DIRTCAL® Dirt Separator

5462 Series

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Application

In heating and air conditioning control systems, the circulation of water containing impurities may result in rapid wear and damage to components such as pumps and control valves. It also causes blockages in heat exchangers, heating elements and pipes, resulting in lower thermal efficiency within the system. The dirt separator separates off these impurities, which are mainly made up of particles of sand and rust, collecting them in a large collection chamber, from which they can be removed even while the system is in operation. This device is capable of efficiently removing even the smallest particles, with very low head loss. Patented.

Typical Specification

Furnish and install on the plans and described herein, a Caleffi DIRTCAL® Dirt Separator as manufactured by Caleffi. Each separator must be designed with a blowdown drain port. The separator design must include a large internal volume and a removable PA66G30 glass-fiber reinforced nylon internal mesh element screen to automatically remove all dirt present in the system, with particle separating capacity to 5µm (0.2 mil). Each dirt separator shall be a Caleffi model 5462 or approved equal.

(See product instructions for specific installation information.)

Technical Specifications

Materials:	
- Body, dirt collection chamber and to	op plug: brass
- Int. element:	PA66G30
- Hydraulic seal:	EPDM
- Drain valve:	brass
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)
Particle separation capacity:	to 5 µm (0.2 mil)
Connections:	
- Main:	3/4", 1", 1 1/4", 1 1/2", 2" NPT female
	1", 1 1/4", 1 1/2", 2" sweat
- Top:	1/2" F (with plug)
- Drain:	3/4" garden hose

Flow Capacity

The maximum fluid velocity recommended at the unit connections is \sim 4 f/s. The following table shows the maximum flow rates to comply with this condition.

	Flow Capacity				
Size	3/4″	1″	1 1/4″	1 1/2″	2″
GPM	6.0	9.3	15.3	23.9	36.0
L/sec.	0.4	0.6	1.0	1.5	2.3
Cv	18.8	32.6	56.6	73.3	81.0



Dimensions



Code	A	В	С	D	E	Weight (lb)	(kg)
546205A	3/4" NPT	4 5/16"	1 1/4"	5"	2"	4.2	1.9
546206A	1" NPT	4 5/16"	1 1/4"	5"	2"	4.2	1.9
546207A	1 1/4" NPT	4 7/8"	1 1/4"	6"	2"	5.3	2.4
546208A	1 1/2" NPT	4 7/8"	1 1/4"	6"	2"	5.3	2.4
546209A	2" NPT	5 1/8"	1 1/4"	6"	2"	5.3	2.4
546228A	1" Sweat	5 1/16"	1 1/4"	5"	2"	4.2	1.9
546235A	1 1/4" Sweat	5 3/16"	1 1/4"	6"	2"	4.2	1.9
546241A	1 1/2" Sweat	5 3/4"	1 1/4"	6"	2"	4.9	2.2
546254A	2" Sweat	6 1/8"	1 1/4"	6"	2"	5.5	2.5

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	Quan	ity
Engineer	Appro	val
Mechanical contractor	Servic	e
Contractor's P.O. No.	Tag N	0
Representative	Notes	

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