DISCAL® air separator



551 series, 2 through 6 inch

Submittal Data 2906 NA — Issue Date 10/2020

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® 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. Each separator shall be a Caleffi model 551 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 (A):

ANSI B16.5 150 CLASS R

- flanged (A):
- threaded(T):
- drain pipe:
- drain shut-off valve:

ANSI B16.5 150 CLASS RF

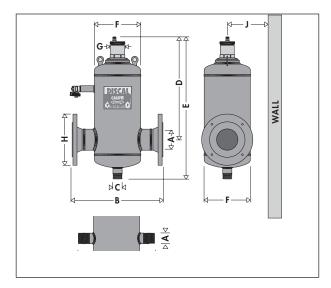
2" & 2½" NPT male

1" NPT male

34" GHT

| | | Flow capacity — steel | | | | | |
|----------|------|-----------------------|--------|-----|------|------|------|
| | Size | 2" | 2 1/2" | 3" | 4" | 5" | 6" |
| 4.0 f/s | GPM | 39 | 60 | 90 | 160 | 245 | 355 |
| 4.0 1/8 | I/s | 2.5 | 3.8 | 5.7 | 10 | 15.5 | 22.4 |
| 10.0 f/- | GPM | 100 | 155 | 220 | 400 | 615 | 880 |
| 10.0 f/s | I/s | 6.3 | 9.8 | 14 | 25.2 | 38.8 | 55.5 |
| | Cv | 87 | 174 | 208 | 324 | 520 | 832 |

Dimensions



| Code | Α | В | С | D | E | F |
|-----------------|-------|------|----|---------|----------|-------|
| 551 050A | 2" | 13¾" | 1" | 14¾" | 1915/16" | 65/8" |
| 551 050T | 2" | 13" | 1" | 14¾" | 1915/16" | 65/8" |
| 551 060A | 21/2" | 13¾" | 1" | 14¾" | 1915/16" | 65/8" |
| 551 060T | 2½" | 13" | 1" | 14¾" | 1915/16" | 65/8" |
| 551 080A | 3" | 18%" | 1" | 171/8" | 237/16" | 85/8" |
| 551 100A | 4" | 18½" | 1" | 171/8" | 237/16" | 85/8" |
| 551 120A | 5" | 25" | 1" | 217/16" | 30½" | 12¾" |
| 551 150A | 6" | 25" | 1" | 217/16" | 30½" | 12¾" |

| Code | G | н | J† | Cap (gal) | Wt (lb) |
|-----------------|---------|-----|--------|--------------|---------|
| 551 050A | 213/16" | 6" | 65/16" | 1.8 | 34 |
| 551 050T | 213/16" | | 65/16" | 1.8 | 30 |
| 551 060A | 213/16" | 7" | 65/16" | 1.8 | 35 |
| 551 060T | 213/16" | | 65/16" | 1.8 | 31 |
| 551 080A | 213/16" | 7½" | 75/16" | 4.8 | 62 |
| 551 100A | 213/16" | 9" | 75/16" | 4.8 | 67 |
| 551 120A | 213/16" | 10" | 9%" | 13.7 | 106 |

 $^{^{\}dagger}\text{This}$ dimension allows for a minimum of 3" wall clearance to accommodate insulation if used.

| We reserve the right to change our products and their relevant technical da | ta, contained in this publication, at any time and without prior notice. Contractors should request production drawings if prefabricating the syste |
|---|---|
| Job name | Size |
| Job location | Quantity |
| Engineer | Λοργονοί |
| Mechanical contractor | Service |
| Contractor's P.O. No. | Tag No |
| Representative | Notes |