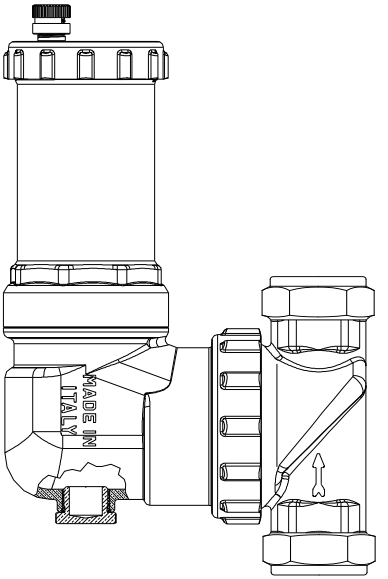
inta-Vent®

Intavent Automatic Air Vent

Installation and Maintenance Instructions



inta

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In this procedure document we have endeavoured to make the information as accurate as possible.
We cannot accept any responsibility should it be found that in any respect the information is inaccurate or incomplete or becomes so as a result of further developments or otherwise.

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Introduction

The Intavent automatic air vent (de-aerator) contains an innovative cartridge that separates the air bubbles generated inside the system from the flowing medium.

The flowing medium entering the de-aerator meets the resistance of the cartridge which captures the air bubbles and once they have merged and reached an adequate size they are released and rise upwards and are expelled by the automatic air vent valve.

These instructions cover the installation, operation and maintenance of the Intavent, please read the enclosed instructions before commencing the installation of this product, please note;

We recommend that the installation of any Inta product is carried out by an approved installer.

It is recommended, that an in-line strainer or magnetic filter such as the Intaklean 2 is fitted to protect system components.

Products

Intavent 22mm automatic air vent	IV22
Intavent 28mm automatic air vent	IV28
Intavent 3/4" automatic air vent	IV34
Intavent 1" automatic air vent	IV1

Technical Specification

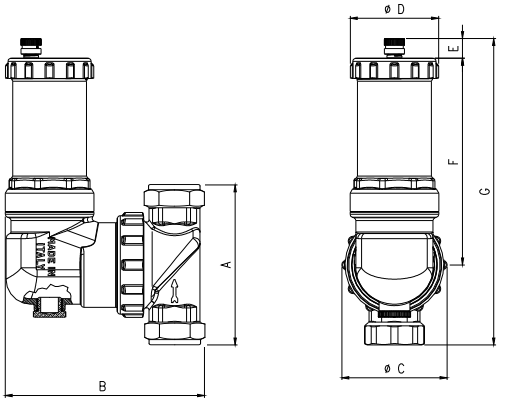
Maximum working pressure:	10 bar
Maximum discharge pressure:	10 bar
Max system temperature:	115˚C
Maximum glycol percentage:	30%
Threaded connections:	BS EN ISO 228
Compression connections:	BS EN 1254-2
Flow co-efficients:	
22mm / ¾" - Kv	9.5 m^3/hr
28mm / 1" - Kv	10.3 m^3/hr

Check Components

Before commencing remove all components from packaging and check each component with the contents list.

Ensure all parts are present, before discarding any packaging. If any parts are missing, do not attempt to install your Intavent automatic de-aerator until the missing parts have been obtained.

Dimensions



	A	B	C	D	E	F	G
22mm	98mm	127mm	68mm	57mm	13mm	135mm	200mm
28mm	102mm	127mm	68mm	57mm	13mm	135mm	202mm
3/4"	98mm	127mm	68mm	57mm	13mm	135mm	200mm
1"	102mm	127mm	68mm	57mm	13mm	135mm	200mm

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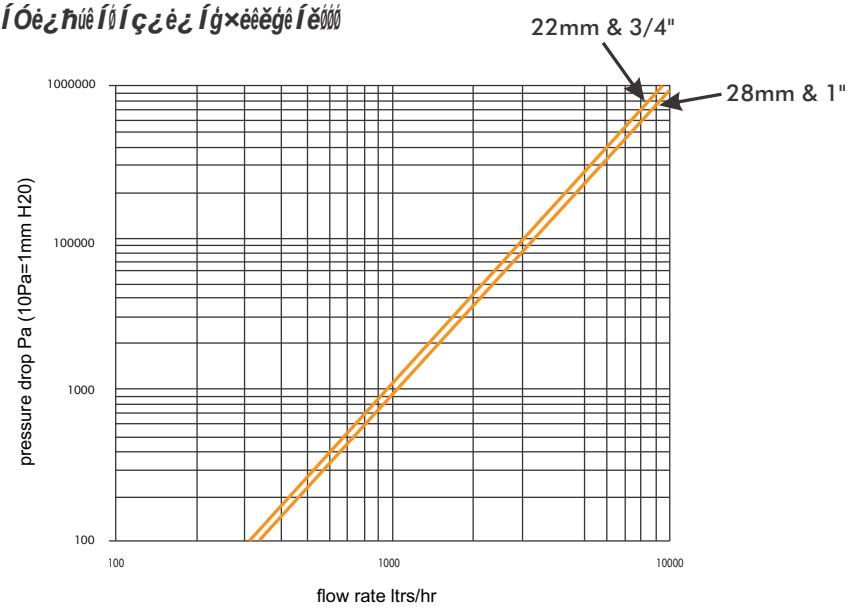
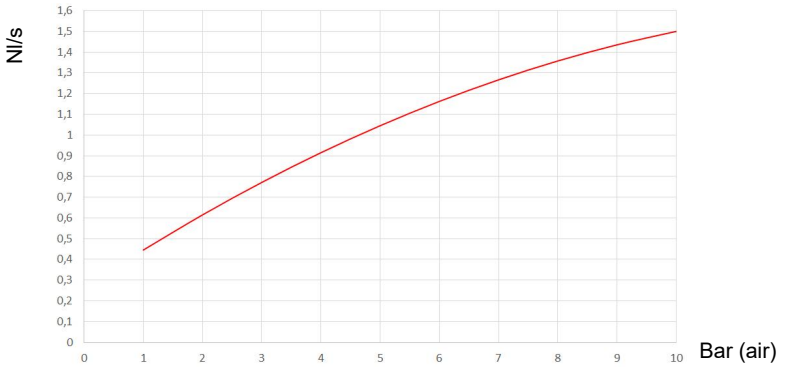
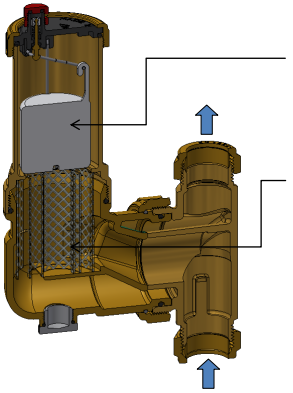


Discharge Capacity



Working Principle



High-performance air vent valve (discharge guaranteed up to 10 bar).

The cartridge is constructed entirely from stainless steel, offering exceptional durability and reliability under varying pressure and temperature conditions. Compared to other materials, stainless steel provides superior resistance to corrosion and wear, even in the presence of increasingly unpredictable impurities in the system.

Key Advantages

- The innovative spiral design features continuous section variations that generate a swirling motion in the fluid. This swirling effect enhances the release of microbubbles from the liquid without significantly impeding the flow.
- As the fluid flows through the cartridge, microbubbles are released and collect on the internal metal cage. Once the bubbles grow to a sufficient size, they rise naturally and are expelled by the passive component of the device—without the need for active mechanical intervention.

Introduction

The de-aerator contains an innovative cartridge that separates the air bubbles generated inside the system from the water.

The flow of water entering the de-aerator meets the resistance of the cartridge which captures the air bubbles and once they have reached an adequate size they rise upwards and are expelled by the automatic air vent valve.

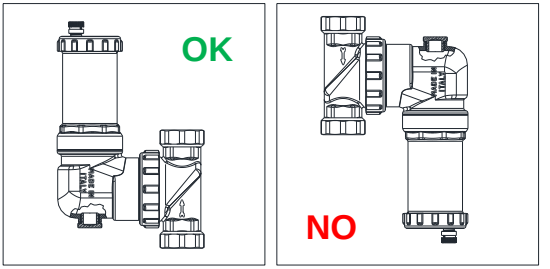
Warnings

- Carefully read the instructions in this manual before installing or performing maintenance on the components. Keep the manual in a safe place for future reference.
- Improper use of the product invalidates the warranty.
- If used with high temperature fluid care must be taken to avoid getting scolded. Before any installation or maintenance is undertaken check that the system water is at ambient temperature.
- Thoroughly flush the system before installing the de-aerator.

Installation

The Intavent de-aerator should be installed on the warmest part of the system, ideally just after the boiler on heating systems or the return on cooling system as this is where microbubbles are more likely to form.
Isolation valves should be installed before and after the de-aerator to allow scheduled maintenance work and filter cleaning.
The de-aerator must be installed with the flow arrow facing the direction of flow.

The Intavent de-aerator must be installed with the air vent facing upwards.



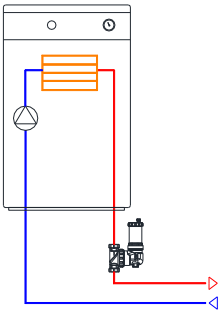


Diagram 1: installed on the system delivery pipe, on a vertical duct.

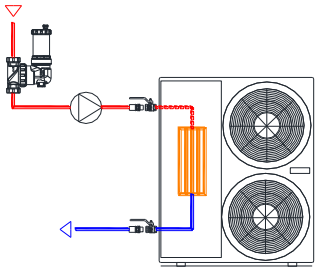


Diagram 2: installed on the system return pipe, at the cooling unit inlet.

Maintenance

Before carrying out maintenance, close the isolation valves upstream and downstream of the de-aerator and then use a pipe wrench to unscrew the upper part of the body.

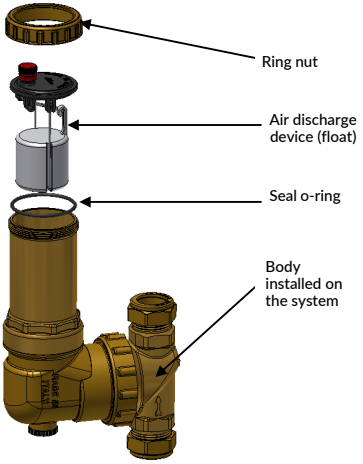
Once the cartridge has been removed and cleaned, refit it into the body.

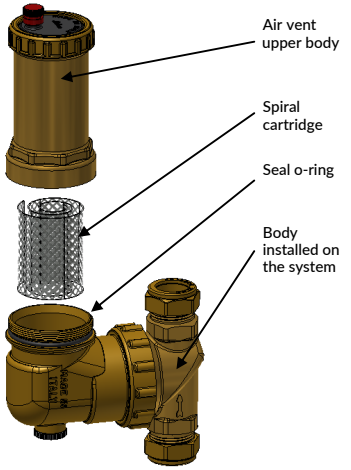
If the air vent valve leaks, it should be removed or replaced.

To remove the cap use a wrench to unscrew the ring nut and extract the vent valve and then clean it by flushing with clean water.

Carefully refit the float back into the upper part of the body, ensuring the o-ring is seated correctly and shows no signs of damaged before refitting the ring nut.

A ½" threaded plug is located at the bottom of the de-aerator so that a drain valve can be installed.





Notes

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Please leave this Manual for the User

To activate your product warranty please visit
www.intatec.co.uk
and click on Product Registration

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