

# MEGASOL

Gas Admission Valves for Gas & Dual-Fuel Engines



Gas Admission Control Unit





MEGASOL 200 II/250 II/400 II/425 II



## MEGASOL Marine



MEGASOL 1000



MEGASOL PCV

Excellent load response

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

# Gas Engine Management

# **MEGASOL**

# Gas admission valves

MEGASOL (**Me**tering of **Ga**s by **Sol**enoids) is HEINZMANN's series of electrically actuated gas admission valves. They are intended for gas and dual-fuel operation on industrial turbo charged four-stroke engines. Each cylinder requires one MEGASOL valve.

MEGASOL valves ensure proper gas quantity for each cylinder and allow gas flow compensation cylinder to cylinder. They are designed to operate with a comparatively high differential pressure of supplying 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 admission valves in different flow sizes. There are also marine versions available.

## Port injection valves:

- MEGASOL 200 II
- MEGASOL 250 II
- MEGASOL 400 II
- MEGASOL 425 II
- MEGASOL 1000

## Prechamber injection valves:

MEGASOL PCV



# **MEGASOL BENEFITS**

- Fast response
- Very low leakage when closed
- Excellent load response of the engine
- Suitable for new engines as well as for retrofit solutions
- Easy installation
- Precise gas dosage for each cylinder
- Cylinder individual adjustment of gas quantity

# MEGASOL 200 II/250 II/400 II/425 II



- Identical housing
- Different flow rates available
- Bolt-on compatible to market standard

## **MEGASOL Marine**



- Double-walled housing for gas leakage detection
- → Different flow rates available
- Technical data equivalent to regular versions

## **MEGASOL** 1000



- ► Enhanced flow dynamic design
- Capable to work against higher pressure drop across valve

## **MEGASOL PCV**

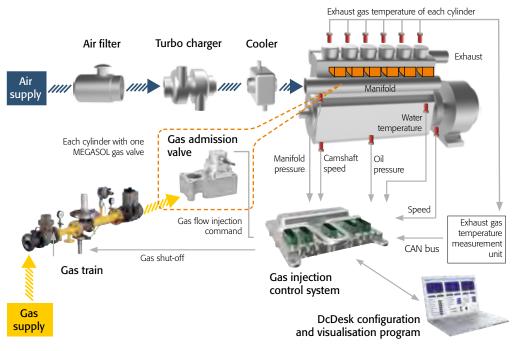


- Nearly no gas pressure generated opening delay
  - Extremely low leakage when closed

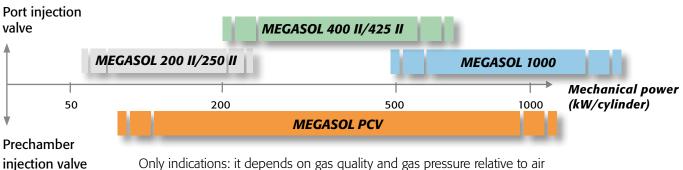
# **PRINCIPLE OF INSTALLATION**

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 MEGASOL VALVES**



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

## **Technical data**

MEGASOL	200 II/250 II/400 II/425 II	1000	PCV
Response time to 100 % open after signal on	< 3 ms	< 4 ms	< 3 ms
Response time to fully closed after signal off	< 2 ms	< 4 ms	< 3 ms
Voltage supply	48-110 VDC	48-110 VDC	24 VDC
Internal leakage when closed	< 0.25 % of steady state flow-rate	< 0.25 % of steady state flow-rate	< 0.25 % of steady state flow-rate
Flow rate (Z-Value)	200 II: 55 250 II: 69 400 II: 105 425 II: 128	250	0.54
Filtration required	5μ	5μ	5μ
Operating temperature	-20 °C up to +105 °C	-20 °C up to +105 °C	-20 °C up to +60 (100) °C

For further technical data please refer to MEGASOL Data Sheets.

# HEINZMANN Group

Quality & Precision since 1897

The Group started in 1897 with Heinzmann GmbH & Co. KG, and now includes HEINZMANN UK, HEINZMANN Shanghai, HEINZMANN Shanghai, HEINZMANN Norea, HEINZMANN India, HEINZMANN DATA PROCESS, REGULATEURS EUROPA, and CPK Automotive as member companies.

> The HEINZMANN Group operates numerous global subsidiaries, including eight production sites and an international distributor network.

Our product portfolio comprises engine management system solutions, as well as exhaust gas aftertreatment solutions, for industrial combustion engines and turbines. It also encompasses automation systems, primarily for the shipping industry.



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