

Safelink Manifolds

On/off valve with Plastic Cap (to open and close manually)

Transition to 1 1/4" CU (OD) and 1" Sweat Cup (ID).

Mounting brackets

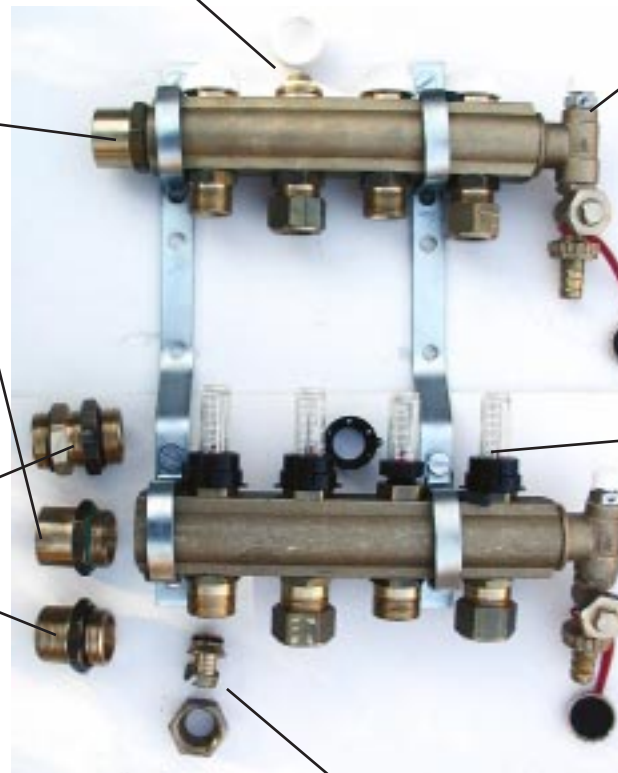
Manifold Body is 1" ;
2 - 12 branches available

Double Nipple with Lock Nut (for joining of manifolds)

Transition to 1" male NPT (Option to Sweat transition)

Note that the end pieces may be mounted on either side so manifolds may be left or right fed.

Optional Isolation Ball Valve with Union (option for the basic Manifold)



Air vent

End Cap with Vent and Fill/Drain Valve Both w/ O-ring seal.



Basic End Cap (available as option)

Flow meter AND Balancing Valve



Compression fittings available for 3/8", 1/2" and 5/8"

The End Cap has an optional hose connector. When removed, a garden hose' female end will fit



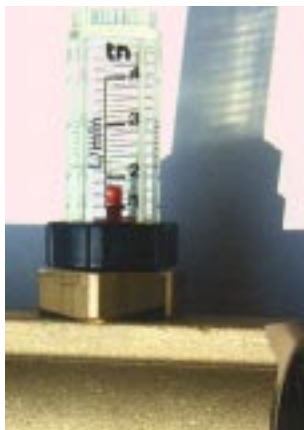
The branch nipples may be custom made. Eurokonus is otherwise the standard.



The on/off supply valve has M28 seat. Valve Actuators are also available.



After filling, the protective cap may be applied.



Fully closed balancing valve



Fully open balancing valve

Turn the flowmeter to adjust the flow to the design value. The scale 0.06 to 1.06 gpm is repeated three times around the flow meter for easy reading.



Snap the lock cap over the flowmeter body after adjustments are done.



Basic Manifolds - without valves are also available (no "holes" on top).

A Double Nipple with Lock-Nut is available in order to be able to join manifolds together. This provides the option to reduce inventory. For example, if Manifolds with just up to 6 branches are kept in inventory, this nipple may be used to provide up to 12 branches by combining them together. The O-rings will provide a tight seal. The Union type Lock nut (at right in picture below) will allow manifold branches to be perfectly aligned.



The optional Ball Valves are provided in order to be able to provide loop isolation when the valve-less manifolds are used. This product is obviously not required for the valved manifolds - but optional for the Kit A manifolds. The female side has a Union in order to provide alignment.

Valve Actuators for Supply Manifolds are also available. They are equipped with End Switch (4 wires) and indicator for open/closed position.



Compression fittings for 3/8", 1/2" and 5/8" have Eurokonus seats.

Other fitting accessories can be made available upon request (sweat or NPT adapters, double nipples for making couplings, etc.)

Manifold kit A (basic):

- Manifold body with Eurokonus branches
- Sweat Adapter to 1" and 1 1/4"
- End Cap with Air Vent and Fill/ Drain Valve & hose adapter
- One Mounting Bracket

Manifold kit B (supply):

- Manifold body with Eurokonus branches
- Built-in Valves with plastic cap for manual shut-off; may be replaced by Valve Actuators.
- Sweat Adapter to 1" and 1 1/4"
- End Cap with Air Vent and Fill/ Drain Valve & Hose adapter
- One Mounting Bracket

Manifold kit C (return):

- Manifold body with Eurokonus branches
- Built-in Balancing Valves equipped with Flow meters
- Sweat Adapter to 1" and 1 1/4"
- End Cap with Air Vent and Fill/ Drain Valve & Hose adapter
- One Mounting Bracket

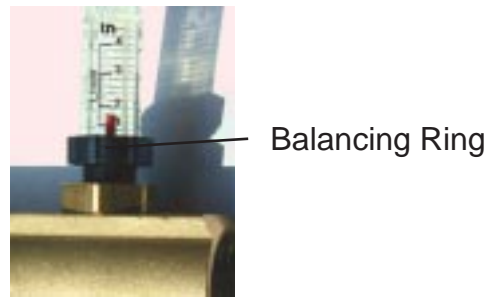
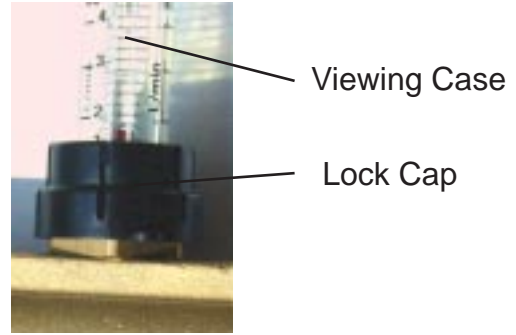
Product	Unit	Price	Product	Unit	Price
Basic Manifold Kit (A)			Supply Manifold Kit (B) and Return Manifold Kit (C)		
2 branches	ea.		2 branches	ea.	
3 branches	ea.		3 branches	ea.	
4 branches	ea.		4 branches	ea.	
5 branches	ea.		5 branches	ea.	
6 branches	ea.		6 branches	ea.	
7 branches	ea.		7 branches	ea.	
8 branches	ea.		8 branches	ea.	
9 branches	ea.		9 branches	ea.	
10 branches	ea.		10 branches	ea.	
11 branches	ea.		11 branches	ea.	
12 branches	ea.		12 branches	ea.	
Manifold transition to 1" NPT	bag of 2				
Basic End Cap	bag of 2		Coupling (pipe to pipe nipple)	bag of 10	
Double Nipple with Lock-Nut	bag of 2		Blind cap (for Manifold Branch)	bag of 10	
Branch Isolation Ball Valve	bag of 10				
Compression Fitting; any size	bag of 10		Valve Actuator w/ End Switch	ea.	

Prices in Euro's are ex works Italian plant. (Multiply by approximately 0.9 to receive at USD)

Price for Valve actuator (in USD) are freight pre-paid, customs cleared.

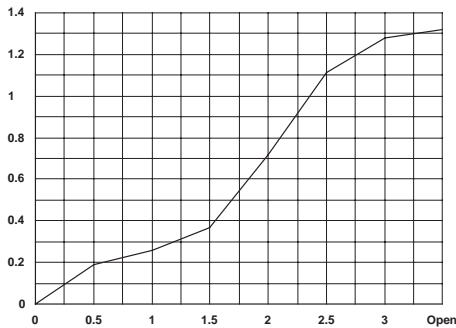
More information on some Manifold parts

The Return Manifold is equipped with a Flowmeter which also serves as a balancing valve. To adjust flow, remove the plastic Lock Cap and turn black Balancing Ring holding the Viewing Case until desired flow is displayed. Adjust flow in all branches of the manifold. Since various flow rates in branches may interact, a few readjustments of flows may be required before all loops have correct flows in accordance with the system design. Note that when several manifolds are served by a single circulator, the flows to manifolds may be influenced during system balancing and require additional flow balancing. Snap on the Lock Caps after all flow balancing is finalized.

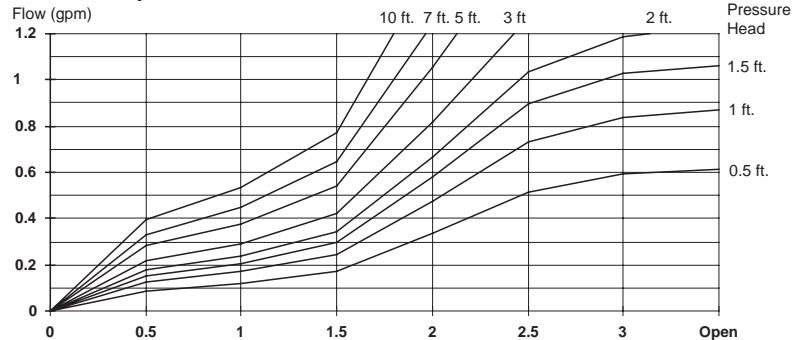


Since balancing is made through WYSIG (What You See Is what you Get) technology, pressure loss charts and flow calculations are virtually superfluous, but this information is still provided below and at right.

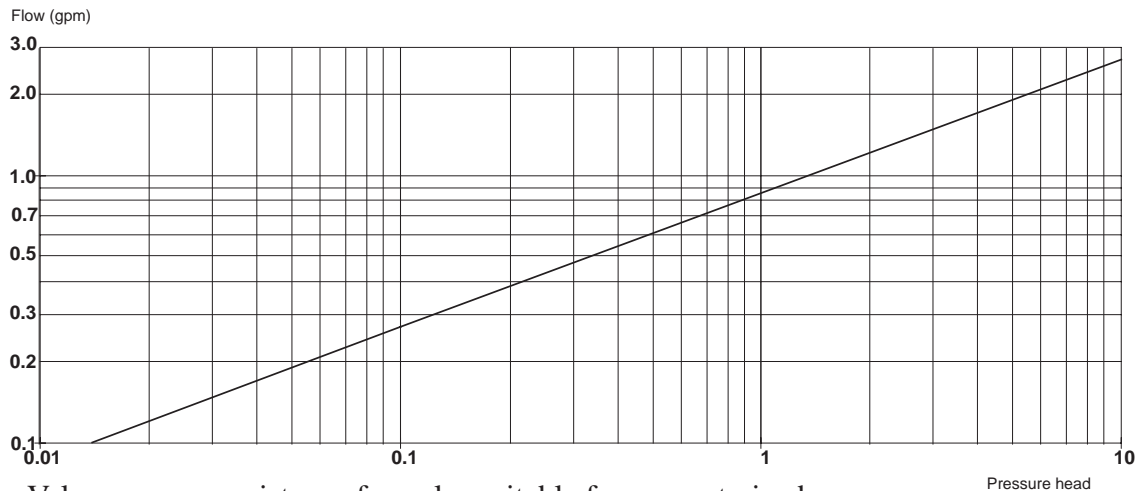
Flowmeter C_v Value as a function of turns from closed



Flowmeter pressure head chart



The C_v value for the Valve on the Supply Manifold is 1.3. The chart at right displays the pressure head as a function of the flow through this valve.

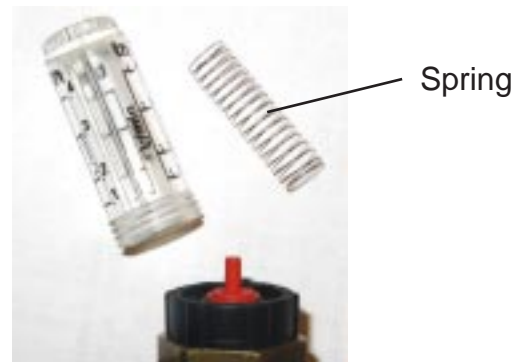
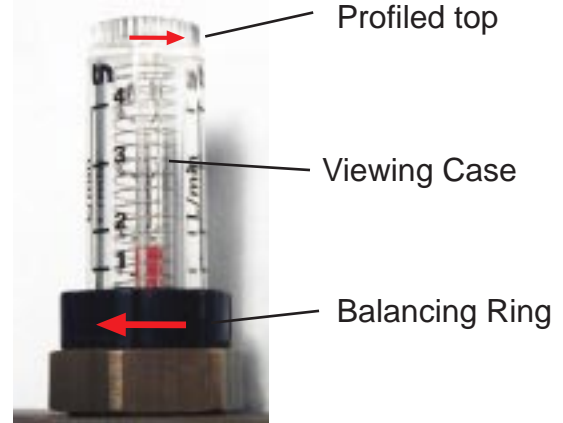


Valve pressure resistance formulas suitable for computerized design programs are available upon request.

Flowmeter Cleaning or Maintenance

The flowmeter will be filled with water at start-up, but after that there will be virtually no exchange of water in the Viewing Case during operation. Therefore, the water will remain quite clear and the flow can be checked also after several years. This is a major advantage over some other flowmeter makes. The Flowmeter will work in any position (also sidewise or even upside down).

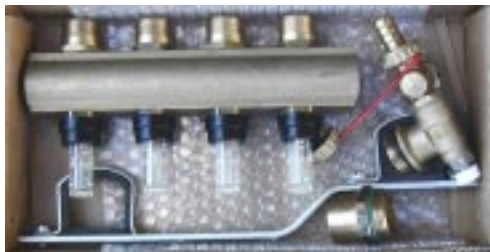
If the Viewing Case for some reason would be damaged so it needs to be exchanged, or if it needs cleaning, this can be done without emptying the system. Do this: Remove the black plastic Lock Cap by snapping it loose. Turn the Balancing Ring clockwise until it bottoms out. Hold the Balancing Ring while turning the Viewing Case counter clockwise. Its top is profiled to allow for grip - gently use a pair of pliers if required. Use gentle care when handling the Spring inside the Viewing Case and don't loose it. Replace the viewing Case with a new unit, or clean it as required. Insert the Spring before re-applying the Viewing Case. Turn the Balancing Ring to set the flow to its design value again. Apply the Lock Cap.



Manifold Kits contents



Kit B



Kit C



Flowmeter with gpm scale
(Some pictures above may display a metric scale, but all delivered to USA have gpm's. The scale is for flow rates between 0.06 and 1.06 gpm)