

DISCAL® Air Separator

551 Series, Brass

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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 high. They are capable of automatically removing 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 any noise, corrosion, localized overheating and 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 brass valve body, seals in EPDM, and removable internal glass-reinforced nylon fiber mesh - PA66G30, coalescing medium (stainless steel for compact version). (See product instructions for specific installation information.)

Technical specifications

Materials:

- Body: brass
- Coalescing Medium (compact version): stainless steel
- Coalescing Medium: PA66GF30
- Seal: EPDM

Suitable fluids: water, with up to a 50% glycol solution

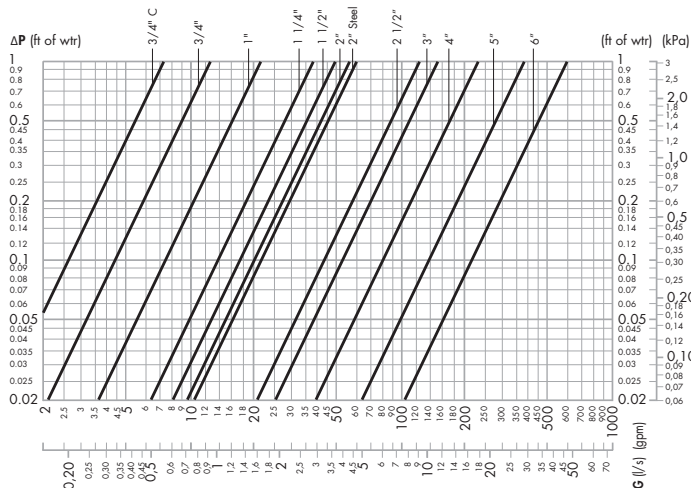
Max working pressure: 150 psi (10 bar)

Temperature range: 32–250°F (0–120°C)

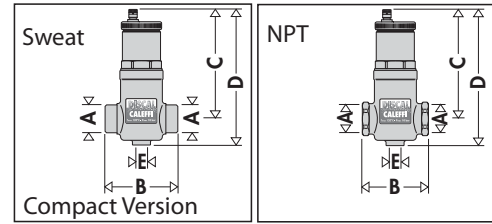
Connections:

- Main (compact version): 3/4" sweat; 3/4" NPT
- Main: 3/4" - 1" - 1 1/4" - 1 1/2" - 2" NPT female
1" - 1 1/4" - 1 1/2" - 2" sweat
- Blowdown: 1/2" NPT male

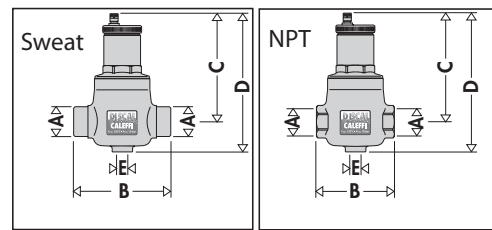
Hydraulic characteristics



Dimensions



| Code | A | B | C | D | E | Weight (lb) | (kg) |
|---------|----------|---------|--------|--------|------|-------------|------|
| 551022A | 3/4" | 3-1/16" | 5-5/8" | 6-7/8" | 1/2" | 2.0 | 0.9 |
| 551003A | 3/4" SWT | 3-1/16" | 5-5/8" | 6-7/8" | 1/2" | 2.0 | 0.9 |



| Code | A | B | C | D | E | Weight (lb) | (kg) |
|---------|------------|---------|---------|--------|------|-------------|------|
| 551005A | 3/4" | 4-5/16" | 5-3/4" | 7-1/2" | 1/2" | 3.7 | 1.7 |
| 551006A | 1" | 4-5/16" | 5-3/4" | 7-1/2" | 1/2" | 3.7 | 1.7 |
| 551007A | 1-1/4" | 4-7/8" | 6-9/16" | 8-1/4" | 1/2" | 4.9 | 2.2 |
| 551008A | 1-1/2" | 4-7/8" | 6-9/16" | 8-1/4" | 1/2" | 4.9 | 2.2 |
| 551009A | 2" | 5-1/8" | 6-9/16" | 8-1/4" | 1/2" | 4.9 | 2.2 |
| 551028A | 1" SWT | 5-1/16" | 5-3/4" | 7-1/2" | 1/2" | 3.7 | 1.7 |
| 551035A | 1-1/4" SWT | 5-3/16" | 6-5/16" | 8-1/4" | 1/2" | 3.7 | 1.7 |
| 551041A | 1-1/2" SWT | 5-3/4" | 6-9/16" | 8-1/4" | 1/2" | 4.9 | 2.2 |
| 551054A | 2" SWT | 6-1/8" | 6-9/16" | 8-1/4" | 1/2" | 5.5 | 2.5 |

Flow capacity

The fluid velocity at connections for DISCALDIRT 546 series air and dirt separators is recommended to not exceed 10.0 f/s. Above this speed, heavy internal turbulence and noise can occur and air and dirt elimination efficiency begins to fall measurably. Optimal air and dirt elimination performance occurs at fluid velocities of 4.0 f/s or less. See the flow capacity chart.

| | | FLOW CAPACITY | | | | | | |
|----------------------|-----|---------------|--------|------|------|--------|--------|------|
| | | Size | 3/4" C | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| Optimal (4.0 f/s) | GPM | | 6.0 | 8.0 | 9.3 | 15.3 | 23.9 | 36.1 |
| | l/s | | 0.4 | 0.5 | 0.6 | 1.0 | 1.5 | 2.3 |
| Max. (10.0 f/s) | GPM | | 14.3 | 19.0 | 22.1 | 36.4 | 56.8 | 86.0 |
| | l/s | | 0.9 | 1.2 | 1.4 | 2.3 | 3.6 | 5.4 |
| Cv | | | 11.6 | 19.1 | 32.5 | 56.4 | 73.1 | 81 |

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 _____