

### Technical Data

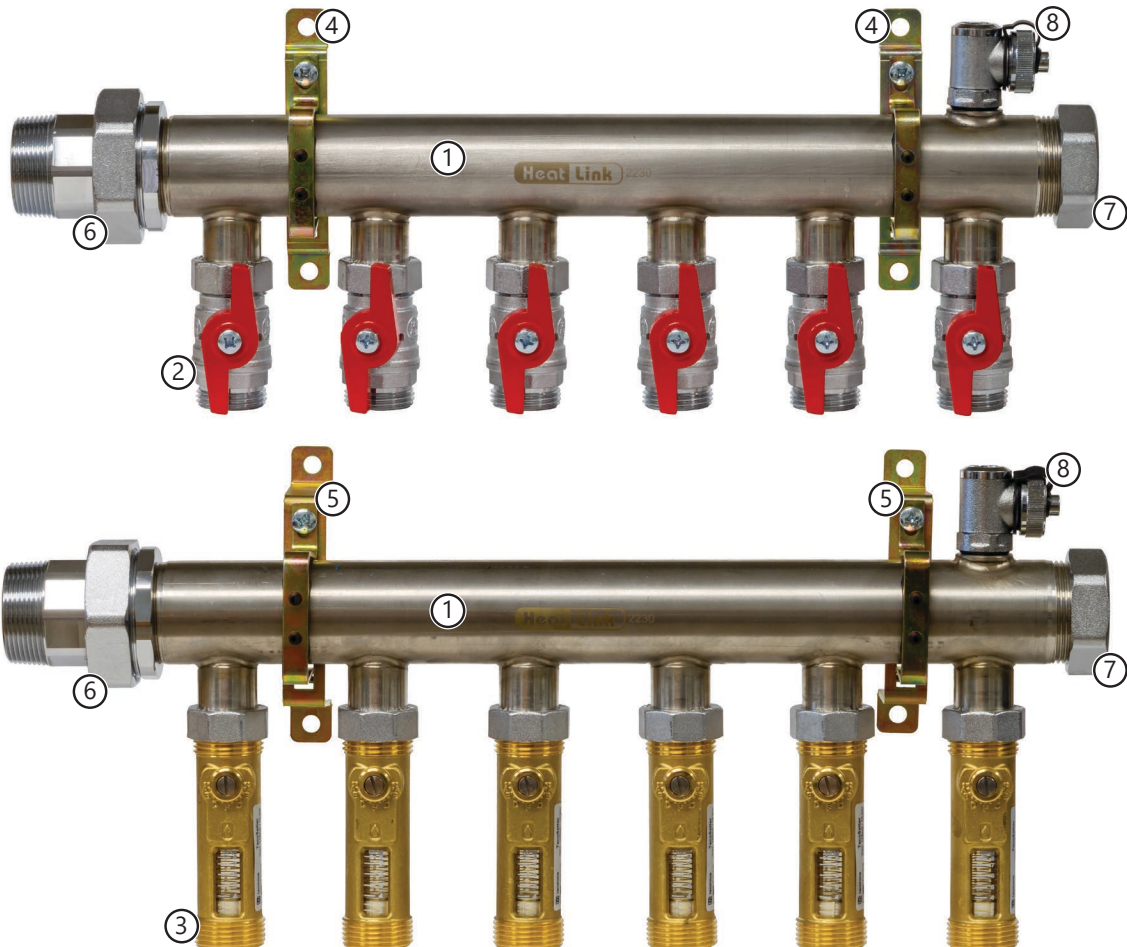
Material:	
Manifold:	Stainless Steel AISI 304L (1.4307 EN10088)
Mounting Brackets:	Zinc Plated Steel
Hosebib:	Nickel Plated Brass (CW 617N - UNI EN 12165/16)
Ball Valves:	Nickel Plated Brass (CW 617N - UNI EN 12165/16)
End Connections:	Stainless Steel
Brass Components:	ASTM B124 C37700 (CW614N AND CW617N)
O-rings:	EPDM
Max. Trunk Flow Rate:	50 US gpm (11.4 m <sup>3</sup> /h)
Global Flow Coefficient (supply + return combined):	5.5 Cv (4.8 Kv)
Max. Working Pressure	145 psi (10 bar) @ 70°F (21°C)
Max. Working Temperature	212°F (100°C)
Max. Glycol Percentage	50%

The 76700 series 1 1/2" manifolds ship assembled, except for the brackets, and tightening of all connections.

### Manifold parts:

- ① 1 1/2" manifold body (x2)
- ② Ball valves (number of loops)
- ③ Flow meters (number of loops)
- ④ Low profile mounting bracket (1 pair)
- ⑤ High profile mounting bracket (1 pair)
- ⑥ Adapters (x2)
- ⑦ End cap with rubber gasket (x2)
- ⑧ Hose bib (x2)

Follow the assembly instructions on pages 2 and 3.

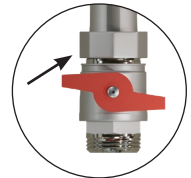


## General Guidelines

Please review the instructions and warranty carefully. Assembly and installation are the installer's responsibility and beyond HeatLink's control.

1. Assemble the manifold under clean conditions. Any dirt on the gaskets may compromise seal. Ensure the gaskets are clean.
2. Brace or support the supply and return mains parallel to the manifold and centered with the manifold's inlet and outlet. This will prevent stress and possible damage on the manifold supply and return end connections.
3. Use precautions when soldering or applying heat within 24" of the manifold.
4. Use ball valves in front of manifold for servicing requirements.
5. Protect the manifold during all phases of construction using a polyethylene sheet or an enclosure.
6. Retighten the PEX to manifold connector nuts after the first week of system operation. Use a backup wrench on the valve.

7. Do not use 1½" Stainless Steel manifolds and accessories for purposes other than those for which they were designed. Do not exceed their specifications. Failure to follow these guidelines or the product's instructions will void the warranty.
8. In case a leak develops during testing, remove pressure from system. If the leak is at gasket connections, clean the gasket, and reapply silicone lube.
9. A water analysis is recommended for every installation site. For warranty claims a water analysis is mandatory.
10. Consult with your HeatLink® dealer or distributor if you have any questions regarding the operations and limits of HeatLink products. Review all instructions and warranty information carefully.



## Manifold Assembly:

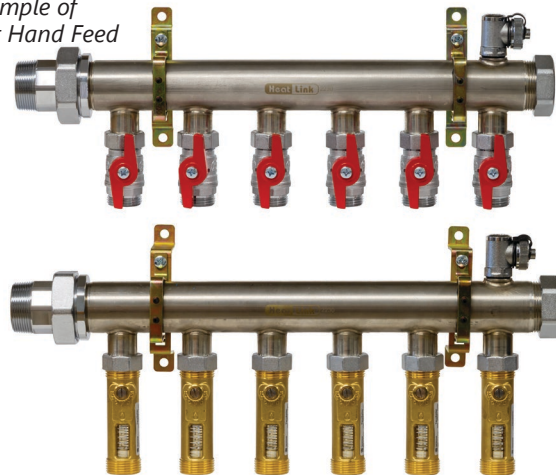
1. Place the supply manifold (ball valves) in the appropriate mounting bracket support (top shown) of each bracket. The brackets should be placed as close to the ends of the manifold as possible. Close the mounting bracket supports and tighten the screw to secure the manifold in place.
2. Place the return manifold (flow meter) in the other mounting bracket support (bottom shown). Close the mounting bracket support and tighten the screw to secure the return manifold in place. Repeat with the second mounting bracket.
3. Tighten the closed ends and open end adapters in the appropriate positions depending on how the manifold will be fed (left, right, or reverse return).
4. Tighten all connections.

*Note: When tightening the ball valves and flow meters always use backup wrenches to avoid strain on the valves, flow meters, or manifold bodies.*

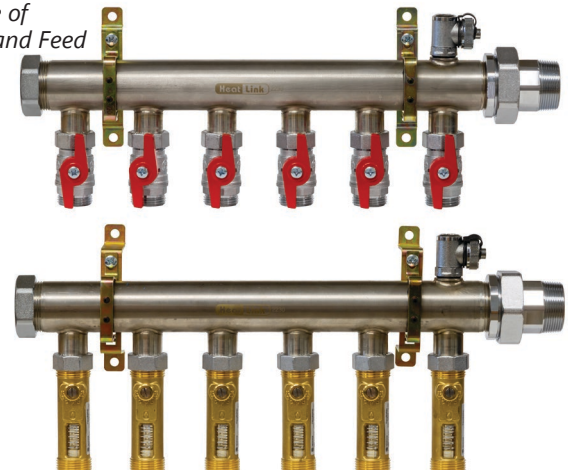
5. Lubricate o-rings with silicone o-ring lubricant (#79952) before making additional connections, or changing feed/flow direction.
6. Ensure that the o-rings are clean and take care not to pinch them.
7. Place the manifolds in the mounting positions and screw the mounting brackets to the wall.

*Note: Use a backup wrench on the open end adapter when tightening a fitting onto it.*

*Example of  
Left Hand Feed*



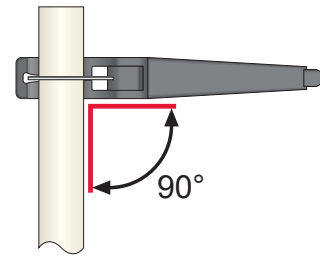
*Example of  
Right Hand Feed*



## PEX to 1 1/2" SS Manifold Connection using PEX to Manifold Connectors (sold separately)

### Compatible connectors

Part #	Description
77519	5/8" to EK 25 PEX compression Fitting
77522	3/4" to EK 25 PEX compression Fitting
EX77419	5/8" to EK 25 F1960 Expansion Fitting
EX77422	3/4" to EK 25 F1960 Expansion Fitting
EX77428	1" to EK 25 F1960 Expansion Fitting



### #77519 5/8" and 77522 3/4" Connectors include a brass insert with O-ring, split ring ferrule, and nut.

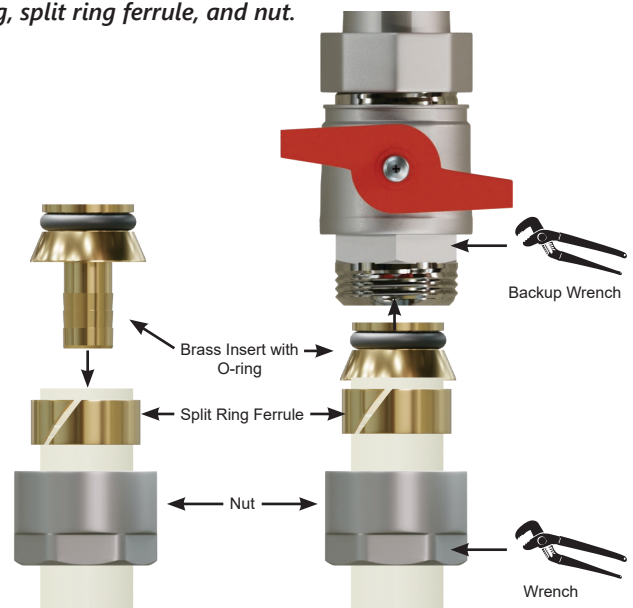
1. Inspect all components for debris, obstructions, and/or damage prior to installation.
2. Lubricate the inside of the manifold port with silicone o-ring lubricant (#79952).
3. Cut the PEX tubing at a 90° angle.
4. Insert the split ring ferrule into the nut first. Open the split to ease insertion of the PEX.

#### Method A

5. Push the Brass Insert onto the PEX tubing as far as it will go.
6. Push the PEX tubing with Brass Insert as far as it will go into the connector base. Ensure the o-ring is clean and take care not to pinch it.

#### Method B

5. Push Brass Insert as far as it will go into the manifold. Ensure the o-ring is clean and take care not to pinch it.
6. Push PEX tubing onto the Brass Insert as far as it will go.
7. Use a wrench to tighten the nut.

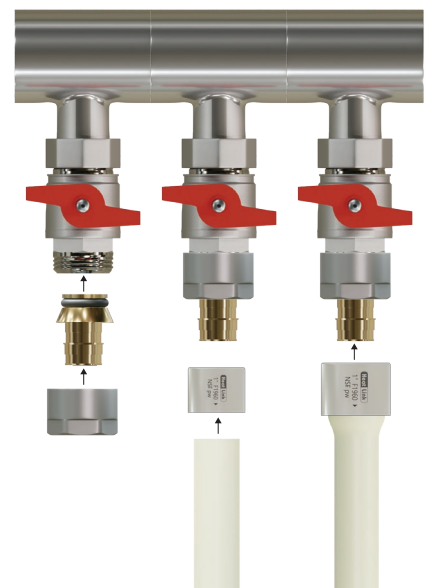


## PEX Tubing to Manifold Conns using #EX77300 Series Expansion Connectors (sold separately)

### #EX77300 Series Connectors (EX77305 1/2" and EX77319 5/8" and EX77322 3/4" ) include a nut and F1960 brass insert.

1. Inspect all components for debris, obstructions, and/or damage prior to installation.
2. Lubricate the inside of the manifold port with silicone o-ring lubricant (#79952).
3. Cut the PEX tubing at a 90° angle.
4. Push the brass insert to the manifold connector.
5. Use a wrench to tighten the nut.
6. Expand tubing and PEX ring, and place on brass insert.

For additional expansion fitting installation info see L3240 PEX-A Potable Expansion System Installation Guide



## Adjusting the Flow Meters

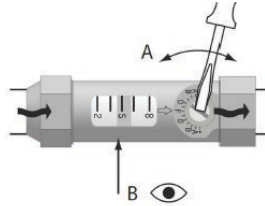
1. Use a flat head screwdriver as shown below to adjust the flow rate as per the chart.



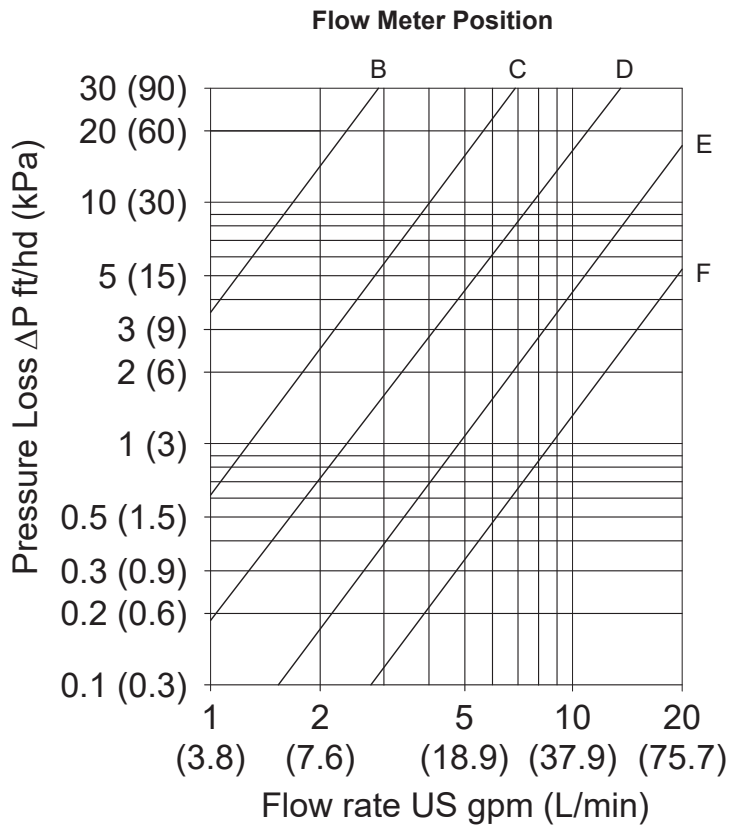
Closed



Open



Position	KV	CV
A	-	-
B	0.30	0.35
C	0.71	0.82
D	1.34	1.55
E	2.68	3.10
F - Fully Open	4.76	5.50



## Warranty

Refer to the HeatLink Limited Heating Warranty.