

sepcoll

hydraulic separator manifold



altecnic

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## Introduction

The Altecnic Sepcoll combines a hydraulic separator and distribution manifold into one unit and is used in heating or air conditioning systems to allow control to individual rooms, when there is only one boiler or chiller.

Various configurations are available, which can be easily fitted into any kind of heating or chilled water circuit.

The compact design requires a minimum of space.

The Sepcoll unit is supplied complete with preformed shell insulation to ensure perfect thermal insulation when used on both heating and chilled water systems.

## Materials

### Component

Body:

Insulation:

Thickness:

Density: internal section

external section

Thermal conductivity (DIN 52612): -at 0°C

-at 40°C

Co-efficient of resistance to the diffusion of vapour (DIN 52615):

Temperature range:

Resistance to fire (DIN 4102)

### Material

Steel - painted  
closed cell  
expanded PEX

20 mm

30 kg/m<sup>3</sup>

50 kg/m<sup>3</sup>

0.038 W/(m·K)

0.045 W/(m·K)

>1.300

0 to 100°C

Class B2

### Product Code Description

559021	2 + 1 separator manifold
559121	2 + 1 in manifold cabinet
559022	2 + 2 external connections with fixing brackets
559031	3 + 1 external connections with fixing brackets

All separator manifolds are supplied with preformed insulation

## Technical Specification

Max. working pressure:

6 bar

Temperature range:

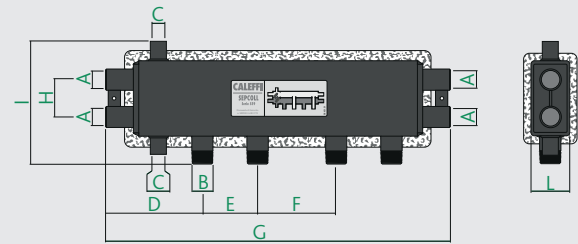
0 to 110°C

Product Code	Volume	Weight
559021	4.1	7.7
559121	4.1	
559022	6.9	13.2
559031	9.8	17.5

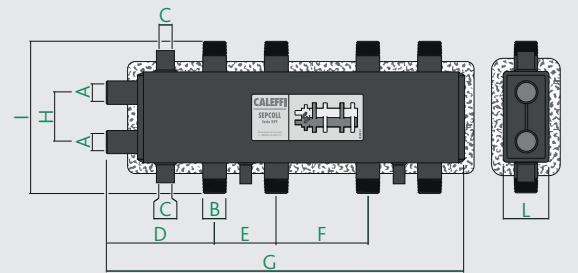
## Maximum Recommended Flowrates

Branches	Primary	Secondary - Total
2 + 1	2 m <sup>3</sup> /h	5 m <sup>3</sup> /h
2 + 2	2.5 m <sup>3</sup> /h	6 m <sup>3</sup> /h
3 + 1	2.5 m <sup>3</sup> /h	6 m <sup>3</sup> /h

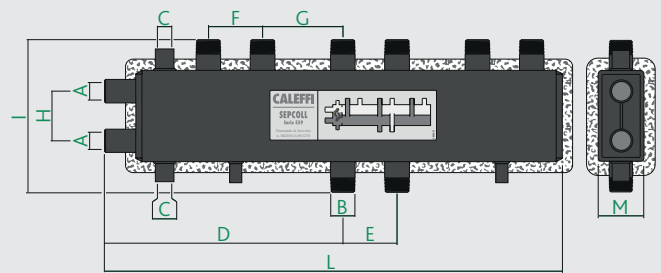
## Dimensions



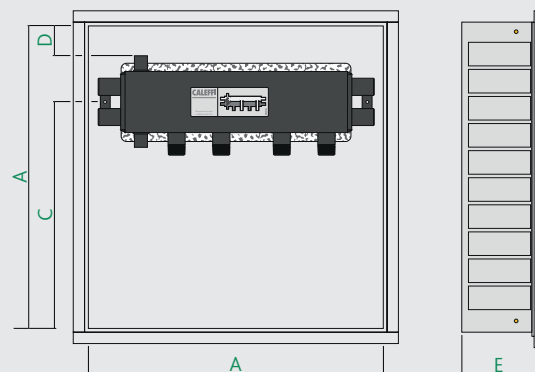
Code	A	B	C	D	E	F	G	H	I	L
559021	1"	1"	1/2"	155	90	570	60	195	140	60



Code	A	B	C	D	E	F	G	H	I	L
559022	1 1/4"	1"	1/2"	160	90	140	530	80	250	80



Code	A	B	C	D	E	F	G	H	I	L
559031	1 1/4"	1"	1/2"	390	90	90	140	80	250	760



Code	A	B	C	D	E
559121	800	770	595	85	150 to 190

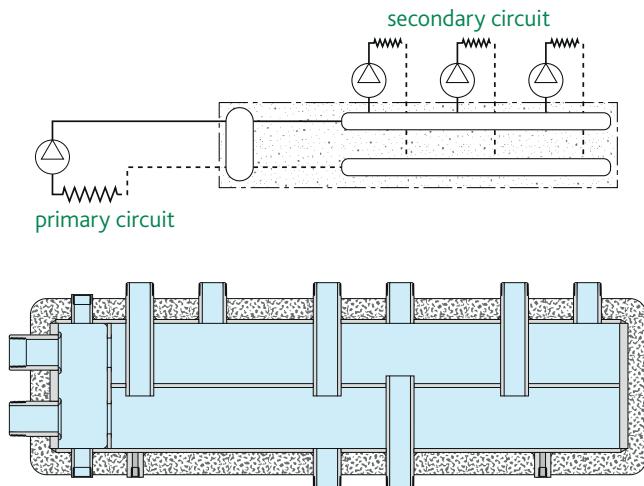
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## Operating Principle

When a system contains a primary circuit with its own pump and a number of secondary circuits with their own distribution pumps operating conditions may arise where the pumps interact, creating abnormal variations in flowrates and pressures within the system.

In the Sepcoll there is a low pressure zone, which enables the primary and secondary circuits to be hydraulic independent of each other.

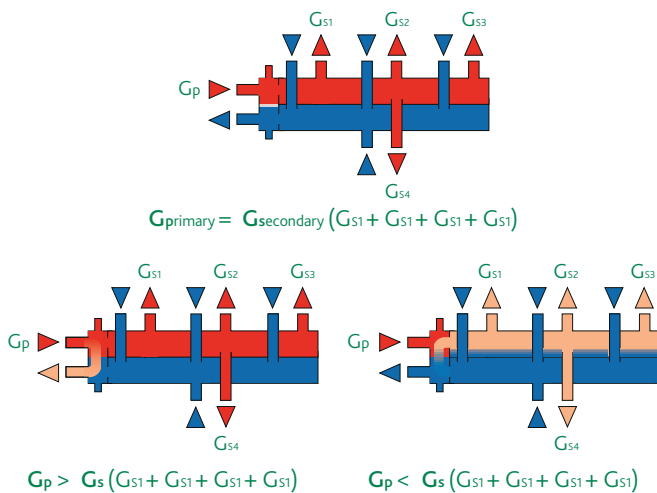
The flow in one circuit does not create flow in the circuit(s) if the pressure loss in the common section is negligible.



The flow passing round the respective circuits depends exclusively on the flow characteristics of the pumps, preventing reciprocal influence due to connection in series.

Downstream of the common low pressure zone are the flow and return manifolds to which the secondary distribution circuits can be connected.

Three possible hydraulic situations are shown below as examples.



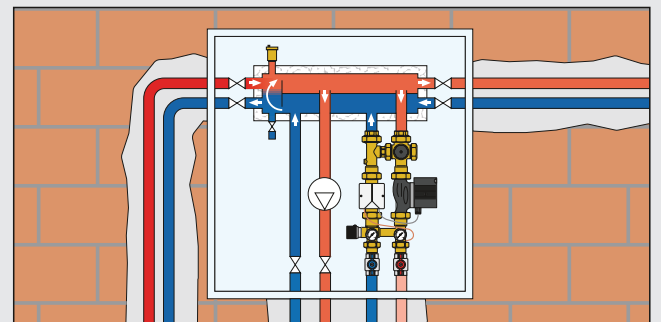
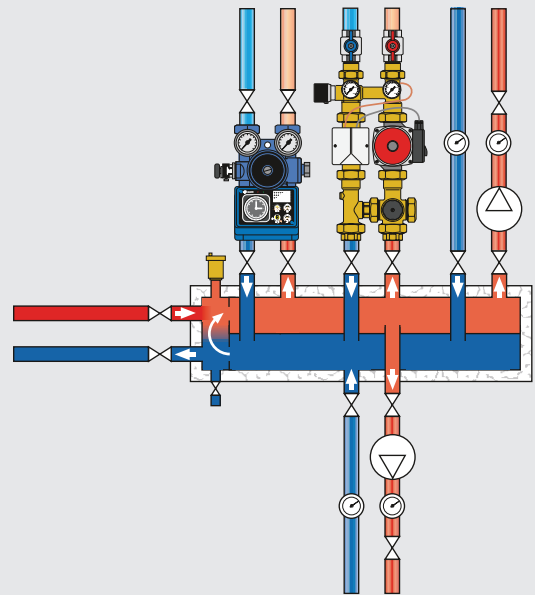
## Installation

Sepcoll units should be installed as shown.

It is important the correct connections of the flow and return pipework to the unit and to the individual circuits are made.

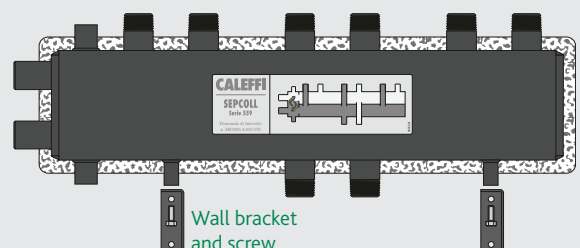
The Sepcoll unit can be installed upside down provided the correct connections are made.

The 1/2" female connections must only be used for connecting an automatic air vent and drain cock as shown.



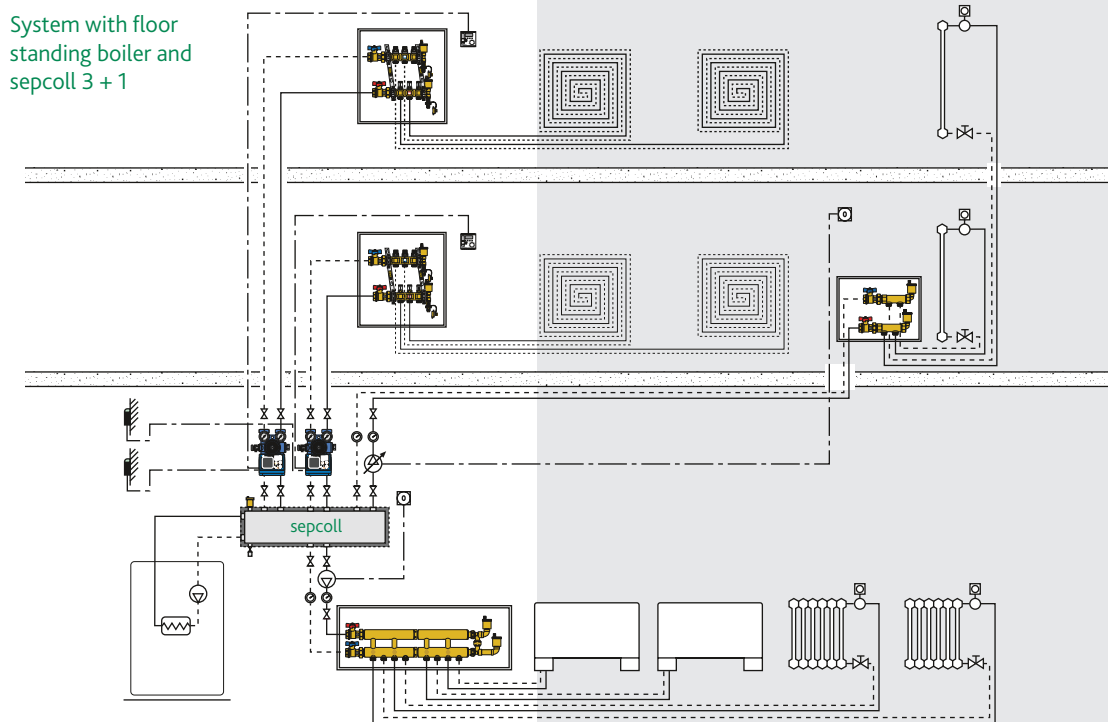
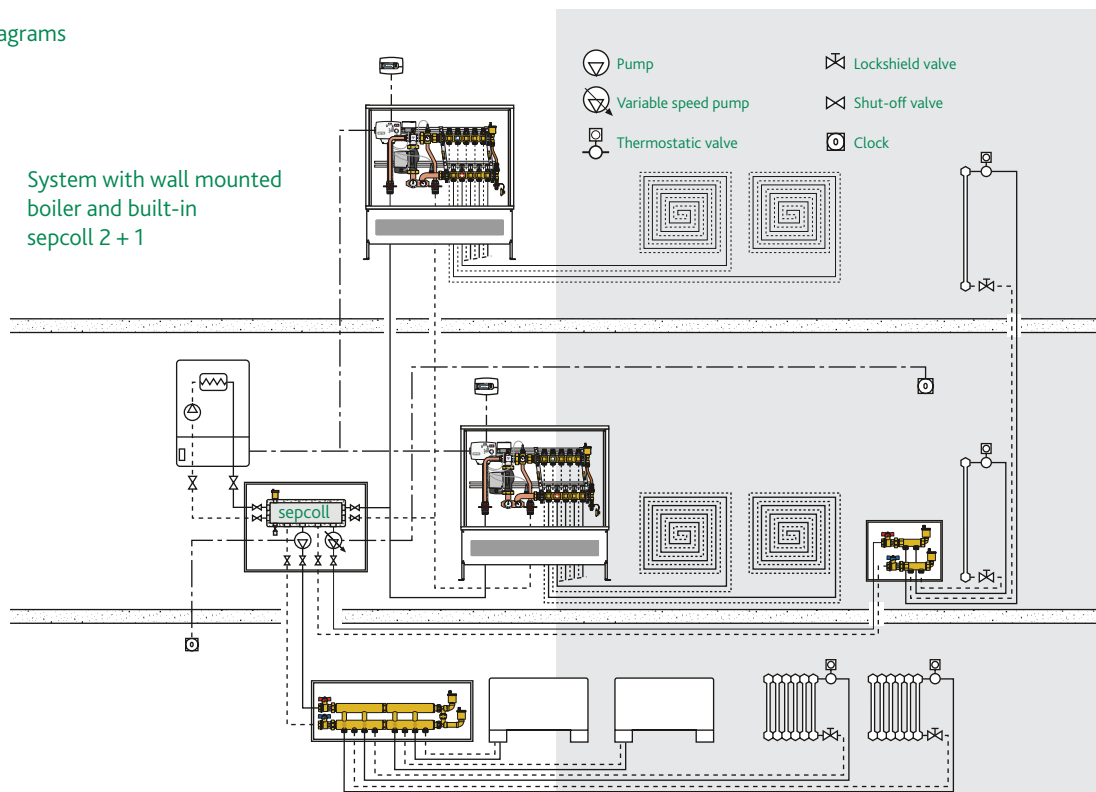
## Installation

The external versions of the sepcoll 2 + 2 and 3 + 1 are supplied complete with wall mounting brackets which allows adjustment of the position from the wall.



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## Application Diagrams



E & O.E

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