys

<table>
<thead>
<tr>
<th>Universal mounting bracket</th>
<th>Quikclamp®</th>
<th>Quikclamp® with wall bracket</th>
<th>Neck mounting bracket</th>
<th>Panel nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>4224-50</td>
<td>4214-51</td>
<td>4214-52</td>
<td>74316-50</td>
<td>4248-89</td>
</tr>
</tbody>
</table>

Tamper resistant kit
<table>
<thead>
<tr>
<th>Quikmount pipe adaptor</th>
<th>Porting block with three alternative 1/4&quot; ports</th>
<th>2/2 Shut-off valves for full technical specification see datasheet 8.160.600</th>
<th>3/2 Shut-off valves for full technical specification see datasheet 8.160.600</th>
</tr>
</thead>
<tbody>
<tr>
<td>4255-51</td>
<td>G1/4: 4215-58</td>
<td>G1/4: T72B-2GA-P1N</td>
<td>G1/4: T72T-2GA-P1N</td>
</tr>
<tr>
<td></td>
<td>G3/8: 4215-59</td>
<td>1/4 PTF: 4216-50</td>
<td>1/4 PTF: T72B-3GA-P1N</td>
</tr>
<tr>
<td></td>
<td>1/4 PTF: 4215-02</td>
<td>1/4 PTF: T72B-2AA-P1N</td>
<td>1/4 PTF: T72T-2AA-P1N</td>
</tr>
<tr>
<td></td>
<td>3/8 PTF: 4215-03</td>
<td>3/8 PTF: T72B-3AA-P1N</td>
<td>3/8 PTF: T72T-3AA-P1N</td>
</tr>
</tbody>
</table>

Pressure switch

<table>
<thead>
<tr>
<th>Porting block for pressure switch</th>
<th>Pressure switch (0.5 ... 8 bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0523109000000000</td>
</tr>
</tbody>
</table>

Service kit

<table>
<thead>
<tr>
<th>Service kit for auto drain</th>
<th>Service kit for manual drain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40 µm</td>
</tr>
<tr>
<td></td>
<td>B72G-KTA44R</td>
</tr>
<tr>
<td></td>
<td>B72G-KTA05R</td>
</tr>
</tbody>
</table>

Gauge

Center back connection, white face
(for full technical specification see datasheet 8.900.900)

<table>
<thead>
<tr>
<th>Pressure range</th>
<th>Thread size</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>bar *1</td>
<td>Mpa</td>
<td>psi</td>
</tr>
<tr>
<td>0 ... 2,5</td>
<td>0 ... 36</td>
<td>40 mm</td>
</tr>
<tr>
<td>0 ... 4</td>
<td>0 ... 58</td>
<td>40 mm</td>
</tr>
<tr>
<td>0 ... 10</td>
<td>0 ... 145</td>
<td>40 mm</td>
</tr>
</tbody>
</table>

*1) Primary scale

Center back connection, black face
(for North America
(for full technical specification see datasheet 8.900.900)

<table>
<thead>
<tr>
<th>Pressure range</th>
<th>Thread size</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>bar</td>
<td>Mpa</td>
<td>ø</td>
</tr>
<tr>
<td>0 ... 30</td>
<td>0 ... 2</td>
<td>1.5&quot; (40 mm)</td>
</tr>
<tr>
<td>0 ... 60</td>
<td>0 ... 4</td>
<td>1.5&quot; (40 mm)</td>
</tr>
<tr>
<td>0 ... 160</td>
<td>0 ... 11</td>
<td>1.5&quot; (40 mm)</td>
</tr>
</tbody>
</table>

*1) Primary scale

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
**Flow characteristics**

Inlet pressure: 10 bar (145 psi)
Port size: 1/4", 40 µm element

Inlet pressure: 7 bar (101 psi)
Port size: 1/4", 40 µm element

**Dimensions**

- **Manual drain**
- **Semi automatic drain**
- **Automatic drain**

---

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PNEUMATICS

B72G
Excelon® 72
Filters / regulators, 1/4, 3/8 (G and PTF)

Accessories

Quikclamp®

Quikclamp® with wall bracket

Porting block

Pipe adapter

Wall mounting bracket

Neck mounting bracket

Shut-off valves

Porting block for pressure switch

Ports 1/4 (ISO G/NPT) plugged
Main ports 1/4” or 3/8” (ISO G/PTF)

Main ports

Main ports 1/4” or 3/8” (ISO G/PTF)
Exhaust port M5 at 3/2 valve only

Pressure switch is not in scope of delivery
Alternative G1/4 ports plugged

EXCELON® 72
Filters / regulators, 1/4, 3/8 (G and PTF)
B84G
Excelon® Plus modular system
General purpose filter/ regulator, 3/8 ... 3/4 (G and PTF)

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- 5 or 40 micron particle and high efficiency water removal (> 98%)
- Double safety lock bowl
- Push to lock adjusting knob with built in tamper resistant feature
- Metal bowl with prismatic liquid level indicator lens
- Light weight polycarbonate bowl
- Easy to read flush mounted integrated pressure gauge as standard

Technical Data

Medium:
Compressed air only
Max. supply pressure:
Polycarbonate bowl: 10 bar (145 psi)
Metal bowl: 20 bar (290 psi)
Outlet pressure ranges:
0,3 ... 10 bar (4 ... 145 psi),
0,3 ... 4 bar (4 ... 58 psi) optional,
0,7 ... 17 bar (2 ... 250 psi) optional
Filter element:
5 µm & 40 µ
Port size:
G3/8, G1/2, G3/4,
3/8 PTF, 1/2 PTF, 3/4 PTF
Gauge port:
Integrated as standard
Gauge port 1/8 as option
Flow:
100 dm³/s
At port size: 1/2”
Inlet pressure 10 bar (145 psi),
6,3 bar (91 psi) set pressure and a
Δp: 1 bar (14,5 psi) drop from set.
Filter element: 40 µm
Diaphragm Type:
Relieving
Ambient/Media temperature:
Polycarbonate bowl:
-10 ... +60°C (+14 ... +140°F)
Metal bowl:
-20 ... +65°C (-4 ... +149°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).
Automatic drain operating conditions (float operated):
Bowl pressure required to close drain: > 0,35 bar (5 psi)
Bowl pressure required to open drain: ≤ 0,2 bar (2.9 psi)
Minimum air flow required to close drain: 1 dm³/s (2 scfm)

Materials

Body:
Die cast aluminium
Body covers:
ABS
Bonnet:
Acetal/ Aluminium
Valve:
PP
Bowl:
Transparent PC with PP guard or die cast aluminium
Liquid level indicator lens (metal bowl):
PA
Filter element:
sintered PP
Bowl ‘o’- ring:
Chloroprene
Elastomers: NBR

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
B84G
Excelon® Plus modular system
General purpose filter / regulator, 3/8 ... 3/4 (G and PTF)

Technical data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Drain</th>
<th>Pressure range (bar)</th>
<th>Filter element (µm)</th>
<th>Bowl</th>
<th>Weight (kg)</th>
<th>Model *1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G3/8</td>
<td>Auto</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Guarded polycarbonate</td>
<td>0,73</td>
<td>B84G-3GK-AP3-RMG</td>
<td></td>
</tr>
<tr>
<td>G1/2</td>
<td>Auto</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Guarded polycarbonate</td>
<td>0,73</td>
<td>B84G-4GK-AP3-RMG</td>
<td></td>
</tr>
<tr>
<td>G3/4</td>
<td>Auto</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Guarded polycarbonate</td>
<td>0,73</td>
<td>B84G-6GK-AP3-RMG</td>
<td></td>
</tr>
<tr>
<td>G3/8</td>
<td>Auto</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Metal with level indicator</td>
<td>0,88</td>
<td>B84G-3GK-AD3-RMG</td>
<td></td>
</tr>
<tr>
<td>G1/2</td>
<td>Auto</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Metal with level indicator</td>
<td>0,88</td>
<td>B84G-4GK-AD3-RMG</td>
<td></td>
</tr>
<tr>
<td>G3/4</td>
<td>Auto</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Metal with level indicator</td>
<td>0,88</td>
<td>B84G-6GK-AD3-RMG</td>
<td></td>
</tr>
<tr>
<td>G3/8</td>
<td>Manual</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Guarded polycarbonate</td>
<td>0,73</td>
<td>B84G-3GK-QP3-RMG</td>
<td></td>
</tr>
<tr>
<td>G1/2</td>
<td>Manual</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Guarded polycarbonate</td>
<td>0,73</td>
<td>B84G-4GK-QP3-RMG</td>
<td></td>
</tr>
<tr>
<td>G3/4</td>
<td>Manual</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Guarded polycarbonate</td>
<td>0,73</td>
<td>B84G-6GK-QP3-RMG</td>
<td></td>
</tr>
<tr>
<td>G3/8</td>
<td>Manual</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Metal with level indicator</td>
<td>0,88</td>
<td>B84G-3GK-QD3-RMG</td>
<td></td>
</tr>
<tr>
<td>G1/2</td>
<td>Manual</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Metal with level indicator</td>
<td>0,88</td>
<td>B84G-4GK-QD3-RMG</td>
<td></td>
</tr>
<tr>
<td>G3/4</td>
<td>Manual</td>
<td>0,3 ... 10</td>
<td>40</td>
<td>Metal with level indicator</td>
<td>0,88</td>
<td>B84G-6GK-QD3-RMG</td>
<td></td>
</tr>
</tbody>
</table>

*1) All models shown here are supplied with integrated gauge applicable for flow direction left to right.

With flow direction right to left please use the online configurator www.imi-precision.com/air-preparation-configurator or contact IMI Norgren

Option selector 1*)

Port size | Substitute
---|---
3/8" | 3
1/2" | 4
3/4" | 6

Thread form | Substitute
---|---
PTF | A
ISO G parallel (standard) | G

Adjustment

Knob (standard) | K
T-bar | T*2)

Drain

Manual (standard) | Q
Auto drain (standard) | A

Bowl

Metal with liquid indicator | D
Transparent with guard (standard) | P

Gauge | Substitute
---|---
With integrated gauge | G
Without integrated gauge but with gauge port 1/8" | N

Pressure range *3) | Substitute
---|---
0,3 ... 4 bar | F
0,3 ... 10 bar (standard) | M
0,7 ... 17 bar | S*2)

Element

40 µm (standard) | 3
5 µm | 1

*1) All models shown here are applicable for flow direction left to right. With flow direction right to left please use the online configurator www.imi-precision.com/air-preparation-configurator or contact IMI Norgren

*2) Units with 17 bar outlet pressure range are available only with the T-bar adjustment, therefore substitute T at the 7th position and S at the 9th position. T-bar handle only available with 17 bar option.

*3) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.
B84G
Excelon® Plus modular system
General purpose filter / regulator, 3/8 ... 3/4 (G and PTF)

- **Flow characteristics**
  - Inlet pressure: 10 bar (145 ps)
  - Port size: 1/2", 40 µm element

![Flow characteristics graph]

- **Dimensions**
  - Minimum clearance for bowl removal
  - Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
  - Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

![Dimensions drawings]

For further information, visit [www.imi-precision.com](http://www.imi-precision.com) and use the new improved search function. If you cannot see the option you require please contact us.
**Accessories**

<table>
<thead>
<tr>
<th>Quikclamp® with bracket assembled</th>
<th>Pressure sensing block 1/4 PTF</th>
<th>Padlock</th>
<th>Lockout device</th>
<th>Pressure switch interface block (18D pressure switch)</th>
<th>Pneumatic pressure switch 18D (0,5 ... 8 bar) *1)</th>
<th>Digital pressure switch 51D (-1 ... 10 bar) *2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page 119</td>
<td>Page 120</td>
<td>Page 120</td>
<td>Page 119</td>
<td>Page 120</td>
<td>Page 120</td>
<td>Page 121</td>
</tr>
<tr>
<td>840014-51KIT</td>
<td>840014-52KIT</td>
<td>840005-01KIT</td>
<td>840005-02KIT</td>
<td>840005-01KIT</td>
<td>840005-02KIT</td>
<td>840014-53KIT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Integrated gauge 10 bar gauge</th>
<th>Integrated gauge 20 bar gauge</th>
<th>Gauge adaptor kit 1/8 PTF</th>
<th>Gauge adaptor kit R 1/8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page 119</td>
<td>Page 120</td>
<td>Page 120</td>
<td>Page 120</td>
</tr>
<tr>
<td>840073-01KT</td>
<td>840073-02KT</td>
<td>840100-01KT</td>
<td>840100-02KT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Full flow porting block 3/4 PTF</th>
<th>Full flow porting block G3/4</th>
<th>Pressure range (bar) *3)</th>
<th>Thread size</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page 120</td>
<td>Page 120</td>
<td>Page 120</td>
<td>Page 120</td>
<td>Page 120</td>
</tr>
<tr>
<td>840028-50KIT</td>
<td>840028-530T</td>
<td>0337717000000000</td>
<td>0881300</td>
<td>0860810</td>
</tr>
</tbody>
</table>

*1) Range version. For other pressure ranges, please see data sheet 5.11.001
*2) For other pressure ranges, please see data sheet 5.11.385
*3) Primary scale

**Gauges**

(For regulators with gauge port instead of integrated port)

**Center back connection, white face**
(for full technical specification see datasheet 8.900.900)

<table>
<thead>
<tr>
<th>Pressure range (bar) *3)</th>
<th>(MPa)</th>
<th>(psi)</th>
<th>ø</th>
<th>Thread size</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 ... 6</td>
<td>0 ... 0.6</td>
<td>0 ... 84</td>
<td>50 mm</td>
<td>R1/8</td>
<td>18-015-012</td>
</tr>
<tr>
<td>0 ... 10</td>
<td>0 ... 1</td>
<td>0 ... 145</td>
<td>50 mm</td>
<td>R1/8</td>
<td>18-015-013</td>
</tr>
<tr>
<td>0 ... 25</td>
<td>0 ... 2.5</td>
<td>0 ... 362</td>
<td>50 mm</td>
<td>R1/8</td>
<td>18-015-014</td>
</tr>
</tbody>
</table>

*3) Primary scale
### Maintenance/Service

<table>
<thead>
<tr>
<th>Auto drain kit with metal nut - Imperial</th>
<th>Auto drain kit with metal nut - Metric</th>
<th>R84 / B84 Elastomer kit</th>
<th>Filter cartridges 5 micron</th>
<th>Filter cartridges 40 micron</th>
</tr>
</thead>
<tbody>
<tr>
<td>8000-61KIT</td>
<td>8000-60KIT</td>
<td>FRLB84-KIT</td>
<td>840038-50KIT</td>
<td>840038-51KIT</td>
</tr>
</tbody>
</table>

### Spare parts

<table>
<thead>
<tr>
<th>Filter bowl (Guarded poly bowl with auto drain 6 mm PIF)</th>
<th>Filter bowl (Guarded poly bowl with manual drain)</th>
<th>Filter bowl (Metal with S/Glass &amp; auto drain, 6 mm PIF)</th>
<th>Filter bowl (Metal with S/Glass &amp; manual drain)</th>
</tr>
</thead>
<tbody>
<tr>
<td>840025-51KIT</td>
<td>840025-50KIT</td>
<td>840003-51KIT</td>
<td>840003-50KT</td>
</tr>
<tr>
<td>Filter bowl (Guarded poly bowl with auto drain, 1/4 PIF)</td>
<td>Filter bowl (Metal with S/Glass &amp; auto drain, 1/4 PIF)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>840025-53KIT</td>
<td>840003-56KIT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B84G
Excelon® Plus modular system
General purpose filter/regulator, 3/8 ... 3/4 (G and PTF)

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
B84G
Excelon®Plus Modular System
General purpose filter/ regulator, 3/8 ... 3/4 (G and PTF)

Pressure sensing block

Full flow porting block

Porting block for 18D pressure switch

18D Pressure switch

18D Porting block and 18D assembled

Pipe adaptor

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
B84G
Excelon® Plus Modular System
General purpose filter/ regulator, 3/8 ... 3/4 (G and PTF)

51D Pressure switch - digital

Switch OUT 1, green LED
Switch OUT 2, red LED
Dustproof protector
Connector M12 x 1
Inlet port
Alternative inlet port G1/8 plugged
Thread for mounting screw

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
B64G, B68G
Olympian Plus plug-in system
Filters / regulators, G1/4 ... 1 1/2

- High efficiency water removal
- Good regulation characteristics
- Non-rising adjusting knob
  has snap-action lock

Technical Data

Medium:
Compressed air only
Max. inlet pressure: 17 bar
Pressure range:
  B64:
    0,3 ... 10 bar standard
    0,3 ... 4 and 0,7 ... 17 optional
  B68:
    0,4 ... 8 bar standard
    0,3 ... 4 and 0,7 ... 17 optional
Filter element:
40 µm standard, 5 µm optional
Port size:
  G1/4, G3/8, G1/2, G3/4,
  G1, G1 1/4 and G1 1/2
Gauge port:
  Rz 1/8
Drain:
  Manual or automatic
Relieving:
  Standard
Fluid/Ambient temperature:
  -20 ... +80°C
Air supply must be dry enough
  to avoid ice formation at
  temperatures below +2°C

Materials

B64G:
  Body & yoke: zinc alloy
  Bonnet & bowl: Aluminium
  Elastomers: Synthetic rubber
  Filter element: Sintered plastic
B68G:
  Body, bonnet, bowl & yoke:
    Aluminium
  Adjusting knob:
    Acetal resin
  Elastomers: Synthetic rubber
  Filter element: Sintered plastic

Symbol Port size Pressure range (bar) Element (µm) Flow *1) (dm³/s) Bowl Drain Weight (kg) Model

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Pressure range (bar)</th>
<th>Element (µm)</th>
<th>Flow *1) (dm³/s)</th>
<th>Bowl</th>
<th>Drain</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1/4</td>
<td>0.3 ... 10</td>
<td>40</td>
<td>30</td>
<td>Metal</td>
<td>Manual</td>
<td>1.71</td>
<td>B64G-2GK-MD3-RMN</td>
<td></td>
</tr>
<tr>
<td>G3/8</td>
<td>0.3 ... 10</td>
<td>40</td>
<td>76</td>
<td>Metal</td>
<td>Manual</td>
<td>1.69</td>
<td>B64G-3GK-MD3-RMN</td>
<td></td>
</tr>
<tr>
<td>G1/2</td>
<td>0.3 ... 10</td>
<td>40</td>
<td>106</td>
<td>Metal</td>
<td>Manual</td>
<td>1.66</td>
<td>B64G-4GK-MD3-RMN</td>
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<tr>
<td>G3/4</td>
<td>0.3 ... 10</td>
<td>40</td>
<td>106</td>
<td>Metal</td>
<td>Manual</td>
<td>2.02</td>
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<tr>
<td>G1/4</td>
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<td>40</td>
<td>30</td>
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<td>1.71</td>
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<td>76</td>
<td>Metal</td>
<td>Automatic</td>
<td>1.69</td>
<td>B64G-3GK-AD3-RMN</td>
<td></td>
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<tr>
<td>G1/2</td>
<td>0.3 ... 10</td>
<td>40</td>
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<td>Automatic</td>
<td>1.66</td>
<td>B64G-4GK-AD3-RMN</td>
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<tr>
<td>G3/4</td>
<td>0.3 ... 10</td>
<td>40</td>
<td>106</td>
<td>Metal</td>
<td>Automatic</td>
<td>2.02</td>
<td>B64G-6GK-AD3-RMN</td>
<td></td>
</tr>
</tbody>
</table>

*1) Typical flow with a 40 µm element at 6,3 bar inlet pressure and 0,5 bar pressure drop.
For replacement filter / regulator (without yoke) substitute “N” at the 5th and 6th digits e.g. B64G-NNK-AD3-RMN.

Symbol Port size Pressure range (bar) Element (µm) Flow *1) (dm³/s) Bowl Drain Weight (kg) Model

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Pressure range (bar)</th>
<th>Element (µm)</th>
<th>Flow *1) (dm³/s)</th>
<th>Bowl</th>
<th>Drain</th>
<th>Weight (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>G3/4</td>
<td>0.4 ... 8</td>
<td>40</td>
<td>240</td>
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<td>Manual</td>
<td>3.29</td>
<td>B68G-6GK-MR3-RLN</td>
<td></td>
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<tr>
<td>G1</td>
<td>0.4 ... 8</td>
<td>40</td>
<td>240</td>
<td>Metal</td>
<td>Manual</td>
<td>3.29</td>
<td>B68G-8GK-MR3-RLN</td>
<td></td>
</tr>
<tr>
<td>G1 1/4</td>
<td>0.4 ... 8</td>
<td>40</td>
<td>240</td>
<td>Metal</td>
<td>Manual</td>
<td>3.35</td>
<td>B68G-4GK-MR3-RLN</td>
<td></td>
</tr>
<tr>
<td>G1 1/2</td>
<td>0.4 ... 8</td>
<td>40</td>
<td>240</td>
<td>Metal</td>
<td>Manual</td>
<td>3.35</td>
<td>B68G-6GK-MR3-RLN</td>
<td></td>
</tr>
<tr>
<td>G3/4</td>
<td>0.4 ... 8</td>
<td>40</td>
<td>240</td>
<td>Metal</td>
<td>Automatic</td>
<td>3.29</td>
<td>B68G-6GK-AR3-RLN</td>
<td></td>
</tr>
<tr>
<td>G1</td>
<td>0.4 ... 8</td>
<td>40</td>
<td>240</td>
<td>Metal</td>
<td>Automatic</td>
<td>3.29</td>
<td>B68G-8GK-AR3-RLN</td>
<td></td>
</tr>
<tr>
<td>G1 1/4</td>
<td>0.4 ... 8</td>
<td>40</td>
<td>240</td>
<td>Metal</td>
<td>Automatic</td>
<td>3.35</td>
<td>B68G-4GK-AR3-RLN</td>
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</tr>
<tr>
<td>G1 1/2</td>
<td>0.4 ... 8</td>
<td>40</td>
<td>240</td>
<td>Metal</td>
<td>Automatic</td>
<td>3.35</td>
<td>B68G-6GK-AR3-RLN</td>
<td></td>
</tr>
</tbody>
</table>

*2) Typical flow with 10 bar inlet pressure, and 1 bar set pressure and 1 bar drop from set.
For replacement filter/regulator (without yoke) substitute “N” at the 5th and 6th digits e.g. B68G-NNK-AR3-RLN.

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
**B64G, B68G**

Olympian Plus plug-in system
Filters / regulators, G1/4 ... 1 1/2

### Option selector

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
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<tbody>
<tr>
<td>1/4</td>
<td>2</td>
</tr>
<tr>
<td>3/8</td>
<td>3</td>
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<tr>
<td>1/2</td>
<td>4</td>
</tr>
<tr>
<td>3/4</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Threads</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTF</td>
<td>A</td>
</tr>
<tr>
<td>ISO G parallel</td>
<td>G</td>
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</table>

<table>
<thead>
<tr>
<th>Adjustment</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knob</td>
<td>K</td>
</tr>
<tr>
<td>T-bar (B73 &amp; 74)</td>
<td>T</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drain</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual</td>
<td>M</td>
</tr>
<tr>
<td>Auto Drain</td>
<td>A</td>
</tr>
</tbody>
</table>

### Gauge

- With: G
- Without: N

### Outlet pressure adjustment range *1)

- 0.3 ... 4 bar: F
- 0.3 ... 10 bar: M
- 0.7 ... 17 bar: S *2)

### Diaphragm

- Relieving: R
- Non-relieving: N

### Element

- 5 µm: 1
- 40 µm: 3

---

*1) Can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

*2) Units with 17 bar adjustment range are available only with the T-bar adjustment; therefore substitute T at the 7th digit and S at the 12th position.

---

### Option selector

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4</td>
<td>6</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
</tr>
<tr>
<td>1 1/4</td>
<td>A</td>
</tr>
<tr>
<td>1 1/2</td>
<td>B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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</tr>
</thead>
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<tr>
<td>PTF</td>
<td>A</td>
</tr>
<tr>
<td>ISO G parallel</td>
<td>G</td>
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</table>

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<td>K</td>
</tr>
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</tbody>
</table>

<table>
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<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual</td>
<td>M</td>
</tr>
<tr>
<td>Auto Drain</td>
<td>A</td>
</tr>
</tbody>
</table>

### Gauge

- With: G
- Without: N

### Outlet pressure adjustment range *1)

- 0.3 ... 4 bar: F
- 0.3 ... 8 bar: L
- 0.7 ... 17 bar: S *2)

### Diaphragm

- Relieving: R
- Non-relieving: N

### Element

- 5 µm: 1
- 40 µm: 3

---

*1) Can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

*2) Units with 17 bar adjustment range are available only with the T-bar adjustment; therefore substitute T at the 7th digit and S at the 12th position.
B64G, B68G
Olympian Plus plug-in system
Filters / regulators, G1/4 ... 1 1/2

Flow characteristics
B64G – Port size 1/2", 40 μm element, pressure range 0,3 ... 10 bar
B68G – Port size 1", 40 μm element, pressure range 0,4 ... 8 bar

Accessories B64G

<table>
<thead>
<tr>
<th>Bracket mounting</th>
<th>Nut</th>
<th>Porting block</th>
<th>Adaptor plate</th>
<th>Pressure switch</th>
<th>Connector</th>
<th>Tamper resistant cap &amp; seal wire</th>
</tr>
</thead>
<tbody>
<tr>
<td>74504-50</td>
<td>74502-88</td>
<td>74507-50</td>
<td>74816-50</td>
<td>4346-99</td>
<td>74503-51</td>
<td>4355-50</td>
</tr>
</tbody>
</table>

*1) These yokes are supplied with two end connector kits as standard.

<table>
<thead>
<tr>
<th>Thread</th>
<th>Single yoke *1)</th>
<th>End connector kit</th>
<th>3/2 way shut-off valve primary side</th>
<th>3/2 way shut-off valve secondary side</th>
<th>Service kit, manual drain</th>
<th>Service kit, automatic drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1/4</td>
<td>Y64A-2GA-N1N</td>
<td>T64T-2GB-P1N</td>
<td>T64T-2GC-P1N</td>
<td>B64G-KITM50R (5 μm)</td>
<td>B64G-KITA50R (5 μm)</td>
<td></td>
</tr>
<tr>
<td>G3/8</td>
<td>Y64A-3GA-N1N</td>
<td>T64T-3GB-P1N</td>
<td>T64T-3GC-P1N</td>
<td>B64G-KITM40R (40 μm)</td>
<td>B64G-KITA40R (40 μm)</td>
<td></td>
</tr>
<tr>
<td>G1/2</td>
<td>Y64A-4GA-N1N</td>
<td>74505-50</td>
<td>T64T-4GB-P1N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G3/4</td>
<td>Y64A-6GA-N1N-*1)</td>
<td>74505-53</td>
<td>T64T-6GB-P1N</td>
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</table>

*1) These yokes are supplied with two end connector kits as standard.

<table>
<thead>
<tr>
<th>Gauge series</th>
<th>Port size</th>
<th>Pressure range in bar</th>
<th>Diameter</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>64 (ISO G main port)</td>
<td>Rz: 1/8</td>
<td>0 ... 6</td>
<td>50 mm</td>
<td>18-013-012</td>
</tr>
<tr>
<td></td>
<td>Rz: 1/8</td>
<td>0 ... 10</td>
<td>50 mm</td>
<td>18-013-013</td>
</tr>
<tr>
<td></td>
<td>Rz: 1/8</td>
<td>0 ... 25</td>
<td>50 mm</td>
<td>18-013-014</td>
</tr>
</tbody>
</table>
Accessories B68G

<table>
<thead>
<tr>
<th>Thread</th>
<th>Bracket mounting</th>
<th>Single yoke *1)</th>
<th>End connector kit</th>
<th>3/2 way shut-off valve primary side</th>
<th>3/2 way shut-off valve secondary side</th>
</tr>
</thead>
</table>

*1) These yokes are supplied with two end connector kits as standard.

<table>
<thead>
<tr>
<th>Nut</th>
<th>Tamper resistant cap &amp; seal wire</th>
<th>Service kit, manual drain</th>
<th>Service kit, automatic drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>5520-89</td>
<td>4355-50</td>
<td>B68G-KITM05R (5 µm)</td>
<td>B68G-KITA05R (5 µm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B68G-KITM40R (40 µm)</td>
<td>B68G-KITA40R (40 µm)</td>
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</table>

Gauge series

<table>
<thead>
<tr>
<th>Port size</th>
<th>Pressure range in bar</th>
<th>Diameter</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rc 1/8</td>
<td>0 ... 6</td>
<td>50 mm</td>
<td>18-013-012</td>
</tr>
<tr>
<td>Rc 1/8</td>
<td>0 ... 10</td>
<td>50 mm</td>
<td>18-013-013</td>
</tr>
<tr>
<td>Rc 1/8</td>
<td>0 ... 25</td>
<td>50 mm</td>
<td>18-013-014</td>
</tr>
</tbody>
</table>

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
B64G, B68G
Olympian Plus plug-in system
Filters/regulators, G1/4 ... 1 1/2

Dimensions
Basic dimensions B64

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.

Bracket mounting

# Minimum clearance required to remove bowl
- Reduces by 4 mm with knob in locked position
- Gauge port
B64G, B68G
Olympian Plus plug-in system
Filters/regulators, G1/4 ... 1 1/2

Basic dimensions 68
0.5 litre bowl

Bracket mounting

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.

For 1 1/4" and 1 1/2" ported yokes add 10 mm

Minimum clearance required to remove bowl
Reduces by 4 mm with knob in locked position
Gauge port

Online at www.imi-precision.com
### Technical Data

**Medium:**
For neutral, gaseous, and liquid fluids, non-combustible (special versions for water application)

**Operation:**
Diaphragm

**Operating pressure range:**
–1 ... 30 bar

**Operating viscosity:**
Up to 1,000 mm²/s

**Switching pressure difference:**
Fixed

**Repeatability:**
±3% for vacuum
±4% of final value
(Depending on regulating pressure)

**Switching element:**
Microswitch with gold plated contacts

**Mounting position:**
Optional

**Degree of protection:**
IP65 for DIN EN 175301-803 (DIN 43650) form A
IP67 for M12 x 1

**Electrical connection:**
DIN EN 175301-803 (DIN 43650) form A or M12 x 1 IEC 947-5-2

**Housing:**
Aluminium (brass)

**Sealing:**
NBR/FKM

---

### Fluid/Ambient temperature:
–10 ... +45°C (NBR)
0 ... +80°C (FPM)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

---

### Technical data 18D - electrical connection acc. to DIN EN 175301-803, form A

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pressure range *1) (bar)</th>
<th>Switching pressure difference (bar)</th>
<th>Max. over pressure *2) (bar)</th>
<th>Switching cycles (1/min)</th>
<th>Materials pressure sensor</th>
<th>Port size</th>
<th>Weight (kg)</th>
<th>Dimension No.</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>–1 ... 0</td>
<td>0,25</td>
<td>0,18</td>
<td>80</td>
<td>100</td>
<td>AL</td>
<td>FKM</td>
<td>0,2</td>
<td>1</td>
<td>0880100</td>
</tr>
<tr>
<td>–1 ... 1</td>
<td>0,15</td>
<td>0,18</td>
<td>80</td>
<td>100</td>
<td>AL</td>
<td>FKM</td>
<td>0,2</td>
<td>1</td>
<td>0880110</td>
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<tr>
<td>–1 ... 0</td>
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<td>0,18</td>
<td>80</td>
<td>100</td>
<td>AL</td>
<td>FKM</td>
<td>0,2</td>
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<td>0880120</td>
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<tr>
<td>–1 ... 2</td>
<td>0,20</td>
<td>0,18</td>
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<td>FKM</td>
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<tr>
<td>–1 ... 4</td>
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<td>FKM</td>
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<tr>
<td>0,5 ... 8</td>
<td>0,35</td>
<td>0,18</td>
<td>80</td>
<td>100</td>
<td>AL</td>
<td>FKM</td>
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<td>0880300</td>
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<td>0,85</td>
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<td>100</td>
<td>AL</td>
<td>FKM</td>
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<td>0,40</td>
<td>1,20</td>
<td>80</td>
<td>100</td>
<td>AL</td>
<td>FKM</td>
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<td>1,20</td>
<td>80</td>
<td>100</td>
<td>AL</td>
<td>FKM</td>
<td>0,2</td>
<td>1</td>
<td>0880420</td>
</tr>
<tr>
<td>1 ... 30</td>
<td>1,0</td>
<td>5,00</td>
<td>80</td>
<td>100</td>
<td>AL</td>
<td>FKM</td>
<td>0,2</td>
<td>1</td>
<td>0880600</td>
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<tr>
<td>1 ... 30</td>
<td>1,0</td>
<td>5,00</td>
<td>80</td>
<td>100</td>
<td>AL</td>
<td>FKM</td>
<td>0,2</td>
<td>1</td>
<td>0880620</td>
</tr>
</tbody>
</table>

---

*1) Setpoints should be ideally in the middle of the switching pressure range. Reference pressure = atmospheric pressure. Switching pressure must not exceed the indicated values.

*2) Max. values

*3) Static seal: o-ring (NBR)

*4) LABS free

*5) Plug 0570110 not included, please order separately.
18D

Pneumatic pressure switches
Electromechanically actuated, –1 ... 30 bar G1/4, 1/4 NPT and flange

- Technical data 18D - electrical connection M12 x 1 acc. to IEC 947-5-2 plug not included, max. allowable voltage 30 V

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pressure range *6) (bar)</th>
<th>Switching pressure difference (bar)</th>
<th>Max. over pressure *7) (bar)</th>
<th>Switching cycles *7) (1/min)</th>
<th>Materials pressure sensor Housing Sealing</th>
<th>Port size (kg)</th>
<th>Dimension No.</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,2 ... 2</td>
<td>0,20 0,35</td>
<td>80 100</td>
<td>AL FKM</td>
<td>G1/4</td>
<td>0,2</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>0,5 ... 8</td>
<td>0,35 0,85</td>
<td>80 100</td>
<td>AL FKM</td>
<td>G1/4</td>
<td>0,2</td>
<td>1</td>
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</tr>
<tr>
<td>1 ... 16</td>
<td>1,00 5,00</td>
<td>80 100</td>
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<td>G1/4</td>
<td>0,2</td>
<td>2</td>
<td>0880260 *8)</td>
<td></td>
</tr>
</tbody>
</table>

*6) Setpoints should be ideally in the middle of the switching pressure range. Reference pressure = atmospheric pressure. Switching pressure must not exceed the indicated values.

*7) Max. values

*8) LABS free

*9) Switching function reversed

- Technical data 18D - versions for water applications
Electrical connection acc. to DIN EN 175301-803, form A

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pressure range *10) (bar)</th>
<th>Switching pressure difference (bar)</th>
<th>Max. over pressure *11) (bar)</th>
<th>Switching cycles (1/min)</th>
<th>Materials pressure sensor Housing Sealing</th>
<th>Port size (kg)</th>
<th>Dimension No.</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,2 ... 2</td>
<td>0,20 0,35</td>
<td>80 100</td>
<td>Brass FKM</td>
<td>G1/4</td>
<td>0,2</td>
<td>1</td>
<td>0880219</td>
<td></td>
</tr>
<tr>
<td>0,2 ... 2</td>
<td>0,20 0,35</td>
<td>80 100</td>
<td>Brass FKM</td>
<td>1/4 NPT</td>
<td>0,2</td>
<td>1</td>
<td>0880240</td>
<td></td>
</tr>
<tr>
<td>0,5 ... 8</td>
<td>0,35 0,85</td>
<td>80 100</td>
<td>Brass FKM</td>
<td>G1/4</td>
<td>0,2</td>
<td>2</td>
<td>0880323</td>
<td></td>
</tr>
<tr>
<td>0,5 ... 8</td>
<td>0,35 0,85</td>
<td>80 100</td>
<td>Brass FKM</td>
<td>1/4 NPT</td>
<td>0,2</td>
<td>2</td>
<td>0880340</td>
<td></td>
</tr>
</tbody>
</table>

*10) Setpoints should be ideally in the middle of the switching pressure range. Reference pressure = atmospheric pressure. Switching pressure must not exceed the indicated values.

*11) Max. values

- Accessories

<table>
<thead>
<tr>
<th>Pressure port Reducing nipple</th>
<th>Surge damper</th>
<th>Cover (Via adjustment screw)</th>
<th>Connector</th>
<th>Connector M 12 x 1 90° straight</th>
</tr>
</thead>
<tbody>
<tr>
<td>0574767 (Brass)</td>
<td>0574773 (Brass)</td>
<td>0554737</td>
<td>0570110</td>
<td>0523068 (2 m cable, 4-core)</td>
</tr>
<tr>
<td>0550083 (Stainless steel)</td>
<td>0553258 (Stainless steel)</td>
<td>0523065 (90° without cable)</td>
<td>0523056</td>
<td>0523057 (5 m cable, 4-core)</td>
</tr>
<tr>
<td>0523055 (Without cable)</td>
<td>0523052 (5 m cable, 4-core)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
18D
Pneumatic pressure switches
Electromechanically actuated, –1 ... 30 bar G1/4, 1/4 NPT and flange

Switching capacity – commutator with gold plated contacts

<table>
<thead>
<tr>
<th>Current type</th>
<th>Load type</th>
<th>U min [V]</th>
<th>Max. permanent current Imax [A] at U *12)</th>
<th>Contact life</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>Ohmic, inductive</td>
<td>6</td>
<td>0.1</td>
<td>2 x 105 switching cycles</td>
</tr>
<tr>
<td>DC</td>
<td>Ohmic, inductive</td>
<td>6</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

*12) Higher currents (≥ 5 A) will cause a reduction of the durability of the micro-switch contacts. Furthermore additional measurements have to be taken to fulfill the EMV regulation 2004/108/EG by the manufacturer.

*13) Spark quenching/overload protection will be necessary using inductive loads.

Recommended circuit – spark quenching and EMV intrinsically safe

1. Quick diode (D) with tv ≤ 200 ns, parallel to inductive load

2. RC Link in parallel to load in parallel to switching contact

Dimensioning principles

\[ R_L \text{ in } W = \frac{0.2 \times R_{\text{Load in } W}}{I_{\text{Load in } A}} \]

\[ C \text{ in } [\mu F] = \frac{U_{\text{DC (AC)}}}{6 \times R_{\text{Load in } W}} \]

Switching function

Plug DIN EN 175301-803, form A
Microswitch SPDT
Terminals 1 - 3: Contacts close on rising pressure.
Terminals 1 - 2: Contacts open on rising pressure.

Switching function

IEC 047-5-2: M12 x 1:
Microswitch SPDT
Terminals 1 - 4:
Contacts close on rising pressure.
Terminals 1 - 2:
Contacts open on rising pressure.
18D
Pneumatic pressure switches
Electromechanically actuated, –1 ... 30 bar G1/4, 1/4 NPT and flange

Dimensions

1

2

3

Adjustable switch point
After releasing the locking screw
Clockwise rotation = increasing switch point
Anti-clockwise rotation = decreasing the switch point

Electrical connection
for plug according to
DIN EN 175301-803, form A
Electrical connection M12 x 1

Accessories

Pressure port/
Reducing nipple
Material: Brass
Model: 0574767

Surge damper
Material: Brass
Model: 0574773

Cover
Material: Polymer
Model: 054737
Pneumatic pressure switches
Electromechanically actuated, –1 ... 10 bar, G1/8

- System pressure (unit bar, psi, MPa, kgf/cm², mmHg, inHg or mmH₂O) selectable
- High accuracy and resolution
- Switching status indicated by LED
- Output: 2 x PNP or 2 x NPN
- Versions with analogue output signal on request

Technical Data

Medium:
Compressed air, filtered, lubricated or non-lubricated

Pressure range:
-1 ... 10 bar
-1 ... 1 bar

Display:
3 1/2 digit LED

Mounting position:
Optional

Repeatability (switch output):
±0,2% of full scale (FS) ±1 digit
- without temperature sensitivity

Response time:
≤2,5 ms

Shockproof:
100 g (980 m/s²), xyz

Vibrationproof:
98 g, 10 - 55 Hz, xyz

Degree of protection acc. to DIN 40050:
IP65 (with mounted dust proof protector)

Weight:
83 g

Temperature sensitivity:
±2% of full scale (FS) of detected pressure

Ambient/Media temperature:
0 ... +50°C

Storage temperature:
-20 ... +60°C

No condensation or freezing

Electrical Parameters

Electrical connection:
M12 x 1

Power supply:
12 ... 24 V d.c.
24 V d.c. (PNP) maximum
30 V d.c. (NPN) maximum

Residual voltage:
≤ 1 V (load current 80 mA)

Permissible residual ripple:
10% or less (P-P)

Current consumption:
≤ 50 mA

Load current:
80 mA maximum (with output short circuit protection)

Switching mode:
PNP or NPN

Indicator:
Green LED (OUT1), red LED (OUT2)

Insulation resistance:
50 MΩ min (at 500 V d.c.
(between case and lead wire))

Electromagnetic compatibility:
According to EN 61326-1

Materials

Body:
PC

Technical data 51D

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port size</th>
<th>Switching pressure range (bar)</th>
<th>Over pressure *1) (bar)</th>
<th>Output signal</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 1/8</td>
<td>–1 ... 10</td>
<td>15</td>
<td>15</td>
<td>2 x PNP</td>
<td>0860810</td>
</tr>
<tr>
<td>G 1/8</td>
<td>–1 ... 10</td>
<td>15</td>
<td>15</td>
<td>2 x NPN</td>
<td>0860815</td>
</tr>
<tr>
<td>G 1/8</td>
<td>–1 ... 1</td>
<td>3</td>
<td>3</td>
<td>2 x PNP</td>
<td>0860820</td>
</tr>
<tr>
<td>G 1/8</td>
<td>–1 ... 1</td>
<td>3</td>
<td>3</td>
<td>2 x NPN</td>
<td>0860825</td>
</tr>
</tbody>
</table>

*1) Short-term pressure peaks are not allowed to exceed this limit value during operation. Operative utilization of the limit value is not permitted. The limit value corresponds to the maximum testing pressure.
51D

Pneumatic pressure switches
Electromechanically actuated, –1 ... 10 bar G1/8

● Accessories

Mounting bracket (Wall mounting)  Mounting bracket (Wall mounting)  Panel mounting kit

0860000  0860001  0860005

● Dimensions

PNP

Pressure switch

NPNN

Electrical connection M12 x 1

<table>
<thead>
<tr>
<th>PIN-No.</th>
<th>Signal</th>
<th>Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+ UB</td>
<td>Brown</td>
</tr>
<tr>
<td>2</td>
<td>Out 2</td>
<td>White</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
<td>Blue</td>
</tr>
<tr>
<td>4</td>
<td>Out 1</td>
<td>Black</td>
</tr>
</tbody>
</table>

Mounting bracket (Wall mounting)

Online at www.imi-precision.com

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
51D
Pneumatic pressure switches
Electromechanically actuated, –1 ... 10 bar G1/8

Dimensions

Mounting bracket
(Bottom mounting)

Panel mounting kit
Front protective lid
Panel adapter

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Technical Data

Medium:
Compressed air, filtered (40 µm), lubricated or non-lubricated

Operation:
Single-acting impact cylinder

Operating pressure:
3 ... 7.5 bar

Port size:
Tube O/D Ø 10 mm

Max. impact energy:
120 Joule

Weight:
10.8 kg

Fluid temperature:
-20 ... +50°C max.

Ambient temperature:
-20 ... +80°C max.

Air supply must be dry enough to avoid ice formation at temperatures below +2°C.

Materials

Barrel and end covers:
Anodized aluminum

Piston & striking pin:
1.4021

Piston seals:
PUR

Stricking pin seals:
FPM

Other seals:
NBR

Operating pressure (bar)
3.5 4.5 5.5 6.5 7.5

Release pressure (bar)
3.0 4.0 5.0 6.0 7.0

Impact energy (Joule)
40 50 70 100 120

Air consumption (l/cycle)
7.5 9.5 11.5 13.6 15.7

Sound level at 1 m distance [dB (A)]
94 96 98 99 100

Symbol & frequency of operating cycles

AC Air reservoir
FRL Air line combination unit, to be ordered separately
P Main pressure
P1 Operating pressure
P2 Release pressure
R Pressure regulator, setting of P1 and P2
V1 Control valve, to be ordered separately
V2 Pilot actuated valve, integrated
V3 Valve actuated by the striking pin, integrated
VI Optional port for visual indicator

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
### Option selector

#### Length of screw bolts

<table>
<thead>
<tr>
<th>Option selector</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 mm (Standard)</td>
<td>None</td>
</tr>
<tr>
<td>Option for customer to specify (e.g. 85 mm)</td>
<td>85</td>
</tr>
</tbody>
</table>

### Accessories

- Visual indicators & nipple adaptor
- Welding flange
- Tool for wear monitoring (Striking pin)
- Service kit

<table>
<thead>
<tr>
<th>Option selector</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVS-421-800</td>
<td>SPCH/080036/120</td>
</tr>
<tr>
<td>150201818 (nipple adaptor)</td>
<td>SPCH/080014</td>
</tr>
<tr>
<td></td>
<td>SPCH/080003/00</td>
</tr>
</tbody>
</table>

### Dimensions

X To order the impact cylinder, fill in the desired dimension in mm for X to the last position of the article code 'SPCH/080003/X'. If there is no dimension provided, the impact cylinder will be produced with a standard-length of 65 mm for X.

- Indicator from the striking pin when installed
- G1/8 port size for visual indicator
- Tube O/D ø10 mm
- Position of striking pin at end of operation. Striking pins must strike a structure. Customer must ensure transfer of striking energy by means of connecting structure.
- For the transmission of the impact energy, the striking pin must travel a minimum of 6 mm and a maximum of 23 mm.
- Protection cap
- Fixing screw
- Adjustment screw
  
  The striking pin will travel 23 mm, if the impact cylinder is mounted flush.
SPCH/080003/X
Impact cylinders
0 ... 120 Joule

Welding flange

Tool for wear monitoring (striking pin)

Visual indicator

Nipple adaptor

For further information, visit www.imi-precision.com
and use the new improved search function. If you cannot see the option you require please contact us.
Pneufit® C
Push-in fittings, metric
Ø 4 ... 16 mm O/D tube

- Pneufit® C fittings are ready to use, offering fast assembly with no need for tools providing optimum flow
- Pneufit® C offers a broad range of over 1,000 composite push-in pneumatic fittings to complement our established all brass Pneufit® series
- Releasable stainless-steel grab-ring to grip nylon or polyurethane tube (85 or 95 durometer)
- Nickel plated brass components provide corrosion and contamination resistance and an extended life
- Pre applied thread sealant on all taper threads and recessed captive o-ring on parallel threads provides optimum rapid sealing

Technical Data

- Medium:
  Compressed air
- Max. operating pressure: 10 bar
- Vacuum: 750 mm Hg
- Tube sizes: 4, 6, 8, 10, 12 and 16 mm
- Thread sizes:
  M5, M6, 1/8, 1/4, 3/8 and 1/2
  ISO G, ISO Rc and ISO R
- Tubing types:
  Nylon 11 or 12
  Polyurethane 85, 95 or 98 durometer
- Operating temperature:
  0 ... +60°C

Warning:
The Norgren Pneufit® C range must not be used in vehicle air braking or ancillary systems. For push-in fittings suitable for these applications, please refer to the Fleetfit range.

Materials

- Body:
  PBT
- Seals:
  NBR (silicone free) u-packing and o-rings
- Threaded bodies:
  Nickel plated brass
- Release sleeve and backing ring:
  POM
- Grab-ring:
  Stainless steel
- Collar:
  Nickel plated brass
- Thread sealant:
  Chemtech G-175L

Method of assembly

1. Ensure that the end of the tube is cut square and free from burrs.
2. Push the tube through the collet into the fitting.
3. Continue pushing the tube through the o-ring until it bottoms on the tube stop, then pull back.
4. To disconnect push the tube into the fitting, hold down the collet and withdraw the tube.

Option selector

Option selector for thread type and shape substitute.

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Pneufit® C
Push-in fittings, metric
Ø 4 ... 16 mm O/D tube

● Straight adaptors and connectors

<table>
<thead>
<tr>
<th>Product</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight adaptor, BSPT thread (external + internal hex) C0125</td>
<td><img src="straight_adaptor_bspt_thread_external_internal_hex_c0125.png" alt="Image" /></td>
</tr>
<tr>
<td>Straight adaptor, BSPP thread (external + internal hex) C0225</td>
<td><img src="straight_adaptor_bspp_thread_external_internal_hex_c0225.png" alt="Image" /></td>
</tr>
<tr>
<td>Straight adaptor, metric or BSPT thread (internal hex only) C012A/C022A</td>
<td><img src="straight_adaptor_metric_or_bspt_thread_internal_hex_only_c012a_c022a.png" alt="Image" /></td>
</tr>
<tr>
<td>Female adaptor, metric or BSPT thread C0226</td>
<td><img src="female_adaptor_metric_or_bspt_thread_c0226.png" alt="Image" /></td>
</tr>
<tr>
<td>Straight union C0020</td>
<td><img src="straight_union_c0020.png" alt="Image" /></td>
</tr>
<tr>
<td>Straight union (unequal) C0020</td>
<td><img src="straight_union_unequal_c0020.png" alt="Image" /></td>
</tr>
<tr>
<td>Stem reducer C0023</td>
<td><img src="stem_reducer_c0023.png" alt="Image" /></td>
</tr>
<tr>
<td>Stem expander (stem/tube) C0023</td>
<td><img src="stem_expander_stem_tube_c0023.png" alt="Image" /></td>
</tr>
<tr>
<td>Bulkhead union C0029</td>
<td><img src="bulkhead_union_c0029.png" alt="Image" /></td>
</tr>
<tr>
<td>Straight adaptor, BSPP thread (female bulkhead) C0232</td>
<td><img src="straight_adaptor_bspp_thread_female_bulkhead_c0232.png" alt="Image" /></td>
</tr>
<tr>
<td>Stem union (equal) C0022</td>
<td><img src="stem_union_equal_c0022.png" alt="Image" /></td>
</tr>
<tr>
<td>Stem union (unequal) C0022</td>
<td><img src="stem_union_unequal_c0022.png" alt="Image" /></td>
</tr>
<tr>
<td>Plug C0004</td>
<td><img src="plug_c0004.png" alt="Image" /></td>
</tr>
<tr>
<td>Cap (female plug) C0012</td>
<td><img src="cap_female_plug_c0012.png" alt="Image" /></td>
</tr>
</tbody>
</table>

● Elbow adaptors and connectors

<table>
<thead>
<tr>
<th>Product</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union elbow C0040</td>
<td><img src="union_elbow_c0040.png" alt="Image" /></td>
</tr>
<tr>
<td>90° swivel elbow adaptor, BSPT thread C0147</td>
<td><img src="90_degree_swivel_elbow_adaptor_bspt_thread_c0147.png" alt="Image" /></td>
</tr>
<tr>
<td>90° swivel elbow adaptor, BSPP thread C0247</td>
<td><img src="90_degree_swivel_elbow_adaptor_bspp_thread_c0247.png" alt="Image" /></td>
</tr>
<tr>
<td>Stem elbow C0043</td>
<td><img src="stem_elbow_c0043.png" alt="Image" /></td>
</tr>
<tr>
<td>90° swivel elbow adaptor (extended), metric or BSPT thread C0154/C0254</td>
<td><img src="90_degree_swivel_elbow_adaptor_extended_metric_or_bspt_thread_c0154_c0254.png" alt="Image" /></td>
</tr>
<tr>
<td>90° swivel elbow adaptor (female), metric or BSPT thread C0148/C0248</td>
<td><img src="90_degree_swivel_elbow_adaptor_female_metric_or_bspt_thread_c0148_c0248.png" alt="Image" /></td>
</tr>
<tr>
<td>Bulkhead union elbow C0049</td>
<td><img src="bulkhead_union_elbow_c0049.png" alt="Image" /></td>
</tr>
</tbody>
</table>

● Y and quadruple connectors

<table>
<thead>
<tr>
<th>Product</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union Y (equal + unequal) C0082</td>
<td><img src="union_y_equal_unequal_c0082.png" alt="Image" /></td>
</tr>
<tr>
<td>Swivel Y adaptor, BSPT thread C0188</td>
<td><img src="swivel_y_adaptor_bspt_thread_c0188.png" alt="Image" /></td>
</tr>
<tr>
<td>Swivel Y adaptor, BSPP thread C0288</td>
<td><img src="swivel_y_adaptor_bspp_thread_c0288.png" alt="Image" /></td>
</tr>
<tr>
<td>Stem Y (equal + unequal) C0084</td>
<td><img src="stem_y_equal_unequal_c0084.png" alt="Image" /></td>
</tr>
<tr>
<td>Quadraple stem reducer C0096</td>
<td><img src="quadraple_stem_reducer_c0096.png" alt="Image" /></td>
</tr>
<tr>
<td>Quadraple Y union, BSPT thread C0195</td>
<td><img src="quadraple_y_union_bspt_thread_c0195.png" alt="Image" /></td>
</tr>
<tr>
<td>Quadraple Y union, BSPP thread C0295</td>
<td><img src="quadraple_y_union_bspp_thread_c0295.png" alt="Image" /></td>
</tr>
<tr>
<td>Quadraple reducer C0097</td>
<td><img src="quadraple_reducer_c0097.png" alt="Image" /></td>
</tr>
</tbody>
</table>

● Tee connectors and adaptors

<table>
<thead>
<tr>
<th>Product</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union tee (equal) C0060</td>
<td><img src="union_tee_equal_c0060.png" alt="Image" /></td>
</tr>
<tr>
<td>Union tee (unequal) C006A</td>
<td><img src="union_tee_unequal_c006a.png" alt="Image" /></td>
</tr>
<tr>
<td>Swivel tee adaptor, BSPT thread C0167</td>
<td><img src="swivel_tee_adaptor_bspt_thread_c0167.png" alt="Image" /></td>
</tr>
<tr>
<td>Swivel tee adaptor, BSPP thread C0267</td>
<td><img src="swivel_tee_adaptor_bspp_thread_c0267.png" alt="Image" /></td>
</tr>
<tr>
<td>Stem tee (equal) C0063</td>
<td><img src="stem_tee_equal_c0063.png" alt="Image" /></td>
</tr>
<tr>
<td>Stem tee (unequal) C0063</td>
<td><img src="stem_tee_unequal_c0063.png" alt="Image" /></td>
</tr>
<tr>
<td>Stem side tee (equal) C0064</td>
<td><img src="stem_side_tee_equal_c0064.png" alt="Image" /></td>
</tr>
<tr>
<td>Stem side tee (unequal) C0064</td>
<td><img src="stem_side_tee_unequal_c0064.png" alt="Image" /></td>
</tr>
<tr>
<td>Swivel side tee adaptor, BSPT thread C0168</td>
<td><img src="swivel_side_tee_adaptor_bspt_thread_c0168.png" alt="Image" /></td>
</tr>
<tr>
<td>Swivel side tee adaptor, BSPP thread C0268</td>
<td><img src="swivel_side_tee_adaptor_bspp_thread_c0268.png" alt="Image" /></td>
</tr>
</tbody>
</table>

● Banjo flow controller

<table>
<thead>
<tr>
<th>Product</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banjo flow control (out), BSPT thread C070A</td>
<td><img src="banjo_flow_control_out_bspt_thread_c070a.png" alt="Image" /></td>
</tr>
<tr>
<td>Banjo flow control (out), metric or BSPP thread C0K51</td>
<td><img src="banjo_flow_control_out_metric_or_bspp_thread_c0k51.png" alt="Image" /></td>
</tr>
<tr>
<td>Banjo flow control (in), BSPT thread C05A0</td>
<td><img src="banjo_flow_control_in_bspt_thread_c05a0.png" alt="Image" /></td>
</tr>
<tr>
<td>Banjo flow control (in), metric or BSPP thread COL51</td>
<td><img src="banjo_flow_control_in_metric_or_bspp_thread_col51.png" alt="Image" /></td>
</tr>
<tr>
<td>Shrouded banjo (out), BSPT thread COT80</td>
<td><img src="shrouded_banjo_out_bspt_thread_cot80.png" alt="Image" /></td>
</tr>
<tr>
<td>Shrouded banjo (out), metric or BSPP thread COK80</td>
<td><img src="shrouded_banjo_out_metric_or_bspp_thread_cok80.png" alt="Image" /></td>
</tr>
<tr>
<td>Swivel speed control (out), BSPT thread C0756</td>
<td><img src="swivel_speed_control_out_bspt_thread_c0756.png" alt="Image" /></td>
</tr>
<tr>
<td>Swivel speed control (out), metric or BSPP thread C0K56</td>
<td><img src="swivel_speed_control_out_metric_or_bspp_thread_c0k56.png" alt="Image" /></td>
</tr>
<tr>
<td>Speed control and pilot check, metric or BSPT thread C012N</td>
<td><img src="speed_control_and_pilot_check_metric_or_bspt_thread_c012n.png" alt="Image" /></td>
</tr>
<tr>
<td>Speed control and pilot check, metric or BSPP thread C02GN</td>
<td><img src="speed_control_and_pilot_check_metric_or_bspp_thread_c02gn.png" alt="Image" /></td>
</tr>
<tr>
<td>In-line flow control C00GE</td>
<td><img src="in_line_flow_control_c00ge.png" alt="Image" /></td>
</tr>
<tr>
<td>In-line flow control C00GP</td>
<td><img src="in_line_flow_control_c00gp.png" alt="Image" /></td>
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</table>
## Cross and manifolds

<table>
<thead>
<tr>
<th>Component</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>Union cross</td>
<td>C0090</td>
</tr>
<tr>
<td>Manifold union</td>
<td>C00B3</td>
</tr>
<tr>
<td>Male manifold, BSPT thread</td>
<td>C01D3</td>
</tr>
<tr>
<td>Stem manifold</td>
<td>C06J3</td>
</tr>
<tr>
<td>Banjo, metric or BSPP thread</td>
<td>C0A51</td>
</tr>
<tr>
<td>Banjo (with top port), metric or BSPT thread</td>
<td>C0D51, C0E51, C0F51, C0G51</td>
</tr>
<tr>
<td>2x swivel elbow adaptor, BSPT thread</td>
<td>C0B51</td>
</tr>
<tr>
<td>2x swivel elbow adaptor, BSPP thread</td>
<td>C0B51</td>
</tr>
<tr>
<td>3x swivel elbow adaptor, BSPT thread</td>
<td>C0H51</td>
</tr>
<tr>
<td>3x swivel elbow adaptor, BSPP thread</td>
<td>C0C51</td>
</tr>
<tr>
<td>Single universal tee, BSPT thread</td>
<td>C0N71</td>
</tr>
<tr>
<td>Single universal tee, BSPP thread</td>
<td>C0A71</td>
</tr>
<tr>
<td>Double universal tee, BSPT thread</td>
<td>C0Q71, C0R71</td>
</tr>
<tr>
<td>Double universal tee, BSPP thread</td>
<td>C0Q71, C0R71</td>
</tr>
<tr>
<td>Female branch adaptor, BSPT thread</td>
<td>C0*7K</td>
</tr>
<tr>
<td>Female branch adaptor, metric or BSPP thread</td>
<td>C0*7J</td>
</tr>
<tr>
<td>Double branch adaptor, BSPT thread</td>
<td>C0Q70</td>
</tr>
<tr>
<td>Double branch adaptor, BSPP thread</td>
<td>C0B70</td>
</tr>
<tr>
<td>Triple branch adaptor, BSPT thread</td>
<td>C0H70</td>
</tr>
<tr>
<td>Triple branch adaptor, BSPP thread</td>
<td>C0C70</td>
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</tbody>
</table>

## In-line non-return valve

<table>
<thead>
<tr>
<th>Valve Type</th>
<th>Code</th>
</tr>
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<tbody>
<tr>
<td>In-line non-return valve</td>
<td>C00GL</td>
</tr>
<tr>
<td>In-line non-return valve (in), BSPT thread</td>
<td>C01G2</td>
</tr>
<tr>
<td>In-line non-return valve (in), metric or BSPP thread</td>
<td>C02G2</td>
</tr>
<tr>
<td>In-line non-return valve (out), BSPT thread</td>
<td>C01G3</td>
</tr>
<tr>
<td>In-line non-return valve (out), metric or BSPP thread</td>
<td>C02G3</td>
</tr>
</tbody>
</table>

## Self sealing adaptors

<table>
<thead>
<tr>
<th>Adaptor Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight adaptor, BSPT thread</td>
<td>C0124</td>
</tr>
<tr>
<td>Straight adaptor, BSPP thread</td>
<td>C0224</td>
</tr>
<tr>
<td>Straight union</td>
<td>C002J</td>
</tr>
<tr>
<td>Swivel elbow, BSPT Thread</td>
<td>C014J</td>
</tr>
<tr>
<td>Swivel elbow, BSPP Thread</td>
<td>C024J</td>
</tr>
</tbody>
</table>

## Hand valves

<table>
<thead>
<tr>
<th>Valve Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/2 shut-off valves, BSPT thread</td>
<td>C016G</td>
</tr>
<tr>
<td>3/2 shut-off valves, BSPP thread</td>
<td>C016H</td>
</tr>
<tr>
<td>3/2 shut-off valves</td>
<td>C016J</td>
</tr>
<tr>
<td>3/2 shut-off valves</td>
<td>C016F</td>
</tr>
</tbody>
</table>
82A series
Aluminium (light weight) compression fittings Ø 6 ... 42 mm
Nominal pipe size, BSPP and BSPT thread

- For use in areas of vibration
- Can be remade without damage to tube
- Suitable for use on seam welded as well as seamless tube or pipe
- Thinner tube can be used; as thin as 0.8 mm wall thickness
- Lower torque requirement on the tube nut than fitting which bite into the tube
- Will cope with tube misalignment of ±4°
- Corrosion resistant AL2 alloy
- Approximately 65% lighter than brass or stainless steel fittings

Technical Data

Medium:
Compressed air, water (plus other media suitable for use with materials of construction)

Operating pressure:
Typically up to 15 bar; for applications above 15 bar on request

Ambient temperature:
−45 ... +150°C with HNBR o-ring (yellow)

Thread sizes:
1/8", 1/4", 3/8", 1/2", 3/4", 1" (BSPT and BSPP)

Testing & Approvals:
PED 97/23/EC
Shock & Vibration tested to EN 61373 Category 2
Salt Spray tested to ISO 9227-06; data on request

Materials

Body & Nut:
AL2 Aluminium with PA20 anodic treatment to HB 175 hardness

Washer & Clamping:
Brass, white galvanised o-ring: HNBR - colour coded yellow

Recommended nut torque settings

<table>
<thead>
<tr>
<th>Tube Ø mm</th>
<th>Recommended torque Nm</th>
<th>Tube Ø mm</th>
<th>Recommended torque Nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>20</td>
<td>22</td>
<td>55</td>
</tr>
<tr>
<td>8</td>
<td>20</td>
<td>25</td>
<td>75</td>
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<tr>
<td>10</td>
<td>20</td>
<td>28</td>
<td>95</td>
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<tr>
<td>12</td>
<td>25</td>
<td>30</td>
<td>135</td>
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<tr>
<td>14</td>
<td>30</td>
<td>32</td>
<td>150</td>
</tr>
<tr>
<td>15</td>
<td>30</td>
<td>35</td>
<td>170</td>
</tr>
<tr>
<td>16</td>
<td>35</td>
<td>38</td>
<td>280</td>
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<tr>
<td>18</td>
<td>45</td>
<td>42</td>
<td>280</td>
</tr>
<tr>
<td>20</td>
<td>55</td>
<td></td>
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</tbody>
</table>

Torque settings based on railway applications up to 15 bar for use with stainless steel tube.

Option selector

<table>
<thead>
<tr>
<th>Thread type</th>
<th>Shape</th>
<th>Pipe size</th>
<th>Substitute</th>
</tr>
</thead>
</table>

Add "F" = optional – FKM high temperature o-ring

Tube stop position

<table>
<thead>
<tr>
<th>Ø A</th>
<th>H</th>
<th>Ø A</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>16,0</td>
<td>22</td>
<td>19,5</td>
</tr>
<tr>
<td>8</td>
<td>17,0</td>
<td>25</td>
<td>21,0</td>
</tr>
<tr>
<td>10</td>
<td>18,5</td>
<td>28</td>
<td>22,5</td>
</tr>
<tr>
<td>12</td>
<td>18,0</td>
<td>30</td>
<td>23,0</td>
</tr>
<tr>
<td>14</td>
<td>18,0</td>
<td>32</td>
<td>23,5</td>
</tr>
<tr>
<td>15</td>
<td>18,5</td>
<td>35</td>
<td>23,5</td>
</tr>
<tr>
<td>16</td>
<td>20,5</td>
<td>38</td>
<td>27,0</td>
</tr>
<tr>
<td>18</td>
<td>19,5</td>
<td>42</td>
<td>26,5</td>
</tr>
<tr>
<td>20</td>
<td>19,5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The information provided in this table are typical values as dimension H will vary slightly with torque applied to the nut. For fittings without tube stops such as straight connector and bulkheads the above tube insertion depths are also applicable.
82A series
Aluminium (light weight) compression fittings Ø 6 ... 42 mm
Nominal pipe size, BSPP and BSPT thread

Method of assembly

1. Ensure that the end of the tube is cut square and free from burrs.

2. Slide the nut (2) onto the pipe (1) from right to left. Slide the split ring (3) onto the pipe (1) from right to left keeping the smaller edge towards the nut (2). Slide the washer (4) onto the pipe (1) from right to left. Slide the o-ring (5) onto the pipe (1) from right to left. N.B. The pipe head must be deburred to ensure the o-ring is not damaged.

3. Before installing the pipe fittings, check that the pipes misalignment is not higher than ± 4°.

4. Move the pipe head (A) with all components assembled as shown towards the casing abutment (B). In pipe fittings without abutment (B), the pipe should be inserted as per the tube stop/abutment position listed below.

5. Move the four components from left to right and screw the nut (2) onto the pipe fitting casing (6).

Straight adaptors and connectors

- Straight adaptor (taper) 82A125
- Straight adaptor (parallel) 82A225
- Female adaptor (parallel) 82A226
- Straight union (equal) 82A020
- Straight union (unequal) 82A020
- Bulkhead union 82A029
- Cap 82A012
- Straight stem connector (taper) 82A115
- Straight stem connector (parallel) 82A215

Elbow connectors and adaptors

- Union elbow (equal) 82A040
- Union elbow (unequal) 82A040
- 90° elbow adaptor (taper) 82A145
- 90° elbow adaptor female (taper) 82A246
- Union tee (equal) 82A060
- Union tee (unequal) 82A060
- Tee adaptor (taper) 82A165
- Tee adaptor female (taper) 82A266

Tee connectors and adaptors

Accessories

- Tubing nut 82A0F4
- Split ring 82A0J1
- Tubing washer 82A0E7
- Tubing ‘o’-ring 8000K
- Thread ‘o’-ring ISO G parallel thread 8000K

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
83A series
Aluminium (light weight) compression fittings Ø 1/8 ... 2"
Nominal pipe size, BSPP and BSPT thread

- For use in areas of vibration
- Pre-assembled units
- No special assembly tools or heat required
- Can be remade without damage to tube
- Suitable for use on seam welded as well as seamless tube or pipe
- Thinner tube can be used; as thin as 0.03" (0.8 mm) wall thickness
- Lower torque requirement on the tube nut than fittings which bite into the tube
- Will cope with tube misalignment of ±4°
- Corrosion resistant AL2 alloy
- Approximately 65% lighter than brass or stainless steel fittings

Technical Data
Medium:
Compressed air, water (plus other media suitable for use with materials of construction)
Operating pressure:
Typically up to 15 bar
For applications above 15 bar on request
Ambient temperature:
−45 ... +150°C with HNBR ‘o’-ring (yellow)

Tube sizes:
1/8", 1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"

Thread sizes:
1/8", 1/4", 3/8", 1/2", 3/4", 1", 1 1/2" (BSPT and BSPP)

Tubing:
Designed for use with:
Copper tube to BS 2871
Nylon - PA12 (tube support required)
Stainless Steel tube to AISI 304 and AISI 316

Testing & approvals:
PED 97/23/EC
Shock & vibration tested to EN 61373 Category 2
(Bogie mounted)
Salt Spray tested to ISO 9227-06, data on request

Materials
Body & Nut:
Al2 aluminium with PA20 anodic treatment to HB 175 hardness
Washer & clamping:
brass, white galvanized ‘o’-ring; HNBR – colour coded yellow

-----------------------------------------------
Option selector

Thread type
Shape
Pipe size

Recommended nut torque settings

<table>
<thead>
<tr>
<th>Nominal pipe size</th>
<th>Recommended torque</th>
<th>Tube Ø mm</th>
<th>Recommended torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8</td>
<td>20 Nm</td>
<td>1</td>
<td>150 Nm</td>
</tr>
<tr>
<td>1/4</td>
<td>30 Nm</td>
<td>1 1/4</td>
<td>300 Nm</td>
</tr>
<tr>
<td>3/8</td>
<td>40 Nm</td>
<td>1 1/2</td>
<td>310 Nm</td>
</tr>
<tr>
<td>1/2</td>
<td>45 Nm</td>
<td>2</td>
<td>320 Nm</td>
</tr>
<tr>
<td>3/4</td>
<td>90 Nm</td>
<td></td>
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</tbody>
</table>

Torque settings based on railway applications up to 15 bar for use with stainless steel tube.

Technical data - standard models

<table>
<thead>
<tr>
<th>Ø A</th>
<th>H</th>
<th>Ø A</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8</td>
<td>0,405</td>
<td>10,3</td>
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</tr>
<tr>
<td>1/4</td>
<td>0,540</td>
<td>13,7</td>
<td>18,5</td>
</tr>
<tr>
<td>3/8</td>
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<tr>
<td>1/2</td>
<td>0,840</td>
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<td>20</td>
</tr>
<tr>
<td>3/4</td>
<td>1,059</td>
<td>26,7</td>
<td>21,5</td>
</tr>
<tr>
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<td>33,4</td>
<td>22,5</td>
</tr>
<tr>
<td>1 1/4</td>
<td>1,660</td>
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<td>27</td>
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<tr>
<td>1 1/2</td>
<td>1,900</td>
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<tr>
<td>2</td>
<td>2,375</td>
<td>60,3</td>
<td>35</td>
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</tbody>
</table>

The information provided in this table are typical values as dimension H will vary slightly with torque applied to the nut. For fittings without tube stops such as straight connector and bulkheads the above tube insertion depths are also applicable.

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
83A series
Aluminium (light weight) compression fittings Ø 1/8 ... 2"
Nominal pipe size, BSPP and BSPT thread

- Method of assembly

1. Ensure that the end of the tube is cut square and free from burns.
2. Slide the nut (2) onto the pipe (1) from right to left. Slide the split ring (3) onto the pipe (1) from right to left keeping the smaller edge towards the nut (2). Slide the washer (4) onto the pipe (1) from right to left. Slide the o-ring (5) onto the pipe (1) from right to left. N.B. The pipe head must be deburred to ensure the o-ring is not damaged.
3. Before installing the pipe fittings, check that the pipes misalignment is not higher than ± 4°.
4. Move the pipe head (A) with all components assembled as shown towards the casing abutment (B). In pipe fittings without abutment (B), the pipe should be inserted as per the tube stop/abutment position listed below.
5. Move the four components from left to right and screw the nut (2) onto the pipe fitting casing (6).

- Straight adaptors and connectors

- Elbow connectors and adaptors

- Tee connectors and adaptors

- Accessories
15 and 16 series
BSP and hose fittings
M5, 1/8 ... 1"

- Extensive range of shapes and sizes including manifolds
- High temperature and pressure copper sealing washers supplied with ISO G threads

Technical Data

Medium:
Compressed air and fluid compatible with sealing materials

Thread forms:
Tapered gas in conformity with ISO 7.1, BS 21, DIN 2999,
Parallel gas in conformity with ISO 228 Class A,
Metric in conformity with ISO R2622.

Operating pressure:
Generally limited by tubing specification except where polyamide sealing washers are used (banjo bolts and M5 units). In these cases pressure is limited to 18 bar.
Suitable for vacuum applications.
Flow regulating banjos are limited to 1 ... 10 bar operating range.

Ambient temperature:
Generally limited by tubing specification except where polyamide sealing washers are used (banjo bolts, & M5 units).
In these cases temperature is limited to +70°C.

Materials

Body:
Made from brass type; OT UNI EN 12164/5 CW 614/7N and undergo to a nickel-plating process. Other materials will be specified with the fitting details.
All ISO G male threads supplied with Copper sealing washer unless stated otherwise.

Medium:
Compressed air and fluid compatible with sealing materials

Thread forms:
Tapered gas in conformity with ISO 7.1, BS 21, DIN 2999,
Parallel gas in conformity with ISO 228 Class A,
Metric in conformity with ISO R2622.

Operating pressure:
Generally limited by tubing specification except where polyamide sealing washers are used (banjo bolts and M5 units). In these cases pressure is limited to 18 bar.
Suitable for vacuum applications.
Flow regulating banjos are limited to 1 ... 10 bar operating range.

Ambient temperature:
Generally limited by tubing specification except where polyamide sealing washers are used (banjo bolts, & M5 units).
In these cases temperature is limited to +70°C.
15 and 16 series
BSP and hose fittings
M5, 1/8 ... 1"

● Straight adaptors, connectors and plugs

ISO G - reducing connector 16023
ISO G - expanding connector 16023
ISO G - ISO R Expanding connector 15023
ISO G - ISO R Reducing connector 15023
NPT - ISO R Adaptor 15423
ISO G - NPT Adaptor 17223
Metric and ISO G - Bulkhead connector 16029
ISO G - Sleeve adaptor 16022
ISO R - Nipple adaptor 15020
ISO R - NPT - Nipple adaptor 15420
ISO R - Flat union 15033
ISO R - Hose adaptor 29117
ISO G - Hose adaptor 29217
ISO G - Plug with flange - Hex 16206
ISO G - Plug with flange - spanner 16005
ISO G - Plug 16213
ISO R - Plug 15005
ISO R - Plug 15113
ISO R - Plug Brass (unplated) 25013

● Elbow adaptors and T-connectors

ISO G - Elbow connector 16042
ISO G - ISO R - Elbow connector 15043
ISO R - Elbow connector 15040
ISO G - Tee connector 16062
ISO R - Tee connector 15060
ISO G - ISO R Tee connector 15069
ISO G - ISO R Tee connector 15072
ISO G - Cross 16082
ISO G - Cross block 16094
ISO G - Manifold - Singlesided - Brass 34050
ISO G - Manifold - Single sided - Aluminium 162B4 and 162B6
ISO G - Manifold - Double sided - Aluminium 162C4 and 162C6

● Elbow banjos

ISO G - Banjo elbow assembly - Regulating out 16K51
ISO G - Banjo elbow assembly - Non-regulating 16A51
ISO G - Banjo elbow body 16051
ISO G - Regulating bolt 20K00, 20L00 and 20M00
ISO G - Non-regulating bolt 20A00 and 20B00

● Seals

Copper seal 48021301 ... .08
Banjo bolt head sealing washer 48030801 ... .04
Banjo bolt thread sealing washer 48030001 ... .04
PTFE sealing tape DB-R-12
<table>
<thead>
<tr>
<th>Page</th>
<th>Fast find guide</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>148</td>
<td>Technical Information</td>
<td></td>
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<tr>
<td>149</td>
<td>Pressure Equipment Directive (PED)</td>
<td></td>
</tr>
<tr>
<td>153</td>
<td>Key to valve catalogue numbers</td>
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<tr>
<td>155</td>
<td>ATEX</td>
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<td>179</td>
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</tbody>
</table>
For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
**Differential pressure regulator**

This regulator initiates cleaning on the basis of the differential pressure* between the dusty and clean gas sides of the filter. When the pressure drop across the filter reaches the preset upper limit, the regulator actuates the cleaning valves by means of the control system. Cleaning is stopped as soon as the lower limit is reached. This type of control extends the life of the filter media and valves. Another bonus is considerably reduced air consumption.

* The differential pressure indicates how strong the filter is polluted.

**Purge valve**

In filter systems coping with high dust levels the measuring lines to the differential pressure regulator can become blocked. The purge valve enables you to avoid this.

**Control systems**

An electronic control unit or pneumatic controller presets the duration of the pulse and interval required of the valves in this application. These control systems actuate the valves directly. The timing can be adjusted if service conditions change.

**Valves**

Dust collector valves produce the pressure intensity crucial for effective cleaning of filter media with compressed air. To meet the requirements these valves have to be designed to open and close extremely quick and allow high flow rates. This response also reduces air consumption.
Filter technology in use

Filter technology can be found in product and dust collector systems. These systems were originally designed for use in product filter systems which filter out the desired product from a stream of gas or air as part of the manufacturing process.

Pneumatic delivery systems (pressure or vacuum) incorporate filter systems to separate the product from the air. Examples include the grain milling, pharmaceutical and cement industries.

Dust collector systems have gained in importance over the years as environmental standards have risen. Air or gas contaminated with dust must nowadays be filtered before it can be discharged into the atmosphere.

Another task performed by dust filter systems is the reduction of gaseous chemical content (e.g., sulphur removal). And not to be forgotten: the cleaning of dust particles from the air used in the combustion processes for electricity generation, e.g., in gas turbine power plants to prevent damage to the turbine blades.

Depending on their application, filters may be classed as:
- Process filters
- Outlet filters
- Inlet filters

The majority of dust collector systems have fabric or cartridge filters that are cleaned with compressed air. The filter elements are cleaned by pulses of compressed air.

IMI Buschjost dust collector valves control these pulses of air from a compressed air reservoir or tank. The dust collection process does not rely on the pulses of compressed air alone; there is also an accompanying secondary air flow (Venturi nozzle or Coander nozzle).

The design of the filter housing, elements and cleaning system influence the dust collection process. IMI Precision Engineering supplies dust collector valves, electronic controls, differential pressure regulators, measuring line purge valves and other accessories for dust collection systems.

IMI Precision Engineering also offers its customers lightweight filter cleaning systems made in profile aluminium that can be customised to meet their specific requirements!
**Twist-on® solenoids / valves**

The solenoid system with bayonet connection is easily mounted – just push down and turn.

![Image of Twist-on® solenoid system]

The internal components of the pilot system are captive.

The plastic encased solenoid can be turned to 3 different positions, 120° apart, without using tools.

The factory fitted silencer prevents annoying noise and stops ingress of particles into the valve.

The solenoid design of the pilot offers maximum security against icing.

The volume above the diaphragm is minimised for extremely fast opening with optimised peak pressures. The similarly ideal closing time ensures low air consumption.

All of the dynamically loaded valve elements are designed to last.

The various parts of the case are designed for high air flow.

Available with internal BSP or NPT threaded connection to international standards.

**Valves for dust filter cleaning with through-type blow tube**

**2/2-way valve**

IMI Precision Engineering has enhanced the existing dust filter cleaning range with a valve with blow tube. This variant offers easy, cost-effective installation and other significant benefits.

Features:

- Higher peak pressures produced by radial flow
- Spacing from 75 mm (between pipe centres)
- No welding or adjustment necessary
- Simple, economical connection of valve to irregularly shaped tanks
- Available pipe lengths: 70 to 200 mm
- High-grade aluminium tube

We will gladly provide you with any further information required.

**Pressure build-up time and diaphragm**

An air volume predefined for the cleaning system in question is led as a pressure wave through the filter valve and onto the dust collector media. This is done to achieve a controlled discharge of the dust cake from the filter medium at low compressed air consumption and with minimum stress effect on the filter element. The rated diameter of the dust collector valve and the development of the compressed air jet must be dimensioned to suit the capacity of the cleaning system.

Insufficient compressed air jets result in poor filter cake discharge. This in turn leads to increased energy consumption on the suction side and/or a reduced suction performance within the overall system. If the compressed air burst is too large, the compressed air consumption is increased. This results in greater wear of the filter medium and increased emissions on the clean gas side.

Important parameters determining which valves should be installed in the cleaning system are the kv-factor, the pressure increase time and the closing time of the dust collector valves. The kv-value describes the volumetric flow of a medium through a valve at defined conditions. It thus allows for the comparison of valves of different design. The pressure increase time is a key factor for the quality of the compressed air jet. Short closing times at the end of the burst time help keep the compressed air consumption to a minimum. The characteristics of IMI Buschjost dust collector valves compare favourably with other products on the market and are the result of an innovative housing design based on advanced air technology and the application of TPE diaphragm technology.

The unique TPE diaphragms used in IMI Buschjost dust collector valves are the result of many years of experience in the field and continued high investment in research and development.
The heart of the dust collector valve is the TPE diaphragm

The TPE diaphragm is the key component in any dust collector valve designed to provide short pressure decay times and high kv-values. Service life is 4-5 times longer than that of comparable, conventional fabric diaphragms. Our product filter systems eliminate the danger that rubber particles could enter the product. The TPE material used has FDA approval (Food and Drug Administration, USA).

Temperature range - fluid temperature:
Standard diaphragm: –40 ... 85°C
For higher temperatures: –10 ... 140°C

Pressure developing chart

Dust collector valves & frost

When operated with damp compressed air, even at negative temperatures, the 82960 series of dust collector pulse valves should not be expected to malfunction as a result of the plunger and/or diaphragm freezing solid.

Laboratory tests have shown that diaphragms frozen onto the seat open even at operating pressure under 0.5 bar, and confirm that no malfunctions have yet become known as a result of use at minus temperatures.

In the case of the diaphragms this is attributable to the high opening force and the very small sealing area of the seat.

The reason the plunger does not ice up is that the plunger tube is not under pressure and no moisture can arise as a result of the temperature falling below the dew point during exhausting of the compressed air during an operating cycle.

Differential pressure regulators

The 8349110 series of regulators can be used in combination with the 83490 series of electronic pulse control units to automatically adapt the cleaning to the dust loading.

A dust-resistant piezoresistive pressure sensor measures the differential between the clean and dust sides of the filter system, which depends on the build-up, and provides a continuous digital readout.

All of the settings can be programmed with the buttons.

The host pulse control unit continues to operate until cleaning has progressed to the extent where the preset limit is reached. Any after-cleaning programmed is then started. Its duration is adjustable.

Two other switching points, Alarm 1 and Alarm 2, set above or below the set points as required, can be used to give an alarm in the event of faults.

The switching outputs can also be operated manually.

The regulator can be switched between 0 to 10 V, 0 to 20 mA or 4 to 20 mA analogue output signals and can be operated off 230 V a.c. or 24 V d.c.


Pressure range - fluid temperature:
Standard diaphragm: –40 ... 85°C
For higher temperatures: –10 ... 140°C

Temperature range - fluid temperature:
Standard diaphragm: –40 ... 85°C
For higher temperatures: –10 ... 140°C

Pressure developing chart

Type: 8296600.8171.02400
Connection: G1 1/2
Tank volume: 32 dm³
Tank pressure: 6 bar
Electrical impulse time: 50 ms
Impulse length: 165 ms
Max. pressure: 4.9 bar
Pressure quotient: 82.0%
Tank pressure drop: 2.9 bar
Volume/impulse: 85.3 Ndm³
Pressure rise time: 13 ms
Opening time: 38.5 ms
Closing time: 133.7 ms
Pressure Equipment Directive (PED)

The Pressure Equipment Directive (PED) is generally applicable to equipment with a working pressure greater than 0.5 bar. Valves as components of this equipment come under the scope of the directive. However, only valves above a certain nominal size are required to bear CE markings.

Valves suitable for different (e.g. neutral, toxic or flammable) fluids only require CE markings above a nominal size of DN 25. Smaller valves must not bear a CE mark in accordance with the Pressure Equipment Directive. This equipment must be designed in line with standard engineering practice so that it meets the requirements of the directive.

Almost all of the valves over DN 25 in size requiring marking should be assigned to Categories I and II. This means that design and testing is the manufacturer’s responsibility, i.e. a company of the IMI Precision Engineering Group. Module H has been chosen as the related method of evaluating conformity and certified by the “nominated body” (TÜV Nord).

The products are also subject to other EU Directives such as EMC, Low Voltage, etc. The products bear a CE mark as a declaration of conformity with all of these. Where applicable (sizes > DN 25) this mark also serves as a declaration of conformity with the Pressure Equipment Directive. Category II valves are also marked with the identification number of the nominated body, CE 0045 for TÜV Nord.

Note to Pressure Equipment Directive (PED):
The valves of this series are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to engineers practice well-known in the member countries. Insofar as a CE marking is available, this does not refer to the PED but to other applicable EU directives. Thus the declaration of conformity is no longer applicable for this directive.

Note to Electromagnetic Compatibility Guideline (EEC):
The dust collector valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (2014/30/EU) satisfied.

Note to EAC marking:
The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.

DGRL 1 Applies to the following series: 82960/82970, 83320, 83920, 83670

Note to Pressure Equipment Directive (PED):
The valves of this series are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to engineers practice well-known in the member countries. The CE-sign at the valve does not refer to the PED. Thus the declaration of conformity is no longer applicable for this directive.

Note to Electromagnetic Compatibility Guideline (EEC):
The products bear a CE mark as a declaration of conformity with all of these. Where applicable (sizes > DN 25) this mark also serves as a declaration of conformity with the Pressure Equipment Directive. Category II valves are also marked with the identification number of the nominated body, CE 0045 for TÜV Nord.

DGRL 2 Applies to the following series: 82870, 82900/82910, 83300/83310, 83930, 83640

Note to Pressure Equipment Directive (PED):
The valves of this series are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to engineers practice well-known in the member countries. A certificate of conformity is not designated.

Note to EAC marking:
The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.

DGRL 3 Applies to the following series: 8587xxx, 8588xxx, 8589xxx

Note to Pressure Equipment Directive (PED):
The filter cleaning systems of this series with a pressure-volume product PS x V up to max. 50 bar * L complies with Art. 4 (3) of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to engineers practice well-known in the member countries. Insofar as a CE marking is available, this does not refer to the PED but to other applicable EU directives. Thus the declaration of conformity is no longer applicable for this directive.

For systems with a pressure-volume product PS x V> 50 bar * Ltr. Art. 4 (1) (a) (i) second indent applies. The basic requirements of the Enclosure I of the PED must be fulfilled. The CE-sign on the filter cleaning system includes the PED. The operating limits and the volume can be found on the nameplate and in the operating instructions. A certificate of conformity of this directive will be available on request.

Note to Electromagnetic Compatibility Guideline (EEC):
The dust collector valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (2014/30/EU) satisfied.

Note to EAC marking:
The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.
Key to valve catalogue numbers

![Diagram showing the key to valve catalogue numbers]

**Glossary**

**Additional equipment**
- Standard: 00
- Normally open (NO): 01
- Manual override: 02
- FPM seals: 03
- PTFE seals: 06
- EPDM seals: 14
- Higher operating pressure: 22
- FPM seals for higher viscosity and other...: 25
- Additional equipment, applicable for all series, but not available in every series. 01 ... 49
- Additional equipment, only applicable for one series. 50 ... 99

**Thread size / Nominal diameter**
- G1/4: 8
- G3/8: 10
- G1/2: 12, 15
- G3/4: 20, 20
- G1: 25, 25
- G1 1/4: 32, 32
- G1 1/2: 40, 40
- G2: 50, 50, 65, 80, 100

**Solenoid**
- Frequency Substitute
  - d.c.: 00
  - 40 - 60 Hz (a.c.): 49
  - 50 Hz (a.c.): 50
  - 50 - 60 Hz (a.c.): 59
  - 60 Hz (a.c.): 60

**Voltage**
- Substitute
  - 24 V: 024
  - 230 V: 230
  - 110 V: 110

Catalogue numbers of the special valves: beginning with 849★★★★★.XXXX.XXXXX and 859★★★★★.XXXX.XXXXX, the ★★★★★-block is numbered consecutively.
Explosion

Clear explosion protection – safe in transit in potentially explosive areas

Wherever a small spark or a hot surface can lead to a serious explosion, comprehensive explosion protection for machinery and systems is indispensable. IMI Precision Engineering has developed special IMI Buschjost ex proof solenoids for environments such as these. They have proven themselves in practice many times and are almost universally applicable in explosive atmospheres. But what is an explosive atmosphere and how does it lead to an explosion?

Whether in the chemical or petrochemical industry, the pharmaceutical or food industry: Where flammable substances are manufactured or processed, vapours, mists, gases and dusts occur. They come into contact with the oxygen from the air, creating an explosive atmosphere. Should this ignite an explosion occurs that can severely endanger people and the environment.
In order to avoid explosions, or at least control these immediately after they occur, there are numerous standards, laws and regulations that apply to ensure the highest possible level of safety. In Europe the ATEX Directive 2014/34/EU sets the necessary level of safety, while the IECEx Regulations apply internationally. Both require plant operators to have a comprehensive protection concept in which potential hazards are analysed and suitable protective measures defined. This also includes the classification of individual areas into different ex-zones. A distinction is made according to the type of flammable substance and the probability of an explosive atmosphere occurring.

**Zone 0 / 20:** Is permanent, long-term or frequent
**Zone 1 / 21:** Forms occasionally in normal operation
**Zone 2 / 22:** Does not normally occur in normal operation or only briefly
Explosive areas

The more hazardous the zone, the more extensive the explosion protection must be. Successive primary, secondary and tertiary protective measures minimise the risk of explosion. The primary explosion protection prevents the formation of an explosive atmosphere. Measures such as the prevention of flammable substances and the limitation of their concentration belong, for example, in this area. Secondary explosion protection concerns preventing existing sources of ignition becoming active in order to prevent the ignition of the atmosphere. Tertiary explosion protection intervenes when an explosion has already occurred, and reduces its effects as far as possible. System depressurisation or the use of pressure-resistant components are suitable protective measures that fall into this category.

<table>
<thead>
<tr>
<th>Zone</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 / 20</td>
<td>Lignite dust silo (Dust)</td>
</tr>
<tr>
<td>1 / 21</td>
<td>Gas station (Gases and vapours)</td>
</tr>
</tbody>
</table>

**Primary explosion protection**
- Prevent the formation of an explosive atmosphere

**Secondary explosion protection**
- Prevent ignition of an explosive atmosphere

**Tertiary explosion protection**
- Limit the effects of an explosion as much as possible
### GLOSSARY

**Type of protection** | **Protection principle** | **Flammable materials** | **Marking in accordance with the equipment protection level** | **Norm**
--- | --- | --- | --- | ---
**General requirements** | - | Gases, vapours and dusts (G) | a: Very high level of protection | EN60079-0
| Flameproof enclosure | Propagation of an explosion inside to the outside is excluded | Gases and vapours (G) | Ex da | Ex db | Ex dc | EN60079-1
| Increased safety | Avoidance of arcs, sparks and excessive temperature | Gases and vapours (G) | – | Ex eb | Ex ec | EN60079-7
| Protection by enclosure | Explosive dust atmosphere keep at a distance from the ignition source | Dusts (D) | Ex ta | Ex tb | Ex tc | EN60079-31
| Encapsulation | Explosive atmosphere keep at a distance from the ignition source | Gases and vapours (G) | Ex ma | Ex mb | Ex mc | EN60079-18
| | | Dusts (D) | | | | |
| Intrinsic safety | Limitation of energy as well as arcs and temperature | Gases and vapours (G) | Ex ia | Ex ib | Ex i | EN60079-11
| | | Dusts (D) | | | | |
Subdivisions of gases and vapours

**Gases and vapours**

<table>
<thead>
<tr>
<th>Subdivisions</th>
<th>Temperature class</th>
<th>Maximum surface temperature of equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetone, ammonia, benzene - pure, acetic acid, ethane, ethyl acetate, ethyl chloride, carbon monoxide, methane, methanol, methylene chloride, naphthalene, phenol, propane, toluene</td>
<td>town gas, acrylnitril</td>
<td>hydrogen</td>
</tr>
<tr>
<td>ethyl alcohol, i-amyl acetate, n-butane, n-butyl alcohol, cyclohexane, acetic acid anhydrit</td>
<td>ethylene, ethylene oxide</td>
<td>ethine (acetylene)</td>
</tr>
<tr>
<td>benzenes - general, diesel fuel, jet fuel, heating oil DIN 51603, n-hexane</td>
<td>ethylene glycol</td>
<td>hydrogen</td>
</tr>
<tr>
<td>acetaldehyde</td>
<td>ethyl-ether</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>sulphide of carbon</td>
</tr>
</tbody>
</table>

**Dust groups**

<table>
<thead>
<tr>
<th>Dust groups</th>
<th>Dusts</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIIA</td>
<td>Flammable fluff</td>
</tr>
<tr>
<td>IIIb</td>
<td>Non-conductive dust</td>
</tr>
<tr>
<td>IIIc</td>
<td>Conductive dust</td>
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</tbody>
</table>

**Use of the operating equipment**

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Marking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without</td>
<td>Operating equipment can be used without restriction</td>
</tr>
<tr>
<td>X</td>
<td>Special conditions of use</td>
</tr>
<tr>
<td>U</td>
<td>Operating equipment with partial certificate, CE-conformity is certified when it is installed into a complete item of operating apparatus</td>
</tr>
</tbody>
</table>

**Official notified bodies**

<table>
<thead>
<tr>
<th>Code number</th>
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<tr>
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<td>0637</td>
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<td>LCIE</td>
<td>France</td>
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<td>0102</td>
<td>PTB</td>
<td>Germany</td>
</tr>
<tr>
<td>0044</td>
<td>TÜV (NORD CERT)</td>
<td>Germany</td>
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</table>

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Our new range of solenoids...  
...available from April 2018!

<table>
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<td>6200 6210</td>
<td>12 W</td>
<td>T3</td>
<td>T150°C</td>
<td>80°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6200</td>
<td>6229 -</td>
<td>14 W</td>
<td>T4</td>
<td>T125°C</td>
<td>80°C</td>
<td>12 V</td>
<td>250 V</td>
<td>12 V</td>
<td>250 V</td>
<td>40 - 60 Hz</td>
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<tr>
<td></td>
<td>8336</td>
<td>6226 6236</td>
<td>16 W</td>
<td>T4</td>
<td>T125°C</td>
<td>80°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>8341</td>
<td>6220 6230</td>
<td>22 W</td>
<td>T3</td>
<td>T135°C</td>
<td>80°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8436</td>
<td>6249 -</td>
<td>23 W</td>
<td>T4</td>
<td>T125°C</td>
<td>80°C</td>
<td>12 V</td>
<td>250 V</td>
<td>24 V</td>
<td>250 V</td>
<td>40 - 60 Hz</td>
</tr>
<tr>
<td></td>
<td>8441</td>
<td>6243 -</td>
<td>29 W</td>
<td>T3</td>
<td>T140°C</td>
<td>80°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6246 6256</td>
<td>32 W</td>
<td>T4</td>
<td>T125°C</td>
<td>80°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6240 6250</td>
<td>40 W</td>
<td>T3</td>
<td>T140°C</td>
<td>80°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Terminal box cable outlet with 180° rotation!

Type examination certificate
PTZ 16 ATEX 0011 X
IECEx PTZ 17.0001X
Our new range of solenoids... 
...available from April 2018!

Solenoid 6100  Solenoid 6120  Solenoid 6140
Solenoid 6170  Solenoid 6190  Solenoid 6200
Solenoid 6220  Solenoid 6240 S

Your benefits at a glance

> ATEX and IECEx approvals
> Explosion group IIC (previously IIB): no restriction in the gas areas
> IP66
> Simple installation with spring-loaded terminals
> Cover can be rotated 180° - variable cable connection side
> One central cover screw (previously four screws)
> Extension of the versions available
> -40 °C and other power levels on request
### Solenoid

#### Category 2

<table>
<thead>
<tr>
<th>Series</th>
<th>Description</th>
<th>Diaphragm design</th>
</tr>
</thead>
<tbody>
<tr>
<td>62400</td>
<td>Indirectly actuated</td>
<td>• •</td>
</tr>
<tr>
<td>62730</td>
<td>Indirectly actuated – stainless steel</td>
<td>• •</td>
</tr>
<tr>
<td>62540</td>
<td>With forced lifting</td>
<td>• •</td>
</tr>
<tr>
<td>62530</td>
<td>With forced lifting</td>
<td>•</td>
</tr>
<tr>
<td>62560</td>
<td>With forced lifting – stainless steel</td>
<td>•</td>
</tr>
<tr>
<td>62510</td>
<td>Directly actuated</td>
<td>• •</td>
</tr>
<tr>
<td>62610</td>
<td>Indirectly actuated</td>
<td>• •</td>
</tr>
<tr>
<td>63030</td>
<td>Indirectly actuated</td>
<td>• •</td>
</tr>
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</table>

#### Category 3

<table>
<thead>
<tr>
<th>Tube diameter</th>
<th>Fastening</th>
</tr>
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<tbody>
<tr>
<td>10 mm</td>
<td>Click on®</td>
</tr>
<tr>
<td>14.4 mm</td>
<td>Click on®</td>
</tr>
<tr>
<td>16 mm</td>
<td>Screw</td>
</tr>
<tr>
<td>-</td>
<td>Twist on®</td>
</tr>
<tr>
<td>-</td>
<td>4 x Screws</td>
</tr>
<tr>
<td>20 mm</td>
<td>Screw</td>
</tr>
</tbody>
</table>

#### Series Description

- **Diaphragm design**
  - 82400 Indirectly actuated
  - 82730 Indirectly actuated – stainless steel
  - 82540 With forced lifting
  - 82530 With forced lifting
  - 82560 With forced lifting – stainless steel
  - 82510 Directly actuated
  - 82610 Indirectly actuated
  - 83030 Indirectly actuated

- **Piston design**
  - 85360 Indirectly actuated
  - 86700 With forced lifting
  - 86740 With forced lifting, stainless steel
  - 86540 With forced lifting, stainless steel
  - 86500 With forced lifting
  - 86480 With forced lifting
  - 86580 With forced lifting – stainless steel – with inspection certificate DIN EN 10204 - 3.1
  - 85660 Indirectly actuated

- **Sealed core tube with PTFE-bellows**
  - 82080 Directly actuated with sealed core tube

- **Pilot valve 3/2-way**
  - 84660 Directly actuated
  - 84680 Directly actuated

- **Dust cleaning valves**
  - 82960 Indirectly actuated
### Solenoid

**Category 2**
- 6240
- 8900 / 8920
- B540 / B560
- 4200
- 4600

**Category 3**
- 8426
- 9426
- -
- B526
- -

<table>
<thead>
<tr>
<th>Tube diameter</th>
<th>30 mm</th>
<th>25 mm</th>
<th>30 mm</th>
<th>48 mm</th>
<th>16 mm</th>
<th>13/16 mm</th>
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</thead>
<tbody>
<tr>
<td>Fastening</td>
<td>Screw</td>
<td>Screw</td>
<td>Screw</td>
<td>Screw</td>
<td>Screw</td>
<td>Screw</td>
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</table>

### GLOSSARY

<table>
<thead>
<tr>
<th>Series</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2400</td>
<td>Indirectly actuated</td>
</tr>
<tr>
<td>B2730</td>
<td>Indirectly actuated – stainless steel</td>
</tr>
<tr>
<td>B2540</td>
<td>With forced lifting</td>
</tr>
<tr>
<td>B2530</td>
<td>With forced lifting</td>
</tr>
<tr>
<td>B2560</td>
<td>With forced lifting – stainless steel</td>
</tr>
<tr>
<td>B2510</td>
<td>Directly actuated</td>
</tr>
<tr>
<td>B2610</td>
<td>Indirectly actuated</td>
</tr>
<tr>
<td>B3030</td>
<td>Indirectly actuated</td>
</tr>
</tbody>
</table>

#### Diaphragm design
- B2400
- B2730
- B2540
- B2530
- B2560
- B2510
- B2610
- B3030

#### Piston design
- B8530
- B8670
- B8640
- B8650
- B86480
- B86580
- B85660

#### Sealed core tube with PTFE-bellows
- B2080

#### Pilot valve 3/2-way
- B8460
- B8480

#### Dust cleaning valves
- B82960

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Solenoid

- Category III
- The solenoids (Click-on®) can be easily installed
- The solenoid system is closed at the top

Technical Data

Protection class:
IP65

Cable gland:
PG 9

Cable diameter:
Ø 4,5 ... 7 mm

Cable:
$T_{\text{permis. max.}} \leq 85^\circ \text{C}$

Conductor cross section:
Max. 1,5 mm²

Fastening:
Click-on®

Tube diameter:
Ø = 10 mm

Weight:
$m = 0,15 \text{ kg}$

ATEX-marking:
II 3G Ex ec IIC T4 Gc
II 3D Ex tc IIC T130°C Dc
ATEX Zone 2/2

Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>Power consumption</th>
<th>$T_{\text{min}}$ (-20°C)</th>
<th>$T_{\text{amb}}$ (°C)</th>
<th>$T_{\text{max}}$ max.(°C)</th>
<th>Temperature class</th>
<th>$U_{\text{max}}$ (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9116</td>
<td>8 W</td>
<td>8 W</td>
<td>50</td>
<td>≤ 110</td>
<td>T4</td>
<td>T130°C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12 ... 250 ±10% DC</td>
</tr>
<tr>
<td>9116</td>
<td>15 VA</td>
<td>15 VA</td>
<td>50</td>
<td>≤ 110</td>
<td>T4</td>
<td>T130°C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12 ... 250 ±10% AC</td>
</tr>
</tbody>
</table>
### Technical Data

**Protection class:**
IP66

**Cable gland:**
M16 x 1.5

**Cable diameter:**
Ø 7 ... 9 mm ($T_{amb}$ min. = -20°C)  
Ø 5 ... 9 mm ($T_{amb}$ min. = -40°C)

**Cable:**
$T_{ambient} \geq 85^\circ$C

**Conductor cross section:**
0.08 ... 2.5 mm²

**Fastening:**
Click-on®

**Tube diameter:**
Ø = 10 mm

**Weight:**
m = 0.2 kg

**Type examination certificate:**
PTZ 16 ATEX 0011 X  
IECEX PTZ 17.0001X

**ATEX-marking:**
II 2G Ex eb mb IIC T4 - T3 Gb  
II 2D Ex mb tb IIIB T125°C - T135°C  
ATEX Zone 1/21

### Materials

**Body:**
Duroplast

---

### Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>$T_{amb}$ min. -20°C</th>
<th>$T_{amb}$ min. -40°C</th>
<th>$P_{nom}$ (W)</th>
<th>$T_{nom}$ max. (°C)</th>
<th>$T_{nom}$ (°C)</th>
<th>Temperature class</th>
<th>$U_{max}$ (V AC / V DC)</th>
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</thead>
<tbody>
<tr>
<td>6100</td>
<td>8</td>
<td>80</td>
<td>8</td>
<td>≤ 80</td>
<td>T3</td>
<td>T135°C</td>
<td>12 ... 250 ±10%</td>
</tr>
<tr>
<td>6106</td>
<td>8</td>
<td>45</td>
<td>8</td>
<td>≤ 80</td>
<td>T4</td>
<td>T125°C</td>
<td>12 ... 250 ±10%</td>
</tr>
<tr>
<td>6109</td>
<td>5</td>
<td>60</td>
<td>8</td>
<td>≤ 80</td>
<td>T4</td>
<td>T125°C</td>
<td>12 ... 250 ±10%</td>
</tr>
</tbody>
</table>
Solenoid

- The solenoids (Click-on®) can be easily installed
- Large ambient temperature range
- The solenoid system is closed at the top
- Approvals:
  Available in an explosion-proof design following EU Directive 2014/34/EU

Technical Data

Protection class:
IP65
Cable gland:
PG 9
Cable diameter:
Ø 4.5 ... 7 mm
Cable:
\( T_{\text{ambient}} \leq 85^\circ \text{C} \)
Conductor cross section:
Max. 1.5 mm²
Fastening:
Click-on®
Tube diameter:
Ø = 14.4 mm
Weight:
m = 0.34 kg
ATEX-marking:
II 3G Ex de IIC T4 Gc
II 3D Ex tc IIC T130°C Dc
ATEX Zone 2/22

Materials

Body:
Duoplast

Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>Power consumption</th>
<th>Power consumption</th>
<th>( T_{\text{max}} ) max. (°C)</th>
<th>( T_{\text{min}} ) (°C)</th>
<th>Gas</th>
<th>Dust</th>
<th>( U_{\text{max}} ) (V)</th>
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<tbody>
<tr>
<td>9176</td>
<td>18 W</td>
<td>18 W</td>
<td>(-25 ... 50)</td>
<td>( \leq 110 )</td>
<td>T4</td>
<td>T130°C</td>
<td>12 ... 250 ±10% DC</td>
</tr>
<tr>
<td>9176</td>
<td>45 VA</td>
<td>35 VA</td>
<td>(-25 ... 50)</td>
<td>( \leq 110 )</td>
<td>T4</td>
<td>T130°C</td>
<td>12 ... 250 ±10% AC</td>
</tr>
</tbody>
</table>
Solenoid

- Category II
- ATEX and IECEx approvals
- Cover can be rotated 180°
- Simple installation with spring-loaded terminals

Technical Data

Protection class:
IP66

Cable gland:
M16 x 1.5

Cable diameter:
Ø 7 … 9 mm (T_{amb} min. = -20°C)
Ø 5 … 9 mm (T_{amb} min. = -40°C)

Cable:
T_{perm.} ≥ 85°C

Conductor cross section:
0.08 … 2.5 mm²

Fastening:
Click-on®

Tube diameter:
Ø = 14.4 mm

Weight:
m = 0.43 kg

Type examination certificate:
PTZ 16 ATEx 0011 X
IECEx PTZ 17.0001X

ATEX-marking:
II 2G Ex eb m IIC T4 - T3 Gb
II 2D Ex mb tb IIIB T125°C - T140°C

ATEX Zone 1/21

Materials

Body:
Duroplast

Technical data - standard models

<table>
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<tr>
<th>Type</th>
<th>Type nom</th>
<th>P nom (W)</th>
<th>T_{amb} min. -20°C</th>
<th>T_{amb} min. -40°C</th>
<th>T_{max.} (°C)</th>
<th>T_{max.} (°C)</th>
<th>Temperature class</th>
<th>U_{max} (V AC / V DC)</th>
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</thead>
<tbody>
<tr>
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<td>6130</td>
<td>18</td>
<td>40</td>
<td>≤ 80</td>
<td>T3</td>
<td>T_{140°C}</td>
<td>12 … 250 ±10%</td>
<td></td>
</tr>
<tr>
<td>6123</td>
<td>-</td>
<td>14</td>
<td>60</td>
<td>≤ 80</td>
<td>T3</td>
<td>T_{140°C}</td>
<td>12 … 250 ±10%</td>
<td></td>
</tr>
<tr>
<td>6123</td>
<td>6136</td>
<td>14</td>
<td>40</td>
<td>≤ 80</td>
<td>T4</td>
<td>T_{25°C}</td>
<td>12 … 250 ±10%</td>
<td></td>
</tr>
<tr>
<td>6129</td>
<td>-</td>
<td>10</td>
<td>60</td>
<td>≤ 70</td>
<td>T4</td>
<td>T_{25°C}</td>
<td>12 … 250 ±10%</td>
<td></td>
</tr>
</tbody>
</table>
Solenoid

- Category III
- Large ambient temperature range
- Compact design

Technical Data

Protection class:
IP65

Cable gland:
PG 9

Cable diameter:
Ø 4,5 ... 7 mm

Cable:
$T_{perm. disc.} \geq 85^\circ C$

Conductor cross section:
Max. 1,5 mm²

Fastening:
Nut

Tube diameter:
Ø = 16 mm

Weight:
m = 0,4 kg

ATEX-marking:
II 3G Ex ec IIC T4 Gc
II 3D Ex tc IIC T130°C Dc

ATEX Zone 2/22

Materials

Body:
Duroplast

Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>Power consumption</th>
<th>$T_{inr.} \min. -20^\circ C$</th>
<th>$T_{amb.} (°C)$</th>
<th>$T_{fluid. max.} (°C)$</th>
<th>Temperature class</th>
<th>$U_{max.} (V)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>9326</td>
<td>18 W</td>
<td>Inrush: 18 W</td>
<td>Holding: 18 W</td>
<td>60</td>
<td>≤ 90 T4</td>
<td>T130°C</td>
</tr>
<tr>
<td>9326</td>
<td>106 VA</td>
<td>18 W</td>
<td>60</td>
<td>≤ 90 T4</td>
<td>T130°C</td>
<td>12 ... 250 ±10% AC</td>
</tr>
</tbody>
</table>

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and use the new improved search function. If you cannot see the option you require please contact us.
Solenoid

- Category II
- ATEX and IECEx approvals
- Cover can be rotated 180°
- Simple installation with spring-loaded terminals

Technical Data

Protection class: IP66

Cable gland: M16 x 1,5

Cable diameter:
Ø 7...9 mm \(T_{\text{amb}} \text{ min.} = -20^\circ\text{C}\)
Ø 5...9 mm \(T_{\text{amb}} \text{ min.} = -40^\circ\text{C}\)

Cable: \(T_{\text{perm}} \geq 85^\circ\text{C}\)

Conductor cross section: 0,08 ... 2,5 mm²

Fastening: Nut

Tube diameter: Ø = 16 mm

Weight: \(m = 0,49\text{kg}\)

Type examination certificate:
PTZ 16 ATEX 0011 X
IECEx PTZ 17.0001X

ATEX-marking:
II 2G Ex eb mb IIC T4 - T3 Gb
II 2D Ex mb tb IIIB T125°C - T135°C
ATEX Zone 1/21

Materials

Body: Duroplast

Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>Temperature class</th>
<th>U_{\text{nom}} (V AC/DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T_{\text{amb}} min. -20°C</td>
<td>T_{\text{amb}} min. -40°C</td>
<td>P_{\text{nom}} (W)</td>
</tr>
<tr>
<td>6140</td>
<td>6150</td>
<td>18</td>
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<td>6143</td>
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<td>14</td>
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<td>6146</td>
<td>6156</td>
<td>14</td>
</tr>
<tr>
<td>6149</td>
<td>-</td>
<td>10</td>
</tr>
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</table>
Solenoid

- The solenoids (Click-on®) can be easily installed
- Large ambient temperature range
- The solenoid system is closed at the top
- Approvals:
  - Available in an explosion-proof design following EU Directive 2014/34/EU

Technical Data

<table>
<thead>
<tr>
<th>Type</th>
<th>Power consumption</th>
<th>$T_{\text{amb}}$ (°C)</th>
<th>$T_{\text{min}}$ °C</th>
<th>$T_{\text{max}}$ °C</th>
<th>Temperature class</th>
<th>$U_{\text{max}}$ (V DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9426</td>
<td>38 W</td>
<td>38 W</td>
<td>50</td>
<td>≤ 110</td>
<td>T4</td>
<td>12 ... 250 ±10%</td>
</tr>
</tbody>
</table>

Materials

- Body: Duroplast

Technical data - standard models

- Protection class: IP65
- Cable: PG 9
- Cable diameter: Ø 4,5 ... 9 mm
- Cable: $T_{\text{ambient}} > 85^\circ$C
- Conductor cross section: Max. 1,5 mm²
- Fastening: Click-on®
- Tube diameter: Ø = 25 mm
- Weight: $m = 1,5$ kg

ATEX-marking:
- II 3G Ex e c IIC T4 Gc
- II 3D Ex tc IIC T130°C Dc IP65
- ATEX Zone 2/22

- Click-on®
- Protection class: IP65
- Cable gland: PG 9
- Cable diameter: Ø 4,5 ... 9 mm
- Cable: $T_{\text{ambient}} > 85^\circ$C
- Conductor cross section: Max. 1,5 mm²
- Fastening: Click-on®
- Tube diameter: Ø = 25 mm
- Weight: $m = 1,5$ kg

ATEX-marking:
- II 3G Ex e c IIC T4 Gc
- II 3D Ex tc IIC T130°C Dc IP65
- ATEX Zone 2/22

- Body: Duroplast
Solenoid

- Category II
- ATEX and IECEx approvals
- Cover can be rotated 180°
- Simple installation with spring-loaded terminals

### Technical Data

**Protection class:**
- IP66

**Cable gland:**
- M16 x 1.5

**Cable diameter:**
- Φ 7 ... 9 mm (T<sub>amb</sub> min. = -20°C)
- Φ 5 ... 9 mm (T<sub>amb</sub> min. = -40°C)

**Cable:**
- T<sub>perm</sub> max. ≥ 85°C

**Conductor cross section:**
- 0.08 ... 2.5 mm²

**Fastening:**
- 4 Screws

**Tube diameter:**
- Φ = 11.4 mm

**Weight:**
- m = 0.28 kg

**Type examination certificate:**
- PTZ 16 ATEX 0011 X
- IECEx PTZ 17.0001X

**ATEX-marking:**
- II 2G Ex eb m1 IIC T4 - T3 Gb
- II 2D Ex mb tb IIB T135°C - T150°C
- ATEX Zone 1/21

### Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>T&lt;sub&gt;amb&lt;/sub&gt; min. -20°C</th>
<th>P&lt;sub&gt;max&lt;/sub&gt; (W)</th>
<th>T&lt;sub&gt;max&lt;/sub&gt; (°C)</th>
<th>T&lt;sub&gt;max&lt;/sub&gt; max. (°C)</th>
<th>Gas</th>
<th>Dust</th>
<th>U&lt;sub&gt;max&lt;/sub&gt; (V AC/V DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6190</td>
<td>6191</td>
<td>12</td>
<td>40</td>
<td>≤ 80</td>
<td>T3</td>
<td>T150°C</td>
<td>12 ... 250 ±10%</td>
</tr>
<tr>
<td>6193</td>
<td>-</td>
<td>9</td>
<td>80</td>
<td>≤ 80</td>
<td>T3</td>
<td>T150°C</td>
<td>12 ... 250 ±10%</td>
</tr>
<tr>
<td>6196</td>
<td>6197</td>
<td>9</td>
<td>45</td>
<td>≤ 80</td>
<td>T4</td>
<td>T135°C</td>
<td>12 ... 250 ±10%</td>
</tr>
<tr>
<td>6199</td>
<td>-</td>
<td>7</td>
<td>60</td>
<td>≤ 80</td>
<td>T4</td>
<td>T135°C</td>
<td>12 ... 250 ±10%</td>
</tr>
</tbody>
</table>

**Materials**

**Body:**
- Duroplast

---

For further information, visit [www.imi-precision.com](http://www.imi-precision.com) and use the new improved search function. If you cannot see the option you require please contact us.
Solenoid

- Category III
- Large ambient temperature range
- Compact design

Technical Data

Protection class: IP65
Cable gland: PG 9
Cable diameter: Ø 7...9 mm
Cable:
   T_{ambient,min} ≥ 85°C
Conductor cross section:
   Max. 1,5 mm²
Fastening: Click-on®
Tube diameter:
   Ø = 20 mm
Weight:
   m = 0,75 kg

ATEX-marking:
   II 3G Ex ec IIC T4 Gc
   II 3D Ex tc IIC T130°C Dc
   ATEX Zone 2/22

Materials

Body: Duroplast

Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>Power consumption</th>
<th>( T_{amb,min} \text{ - }-20°C )</th>
<th>( T_{amb} ) (°C)</th>
<th>( T_{fluid} ) max.(°C)</th>
<th>Temperature class</th>
<th>( U_{max} ) (V DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8326</td>
<td>22 W</td>
<td>22 W</td>
<td>50</td>
<td>≤ 110</td>
<td>T4</td>
<td>T130°C</td>
</tr>
</tbody>
</table>

For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.
Solenoid

- Category II
- ATEX and IECEx approvals
- Cover can be rotated 180°
- Simple installation with spring-loaded terminals

**Technical Data**

**Protection class:**
IP66

**Cable gland:**
M16 x 1,5

**Cable diameter:**
Ø 7 ... 9 mm (T\textsubscript{amb} min. = -20°C)
Ø 6 ... 9 mm (T\textsubscript{amb} min. = -40°C)

**Cable:**
T\textsubscript{perm} \(\geq\) 85°C

**Conductor cross section:**
0,08 ... 2,5 mm\(^2\)

**Fastening:**
Nut

**Tube diameter:**
Ø = 20 mm

**Weight:**
m = 0,75 kg

**Type examination certificate:**
PTZ 16 ATEX 0011 X
IECEx PTZ 17.0001X

**ATEX-marking:**
II 2G Ex eb ib IIC T4 - T3 Gb
II 2D Ex mb ib IIB T135°C - T150°C
ATEX Zone 1/21

**Materials**

**Body:**
Duroplast

---

**Technical data - standard models**

<table>
<thead>
<tr>
<th>Type</th>
<th>(T_{\text{amb}}) (-20°C)</th>
<th>(T_{\text{amb}}) (-40°C)</th>
<th>(P) (W)</th>
<th>(T_{\text{fluid max.}})</th>
<th>Temperature class</th>
<th>(U_{\text{max}}) (V AC/ V DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6220</td>
<td>22</td>
<td>40</td>
<td>≤ 80</td>
<td>T3</td>
<td>T135°C</td>
<td>12 ... 250 ±10%</td>
</tr>
<tr>
<td>6230</td>
<td>-</td>
<td>-</td>
<td>≤ 80</td>
<td>T3</td>
<td>T135°C</td>
<td>12 ... 250 ±10%</td>
</tr>
<tr>
<td>6223</td>
<td>14</td>
<td>60</td>
<td>≤ 80</td>
<td>T4</td>
<td>T125°C</td>
<td>12 ... 250 ±10%</td>
</tr>
<tr>
<td>6226</td>
<td>16</td>
<td>55</td>
<td>≤ 80</td>
<td>T4</td>
<td>T125°C</td>
<td>12 ... 250 ±10%</td>
</tr>
<tr>
<td>6229</td>
<td>-</td>
<td>60</td>
<td>≤ 80</td>
<td>T4</td>
<td>T125°C</td>
<td>12 ... 250 ±10%</td>
</tr>
</tbody>
</table>
Solenoid

- Category III
- Large ambient temperature range
- Compact design

Technical Data

<table>
<thead>
<tr>
<th>Type</th>
<th>Power consumption</th>
<th>Temperature class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Inrush (W)</td>
<td>Holding (W)</td>
</tr>
<tr>
<td>T_{amb min.} -20°C</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

Materials

- Body: Duroplast
**Solenoid**

- Category II
- ATEX and IECEx approvals
- Cover can be rotated 180°
- Simple installation with spring-loaded terminals

### Technical Data

**Protection class:**
- IP66

**Cable gland:**
- M16 x 1,5

**Cable diameter:**
- Ø 7 ... 9 mm ($T_{\text{amb}}$ min. = -20°C)
- Ø 5 ... 9 mm ($T_{\text{amb}}$ min. = -40°C)

**Cable:***
- $T_{\text{permissible}} \geq 85°C$

**Conductor cross section:**
- 0.08 ... 2,5 mm²

**Fastening:**
- Nut

**Tube diameter:**
- Ø = 29,8 mm

**Weight:**
- $m = 1.83$ kg

**Type examination certificate:**
- PTZ 16 ATEX 0011 X
- IECEx PTZ 17.0001X

**ATEX-marking:**
- II 2G Ex eb mb IIC T4 - T3 Gb
- II 2D Ex mb tb IIIB T125°C - T140°C
- ATEX Zone 1/21

### Materials

**Body:**
- Duroplast

### Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>$T_{\text{amb}}$ min. -20°C</th>
<th>$P_{\text{max}}$ (W)</th>
<th>$T_{\text{nom}}$ (°C)</th>
<th>$T_{\text{max}}$ max.(°C)</th>
<th>Temperature class</th>
<th>$U_{\text{max}}$ (V AC/ V DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6240</td>
<td>6250</td>
<td>40</td>
<td>40</td>
<td>≤ 80</td>
<td>T3</td>
<td>T140°C</td>
</tr>
<tr>
<td>6243</td>
<td></td>
<td>29</td>
<td>60</td>
<td>≤ 80</td>
<td>T3</td>
<td>T140°C</td>
</tr>
<tr>
<td>6246</td>
<td>6256</td>
<td>32</td>
<td>50</td>
<td>≤ 80</td>
<td>T4</td>
<td>T125°C</td>
</tr>
<tr>
<td>6249</td>
<td></td>
<td>23</td>
<td>60</td>
<td>≤ 80</td>
<td>T4</td>
<td>T125°C</td>
</tr>
</tbody>
</table>

**Technical Data - Materials**

- Protection class:
  - IP66
- Cable gland:
  - M16 x 1.5
- Cable diameter:
  - Ø 7 ... 9 mm ($T_{\text{amb}}$ min. = -20°C)
  - Ø 5 ... 9 mm ($T_{\text{amb}}$ min. = -40°C)
- Cable:
  - $T_{\text{permissible}} \geq 85°C$
- Conductor cross section:
  - 0.08 ... 2.5 mm²
- Fastening:
  - Nut
- Tube diameter:
  - Ø = 29.8 mm
- Weight:
  - $m = 1.83$ kg
- Type examination certificate:
  - PTZ 16 ATEX 0011 X
  - IECEx PTZ 17.0001X
- ATEX-marking:
  - II 2G Ex eb mb IIC T4 - T3 Gb
  - II 2D Ex mb tb IIIB T125°C - T140°C
  - ATEX Zone 1/21

**Materials and Protection Class:**

- Body: Duroplast
- Protection class:
  - IP66
- Cable gland:
  - M16 x 1.5
- Cable diameter:
  - Ø 7 ... 9 mm ($T_{\text{amb}}$ min. = -20°C)
  - Ø 5 ... 9 mm ($T_{\text{amb}}$ min. = -40°C)
- Cable:
  - $T_{\text{permissible}} \geq 85°C$
- Conductor cross section:
  - 0.08 ... 2.5 mm²
- Fastening:
  - Nut
- Tube diameter:
  - Ø = 29.8 mm
- Weight:
  - $m = 1.83$ kg
- Type examination certificate:
  - PTZ 16 ATEX 0011 X
  - IECEx PTZ 17.0001X
- ATEX-marking:
  - II 2G Ex eb mb IIC T4 - T3 Gb
  - II 2D Ex mb tb IIIB T125°C - T140°C
  - ATEX Zone 1/21
Solenoid

- Category III
- Ambient temperature range to +75°C
- Compact design
- Flame-proof enclosure (d)

### Technical Data

**Protection class:**
- IP65

**Cable gland:**
- M20 x 1,5

**Cable diameter:**
- Ø 8 … 11,5 mm

**Cable:**
- \( T_{\text{perm,asa}} > 85^\circ\text{C} \)

**Conductor cross section:**
- 0,08 … 2,5 mm²

**Fastening:**
- Nut

**Tube diameter:**
- Ø = 29,8 mm

**Weight:**
- \( m = 6,6 \text{ kg} \)

**Type examination certificate:**
- ATEX: BVS_19_ATEX_E_014_X
- IECEx: BVX_19.0017X

**ATEX-marking:**
- II 2G Ex de IIC T4/T5
- II 2D Ex tD A21 IP65 T130°C/ 95°C

### Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>( P_{\text{nom}} ) (W)</th>
<th>( T_{\text{min}} ) (°C)</th>
<th>( T_{\text{max, max.}} ) (°C)</th>
<th>( T_{\text{max}} ) (°C)</th>
<th>( T_{\text{min}} ) (°C)</th>
<th>Temperature class</th>
<th>( U_{\text{max}} ) (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8900</td>
<td>29</td>
<td>40/60</td>
<td>≤ 80/110</td>
<td>TS/T4</td>
<td>TS/T4</td>
<td>12 … 400 ±10% DC</td>
<td></td>
</tr>
<tr>
<td>8900</td>
<td>29</td>
<td>40/60</td>
<td>≤ 80/110</td>
<td>TS/T4</td>
<td>TS/T4</td>
<td>24 … 400 ±10% AC</td>
<td></td>
</tr>
</tbody>
</table>
Solenoid

- Category III
- Ambient temperature range to +75°C
- Compact design
- Flame-proof enclosure (d)

Technical Data

Protection class:
IP65

Cable gland:
M20 x 1,5

Cable diameter:
Ø 8 ... 11,5 mm (T\text{amb} min. = -40°C)

Cable:

Peerless ≥ 85°C

Conductor cross section:
0,08 ... 2,5 mm²

Fastening:
Nut

Tube diameter:
Ø = 29,8 mm

Weight: m = 6,6 kg

Type examination certificate:
ATEX: BVS_19_ATEX_E_013X
IECEx: BVS_19.0016x

ATEX-marking:
II 2G Ex db IIC T4/T5 Gb
II 2D Ex tb IIIC T130°C/ T95°C Db

Materials

Body:
Steel

Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>P\text{nom} (W)</th>
<th>T\text{min} (°C)</th>
<th>T\text{max} max. (°C)</th>
<th>Temperature class</th>
<th>U\text{max} (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8920</td>
<td>29</td>
<td>40/75</td>
<td>≤ 90/100</td>
<td>Gas</td>
<td>T5/T4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dust</td>
<td>T95/130°C</td>
</tr>
<tr>
<td>8920</td>
<td>29</td>
<td>40/75</td>
<td>≤ 90/100</td>
<td>Gas</td>
<td>T5/T4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dust</td>
<td>T95/130°C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12 ... 400 ±10% DC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24 ... 400 ±10% AC</td>
</tr>
</tbody>
</table>
Solenoid

Technical Data

- Protection class: IP65
- Cable gland: PG 9
- Cable diameter: Ø 4,5 ... 7 mm
- Cable: $T_{perm.} \geq 85^\circ C$
- Conductor cross section: Max. 1,5 mm²
- Fastening: Nut
- Tube diameter: Ø = 47,7 mm
- Weight: m = 6 kg
- ATEX-marking:
  - II 3G Ex ec IIC T4 Gc
  - II 3D Ex tc IIC T130°C Dc IP65
- ATEX Zone 2/22

Materials

- Body: Steel

Technical data - standard models

<table>
<thead>
<tr>
<th>Type</th>
<th>$T_{min.} \geq -40^\circ C$</th>
<th>$P_{min.}$ (W)</th>
<th>$T_{max.}$ (°C)</th>
<th>$T_{max. \ max.}$ (°C)</th>
<th>Temperature class</th>
<th>$U_{max.}$ (V AC/ V DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9526</td>
<td></td>
<td>80</td>
<td>50</td>
<td>$\leq 110$</td>
<td>Gas</td>
<td>T4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dust</td>
<td>T130°C</td>
</tr>
</tbody>
</table>
For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.

- Category II
- Compact design
- For use with flange valves

**Technical Data**

**Materials**

**Protection class:**
IP66

**Cable gland:**
M16 x 1,5

**Cable diameter:**
Ø 6 ... 12 mm (T<sub>amb</sub> min. = -40°C)

**Cable:**
T<sub>perm.all</sub> ≥ 85°C

**Conductor cross section:**
0,08 ... 2,5 mm²

**Fastening:**
Nut

**Tube diameter:**
Ø = 47,7 mm

**Weight:**
m = 7,4 kg

**Type examination certificate:**
TÜV 07 ATEX 553412X
IECEx (coming soon)

**ATEX-Kennzeichnung:**
II 2G Ex e mb II T4/ T3
II 2D Ex d A21 IP65 T140°C

---

**Technical data - standard models**

<table>
<thead>
<tr>
<th>Type</th>
<th>P&lt;sub&gt;nom&lt;/sub&gt; (W)</th>
<th>T&lt;sub&gt;amb&lt;/sub&gt; (°C)</th>
<th>T&lt;sub&gt;max&lt;/sub&gt; max. (°C)</th>
<th>Temperature class</th>
<th>U&lt;sub&gt;max&lt;/sub&gt; (V AC/ V DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9540</td>
<td>65</td>
<td>40/40</td>
<td>≤ 80/100</td>
<td>T4/T3</td>
<td>24 ... 400 ±10%</td>
</tr>
<tr>
<td>9560</td>
<td>47</td>
<td>60/70</td>
<td>≤ 100/100</td>
<td>T4/T3</td>
<td>24 ... 400 ±10%</td>
</tr>
</tbody>
</table>
We help move man’s most marvellous machines
Index
INDEX

BY PRODUCT DESCRIPTION

Valves ........................................ 13 ... 43

Process valves
- Remote pilot operated diaphragm valves, series 82900/82910 ........ 15
- Solenoid pilot operated diaphragm valves, series 82960/82970 ........ 17
- Remote pilot operated diaphragm valves, single stage, series 82900/82910 ... 20
- Solenoid pilot operated diaphragm valves, single stage, series 82960/82970 ... 22
- Remote pilot operated diaphragm valves, series 83300/83310 ........ 25
- Solenoid pilot operated diaphragm valves, series 83320 ........ 27
- Remote pilot operated diaphragm valves, series 83920 ........ 30
- Solenoid pilot operated diaphragm valves, series 83920 ........ 32
- Remote pilot operated diaphragm valves, flange version, series 83930 .... 35
- Solenoid pilot operated diaphragm valves, flange version, series 83920 .... 36
- Remote pilot operated diaphragm valves, series 83640 ........ 38
- Solenoid pilot operated diaphragm valves, series 83670 ........ 40

Controllers .................. 59 ... 76

Microcontroller-operated valve controllers
- Casing version / Standard rail support / PCB version ...................... 65

Valve controllers for industrial filters
- Master-Version without Δp ........................................ 66
- Master-Version prepared for Δp .................................... 66
- Slave-Version ......................................................... 66
- Master-Version with Δp ........................................... 67
- Master-Version without Δp ......................................... 68
- Master-Version without Δp ......................................... 69
- Master-Version with Δp ........................................... 70

Differential pressure measuring transducers
- Measuring transducers ............................................. 71

Differential pressure controllers
- Controllers ......................................................... 72, 73
- Controllers with integrated measuring hose cleaning .................. 74

Pneumatic controllers
- Pneumatic actuated controllers with ATEX approval ..................... 75

Systems .................................... 45 ... 58

Filter cleaning systems
- Systems for dust collector Ø 220 mm, 8587xxx ......................... 47
- Systems for dust collector Ø 135 mm, 8589xxx ......................... 53
- Systems for dust collector Ø 75 mm, 8588xxx ......................... 56
Pneumatic .......................... 105 ... 146

Filters
- General purpose filters F18 .................................................. 107

EXCELON®
- Filters / regulators B72G .................................................. 109
- Filters / regulators B84G .................................................. 114

Olympian Plus plug-in systems
- Filters / regulators B64G, B68G ........................................... 122

Pressure switches
- Pneumatic pressure switches 14D ...................................... 128
- Pneumatic pressure switches 51D ...................................... 132

Cylinders
- Cylinders SPCH/080003/X ............................................. 135

Fittings
- PNEUFIT® C-Push-in-fittings .......................................... 138

Compression fittings
- Compression fittings Ø 6 ... 42 mm - 82A series ..................... 141
- Compression fittings Ø 1/8 ... 2" - 83A series ....................... 143

Accessories
- Accessories M5, 1/8 ... 1" - 15 / 16 series ............................ 145

Glossary ............................ 147 ... 179

Accessories
- Solenoids 9116 ............................................................. 164
- Solenoids 6100 ............................................................. 165
- Solenoids 9176 ............................................................. 166
- Solenoids 6120 ............................................................. 167
- Solenoids 9326 ............................................................. 168
- Solenoids 6140 ............................................................. 169
- Solenoids 9426 ............................................................. 170
- Solenoids 6190 ............................................................. 171
- Solenoids 9326 ............................................................. 172
- Solenoids 6220 ............................................................. 173
- Solenoids 8426 ............................................................. 174
- Solenoids 6240 ............................................................. 175
- Solenoids 8930 ............................................................. 176
- Solenoids 8920 ............................................................. 177
- Solenoids 9526 ............................................................. 178
- Solenoids 9540/9560 ...................................................... 179
INDEX

BY PART NUMBERS

Series

15/16 ............................................................. 145
18D .......................................................... 128
382 .......................................................... 95
428x ......................................................... 97
468x ......................................................... 99
51D ......................................................... 132
6100 .......................................................... 165
6120 .......................................................... 167
6140 .......................................................... 169
6170 .......................................................... 92
6190 .......................................................... 171
6200 .......................................................... 94
6220 .......................................................... 173
6240 .......................................................... 175
80x .......................................................... 87
8026 ......................................................... 93
817x .......................................................... 85
8176 .......................................................... 89
82A .......................................................... 141
82870 ......................................................... 75
82900 ......................................................... 15
82900, [single stage] ...................................... 20
82910 ......................................................... 15
82910, [single stage] ...................................... 20
82960 ......................................................... 17
82960, [single stage] ...................................... 22
82970 ......................................................... 17
82970, [single stage] ...................................... 22
8326 .......................................................... 172
83A .......................................................... 143
83300 ......................................................... 25
83310 ......................................................... 25
83320 ......................................................... 27
83490xx.0000.xxxxx ...................................... 65
83491xx.0000.xxxxx ...................................... 66
83492xx.0000.xxxxx ...................................... 68
8349200.0000.xxxxx .................................... 69
834950x.8274.xxxxx .................................... 67
8349500.0000.xxxxx .................................... 70
8349900.0000.0000 ..................................... 71
8349900.0000.xxxxx .................................... 72
834991x.0000.0000 ..................................... 73
834992x.0000.0000 ..................................... 74
83640 ....................................................... 38
83670 ....................................................... 40
83920 ....................................................... 32
83920, [flange version] .................................. 36
83930 ....................................................... 30
83930, [flange version] .................................. 35
8426 ......................................................... 174
8499xxx.827x.xxxxx .................................... 81
8493571.8821x.xxxxx .................................... 79
8587xxx .................................................... 47
8588xxx .................................................... 56
8589xxx .................................................... 53
8621 .......................................................... 83
8900 .......................................................... 176
8920 .......................................................... 177
9116 .......................................................... 164
915x .......................................................... 89
9176 .......................................................... 166
9326 .......................................................... 168
9426 .......................................................... 170
9526 .......................................................... 178
9540 .......................................................... 179
9560 .......................................................... 179
9560 .......................................................... 179
B64G .......................................................... 122
B64G .......................................................... 122
B72G .......................................................... 109
B84G .......................................................... 114
F18 ............................................................ 107
Pneufit® C .................................................... 138
SPCH/080003/X ........................................... 135

BY BRAND AND PRODUCT NAME

IMI Buschjost®  Valves ........................................ 13 ... 43
Systems for Dust Collectors ................................ 44 ... 58
Controllers ..................................................... 57 ... 74
Accessories ..................................................... 77 ... 103
Solenoids ....................................................... 83, 164

EXCELON®  EXCELON®-Maintenance equipment .................. 109, 114

IMI Norgren®  General purpose filters ................................ 107
Pressure switches .......................................... 128, 132
Impact cylinders ........................................... 135
Compression fittings ...................................... 141, 143, 145

Olympian Plus  Filters / Regulators ......................... 122

Pneufit®  C .................................................... 138
Dieser Regler sorgt für eine Abreinigung in Abhängigkeit vom Differenzdruck zwischen Roh- und Reingasseite des Filters. ... Der Differenzdruck ist ein Maß für den Verschmutzungsgrad des Filters.

In Staubfilteranlagen können sich die Messleitungen für die Differenzdruckregelung bei starkem Staubanfall zusetzen. Abhilfe schafft der Messleitungsreiniger.

Für eine effektive Abreinigung der Filtermedien von Staubfilteranlagen ist die Intensität des Druckstoßes von ... und hohen Durchflussleistungen entsprechen. Kurze Reaktionszeiten sorgen auch für einen reduzierten Luftverbrauch.

Die geforderten Impuls- und Pausenzeiten der Ventile im Abreinigungssystem werden über elektronische oder pneumatische Steuerungen aktivieren die Ventile direkt. Bei veränderten Betriebsverhältnissen können die Taktzeiten verändert werden.