Hydro separator

NA548 series, ASME/CRN, 2" - 4" with flanges

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Application

The hydraulic separator creates a zone with a low pressure loss, which enables connected primary and secondary circuits to be hydraulically independent of each other; the flow in one circuit does not create or interupt flow in another. Hydraulically decoupling primary and secondary circuits eliminates pump conflict.

Typical Specification

Furnish and install on the plans and described herein, a Caleffi Hydro Separator as manufactured by Caleffi. Each separator must be designed with an epoxy resin painted steel body, 304 stainless steel internal baffle, preformed insulation, a brass blowdown drain valve and automatic brass air vent isolated manually with brass shutoff valve. The separator design must include ANSI B16.5 Class 150 RF flanges. The separator is 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 Inspector, and CRN registered, and stamped for 150 psi (10 bar) working pressure, with ASME U stamp. Each separator shall be a Caleffi model NA548 series or approved equal. (See product instructions for specific installation information.)

Technical data

Materials	- separator body:	epoxy resin painted steel
	- air vent body:	brass
	- shut off and drain valve body:	brass
	- internal baffle:	304 stainless steel

Performance

Suitable fluids: water and non-hazardous glycol solution up to 50%
Max. operating pressure: 150 psi (10 bar)
Working temperature range with insulation: 32–220°F (0–105°C)
Working temperature range without insulation (vessel): 32–270°F (0–132°C)

Connections	- main:	2"-4" ANSI B16.5 150 CLASS RF
	- drain valve:	1¼" NPT female

Technical specifications of insulation

Internal part

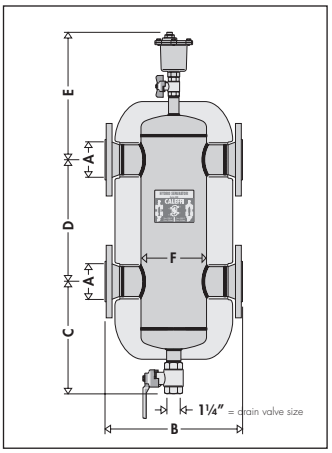
Materials: rigid closed cell expanded polyurethane foam
Thickness: 2 3/8" (60 mm)
Density: 2.8 lb/ft^3 (45 kg/m^3)
Thermal conductivity: 6 BTU·in/hr·ft^2·°F (0.023 W/(m·K))
Temperature range: 32–220°F (0–105°C)

Outer part

Materials: embossed aluminum
Thickness: 7.0-mil (0.7 mm)
Reaction to fire (DIN 4102): class 1

Head covers Heat formed materials: PS

Dimensions



ASME U

Code	A	B	C	D	E	F	Wt. (lbs.)	Wt. (kg)
NA548052A	2"	13¾"	13"	13"	13½"	6⅝"	75	34
NA548062A	2½"	13¾"	13"	13"	13½"	6⅝"	82	37
NA548082A	3"	18⅜"	15"	17¾"	15¼"	8⅝"	112	51
NA548102A	4"	18½"	15"	17¾"	15½"	8⅝"	117	53

Hydraulic characteristics

The hydraulic separator should be sized according to the maximum flow rate value at the inlet. The selected design value must be the greatest required flow rate of either the primary circuit or the secondary circuit.

Flanged connections

Size	2"	2½"	3"	4"
gpm	60	80	124	247
l/s	3.8	5.0	7.8	16
gallons	4.0	4.0	8.0	8.0
liters	15.1	15.1	30.3	30.3

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

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