

## Myson Comfort Fit Manifold with Automatic Flow Control Technology

### Application

Myson Comfort Fit manifolds with *Automatic Flow Control (AFC)* Technology are suitable for use in all properly designed hydronic heating and cooling systems. Individual circuits can support up to 1.32 gallons per minute of flow (5.0 litres per minute).

### What you should find in the package

Pre-assembled components:

- Mounting Brackets: 2 brackets with offsets, predrilled mounting holes and header isolators
- Return Header: Thermometer, protective caps over thermostatic valve insert and drain/fill valve ( $3/4$ " hose connection)
- Supply Header: Thermometer, AFC valves on each circuit and drain/fill valve ( $3/4$ " hose connection)
- AFC valve range: 0 – 1.32 gpm (*approximately 0 – 5.0 l/min*)

Enclosed components (site assembly required):

- Mounting screw set with wall anchors – *It is the responsibility of the installer to make sure the mounting screw set and wall anchors are suitable for the as-built conditions of the mounting surface.*
- 2 – 1 inch NPT isolation valves (red handle for supply, blue handle for return)



### Manifold Mounting

Mount the manifold on a rigid surface with enough room to transition the circuit pipes into the manifold. The best practice is to allow a minimum of 18" (45 cm) of straight run into the manifold by individual circuits and 24" (60 cm) for the main supply and return header pipes. Be sure to provide appropriate protection around pipes where they pass through framing members, thermal mass penetrations and other construction materials.

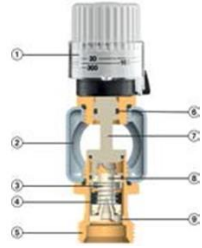
### Operating and Technical Parameters

Myson Comfort Fit manifolds are precision instruments. The hydronic system in which they are installed should be properly sized and installed. **Air which is entrained in system pipes can cause poor or no flow conditions. Likewise, dirt and debris in system fluid can prevent AFC valves from operating properly. Therefore, Myson recommends the installation of micro-bubble type air eliminators and dirt separator devices installed upstream of all manifolds.** Myson is not responsible for product performance related problems that arise from improper system design, installation or use of system components to include air eliminators and dirt separators. Use only clean fluid when filling the system. When initially filling the system, best practice is to purge air from each manifold circuit individually. In other words, when filling and purging a circuit, all other circuits should be in the "off" position.

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|----------------------------|---|
| • Operating Temperatures:  | 14°F and 158°F (-10°C and +70°C)                        |
| • System Operating Fluid:  | Non-corrosive system fluid according to VDI 2035 Part 2 |
| • Max. Operating Pressure: | 60 psi (4 bar)  |
| • Max Test Pressure:       | 87 psi (6 bar – according to DIN EN 1264-4)             |
| • Material:                | Stainless Steel type 1.4301/grade 304 – X5CrNi18-10     |
| • Glycol:                  | Concentrations must not exceed 50% (by volume)          |

*All stainless steel is subject to corrosion under certain conditions that include excessive flow rates, high concentrations of certain organic compounds such as chlorides as well as low pH. Please check local conditions and understand the chemical nature of the fluid you are placing in the system when using Comfort Fit manifolds. Use of system fluid that contains glycol solutions that are approved for hydronic systems is acceptable. Glycol concentration must not exceed 50% (by volume) and should be checked and maintained per the manufacturer's recommendations.*

## AFC valve adjustment

Construction	
1 – Setting cap with securing ring	
2 – Myson Comfort Fit manifold supply header	
3 – Compression Spring	
4 – Cartridge	
5 – Circuit Connection	
6 – O-ring seal	
7 – Adjustment Spindle	
8 – Sleeve	
9 – AFC valve control element	

AFC valve setting
Each AFC Valve is adjusted by turning the setting cap (1). Lift up on the clear plastic securing ring to allow the dial to turn freely. Simply turn the setting cap (1) to the design GPM setting. Once the dial is set, return the securing ring.



The exact adjustment is determined by the system designer and based on the heating or cooling load associated with the circuit. Once dialed in, the AFC Valve will maintain the flow setting even with changing system flow conditions (e.g. an adjacent circuit is closed). If you need help with system design or circuit setting, please contact Myson by calling 1-802-654-7022.

*Please refer to Myson's terms and conditions for all sales*