

# **CLENSTON**

## **Air & Dirt Separator**

**Models**  
**CL50, CL65, CL80, CL100,**  
**CL125, CL150, CL200**

### **IMPORTANT NOTE**

**THESE INSTRUCTIONS MUST BE READ  
AND UNDERSTOOD BEFORE INSTALLING,  
COMMISSIONING, OPERATING OR  
SERVICING EQUIPMENT**

# Customer After Sales Services

Telephone: **01202 662555** E-mail: **service@hamworthy-heating.com** Fax: **01202 662522**

## **Technical Enquiries**

To supplement the detailed technical brochures, technical advice on the application and use of products in the Hamworthy Heating range is available from our technical team in Poole and our accredited agents.

## **Site Assembly**

Hamworthy offer a service of site assembly for many of our products where plant room access is restricted. Using our trained staff we offer a higher quality of build and assurance of a boiler built and tested by the manufacturer.

## **Commissioning**

Commissioning of equipment by our own engineers, accredited agents or specialist sub-contractors will ensure the equipment is operating safely and efficiently.

## **Service Contracts**

Regular routine servicing of equipment by Hamworthy service engineers inspects the safety and integrity of the plant, reducing the risk of failure and improving performance and efficiency. Service contracts enable you to plan and budget more efficiently.

## **Breakdown service, repair, replacement**

Hamworthy provide a rapid response breakdown, repair or replacement service through head office at Poole and accredited agents throughout the UK.

## **Spare Parts**

We offer a comprehensive range of spare parts, providing replacement parts for both current and discontinued products. Delivery options are available to suit you. Please refer to our website for more details.

**CLENSTON  
AIR & DIRT SEPARATOR**

**Installation, Commissioning  
and Operating Instructions**

**Models: CL50, CL65, CL80, CL100  
CL125, CL150, CL200**

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INSTALLING, COMMISSIONING, OPERATING OR SERVICING EQUIPMENT.**

**COUNTRY OF DESTINATION : UNITED KINGDOM & REPUBLIC OF IRELAND**

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## CLENSTON - AIR AND DIRT SEPARATORS

### Introduction:

Clenston air & dirt separators must be installed by a competent person. All installations must conform to relevant regulations. Health & safety requirements must also be taken into account when installing any equipment.

The Clenston air & dirt separator units are designed to :

- a) remove dissolved gases from liquids such as air from water.  
When water is heated or the pressure reduced, gas microbubbles are released into the System. These microbubbles can be the cause of major problems such as pump failure, Corrosion and energy loss.
- b) remove dirt particles from heating and chilled water systems.  
When installed the Clenston can remove dirt particles as small as 10 microns.

### Installation:

Ensure there is clear access to the front of the unit to allow safe operation of the drain/flushing valves. Install at a sufficient height to allow the appliance to be safely drained. Take care when lifting and handling the unit.

This combined unit must be installed at the hottest part of the system (before the pumps). In a heating system this is the main flow from the boilers.

In a chilled water system the unit must be located in the return close to the chiller.

The static head must not exceed 30 metres in a Heating system for optimum performance.

Maximum static head must not exceed 15 metres in a chilled water system. N.B. if the static head is greater than these figures the efficiency of the Clenston is reduced .

It is considered good practice to fit an isolation valve either side of the unit to allow for removal.

### Flanges:

All flanges are to BS 4504 PN16 as standard.

### Commissioning:

The Clenston units are fitted with a fast bleed valve which should be used when initially filling the system. The same valve is used for draining off "scum" and also prevents the possibility of dirt clogging the air vent.

Please contact Hamworthy Heating Service department for further details of our commissioning services.

### Maintenance:

Maintenance will be required to remove trapped dirt and sludge. Opening the ball valve at the bottom of the unit does this. The valve may be opened while the system is under pressure.

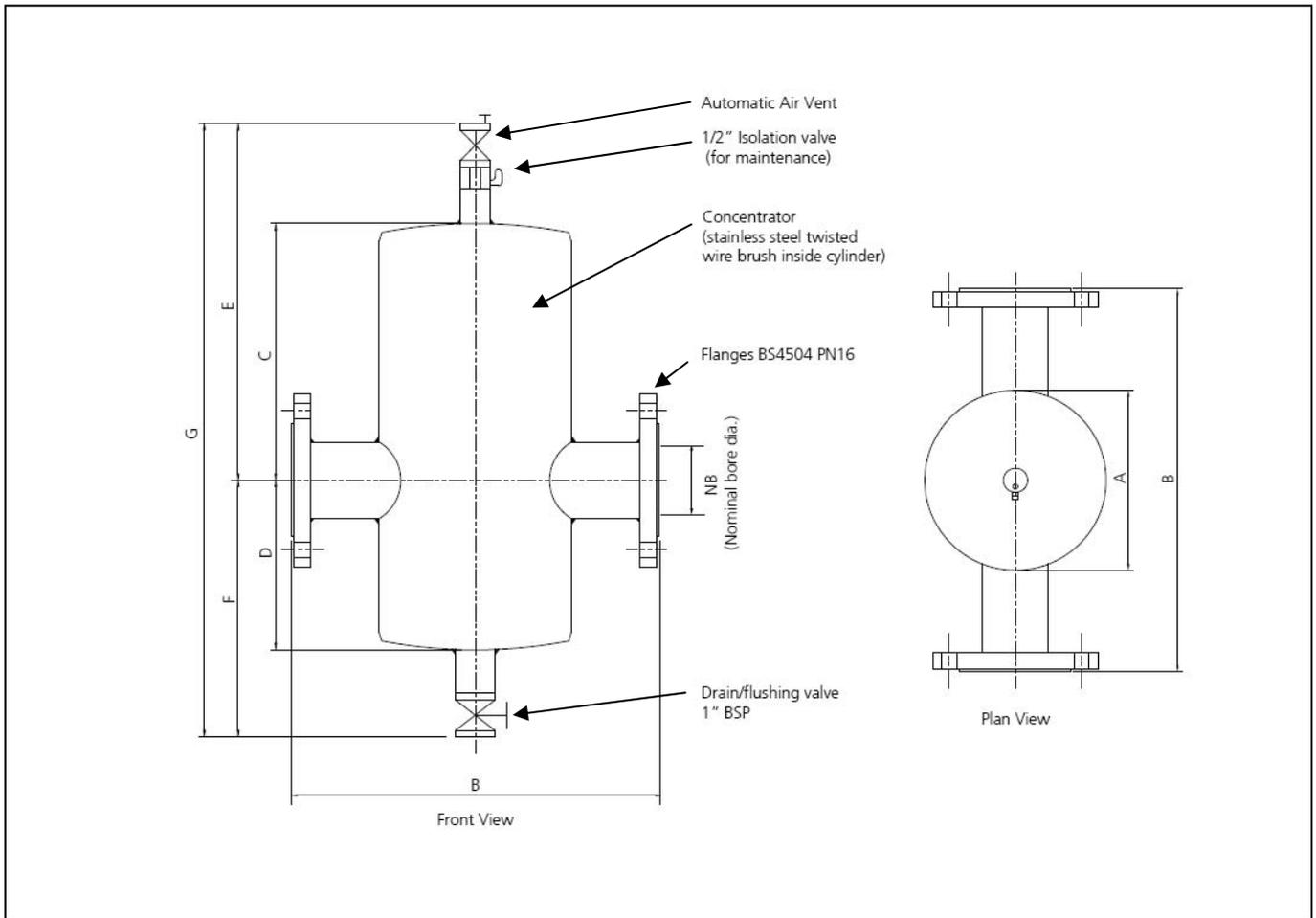
**Scalding is a danger at high pressures and temperatures. Ensure that the water is safely piped to drain before opening the valve.**

The system pressure will flush the dirt out. Leave the valve open until the collected dirt has been flushed out; repeat this operation every few days. Once the water is clear it may be possible to drain every 6 months or so depending on the size and age of the system.

Most of the dissolved air will be removed in a few days. However this may vary from system to system .In large systems it may take several weeks.

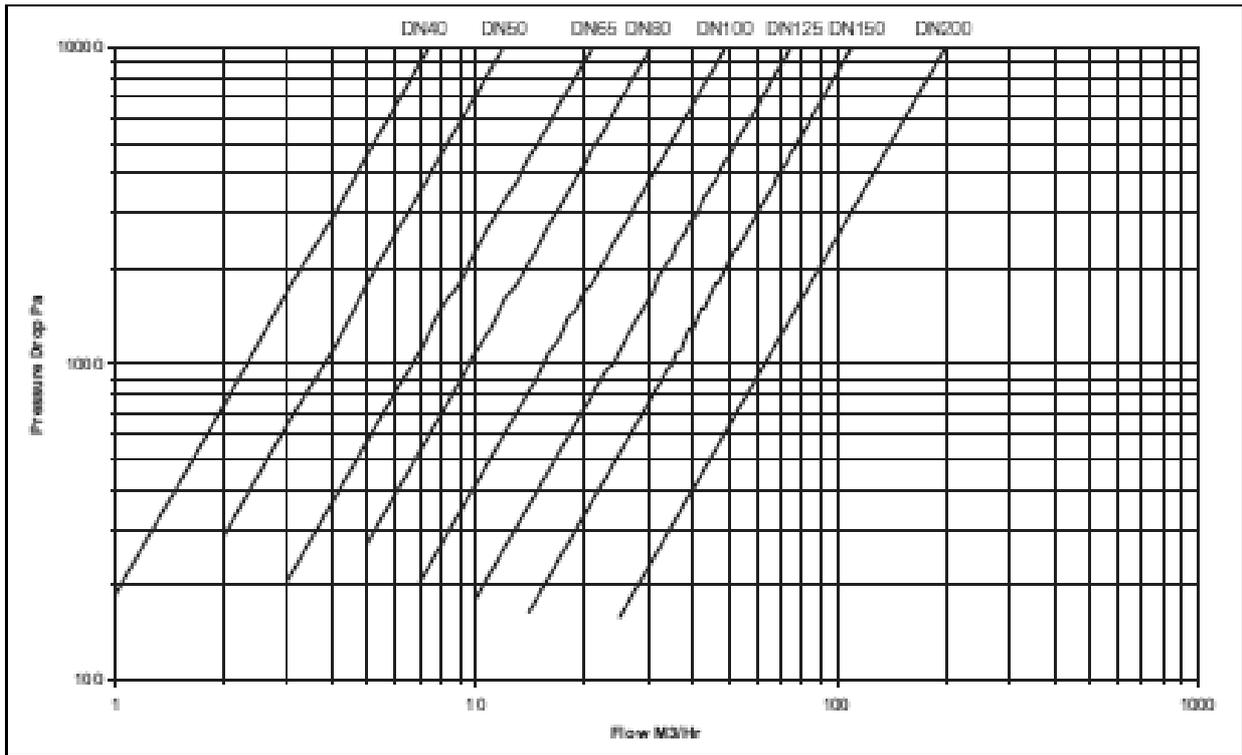
Dirt separators can only remove dirt that is circulating.

Technical data:



Product Code	Dimensions									Dry Weight Kg
	Nominal bore	Pipe Connection	A	B	C	D	E	F	G	
CL-50	50	DN50 - PN16	165	350	225	125	358	225	583	15
CL-65	65	DN65 - PN16	165	350	225	125	358	225	583	16
CL-80	80	DN80 - PN16	219	460	300	200	433	300	733	29
CL-100	100	DN100 - PN16	219	460	300	200	433	300	733	31
CL-125	125	DN125 - PN16	273	630	435	335	568	435	1003	39
CL-150	150	DN150 - PN16	324	630	435	335	568	435	1003	46
CL-200	200	DN200 - PN16	407	780	475	375	608	475	1083	62

Calculated pressure drop for the air & dirt separator



Rating :

Maximum working pressure : 10 Bar

Test pressure: 16 Bar

Max. working Temp: 110°C

## **MODEL RANGE & PART NUMBERS:**

Clenston CL50.....	532714057
Clenston CL65.....	532714058
Clenston CL80.....	532714059
Clenston CL100.....	532714060
Clenston CL125.....	532714061
Clenston CL150.....	532714062
Clenston CL200.....	532714063

### Spare Part Numbers:

Ball valve for drain.....	531911067
Automatic air vent (AAV).....	531905018
Isolation valve for AAV .....	531905017

For service or spares please contact:-

**Hamworthy Heating Limited**  
**Wessex House**  
**New Fields Business Park**  
**Stinsford Road**  
**Poole, Dorset BH17 0NF**

**Phone Number**\_\_\_01202 662500  
**Fax Number**\_\_\_\_\_01202 662522  
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**Spares**\_\_\_\_\_01202 662525  
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NOTES:

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# Hamworthy Heating Accredited Agents

## **Southern Ireland (Sales & Service)**

HEVAC Limited  
Naas Road, Dublin 12, Ireland  
tel: **00 353 141 91919** fax: **00 353 145 84806**  
email: **info@hevac.ie**

## **Scotland (Sales & Service)**

McDowall Modular Services  
2 Penson Road, Queenslie Industrial Estate, Glasgow, G33 4AG  
tel: **0141 336 8795** fax: **0141 336 8954**  
email:  
**MMS.McDowallModularServices@hamworthy-heating.com**

## **Northern Ireland (Sales & Service)**

HVAC Supplies Limited  
Unit A6, Dargan Court, Dargan Crescent, Belfast BT3 9JP  
tel: **028 9077 7737**  
email: **hvacsupplies@btconnect.com**

## **North East England (Service)**

Allison Heating Products  
12 Sunnyside Lane, Cleadon Village, Sunderland SR6 7XB  
tel: **0191 536 8833** fax: **0191 536 9933**  
email: **allison.heating@gmail.com**

# Hamworthy Heating Customer Service Centre

## **Sales**

tel: **01202 662552**  
email: **sales@hamworthy-heating.com**

## **Technical Enquiries**

tel: **01202 662505**  
email: **technical@hamworthy-heating.com**

## **Servicing**

tel: **01202 662555**  
email: **service@hamworthy-heating.com**

## **Spares**

tel: **01202 662525**  
email: **spares@hamworthy-heating.com**

British engineering excellence from Hamworthy Heating;  
the commercial heating and hot water specialists.



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