DIRTMAG® magnetic dirt separator

NA5465M ASME Steel 8, 10, 12, 14 inch

Submittal Data 02928.3 NA — Issue Date 09/2018

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

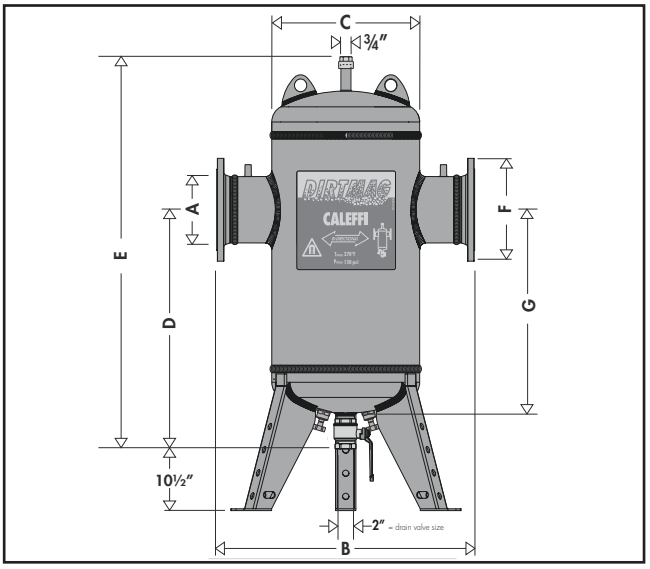
Performance

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
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)	380/172	390/177	550/250	740/336

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"	51¾"

	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

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

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