

# DISCAL<sup>®</sup> air separator



## NA551 series, 2 through 6 inch with flanges

Submittal Data 2905 NA — Issue Date 10/2018

### Application

Air separators are used to continuously remove the air contained in hydronic circuits of heating and cooling systems. The air discharge capacity of these devices is very high. They automatically remove all the air present in the system down to micro-bubble level with low head loss due to the special internal shape of the separator body. The circulation of fully de-aerated water enables the equipment to operate under optimum conditions, free from noise, corrosion, localized or mechanical damage.

### Typical Specification

Furnish and install on the plans and described herein, a Caleffi DISCAL<sup>®</sup> 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 medium 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 150 psi (10 bar) working pressure with ASME U stamp and CRN registered. Each separator shall be a Caleffi model NA551 or approved equal.

(See product instructions for specific installation information.)



### Technical data

Materials

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

### Performance

Suitable fluids: water, glycol solution  
 Max. percentage of glycol: 50%  
 Max. working pressure: 150 psi (10 bar)  
 Temperature range (vessel): 32–270°F (0–132°C)  
 Air separation efficiency: 100% removal to microbubble level

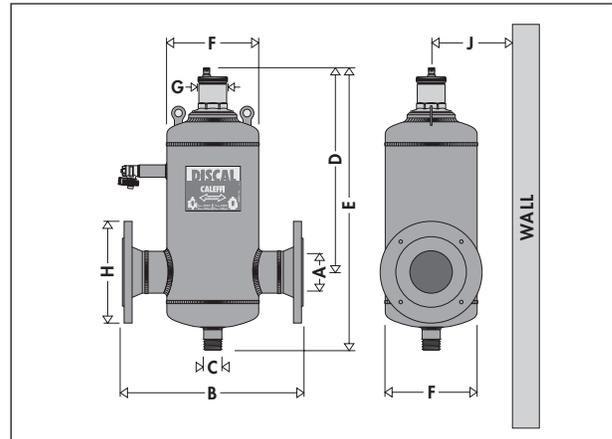
Connections

- flanged: ANSI B16.5 150 CLASS RF
- drain pipe: 1" NPT male
- side drain shut-off valve: 3/4" GHT

### 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 Inspectors, stamped for 150 psi (10 bar) working pressure, with ASME U stamp and CRN registered.

### Dimensions



Code	A	B	C	D	E	F
NA551050A	2"	13 3/4"	1"	14 3/4"	19 15/16"	6 5/8"
NA551060A	2 1/2"	13 3/4"	1"	14 3/4"	19 15/16"	6 5/8"
NA551080A	3"	18 3/8"	1"	17 1/8"	23 7/16"	8 5/8"
NA551100A	4"	18 1/2"	1"	17 1/8"	23 7/16"	8 5/8"
NA551120A	5"	25"	1"	21 1/16"	30 1/2"	12 3/4"
NA551150A	6"	25"	1"	21 1/16"	30 1/2"	12 3/4"

Code	G	H	J†	Cap (gal)	Wt (lb)
NA551050A	2 13/16"	6"	6 5/16"	1.8	34
NA551060A	2 13/16"	7"	6 5/16"	1.8	35
NA551080A	2 13/16"	7 1/2"	7 7/16"	4.8	62
NA551100A	2 13/16"	9"	7 7/16"	4.8	67
NA551120A	2 13/16"	10"	9 3/8"	13.7	106
NA551150A	2 13/16"	10"	9 3/8"	13.7	117

†This dimension allows for a minimum of 3" wall clearance to accommodate insulation if used.

		Flow capacity — steel						
		Size	2"	2 1/2"	3"	4"	5"	6"
4.0 f/s	GPM		39	60	90	160	245	355
	l/s		2.5	3.8	5.7	10	15.5	22.4
10.0 f/s	GPM		100	155	220	400	615	880
	l/s		6.3	9.8	14	25.2	38.8	55.5
	Cv		87	174	208	324	520	832

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 \_\_\_\_\_