

DIRTMAG[®] magnetic dirt separator



NA5465M ASME Steel 8, 10, 12, 14 inch

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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, 2½ 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. The separator must be designed and built in accordance with Section VIII, Division 1 of the ASME Boiler and Pressure Vessel Code and tagged and registered with the National Board of Boiler and Pressure Vessel Inspectors, stamped for 150 psi (10 bar) working pressure, with ASME U stamp. (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

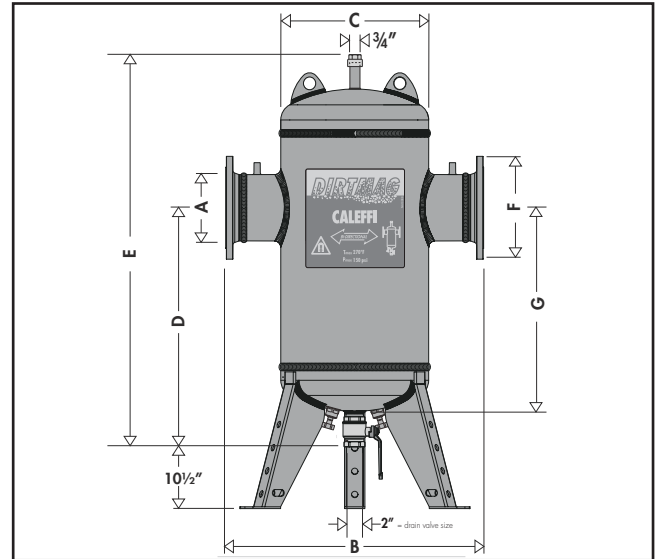
Suitable fluids: water, glycol solution
Max. percentage of glycol: 50%
Max. working pressure: 150 psi (10 bar)
Temperature range (vessel): 32 - 270°F (0-132°C)
Particle separation capacity: to 5 µm (0.2 mil)
Ferrous impurities separation efficiency: up to 100% removal
Total magnetic strength: >10,000 gauss
Connections:

flanged: 8" - 14" ANSI B16.5 150 CLASS RF
top: ¾" NPT (with cap)
drain valve: 2" NPT

Vessel Volume

Size	8"	10"	12"	14"
Capacity (gal/liter)	56/212	110/416	170/644	305/1155
Weight (lb/kg)	345/157	630/285	880/400	1,010/460

Dimensions



NOTE: Drawing may not reflect the actual size of the separators.

Code	A	B	C	D	E	F	G
NA546520AM	8"	35½"	20"	34½"	52¾"	13½"	28¾"
NA546525AM	10"	41¾"	26"	40"	68⅞"	16"	34¼"
NA546530AM	12"	46½"	30"	45⅞"	68⅞"	19"	38⅜"
NA546535AM	14"	48"	36"	57½"	82¾"	21"	51¼"

MAX FLOW RATE				
Size	8"	10"	12"	14"
GPM	1,570	2,450	3,525	4,800
l/s	100	155	225	303
Cv	1,055	1,400	1,755	2,075

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 _____