Hydraulic Separator

548 series

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- This device consists of several different functional components. Hydraulic separator: to keep hydraulic circuits totally independent from each other.
- Dirt remover: to permit the separation and collection of any impurities present in the circuits. Provided with a drain valve.
- Automatic air vent: for automatic venting of any air contained in the circuits.Provided with a shut off valve for maintenance purposes.
- Insulation: the separators, threaded and flanged up to DN 150, are supplied complete with pre-formed shell insulation to ensure perfect thermal insulation when used in both hot and chilled water systems.

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PRODUCT RANGE

CODE	CONN.	MAX. RECOMMENDED FLOW RATE
548006	1”	2,5 m³/h
548007	1 1/4”	4 m³/h
548008	1 1/2”	6 m³/h
548009	2”	8,5 m³/h

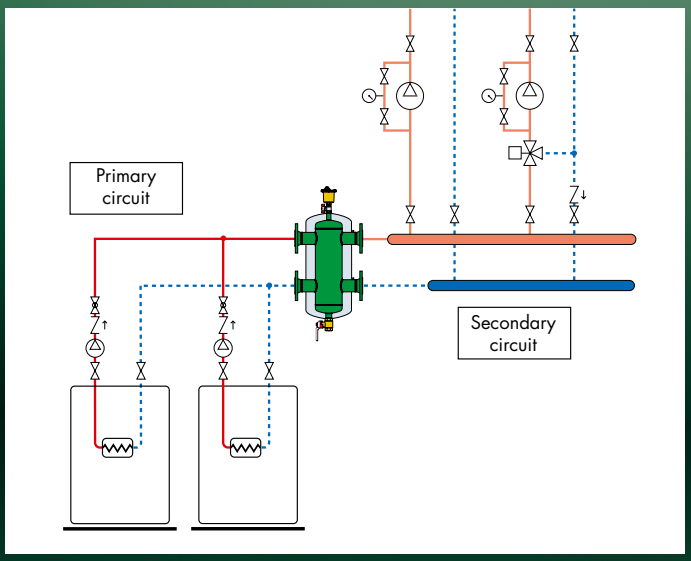
CODE	CONN.	MAX. RECOMMENDED FLOW RATE
548052	DN 50	9 m³/h
548062	DN 65	18 m³/h
548082	DN 80	28 m³/h
548102	DN 100	56 m³/h
548122	DN 125	75 m³/h
548152	DN 150	110 m³/h

CODE	CONN.	MAX. RECOMMENDED FLOW RATE
548200	DN 200	180 m³/h
548250	DN 250	300 m³/h
548300	DN 300	420 m³/h

TECHNICAL SPECIFICATIONS

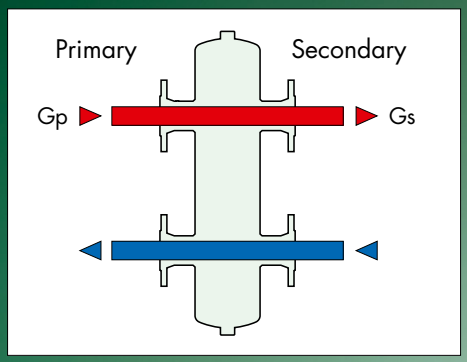
Body material	epoxy resin coated steel
Max. working pressure	10 bar
Temperature range:	threaded: 0–100°C flanged DN 50–100: 0–105°C flanged DN 125-150: 0–100°C
Medium	water, glycol solutions
Max. percentage of glycol	threaded: 30% flanged: 50%

APPLICATION DIAGRAMS



OPERATING PRINCIPLE

The hydraulic separator creates a zone with a low pressure loss, which enables the primary and secondary circuits connected to it to be hydraulically independent of each other; **the flow in one circuit does not create a flow in the other if the pressure loss in the common section is negligible.**
In this case, the flow rate in the respective circuits depends exclusively on the flow rate characteristics of the pumps, preventing reciprocal influence caused by connection in series.
With the hydraulic separator, it is thus possible to have a production circuit with a constant flow rate and a distribution circuit with a variable flow rate; these operating conditions are typical of modern heating and air-conditioning systems.



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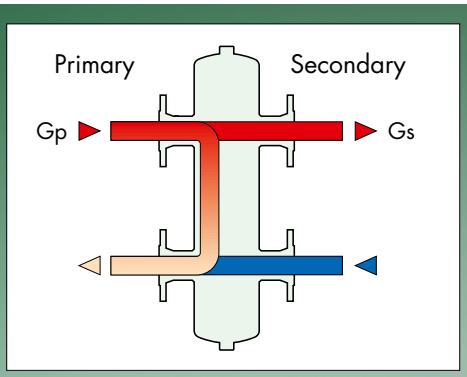

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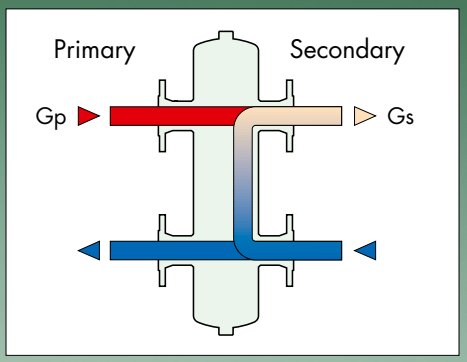

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REFERENCE DOCUMENTATION

548 series - Technical brochure 01076

CALEFFI Hydronic Solutions

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