MEGASOL
Gas Injection Valves for Gas & Dual Fuel Engines

Gas Injection Control Unit

- Excellent load response
- Exact gas metering for each cylinder
- Cylinder individual adjustment of the gas quantity
- No risk of backfire
- Long life cycle

MEGASOL 1000
MEGASOL 200A
MEGASOL 425B
MEGASOL PCV
MEGASOL
Gas injection valves
MEGASOL is HEINZMANN’s series of electrically actuated gas injection valves for industrial gas and dual fuel engines. Each cylinder requires one MEGASOL valve.

MEGASOL valves ensure proper gas quantity for each cylinder and allow a gas flow compensation cylinder to cylinder. They are designed to work with a relative high differential pressure between air and gas.

MEGASOL valves are characterised by excellent load response, precise dosage and individual adjustment of gas quantity for each cylinder. MEGASOL valves have a very low leakage when closed and are easy to maintain.

Design
The MEGASOL valves are available as port or prechamber injection valves in four different flow sizes.

Port injection valves:
- MEGASOL 1000
- MEGASOL 425
- MEGASOL 200

Prechamber injection valves:
- MEGASOL PCV

MEGASOL ADVANTAGES
✓ Excellent load response of the engine
✓ Precise dosage of gas for each cylinder
✓ Cylinder individual adjustment of the gas quantity
✓ Fast responding valves for low and high-speed engines
✓ Very low leakage when closed
✓ No risk of backfire
✓ Easy maintenance

MEGASOL 1000
- Nearly no gas pressure generated opening delay
- Reduced pressure drop across the valve

MEGASOL 425
- Available with two different housing sizes: body A with gas inlet on the top and body B with lateral gas inlet

MEGASOL 200
- Available with two different housing sizes
- No gas pressure generated opening delay due to its pressure compensated design

MEGASOL PCV
- Nearly no gas pressure generated opening delay
- Extremely low leakage when closed
- Reduced pressure drop across the valve
**PRINCIPLE OF INSTALLATION**

The MEGASOL valves are one component of a complete HEINZMANN gas injection system made up of:

- Engine control unit (HEINZMANN DARDANOS series of electronic fuel injection control units)
- One MEGASOL valve for each cylinder
- Sensors (speed sensors, etc.) and cables
- Other governors according to your needs

**POWER RANGE OF THE VALVES MEGASOL 200, 425, 1000 AND PCV**

Port injection valve

Prechamber injection valve

(Only indications: it depends on gas quality and gas pressure relative to air)

**Technical data**

<table>
<thead>
<tr>
<th></th>
<th>MEGASOL 1000</th>
<th>MEGASOL 425</th>
<th>MEGASOL 200</th>
<th>MEGASOL PCV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time to fully open after signal on</td>
<td>&lt; 4 ms</td>
<td>&lt; 4 ms</td>
<td>&lt; 4 ms</td>
<td>3 ms</td>
</tr>
<tr>
<td>Time to fully close after signal off</td>
<td>&lt; 4 ms</td>
<td>&lt; 4 ms</td>
<td>&lt; 4 ms</td>
<td>3 ms</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>48 V (up to 110 V)</td>
<td>48 V (up to 110 V)</td>
<td>48 V (up to 110 V)</td>
<td>24 V</td>
</tr>
<tr>
<td>Leakage</td>
<td>Less than 0.25 % of the opened valve flow</td>
<td>Less than 0.25 % of the opened valve flow</td>
<td>Less than 0.25 % of the opened valve flow</td>
<td>Less than 0.11 % of the opened valve flow</td>
</tr>
<tr>
<td>Flow rate (Z-Value)</td>
<td>250</td>
<td>110</td>
<td>20/24/48/60</td>
<td>0.7</td>
</tr>
<tr>
<td>Filtration required</td>
<td>5 µ</td>
<td>5 µ</td>
<td>5 µ</td>
<td>5 µ</td>
</tr>
<tr>
<td>Operation temperature</td>
<td>-20 °C up to 105 °C</td>
<td>-20 °C up to 105 °C</td>
<td>-20 °C up to 105 °C</td>
<td>-20 °C up to 100 °C</td>
</tr>
<tr>
<td>Lifetime</td>
<td>500 million cycles</td>
<td>500 million cycles</td>
<td>500 million cycles</td>
<td>500 million cycles</td>
</tr>
</tbody>
</table>

For further technical data please refer to MEGASOL Data Sheets.
Quality & Precision since 1897

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