

QuickSetter™ Balancing Valve with flow meter

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132 Series



LOW-LEAD



Function

The QuickSetter+™ balancing valve accurately controls the flow rate in plumbing systems. Proper system balancing ensures the system operates according to design specifications, achieving, with the QuickSetter+™, precise quick manually balanced hot water circuits. The flow meter is housed in a bypass circuit on the valve body and can be shut off during normal operation. The flow meter permits fast and easy circuit balancing without added differential pressure gauges and charts.

Product range

132 Series Balancing valve with flow meter sizes 1/2", 3/4", and 1". Includes check valve and optional outlet temperature gauge.

Technical characteristics

Valve

Material: Body and ball: low-lead brass (<0.25% lead content)
Ball control stem: 303 stainless steel
Ball seal seat: PTFE
Control stem guide: PSU
Seals: EPDM

Flow meter

Material: Body and headwork: low-lead brass (<0.25% lead content)
Valve stem: chrome plated brass
Springs: stainless steel
Seals: EPDM
Flow meter float and indicator cover: PSU

Performance: Max. working pressure: 150 psi (10 bar)
Max. glycol percentage: 50%
Working temperature range: 14–230°F (-10–110°C)
Flow rate range unit of measurement: gpm
Accuracy: ±10%
Control stem angle of rotation: 90°
Required operating wrench: 1/2"–1": 9 mm
Connections: 1/2", 3/4", 1" union sweat

Reduction of Lead in Drinking Water Act Compliant: 0.25% Max.
weighted average lead content. Reduction of Lead in Drinking
Water Act Certified by IAPMO R&T



SAFETY INSTRUCTION

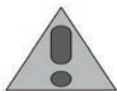
This safety alert symbol will be used in this manual to draw attention to safety related instructions. When used, the safety alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN A SAFETY HAZARD.**



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.



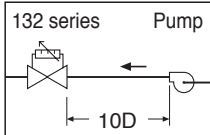
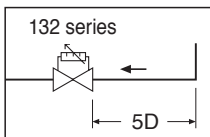
CAUTION: Over-tightening and breakage can occur with the use of Teflon® pipe joint compounds. Teflon® provides lubricity so that care must be exercised not to over-tighten joints. Failure to follow these instructions could result in property damage and /or personal injury.



WARNING: System fluids are under pressure or temperature can be hazardous. Be sure the pressure has been reduced to zero and the system temperature is below 100°F (38°C). Failure to follow these instructions could result in property damage and/or personal injury.

Caleffi shall not be liable for damages resulting from stress corrosion, misapplication or misuse of its products.

Installation



The balancing valves, with built-in flow meter, must be installed by qualified technical personnel in accordance with the instructions given in this manual and with current regulations.

Clean the pipes of any debris, rust, welding slag and any other contaminants.

As in all piping circuits it is important to pay attention to the cleanliness of the entire system.

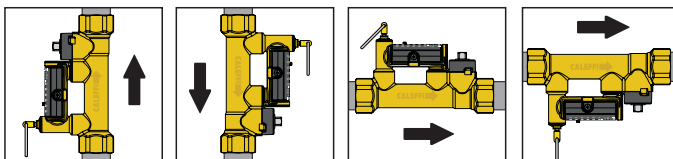
For optimal operation, any air in the water must be removed.

In order to ensure measuring accuracy, the balancing valves with flow meter must be installed by keeping a straight section above them at least as long as five diameters, increased to at least ten diameters if the nearest device upstream is a pump.

The valves must be installed so that:

- the direction of the flow agrees with that of the arrow on the valve body.
- there is easy access to the flow meter valve, control stem and dial with the calibration adjustment range.

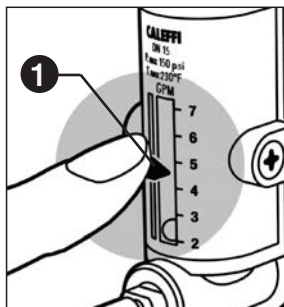
The valves can be fitted on either vertical or horizontal pipes.



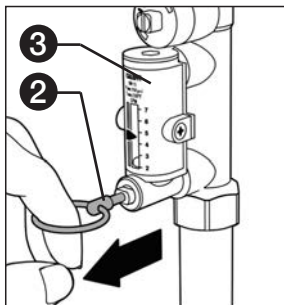
Flow rate adjustment

The flow rate is adjusted by carrying out the following operations:

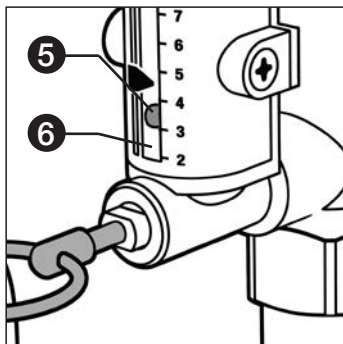
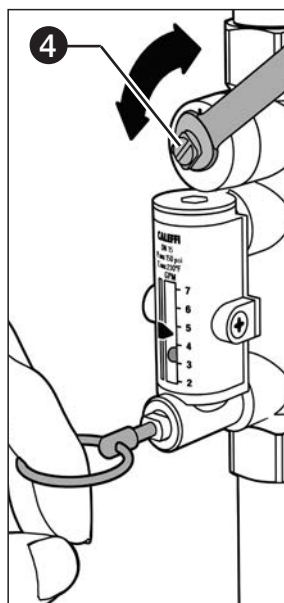
- A. With the aid of the indicator (1), mark the reference flow rate on which the valve is to be set.



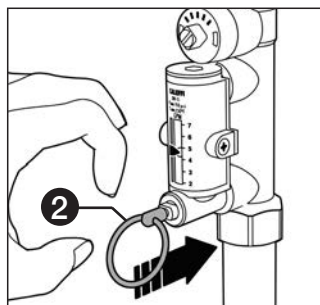
- B. Use the ring (2) to slowly open the flow meter bypass valve that shuts off the flow of medium in the flow meter (3) under normal operating conditions.



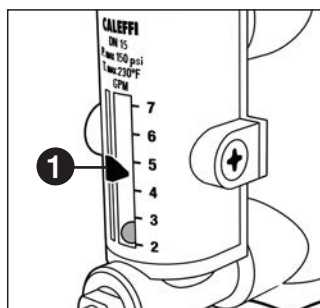
- C. Keeping the flow meter by-pass valve open, apply a wrench (9 mm for 1/2" to 1 1/4" sizes; 12 mm for 1 1/2" and 2" sizes) to the balancing valve control stem (4) to slowly adjust the flow rate, which is indicated by a metal ball (5) that runs inside a transparent cylinder (6) alongside which there is a graduated scale in GPM.



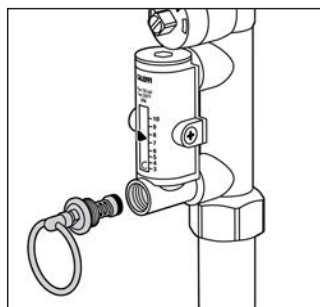
- D. After completing the balancing, release the ring (2) of the flow meter bypass valve, which will automatically go back into the closed position.



- E. On completing the adjustment, the indicator (1) can be used to keep the setting in memory, in case checks need to be made over time.

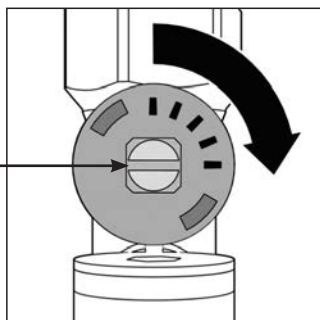


- F. A replacement flow meter bypass valve stem with operating ring is available in the event it is damaged and inoperable. Order code F19346. See page 6 for replacement instructions.

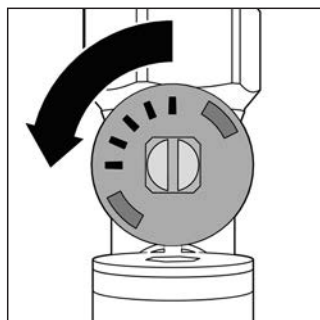


**Complete closing/
opening
of valve**

**Balancing valve
control stem**

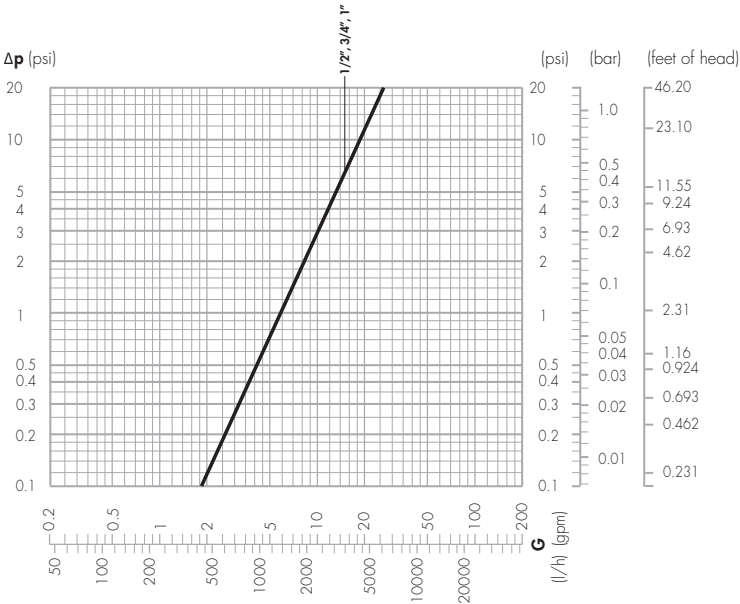


Complete closing of valve



Complete opening of valve

**Hydraulic
characteristics
at 100% open**



Code	Connections	Flow rate (GPM)	Cv
132439AFC 132438AFC	1/2" sweat with check valve 1/2" sweat with temp gauge & check valve	1/2 to 1-3/4	6.3
132539AFC 132538AFC	3/4" sweat with check valve 3/4" sweat with temp gauge & check valve		
132639AFC 132638AFC	1" sweat with check valve 1" sweat with temp gauge & check valve		
132459AFC 132458AFC	1/2" sweat with check valve 1/2" sweat with temp gauge & check valve	2 to 7	
132559AFC 132558AFC	3/4" sweat with check valve 3/4" sweat with temp gauge & check valve		
132659AFC 132658AFC	1" sweat with check valve 1" sweat with temp gauge & check valve		

Application: Balanced recirculating systems

In some buildings, an example recirculation system is shown below:

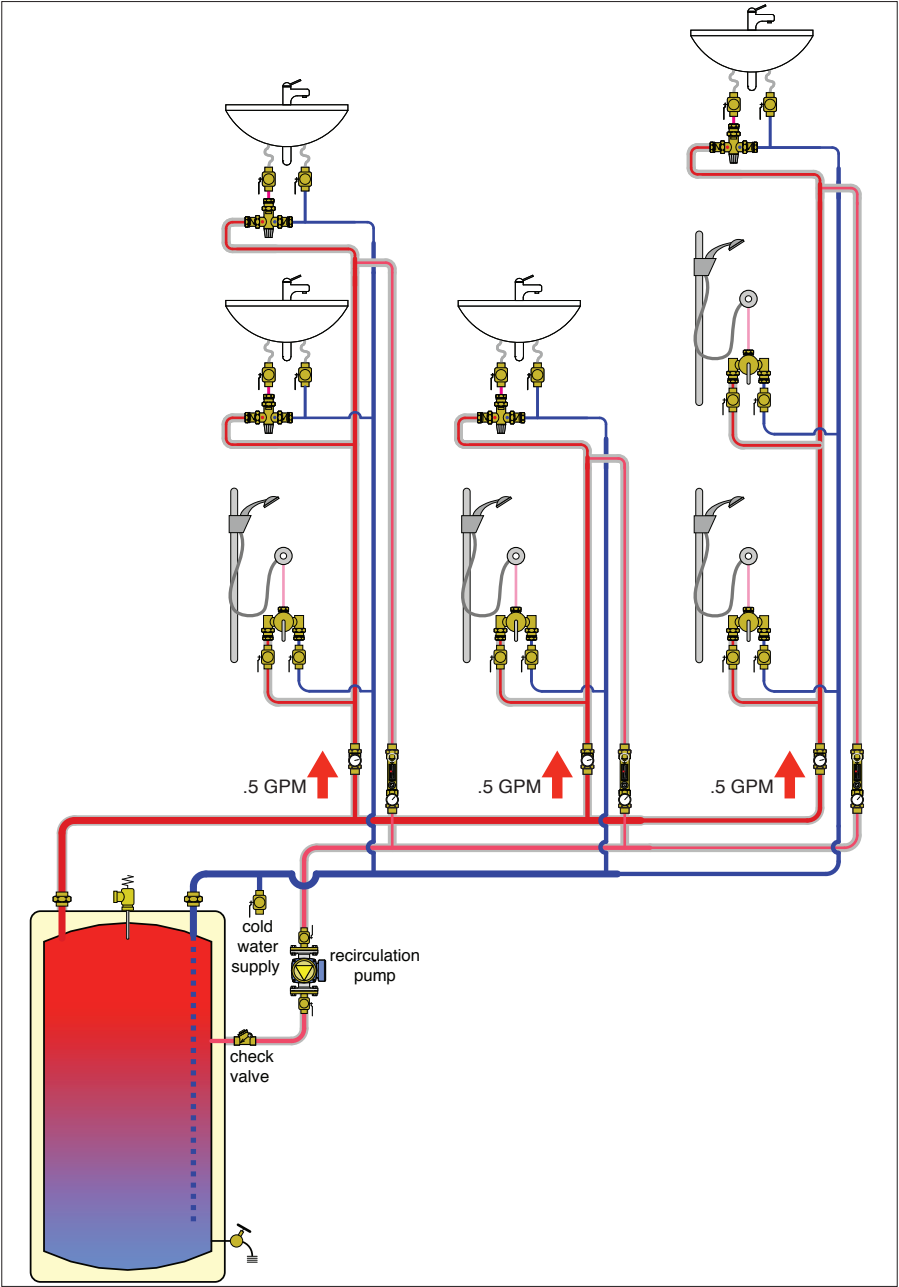
Multiple hot and cold water risers are supplied from common hot and cold water mains. The number and type of fixtures served by each set of risers will often be different. A recirculation riser accompanies each set of hot and cold risers. A single circulator provides recirculation flow through the entire system.

This type of piping network is similar to a 2-pipe direct return distribution system for hydronic heating. Because of differences in the lengths or sizes of both the main piping and riser piping, the recirculation flow through each set of risers is likely to be different. This can lead to different temperature drops between the beginning of a given hot water riser and the end of its associated return riser. This may cause the hot water temperature arriving at a distant fixture to be insufficient for the intended usage.

This situation can be corrected by “balancing” the recirculation flow between the various sets of risers. The goal of such balancing is to establish recirculation flow rates that create equal temperature drop between the start of each hot water riser and the end of its associated return (recirculation) riser.

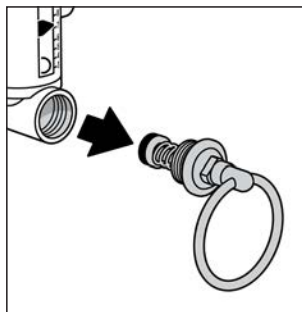
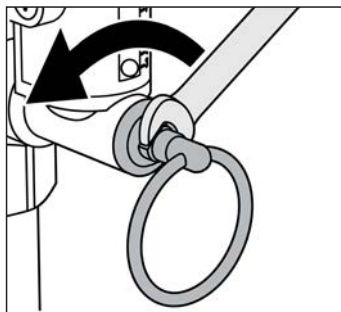
Balancing is enabled with the QuickSetter+™ 132X38AFC, balancing valve with flow meter, temperature gauge and check valve, near the end of each return riser. These valves are 0.25% max. lead brass, certified to 2014 lead plumbing law by IAPMO, rated for contact with potable water.

The QuickSetter+™ 132X38AFC includes a check valve so when installed as shown near the end of each recirculation riser to prevent reverse flow. Also, when the risers are vertical, as shown, the recirculation pipe should tee into the hot water riser below the final fixture take off. This allows any air bubbles that may be present in the hot water riser to leave each time hot water is drawn at the highest fixture.



**Procedure for
replacing bypass
valve stem with
operating ring**

1. Remove bypass valve assembly with an 8 mm wrench.
2. Install replacement bypass valve assembly, code F19346, using locktight to seal the threads.



CAUTION: If the balancing valve valve 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.



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