

DISCAL DIRT[®] air and dirt separator



546 Series, brass

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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[®] 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 brass body with large internal volume, seals in peroxide-cured EPDM, blowdown drain port, and removable glass-reinforced nylon fiber mesh (PA66GF30) internal element screen/coalescing medium to automatically remove all air present in the system and all dirt present in the system, with particle separating capacity to 5µm (0.2 mil). Air separation efficiency 100% removal to microbubble level. Each air and dirt separator shall be a Caleffi model 546 or approved equal. (See product instructions for specific installation information.)

Technical Data

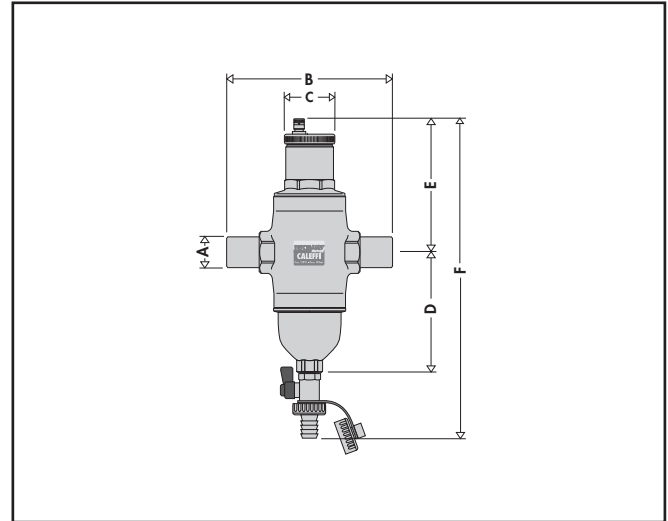
- Materials** - body: brass
 - dirt separation chamber: brass
 - air vent body: brass
 - internal element: glass reinforced nylon, PA66GF30
 - air vent float: PP
 - air vent float guide pin: stainless steel
 - air vent float linkages: stainless steel
 - spring: stainless steel
 - seals: peroxide-cured EPDM
 - bottom 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: 32–250°F (0–120°C)
 Air separation efficiency: 100% removal to microbubble level
 Particle separation capacity: to 5 µm (0.2 mil)
 Connections - main: 1" & 1-1/4" sweat; 1" NPT male
 - drain shut-off valve: 3/4" garden hose connection

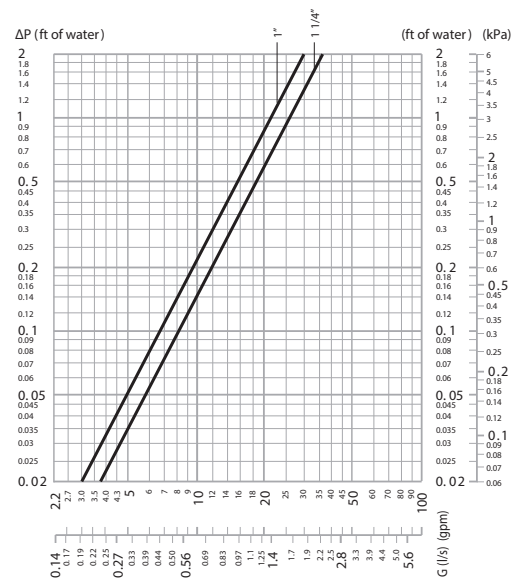
FLOW RATE			
	Size	1"	1 1/4"
4.0 f/s	GPM	10	15
	Cv	32	40

Dimensions



Code	Connections	A	B	C	D	E	F	Wt. (lb)	Wt. (kg)
546096A	Sweat	1"	7 3/8"	2 1/8"	5"	5 1/2"	12 3/4"	8.3	3.8
546016A	NPT male	1"	7 3/8"	2 1/8"	5"	5 1/2"	12 3/4"	8.3	3.8
546097A	Sweat	1 1/4"	6 3/8"	2 1/8"	5"	5 1/2"	12 3/4"	8.3	3.8

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

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