

# Automatic Pressure Control for AVM2-PC

HB401



# Automatic Pressure Control HB401

The HB401 Automatic Pressure Control (APC) and *magma<sup>plus</sup>* upgrades are easily installed on existing CR equipped AVM2-PC's to provide the capability to run automatic, unattended testing of Common Rail pumps in **Hartridge** "All Makes" mode. In addition, the upgrade provides fuel injection manufacturers with a platform that they can adopt for their future programs.

The upgrade comprises three main elements:

## High Pressure Module

Mounted on the common rail guard and comprising:

- Integrated high pressure filter
- High pressure control valve block

## Auto Pressure Control Unit

Mounted on the front of the machine and comprising:

- Flow meter for high flow measurements
  - 100 cc/min to 6L/min
  - Can be used in place of HB389 flowmeter for CR pump test
- Flow control process valves
- Additional cooling
- Quick release fittings
- System control PLC
- Pressure control PCB
- Transformer

## *magma<sup>plus</sup>*

AVM2-PC software suite enabling the advanced features of

- Auto Pressure Control
- "All Makes" Loadcell
- Communication with IRIS (Delphi Software)
- Free software updates during the license period

\* **Note:** *magma<sup>plus</sup>* software and licences must be ordered separately from HB401. Minimum PC specification applies



Figure 1 High Pressure Module



Figure 2 Auto Pressure Control Unit

The system can provide a stable pressure in 5 seconds typically (this can vary depending upon the condition of the pump under test and the magnitude of the pressure change). This compares to adjustment and stabilisation times of 10 to 30 seconds using the current manual pressure regulator. Additionally as the pump warms up/stabilises, the system will continuously control the pressure removing the need for the operator to manually adjust. Dependent upon the number of steps in the test plan, this can reduce the test time by **up to 20%**.

The *magma<sup>plus</sup>* operating software and new Test Plan Editor provide the ability to write fully automatic test plans. Hence the time the operator needs to spend at the machine is greatly reduced. Once the operator has installed the pump, selected the test plan and watched the first step (to ensure that the set up is correct and there are no gross failures within the pump) he can concentrate on productive work elsewhere in the workshop increasing productive time by **up to 50%**.

## OEM Authorisation

**Hartridge** is pleased to confirm that Delphi IRIS software for AVM2-PC will be compatible with the **Hartridge** HB401 Auto Pressure Control Unit.

Contact your local **Hartridge™** distributor

for more detailed information or visit

[www.hartridge.com](http://www.hartridge.com)



The Hartridge Building  
Network 421  
Radclive Road  
Buckingham MK18 4FD  
United Kingdom

**Tel:** +44 (0)1280 825600

**Fax:** +44 (0)1280 825601

**Email:** [sales@hartridge.com](mailto:sales@hartridge.com)

[www.hartridge.com](http://www.hartridge.com)

Continuous development is taking place. **Hartridge™** reserves the right to alter the design and/or specification without prior notice.

© **Hartridge™** 2010

HB401 (EN) version 1.00 04/10