



## Installation Instructions / Operating & Maintenance Manual Air & Dirt Remover – Model ADR



Model shown – ADR546

### FOREWORD

The ADR separates and removes air and impurities from a heated or chilled circuit and prolongs the system life. An Automatic Air Vent releases the removed air into the atmosphere and the dirt drops to the bottom of the unit.

### SUPPORTING LITERATURE

- ADR Datasheet

SECTION	ITEM
1.0	INSTALLATION NOTES
2.0	INSTALLATION – HEATING SYSTEMS
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4.0	OPERATION
5.0	MAINTENANCE

### 1.0 INSTALLATION NOTES

- 1.1. The unit must be fitted to horizontal pipes, with the AAV at the top.
- 1.2. The flow direction of the medium is not important.
- 1.3. To maximise air removal efficiency, the device should be fitted to low pressure points in the system. This is normally towards the top of building.

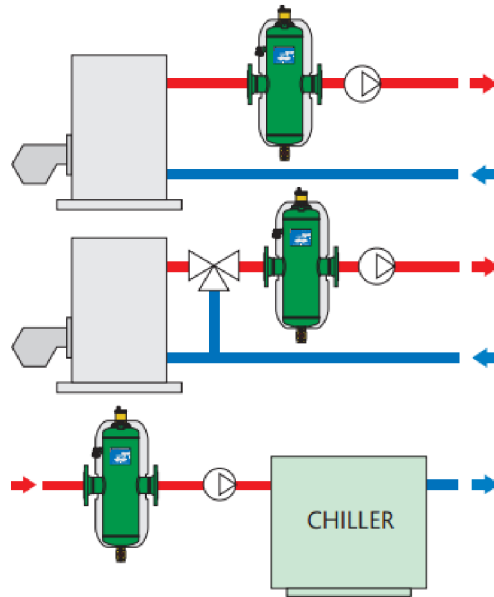
## Operating & Maintenance Manual – Air & Dirt Remover - Arrow Valves

### 2.0 INSTALLATION - HEATING SYSTEMS

- 2.1. The ADR must be located at the hottest point after the boiler.
- 2.2. It should also be positioned preferably upstream of the pump as this is where a lot of bubbles and impurities can develop.
- 2.3. This set up will ensure maximum efficiency.
- 2.4. The maximum static head must not exceed 15 metres otherwise efficiency is reduced.

### 3.0 INSTALLATION - COOLING SYSTEMS

- 3.1. The ADR should be positioned close to the return into the chiller.
- 3.2. It should also be positioned preferably upstream of the pump as this is where a lot of bubbles and impurities can develop.
- 3.3. The maximum static head must not exceed 10 metres otherwise efficiency is reduced.



### 4.0 OPERATION

- 4.1. The dirt collected must be removed. This can be done by opening the ball valve at the bottom of the unit and allowing the system pressure to flush the dirt out.
- 4.2. This should be repeated every few days.
- 4.3. Air collected in the ADR is automatically dispersed when the volume reaches a certain level.
- 4.4. The collected air forces a float downwards until it reaches a certain point, at which the float automatically opens a valve.
- 4.5. The air is released into the atmosphere through the valve. The float rises as the air escapes, causing the valve to close again.

### 5.0 MAINTENANCE

- 5.1. After the initial flushing, the unit only needs to be drained approximately every 6 months, depending on the size and age of the system.

#### WARNING!



***The unit is under high pressure and becomes very hot. Take care to avoid scolding. Be sure to drain the water before opening the valve.***