

DISCAL[®] air separator



NA551 series ASME/CRN 8, 10, 12 inch with flanges

Submittal Data 02905.1 NA — Issue Date 10/2018

Application

Air separators are used to continuously remove the air contained in the hydronic circuits of heating and cooling systems. The air discharge capacity of these devices is very high. They are capable of removing automatically all the air present in the system down to the micro-bubble level.

The circulation of fully de-aerated water enables the equipment to operate under optimum conditions, free from noise, corrosion, localized or mechanical damage. Micro-bubbles, fusing with each other, increase in volume (get larger) until they become large enough to rise to the top where they are automatically released.

Typical Specification

Furnish and install on the plans and described herein, a Caleffi DISCAL[®] Air Separator as manufactured by Caleffi. Each separator must be designed with a blowdown drain port, side drain valve and automatic air vent. The separator design must include a 304 stainless steel coalescing internal element to automatically remove all air present in the system. The separator must be constructed in accordance with the latest revision of the ASME Boiler and Pressure Vessel Code and stamped for 200 psi (14 bar) working pressure with ASME U stamp and CRN registered (12" pending). Each separator shall be Caleffi model NA551 or approved equal. (See product instructions for specific installation information.)



Technical specification

- Materials**
- body: epoxy resin coated steel
 - internal element: 304 stainless steel
 - air vent float: PP
 - seal: peroxide-cured EPDM
 - air vent float guide pin and linkage: stainless steel
 - side drain shut-off valve: brass

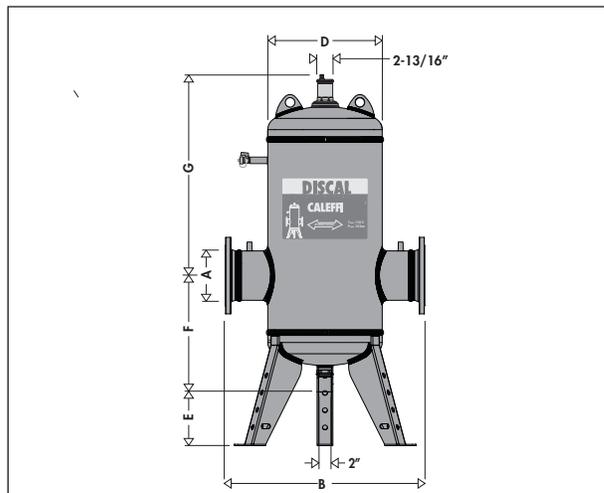
Performance

- Suitable fluids: water, glycol solution
- Max. percentage of glycol: 50%
- Max. working pressure: 200 psi (10 bar)
- Temperature range: 32–270°F (0–132°C)
- Air separation efficiency: 100% removal to micro-bubble level

- Connections**
- flanged: 8"– 12" ANSI B16.5 150 CLASS RF
 - drain pipe: 2" NPT male
 - side drain shut-off valve: ¾" GHT
 - thermo well tap (8 - 12"): ½" NPT female

Agency Approval - NA551 series is designed and built in accordance with Section VIII, Division 1 of the ASME Boiler and Pressure Vessel Code and tagged and registered with the National Board of Boiler and Pressure Vessel Inspector, and CRN registered (12" pending, consult Caleffi).

Dimensions



Code	A	B	D	E	F	G	Cap. (gal)	Wt (lb)
NA551200A	8"	35 7/16"	20"	8 1/2"	20"	32 1/2"	56	335
NA551250A	10"	41 3/4"	26"	8 1/2"	22 5/8"	38 1/4"	110	617
NA551300A	12"	46 1/2"	30"	8 1/2"	25 3/8"	43 3/8"	169	871

		Flow capacity		
		8"	10"	12"
4.0 f/s	GPM	625	980	1,410
	l/s	40.0	62.0	89.0
10.0 f/s	GPM	1,570	2,450	3,530
	l/s	99.0	154.5	222.7
	Cv	1,109	1,387	1,664

We reserve the right to change our products and their relevant technical data, contained in this publication, at any time and without prior notice. Contractors should request production drawings if prefabricating the system

Job name _____
 Job location _____
 Engineer _____
 Mechanical contractor _____
 Contractor's P.O. No. _____
 Representative _____

Size _____
 Quantity _____
 Approval _____
 Service _____
 Tag No. _____
 Notes _____