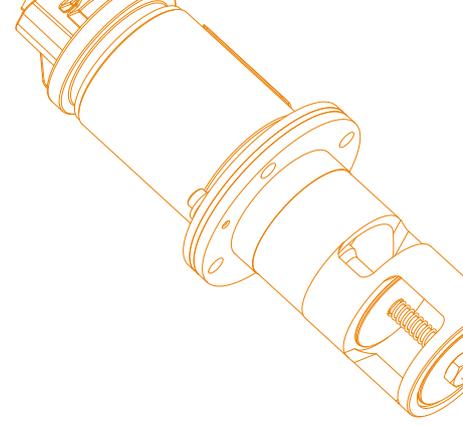


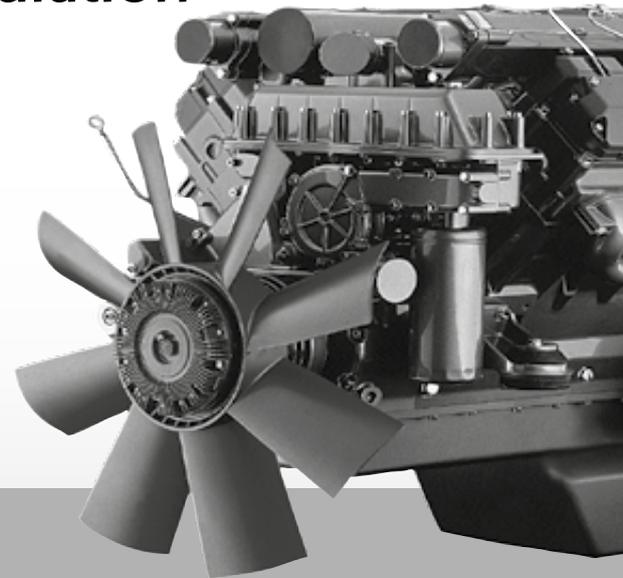


# APOLLON

## Exhaust Gas Recirculation



*EGR-PV Poppet Valve*



*Choice of different Control Units*

- ✓ Reduction of PM and NO<sub>x</sub> emissions
- ✓ A broad range of engine sizes
- ✓ For on-road or off-road engines
- ✓ Full system integration

## APOLLON

### Exhaust gas recirculation

Emissions regulations are becoming more stringent, requiring sophisticated aftertreatment systems of exhaust gases as well as improved internal combustion and engine management. HEINZMANN's APOLLON System reduces your engine emissions.

Exhaust Gas Recirculation (EGR) minimises the formation of nitrogen oxides (NO<sub>x</sub>) when fuel is burned in internal combustion engines. HEINZMANN offers customised EGR solutions.

APOLLON technology is suitable for on-road and off-road vehicles, industrial and stationary applications, locomotive and marine applications as well as for generators.

HEINZMANN can provide full development service to meet current and future exhaust gas emission limits.



## APOLLON Benefits

- ✓ **EGR system with valves, actuators and ECU**
- ✓ **Fast response time**
- ✓ **Steady-state and dynamic control modes**
- ✓ **Low leakage**
- ✓ **Robust and durable**
- ✓ **Simple system integration**

## EXHAUST GAS RECIRCULATION

### APOLLON EGR-PV Systems

#### Dual poppet valve with proportional solenoid and control system

The APOLLON EGR-PV 45 valve provides exhaust gas metering by using a pressure compensated double seat. The valve is controlled by a compact high-performance actuator. The valve is controlled by a compact high-performance actuator.

The required valve position is achieved using a PWM current. Positional feedback is provided by a position sensor, which can also be used for diagnostic purposes. The design of the valves provides force compensation, making them largely insensitive to pulsations in the exhaust flow.

### Technical information

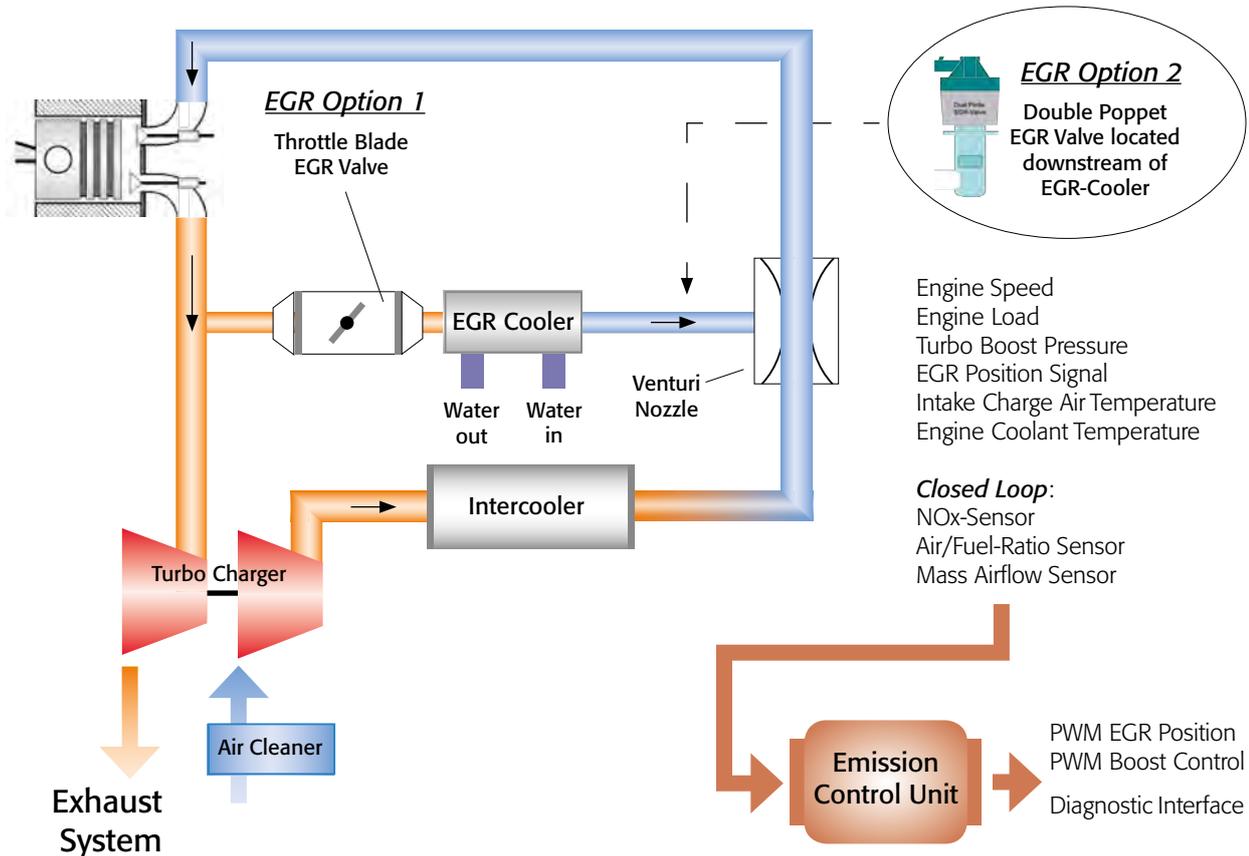
Power range of diesel engine	500 kW
Flow rate at 100 mbar	315 kg/h
Minimum flow area	970 mm <sup>2</sup>
Maximum stroke	5.4 mm
Maximum opening force	40 N
Valve diameter	45 mm
Operating temperature	-40 ° up to +150 °C
Maximum current draw	3.5 A
Opening/closing response	80 ms
Power supply	24 VDC
Position feedback	0.7 ... 4.5 V
Weight	1.3 kg

# APOLLON SYSTEM OVERVIEW

In order to comply with ever-increasing emission limits, the interactions within the entire engine management system must be taken into account. HEINZMANN has risen to this challenge and offers customer-specific

emission management systems that comprise the complete common rail high-pressure injection system, wastegate control, EGR control, exhaust treatment, sensors and development tools.

## Example EGR system



## Control units

HEINZMANN offers various control units for EGR control to fulfil any customer requirement. Complete engine control as well as retrofit systems can be realised.

For further information please refer to the leaflet HEINZMANN Digital Control Systems.



DC 6



DC 10



DC 12

# HEINZMANN Group

Quality & Precision  
since 1897

The Group started in 1897 with  
Heinzmann GmbH & Co. KG,  
and now includes  
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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  
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