# **Thermostatic Mixing Valve**

CHICAGO FAUCETS

a Geberit company

Model Numbers: 131-NF, 131-ABNF, 131-CNF, 131-CABNF

Size: 3/8" (10 mm)

# **Description**

The 131 Series  $3/8^{\circ}$  (10 mm) compression fitting thermostatic mixing valves maintain and limit hot water to a desired selectable temperature between  $80^{\circ}$ F and  $120^{\circ}$ F (27°C and 49°C), with flow rates as low as 0.5 gpm (1.9 LPM). The superior flow characteristics of these valves provide accurate temperature control ( $\pm 3^{\circ}$ F) with low pressure drop. As an added feature, the 131 Series incorporates dual check valves to protect against cross-flow and integral screens to filter out debris.

#### **Applications**

A thermostatic mixing valve is intended for under-sink installation to control the hot water temperature and prevent accidental scalding. The water temperature must be adjusted by the installer using a thermometer to measure the hot water temperature at the faucet outlet. Maximum temperature of  $110^{\circ}F$  (43°C) is recommended.

#### **Application Note**

Delivery of water to fixtures intended for hand washing should always be controlled by valves listed to ASSE 1070. Thermostatic valves provide the user with both thermal shock and scald protection. These valves should always be adjusted after installation to the desired temperature.

#### **Pressure - Temperature**

Minimum Supply Pressure: 30 psi (207 kPa)

Hot Inlet Temperature:  $120^{\circ}\text{F} - 180^{\circ}\text{F} (49^{\circ}\text{C} - 82^{\circ}\text{C})$ Cold Inlet Temperature:  $40^{\circ}\text{F} - 85^{\circ}\text{F} (4^{\circ}\text{C} - 29^{\circ}\text{C})$ 

Minimum Inlet

Temperature Differential: 20°F (9°C)

Temperature Out: 80°F - 120°F (27°C - 49°C)

Factory Setting: 100.4°F

Maximum Pressure: 125 psi (10.3 bar)

The pressure differential must be less than 20% between the hot and cold inlet supplies.

#### **Installation Instructions**

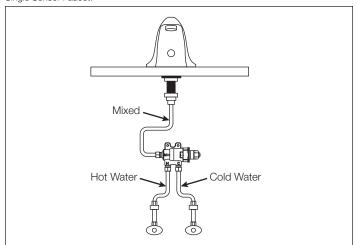
The 131 Series installs easily onto most faucets. When installing this thermostatic mixing valve, be sure to follow all local plumbing codes for your application.

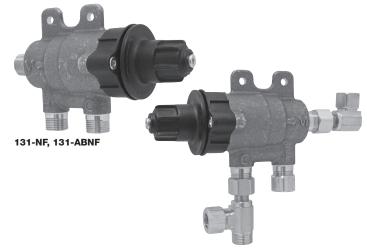
- Shut off the supply valves and remove any existing piping between the supply valves and the faucet
- Connect the 131 Series to the supply valves and the faucet. Typical connections are shown in Figures 2 and 3 below.
- 3. Turn on the supply valves.
- 4. Follow the instructions on page 2 of this manual, Temperature Adjustment, to obtain the desired outlet water temperature.
- Note 1: When using copper tubing, do not extend the tubing more than 3/16" beyond the compression ferrule. When installing with non-rigid supply hose connections, anchor the 131 Series thermostatic valve to the wall using the provided spacer to prevent any unintentional movement.

Note 2: Do not use pipe dope/paste on valve thread connections.

# Figure 2. Typical Installations, 131-NF and 131-ABNF

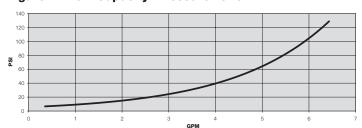
Single Sensor Faucet:





131-CNF, 131-CABNF

Figure 1. Flow Capacity: Pressure vs. GPM



Approval: CSA B125 Certified

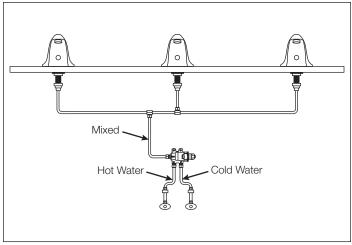
Listing: ASSE 1070

131-ABNF, 131-CABNF compliant to: CA AB1953 and VT S.152



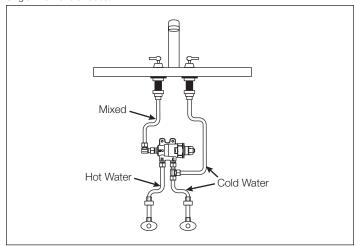


Multiple Sensor Faucets:

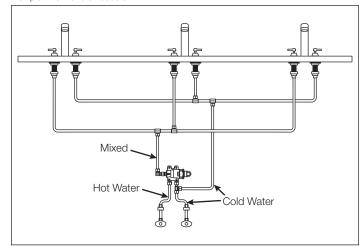


#### Figure 3. Typical Installations, 131-CNF and 131-CABNF

Single Two-Handle Faucet:



Multiple Two-Handle Faucets:



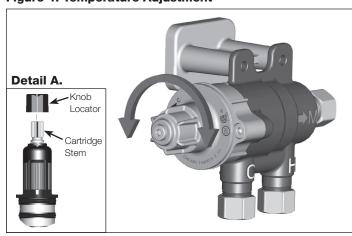
# **Temperature Adjustment**

- 1. Loosen the cap screw with a 3mm (7/64") hex wrench.
- As a safety feature the cap must be partially lifted from the valve to adjust temperature.
- With the faucet turned on and in the full hot position, adjust the setting of the valve to obtain the desired outlet water temperature. Turn clockwise to decrease temperature.
- 4. Lower handle and tighten screw.
- 5. Check outlet temperature
- **Note 1:** The hot water should be allowed to flow for two or three minutes prior to adjusting the valve setting in order to have the hottest inlet temperature flowing through the valve.
- Note 2: If handle knob locator becomes separated from stem, align black mark on cartridge stem with groove on knob locator and reassemble as shown in Detail "A".

**ATTENTION INSTALLER:** After installation, please leave this Instruction Sheet for occupant's information.

**IMPORTANT:** Inquire with governing authorities for local installation requirements.

**Figure 4. Temperature Adjustment** 



### CHICAGO FAUCETS LIMITED WARRANTY

#### TO WHOM DOES THIS WARRANTY APPLY?

The Company extends the following limited warranty to the original user only.

### WHAT DOES THIS WARRANTY COVER AND HOW LONG DOES IT LAST?

This Product is warranted against material manufacturing defects for a period of one (1) year from the date of Product purchase.

#### OTHER WARRANTIES

All other Products not covered above are warranted against material manufacturing defects for a period of one (1) year from the date of Product purchase.

# WHAT THIS WARRANTY DOES NOT COVER The Company will not be liable for any labor, transportation or consequential expenses not specifically stated above. There is **NO WARRANTY** in cases of damage in transit,

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#### **HOW DOES STATE LAW APPLY?**

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. **RESTRICTIONS APPLY.** 



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