

DIRTMAG[®] magnetic dirt separator



5465M Steel 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 DIRTMAG[®] magnetic dirt separator removes both ferrous and non-ferrous impurities continuously, featuring powerful removable magnets that remove up to 100% of the ferrous impurities, including magnetite, that can form in a hydronic system, 2 ½ times the removal performance of a standard dirt separator.

Typical Specification

Furnish and install on the plans and described herein, a Caleffi DIRTMAG[®] magnetic 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 stainless steel and HDPE internal element to automatically remove all dirt present in the system with particle separating capacity to 5 µm (0.2 mil), and a stack of neodymium rare-earth magnets inside a brass dry-well, removable for purging, with up to 100% ferrous impurities, including magnetite, separation efficiency. (See product instructions for specific installation information.)



Technical Data

Materials

Body: epoxy resin painted steel
 Internal element: stainless steel and HDPE
 Hydraulic seal: non-asbestos fiber
 Drain valve: brass
 Magnet: neodymium rare-earth
 Magnet probe dry-well: brass

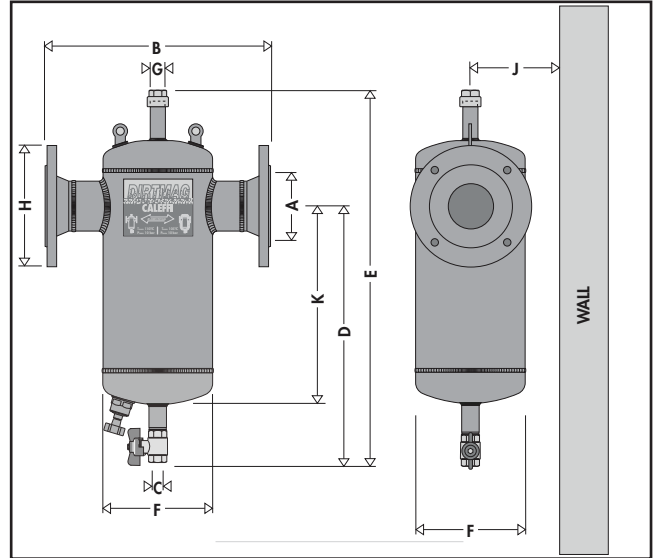
Performance

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)
 Particle separation capacity: to 5 µm (0.2 mil)
 Ferrous impurities separation efficiency: up to 100% removal
 Connections:
 flanged: 2" - 4" ANSI B16.5 150 CLASS RF
 top: 3/4" M (with cap)
 drain valve: 1" NPT

Vessel Volume

Size	2"	2 ½"	3"	4"
Capacity (gal)	1.8	1.8	4.8	4.8

Dimensions



Code	A	B	C	D	E
546550AM	2"	13 ¾"	1"	16 5/16"	23 7/8"
546560AM	2 ½"	13 ¾"	1"	16 5/16"	23 7/8"
546580AM	3"	18 3/8"	1"	20 11/16"	30 5/8"
546510AM	4"	18 3/8"	1"	20 11/16"	30 5/8"

Code	F	G	H	J*	K	Wt (lb)
546550AM	6 5/8"	¾"	6"	6 5/16"	12"	41
546560AM	6 5/8"	¾"	7"	6 5/16"	12"	41
546580AM	8 5/8"	¾"	7 ½"	7 5/16"	13 3/8"	58
546510AM	8 5/8"	¾"	9"	7 5/16"	13 3/8"	58

*Allows for a minimum of 3" wall clearance to accommodate insulation if used.

FLOW RATE at 4 ft/sec				
Size	2"	2 ½"	3"	4"
GPM	37	63	95	149
Cv	88	176	211	328

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 _____