

# DISCAL DIRT<sup>®</sup> air and dirt separator

## 546 Series, Steel 2 - 6 inch Flanged



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### Application

Air and dirt separators are used to continuously remove the air and debris contained in the hydronic circuits of heating and cooling systems. The air discharge of these devices is very high. They are capable of automatically removing all of the air present in the system down to the microbubble level. The DISCALDIRT<sup>®</sup> air and dirt separator also removes any solid impurities in the system. The impurities collect at the bottom of the device and can be flushed through the integral drain shut-off valve. The circulation of fully de-aerated and cleaned water enables the equipment to operate under optimum conditions, free from noise, corrosion, or mechanical damage.

### Typical Specification

Furnish and install on the plans and described herein, a Caleffi DISCALDIRT air and dirt separator as manufactured by Caleffi. Each separator must be designed with a side drain valve and automatic air vent. The separator design must include a large internal volume, and a stainless steel internal screen to automatically remove all dirt present in the system with particle separating capacity to 5µm (0.2 mil). Each separator shall be Caleffi model 546 or approved equal. (See product instructions for specific installation information.)

### Technical Data

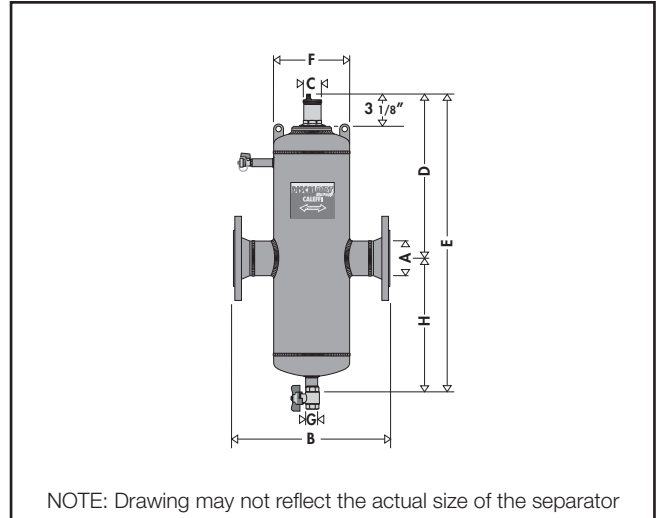
- Materials** - body: epoxy resin painted steel
- air vent body: brass
  - internal element: stainless steel
  - air vent float: PP
  - air vent float guide pin: stainless steel
  - air vent float linkages: stainless steel
  - spring: stainless steel
  - seals: EPDM
  - bottom drain shut-off valve: brass
  - 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
  - Particle separation capacity: to 5 µm (0.2 mil)
  - Connections - flanged: 2½"–6" ANSI B16.5 150 CLASS RF
  - bottom drain valve: 1" NPT female

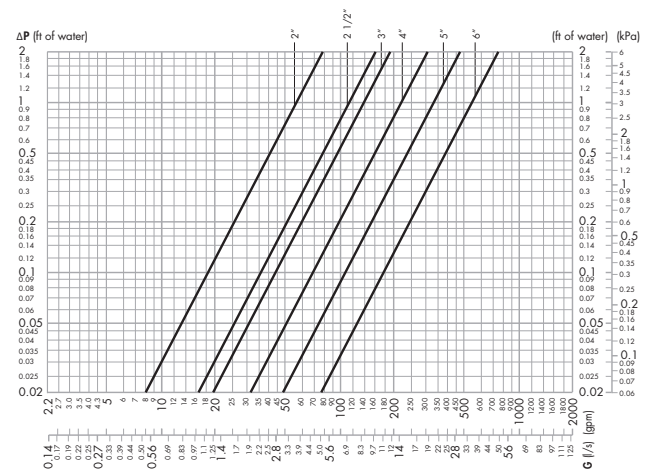
		FLOW RATE					
		Size	2"	2½"	3"	4"	5"
4.0 f/s	GPM	37	63	95	149	259	380
	Cv	87	174	208	324	520	832
10.0 f/s	GPM	89	150	227	355	816	904
	Cv	87	174	208	324	520	832

### Dimensions



Code	A	B	C	D	E	F	G	H	Cap. (gal)	Wt. (lb)	Wt. (kg)
546050A	2"	13¾"	2⅜"	14⅞"	28¼"	6⅞"	1"	13⅞"	3.6	40	18.1
546060A	2½"	13¾"	2⅜"	14⅞"	28¼"	6⅞"	1"	13⅞"	3.6	42	18.6
546080A	3"	18¾"	2⅜"	17"	34½"	8⅞"	1"	17½"	7.6	73	33.1
546100A	4"	18½"	2⅜"	17"	34½"	8⅞"	1"	17½"	7.8	78	35.4
546120A	5"	25"	2⅜"	21⅞"	46⅞"	12¾"	1"	25⅞"	22.4	181	82.1
546150A	6"	25"	2⅜"	21⅞"	46⅞"	12¾"	1"	25⅞"	23.0	188	85.3

### Hydraulic characteristics



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	_____	Size	_____
Job location	_____	Quantity	_____
Engineer	_____	Approval	_____
Mechanical contractor	_____	Service	_____
Contractor's P.O. No.	_____	Tag No.	_____
Representative	_____	Notes	_____