

HydroLink™

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Function



The Hydrolink™, combining a hydraulic separator with a distribution manifold, is used in heating and air-conditioning systems. It provides a chamber to hydraulically separate the boiler (or chiller) circuit from the distribution circuits and also provides a self-contained manifold station that supplies up to four independently controlled load circuits with the same supply temperature. Available configurations are compact, and can be easily installed in any hydronic system, saving space.

These items are designed for use in closed hydronic systems. Do not use in plumbing applications. These items do not meet the low-lead plumbing standards of U.S. and Canada.

Product range

- Code 559920A 2+0 separator-manifold with built-in mounting brackets and pre-formed insulation. Size: 1" NPT female main; 1" NPT male branches.
- Code 559921A 2+1 separator-manifold with built-in mounting brackets and pre-formed insulation. Size: 1" NPT female main; 1" NPT male branches.
- Code 559922A 2+2 separator-manifold with angle mounting brackets and pre-formed insulation. Size: 1 1/4" NPT female main; 1" NPT male branches.
- Code 559931A 3+1 separator-manifold with angle mounting brackets and pre-formed insulation. Size: 1 1/4" NPT female main; 1" NPT male branches.

Technical characteristics

Materials:

Body: painted steel
 Maximum working pressure: 100 psi (7 bar)
 Working temperature range: 32 to 230°F (0 to 110°C)

Performance:

Medium: Water and non-hazardous glycol solutions
 Maximum glycol percentage: 50%

Connections:	- main:	3+1 and 2+2: 2+0 and 2+1:	1 1/4" NPT female 1" NPT female
	- branches:	3+1 and 2+2: 2+0 and 2+1:	1" NPT male 1" NPT male
	- air vent valve:		1/2" NPT female
	- drain valve:		1/2" NPT female
Center distances:	- main:	3+1 and 2+2: 2+0 and 2+1:	3 1/8" (80 mm) 2 3/8" (60 mm)
	- branches:	3+1 and 2+2: 2+0 and 2+1:	5" (125 mm) 5" (125 mm)

Insulation

Material: EPP
 Thickness: 3/4" (20 mm)
 Density: 3 lb/ft³ (45 kg/m³)
 Thermal conductivity: 0.25 BTU/in (.037 W/mK) at 50°F (10°C)
 Temperature range: 20 to 250°F (-5–120°C)
 Reaction to fire (UL 94): class HBF

Flow Characteristics

Maximum recommended flow rates at connections:

Branches	Primary	Secondary (totals)
2+0	9 gpm (.56 l/s)	22 gpm (1.4 l/s)
2+1	9 gpm (.56 l/s)	22 gpm (1.4 l/s)
2+2	11 gpm (.70 l/s)	26 gpm (1.67 l/s)
3+1	11 gpm (.70 l/s)	26 gpm (1.67 l/s)



SAFETY INSTRUCTION

This safety alert symbol will be used in this manual to draw attention to safety related instructions. When used, the safety alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN A SAFETY HAZARD.**



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



CAUTION: All work must be performed by qualified personnel trained in the proper application, installation, and maintenance of systems in accordance with all applicable codes and ordinances.



CAUTION: If the HydroLink™ device is not installed, commissioned and maintained properly, according to the instructions contained in this manual, it may not operate correctly and may endanger the user.



CAUTION: Make sure that all the connecting pipework is water tight.



CAUTION: When making the water connections, make sure that the HydroLink™ device connecting pipework is not mechanically overstressed. Over time this could cause breakages, with consequent water losses which, in turn, could cause harm to property and/or people.



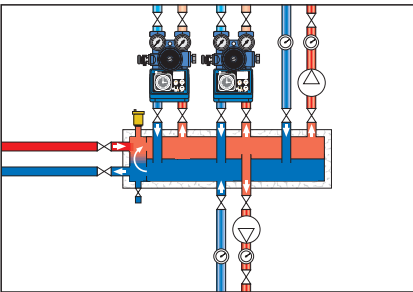
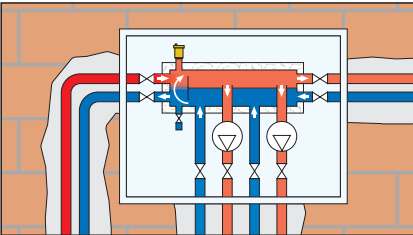
CAUTION: Water temperatures higher than 100°F (38°C) can be dangerous. During the installation, commissioning and maintenance of the HydroLink™ device, take the necessary precautions to ensure that such temperatures do not endanger people.

Installation

HydroLink™ units should be installed in accordance with the diagrams shown in this instruction manual, ensuring the correct connection of the flow and return pipework and the main and branch connections.

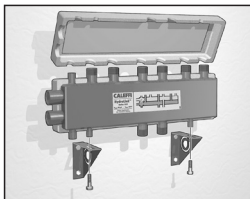
HydroLink™ units can also be installed upside down, as long as the connection logic shown is followed.

The 1/2" NPT female connections must only be used for connecting an air vent valve and drain valve, and not for connecting branch circuits. The air vent and drain valve are included in shipment but not connected to the HydroLink™. Use a liquid anaerobic thread sealant to ensure water tight connections.



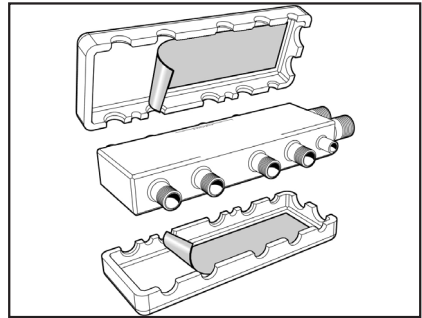
Installation and Insulation Assembly Procedures – Models 2+2 and 3+1

HydroLink™ models 2+2 and 3+1 are supplied with angle wall-mounting brackets, which allow the front-to-back positioning to be adjusted.

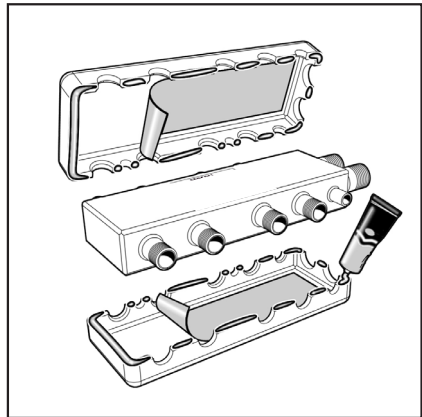


After bracket mounting and leak-testing, the pre-formed insulation shell should be attached as described in points 1 and 2 below.

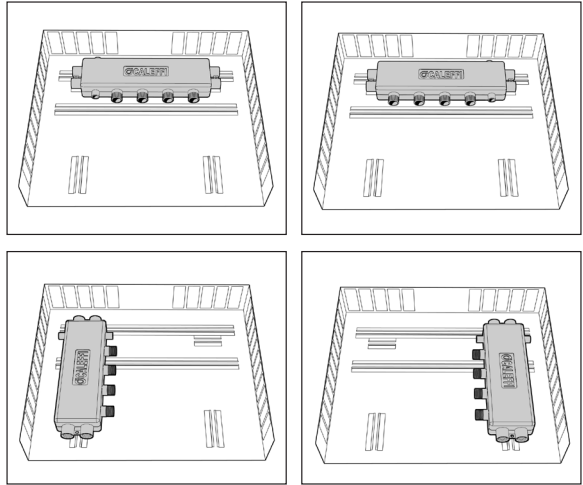
1. Remove the protection film from the surface adhesive and assemble.



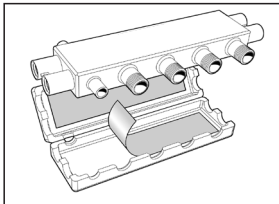
2. If the HydroLink™ unit is to be used with chilled water, spread a thin layer of sealant around the outer edges of the pre-formed insulation, wait until the solvent has evaporated (about 10 minutes) and then assemble.



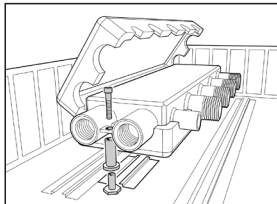
**Installation and Insulation
Assembly Procedures -
Model 2 + 0 and 2 + 1
Examples of location
in manifold box**



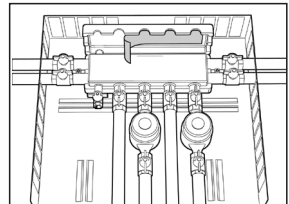
Having chosen the box location, proceed as in points 1-2-3-4 below.



1. Remove the protection film from the lower surface adhesive and position the HydroLink™ unit inside the insulation shell.



2. Mount the device to the internal supports in the manifold box.



3. Connect the piping, leak-test and close the pre-formed insulation shell after removing the protection film from the upper surface adhesive.

4. If the unit is to be used with chilled water, see point 2 of the previous section.

Service Instructions

There is no service required for the HydroLink™ device.

Leave this manual for the user.

Scan to view .



5599 HydroLink™

Installation Tip

CALEFFI
Hydronic Solutions

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Caleffi North America, Inc.
3883 West Milwaukee Road
Milwaukee, WI 53208
T: 414.238.2360 F: 414.238.2366