

Magnetic Hydraulic Separator

The FlexFlow Balancer is an ASME magnetic hydraulic separator which maintains hydraulic balance between the primary and secondary loops.

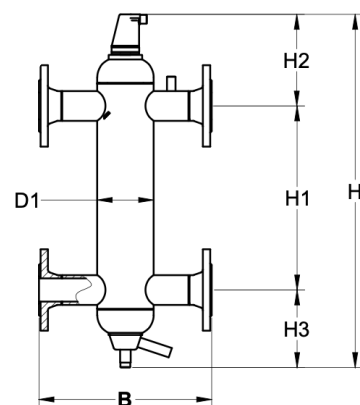
Additionally, the FlexFlow Balancer can be used to remove air, dirt, and ferrous metal particles entrained in the system fluid.

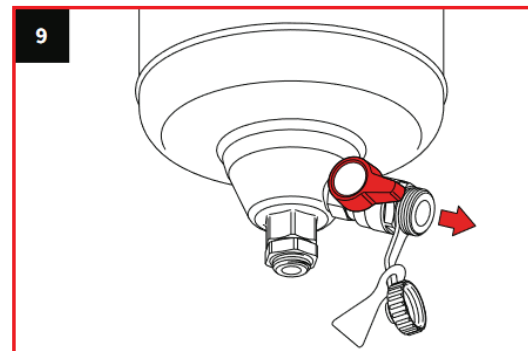
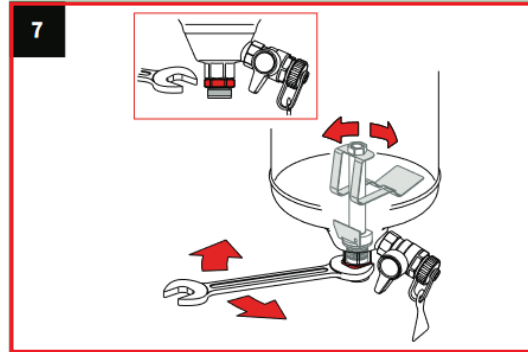
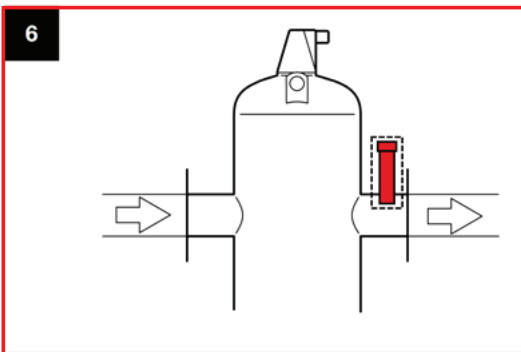
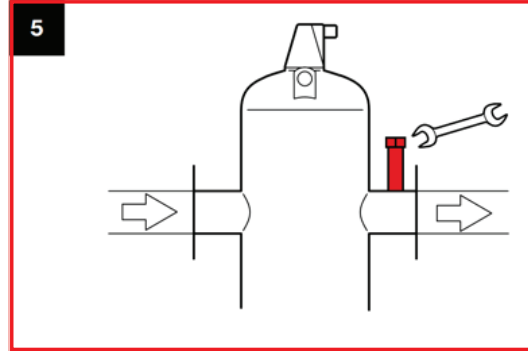
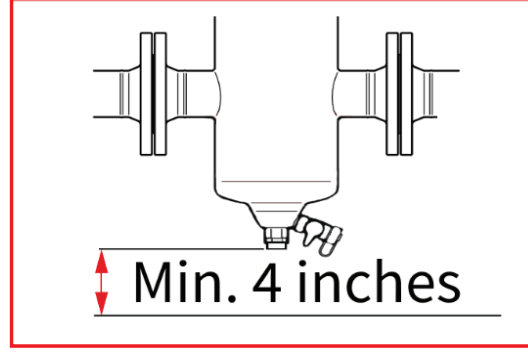
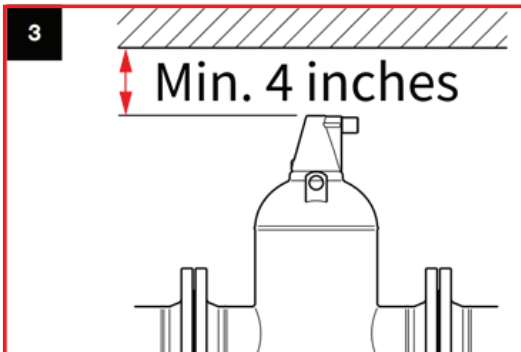
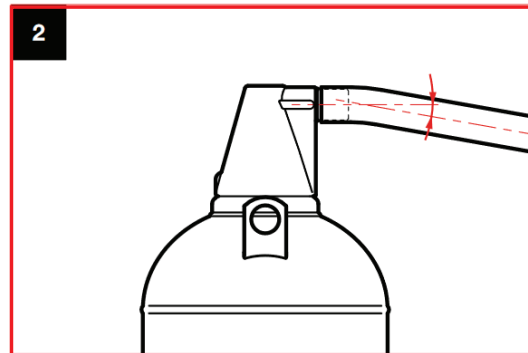
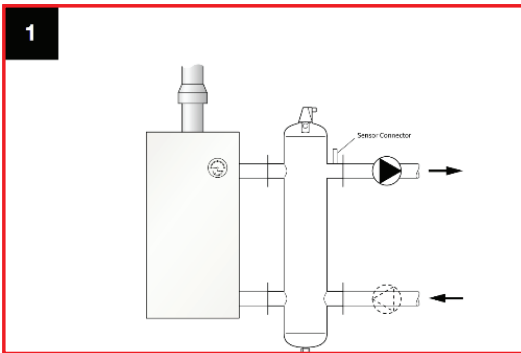
The FlexFlow Balancer is suitable for use in sealed heating and cooling systems using glycol-based additives (max. 50%)

Materials

- Shell: Carbon Steel
- Separating Element: Carbon Steel
- Air Vent: Brass
- Dirt Collector Assembly: Brass & Steel

Size	Dimensions (in)						Wt. (Lbs.)	Part Number
	D1	B	H	H1	H2	H3		
2"	6.33	13.80	37.95	19.06	9.70	9.19	85.10	FMHS-200A
2½"	6.33	13.80	37.95	19.06	9.70	9.19	99.00	FMHS-250A
3"	10.75	18.50	39.50	21.13	9.42	8.95	125.60	FMHS-300A
4"	10.75	18.50	54.88	29.38	13.06	12.45	171.70	FMHS-400A
5"	16.00	25.00	58.10	34.00	12.43	11.68	204.90	FMHS-500A
6"	16.00	25.00	68.45	43.06	13.16	12.23	248.00	FMHS-600A
8"	18.00	30.50	89.13	58.75	15.44	14.94	407.40	FMHS-800A
10"	24.00	39.00	109.81	73.44	18.37	18.00	782.00	FMHS-1000A
12"	24.00	39.60	130.50	88.13	21.49	20.88	991.70	FMHS-1200A







Installation

General

- The FlexFlow Balancer may be hot during operation
- Maximum working temperature: 250°F
- Maximum working pressure: 150 PSI
- Suitable for Water/Glycol mixes up to 50%
- Maximum Flow Velocity: 9.8 ft/s

Safety Requirements

This product contains a powerful magnet. Care must be taken with in the vicinity of pacemakers, data carriers, and other products that are sensitive to magnetism.

Installation and maintenance must be carried out by qualified personnel only.

Observe local regulations and guidelines.

Installation

- Install the FlexFlow Balancer in a dry location not susceptible to frost and which is easily accessible for maintenance purposes.
- The FlexFlow Balancer should be connected vertically to the flow and return circuit as close to the boiler or chiller as possible.
- Shutoff valves before and after the FlexFlow Balancer are recommended for ease of maintenance but not required.

Note: The sensor connection must be located at the outlet side to the installation (the second circuit) (fig. 1)

- For maximum efficiency the flow rate in the flow pipe should be approx. 3.3 ft/s (maximum 6.6 ft/s).
- The valve end of the air vent has an external measurement of approximately 7/8" allowing it to be easily attached to the air venting pipe which should slope downwards (fig. 2).
- For ease of maintenance there must be a clearance of at least 4" above the air vent and below the blowdown (fig. 3).
- If available, slide the temperature sensor as deep as possible into the drywell see fig. 6 (internal diameter approximately 1/2").

DRY WELL**Maintenance and service**

Perform regular visual inspections.

In the event of a leak from the air vent, it may be closed with the screw (**fig. 4**).

The dirt that collects at the bottom of the FlexFlow Balancer can be removed with the aid of the drain valve (*fig. 9*). Before draining, rotate the scraper and remove the magnet (**fig. 7 & 8**). open the drain valve and blow down the separator until the fluid stream is clear. Close the drain valve and reinsert the magnet back.

To flush the FlexFlow Balancer properly it is recommended to place the product between shutoff valves.

A hose can be attached to the drain valve as required. Only use the drain valve for draining dirty system fluid, never for filling or draining the installation (**fig. 10**).

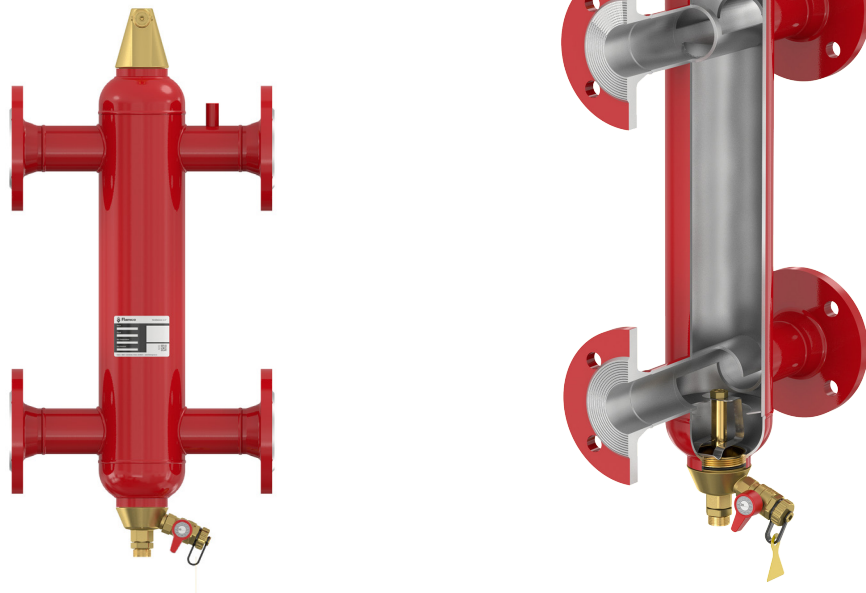
Use the Flamco Service stickers to record dates of maintenance on the handle of the drain valve (**fig. 11**).

Maintenance should only be performed while the system pumps are inactive.

Removal

Depressurize the system and remove the FlexFlow Balancer.

Observe local regulations for disposing of the FlexFlow Balancer.



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