ART. S111 DISAERATOR

TECHNICAL DATA SHEET 05/2018 - ENG

FUNCTION

ICMA S111 deaerators are used to discharge the air contained in the hydraulic circuits of air conditioning systems. Thanks to their characteristics they are able to eliminate all the air present in the system in a completely automatic way, even in the presence of high operating pressures.
ICMA S111 deaerators guarantee optimal operation of air conditioning systems, helping to solve problems such as:
- Noise, caused by the presence of air bubbles in the pipes
- Corrosion due to the presence of oxygen in the system
- Cavitation phenomena in circulation pumps
- Air pockets in the radiators with a consequent reduction in system efficiency.

PRODUCTS

Code	*Size*
93S111AD05	G ½" F
93S111AE05	G ¾" F

TECHNICAL FEATURES

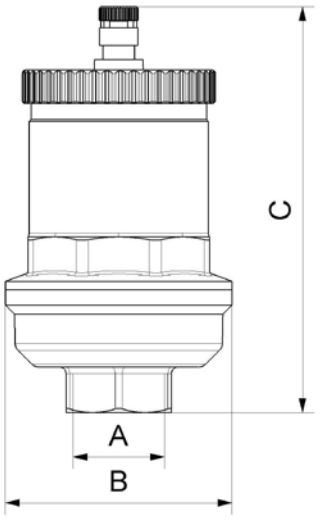
MATERIALS

Body	Brass UNI EN 12165 - CW617N
Cover	Brass UNI EN 12165 - CW617N
Floater	Polymethylpentene
Floater guide	Brass UNI EN 12164 CW614N
Obturator rod	Brass UNI EN 12164 CW614N
Floater lever	Stainless steel
Spring	Stainless steel
Gasket	EPDM PEROX - (alta resistenza)

TECHNICAL DATA

Working fluids	water, glycol solution
Max percentage glycol	50%
Working temperature	-30° /160°C
Max working pressure	10 bar
Max discharge pressure	10 bar
Connections	1/2" F – 3/4" F

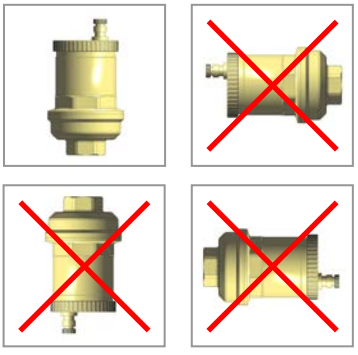
DIMENSIONS



CODE	A	B	C	WEIGHT
93S111AD05	1/2"	65	115	550 g.
93S111AE05	3/4"	65	115	550 g.

INSTALLATION

The ICMA deaerator must be installed in a vertical position.
Below are some indications to follow scrupulously for the correct operation of the device:
- Install the ICMA S111 deaerator at the highest point of the system, a zone in which all the air present in the system will tend to concentrate and from which it will be automatically expelled.
- We recommend installing a shut-off valve before the device to simplify maintenance operations.
- Installation in non-inspectionable places is strongly discouraged.
- Do not install the deaerator in places with risk of frost.

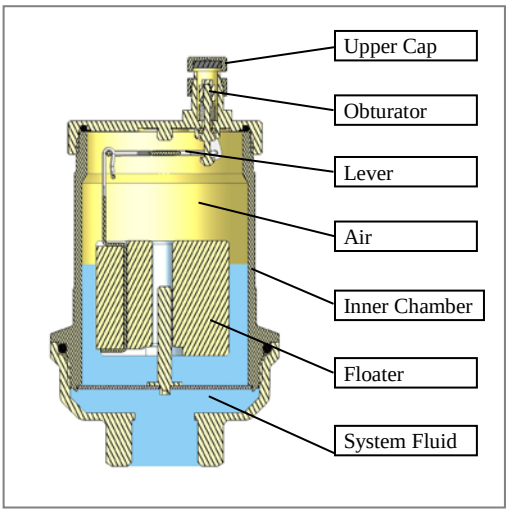


ICMA S.p.a. via Garavaglia, 4 20012 Cuggiono (MI) – ITALIA
Tel. +39 02 97249134 / +39 02 97249135
www.icmaspa.it e-mail: sales@icmaspa.it

OPERATING PRINCIPLE

The operation of the deaerator is determined by the movement of the float present inside it. The accumulation of air in the upper part of the internal chamber of the deaerator causes the consequent lowering of the liquid level of the system, this causes the float downwards and through the system of linkages to which it is connected opens the shutter, unloading excess air.
The shutter will automatically close again only when all the excess air has been expelled and the level of the liquid and float will be returned to the rest position.

ATTENTION: During normal operation the upper cap must be slightly open, in this way the air accumulated by the deaerator is automatically discharged (closing the upper cap instead prevents the deaerator from discharging the air).

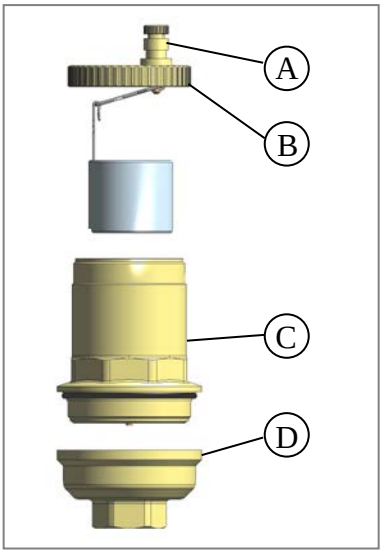


MAINTENANCE

ICMA deaerators are designed to facilitate maintenance and cleaning operations without having to remove the valve body from the pipeline.

- Unscrewing the Cap "A" it is possible to check the correct functioning of the deaerator, by gently pressing the small pin present in the valve seat you get the manual discharge of the air inside the deaerator (attention: inside the deaerator it is right that there is always the presence of a certain amount of air between the float and the cover, all the excess air is instead automatically expelled from the system).
- By unscrewing the Cap "B", on the other hand, it is possible to access the internal parts of the deaerator which command the opening of the shutter and consequently the automatic discharge of the excess air, so it is possible to check its status and check for any dirt. .
- By unscrewing the sleeve "C", it is possible to remove all the air drier from the system to check it and, if necessary, clean it in another location, without having to remove the base body "D" from the pipe.

NB: the seal between the B-C-D components of the deaerator is guaranteed by the presence of O-rings in peroxide EPDM. During the disassembly / assembly phases of these components, pay particular attention not to damage the O-rings to avoid compromising the seal.

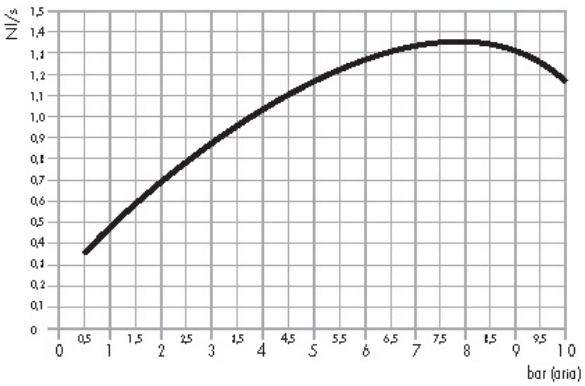


SAFETY

To maintain the good state of the internal components, during cleaning, it is necessary not to use detergents containing solvents. Read and strictly observe the assembly and commissioning instructions before operating the appliance in order to prevent accidents and system failures caused by improper use of the product. Please note that the right to the warranty is void in case of unauthorized modifications or tampering during the assembly and construction phase. Observe all safety warnings and, in case of doubts concerning the use or modification of parameters or functions, request help from qualified personnel.

HYDRAULICAL FEATURES

Capacità di scarico in fase di caricamento impianto



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