

# Barelli Stainless Steel Manifoled



Tensile Strength  
520 N/mm<sup>2</sup>  
(520 Newtons per square millimeter)



# Why Barreli Stainless Steel Underfloor Heating Manifolds

## 1 Lightness

A pre-assembled stainless steel manifold is up to 50% lighter than a brass manifold of the same size and features.

## 2 Mechanical Resistance

AISI 304L steel has a tensile strength of 520 N/mm<sup>2</sup> (520 MPa). The CW614N brass used for manifolds has a tensile strength of 430 N/mm<sup>2</sup> (430 MPa). This means stainless steel offers 20.93% higher mechanical strength than brass.

## 3 High Temperature Resistance

Stainless steel manifolds are resistant to both high and low temperatures, making them excellent for installation in any heating and cooling system.

## 4 High-Quality Raw Materials

Aesthetically, stainless steel is superior to brass and polymer. Furthermore, it is recognized globally as a proven and trusted material.

## 5 High Flow Rate

Due to a larger cross-sectional area, stainless steel manifolds provide a 20% higher flow rate compared to brass manifolds. The flow rate of a 1-inch stainless steel manifold is 5 m<sup>3</sup>/h (cubic meters per hour), while the flow rate of a 1-inch brass manifold is 4.2 m<sup>3</sup>/h.

## 6 Maximum Corrosion Resistance

Free from stress corrosion cracking and electrolytic corrosion.

## 7 Leak-Free Design

Plastic manifolds consist of modular polymer elements, typically reinforced with fiberglass. These modules are connected using fixed elements, with elastomer seals (like O-rings) providing the hydraulic seal. This means that every joint is a potential leakage point. In contrast, stainless steel manifolds are manufactured from a single bar, available in sizes from 2 to 13 outlets, eliminating these intermediate joints.

## 8 Ideal for Both Heating and Cooling Systems

The stainless steel manifold is the best alternative to polymer manifolds for cooling systems, offering the significant advantage of a much higher flow rate.



## Manifold Flowmeter



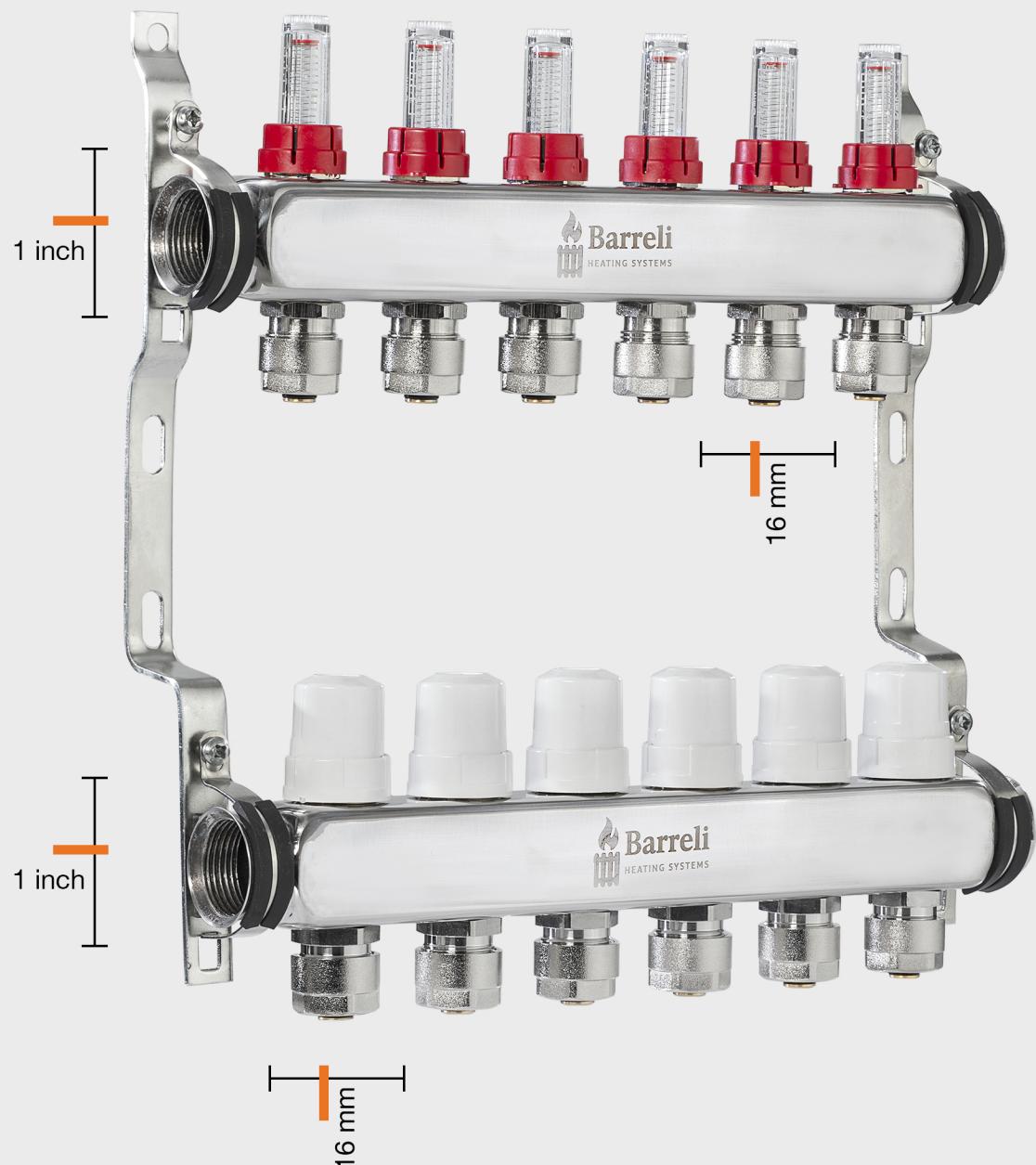
Because the manifold is equipped with flowmeters, the inlet water flow rate for each circuit can be controlled. Consequently, the volume of hot water entering the circuit is adjusted, and the heat output for that specific zone can be regulated.

1. Lightness
2. Mechanical Resistance
3. Temperature Resistance

4. High-Quality Raw Materials
5. High Flow Rate
6. Corrosion Resistance
7. Leak-Free Design
8. Ideal for Both Cooling and Heating Systems

## Body (1" x 16mm) "1/4"

From 3 to 12 circuits  
supply and return



The flowmeter-equipped underfloor heating manifolds feature a 1-inch main inlet and 16mm outlets for each circuit.

On the flowmeter models, you can precisely adjust the hot water flow rate for each individual heating loop. This allows you to set the desired ambient temperature for each specific zone, ensuring customized comfort throughout the space.

For automated control, you can connect a thermostatic valve to regulate the main inlet temperature to your exact preference.

Furthermore, the stainless steel manifolds can be connected to an electrical control module. By installing the companion app, you can control your heating system remotely from your smartphone.

**Stainless  
Steel Manifolds**  
For Underfloor Heating  
with Flowmeters



**Body (1" x 16mm) "1/4"**

**From 3 to 12 Port**  
supply and return



## Manifold Packaging

### Complete Installation Kit

The manifold bodies  
with all fittings  
(valves and flowmeters)

Test pressure 8 bar

### Secure and Custom Packaging

Packaged in a cardboard box with custom  
foam inserts for protection against impact.

Maximum Working Pressure: 10.5 bar

### Fast and Secure Delivery

Available for  
shipping by post.

Maximum working temperature 95°C

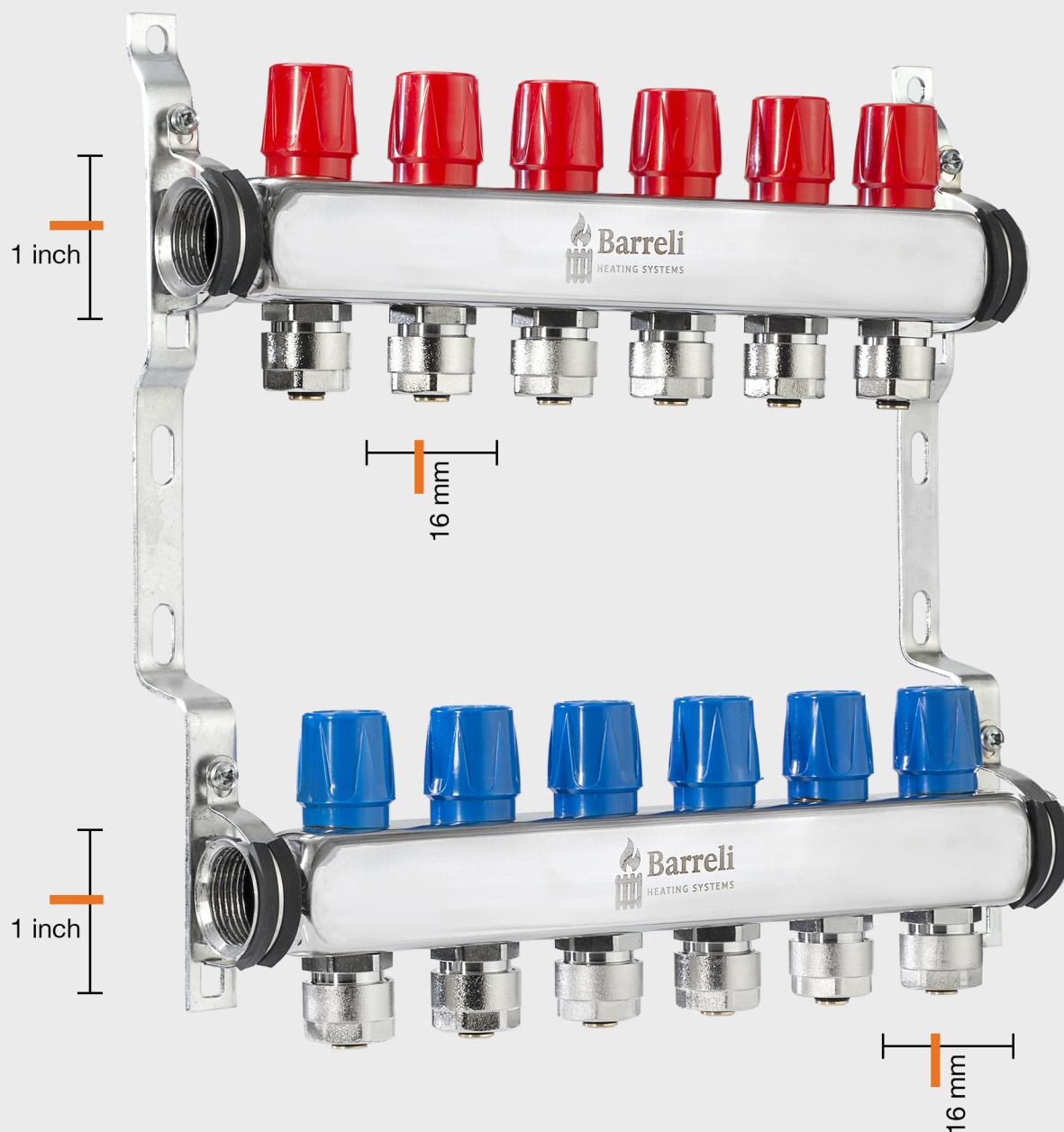
## Stainless Steel Manifolds

supply and return

The manual adjustment underfloor heating manifolds are designed to distribute and control the hot water within the heating system. Featuring a 1 1/4" body, a 1-inch main inlet, and 16mm outlets, these manifolds direct hot water from the heating source (e.g., a boiler) into the underfloor heating pipes. After the thermal exchange takes place, the cooled water is returned to the heating source to be reheated.

## From 3 to 12 Port

supply and return



**Body (1" x 16mm) "1.4**

## Manifold Packaging

### Complete Installation Kit

The manifold bodies with all fittings (valves and flowmeters)

Test pressure 8 bar

### Secure and Custom Packaging

Packaged in a cardboard box with custom foam inserts for protection against impact.

Maximum Working Pressure: 10.5 bar

### Fast and Secure Delivery

Available for shipping by post.

Maximum working temperature 95°C



**From 3 to 12 Port**  
supply and return

**Body (1" x 16mm) "1/4**

## Stainless Steel Manifolds for Water Systems

The Barreli Warm House potable water manifolds feature a 1-inch main inlet and 1/2-inch outlets. Thanks to their stainless steel construction, these manifolds offer superior durability against mechanical stress and temperature fluctuations. Additionally, they provide enhanced corrosion resistance and accommodate a higher water flow rate.

Barreli Warm House stainless steel manifolds provide an effective solution for a wide range of applications, including domestic pump systems, central heating plants, sanitary water distribution, and heating systems. Specifically for potable water, the manifold—available with 2 to 12 outlets—solves the challenge of efficiently distributing water within a residential unit.



**From 3 to 12 Port**  
supply and return

**Body (1" x 12mm) 1-1.4**

### 1. Complete Installation Kit

The manifold bodies with all fittings (valves and flowmeters).

### 2. Secure and Custom Packaging

Packaged in a cardboard box with custom foam inserts for protection against impact.

### 3. Fast and Secure Delivery

Available for shipping by post.

Test pressure 8 bar

Maximum Working Pressure: 10.5 bar

Maximum working temperature 95°C



# BARRELI & WARMHAUS

## Factory

Thirty-first 20-Meter St.  
Shahid Salimi Industrial Estate  
Tabriz, Iran

## Tabriz office

Unit A, 5th Floor  
No. 1/33, Valiasr St.  
(Corner of North Sa'di St.)  
Tabriz, Iran

## Tehran office

5th Floor  
No. 20, Vosough Ln.  
Zafaraniyeh District  
Tehran, Iran

## Contact

+98 4132313124  
+98 4132314418  
+98 9148603446