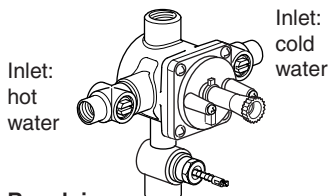


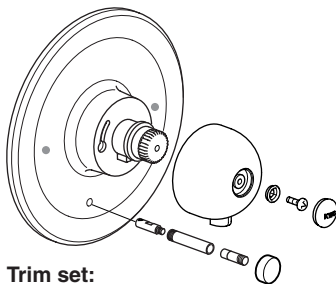
Concealed pressure balanced bath and shower mixer

KWC MARLINO

4 port with diverter

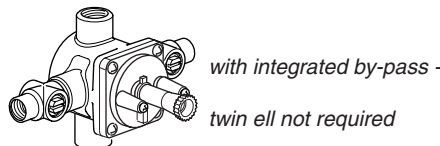


Rough in:
K.37.P4.01.931.23

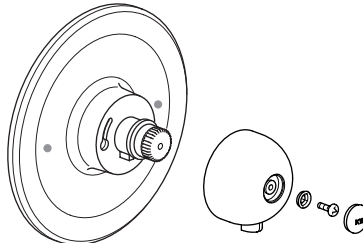


Trim set:
KWC MARLINO
K.20.P4.00

4 port without diverter

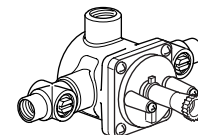


Rough in:
K.37.P4.02.931.23

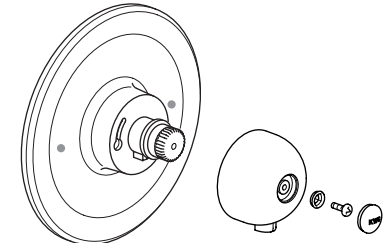


Trim set:
KWC MARLINO
K.21.P4.00

3 port



Rough in:
K.37.P4.03.931.23



Trim set:
KWC MARLINO
K.21.P4.00



This product is precision engineered to provide superior performance provided it is installed and operated in accordance with these recommendations. In order to fully enjoy the comfort, safety and reliability of your pressure balancing valve, be certain to familiarize yourself with these instructions.

Failure to follow these instructions may cause damage or improper operation and nullify the warranty!

Maintenance:

- A) To clean your faucets and accessories simply wipe them with a wet, soapy cloth, immediately rinse off with cold water and wipe dry with soft, damp cloth or towel.**
- B) Most bathroom and kitchen cleaners contain aggressive (acidic / corrosive) chemicals or abrasives which will harm the finish and cause operational problems.**
- C) Use of these products voids the manufacturer's warranty.**

Operation:

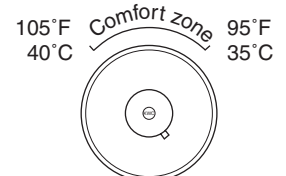
A counterclockwise rotation opens the valve beginning with cold water. Preventing accidental scalding.

An adjustable hot limit stop reduces risk of exposure to extremely hot water.

Clockwise rotation of the handle closes the valve.

The valve's comfort zone ensures a safe, reliable and precise adjustment of mixed water temperature in the range from 95° F (35°C) to 105° F (40°C).

The featherlight touch of the handle provides simple and easy control for the young or elderly.



- E Operating data**
- Ideal operating pressure : 3 bar (45 PSI)
 - Max. operating pressure : 5 bar (70 PSI)
 - Equal pressures cold/warm recommended
 - Ideal water temperature : 65 °C (149°F)
 - Max. hot water temperature : 90 °C (194°F)



Attention:
Before installation flush pipes thoroughly!

Schweiz, Suisse:
KWC AG
Hauptstrasse
CH-5726 Unterkulm

Tel. : 062 768 67 77
Fax : 062 768 61 62

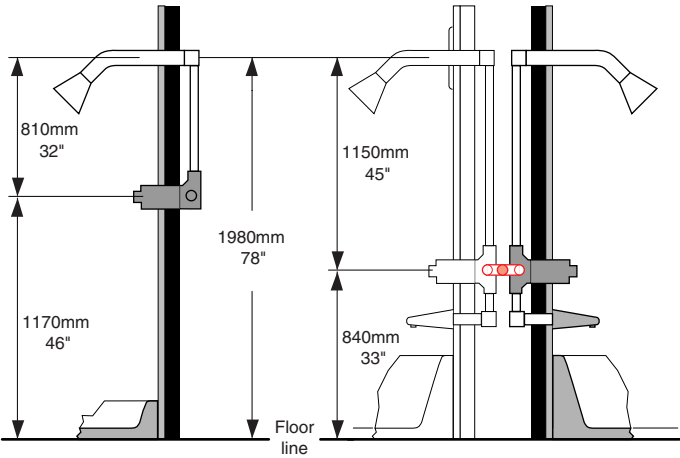
USA:
KWC FAUCETS INC.
1770 Corporate Drive # 580
Norcross, GA 30093

Phone: 678 334 2121
Fax: 678 334 2128

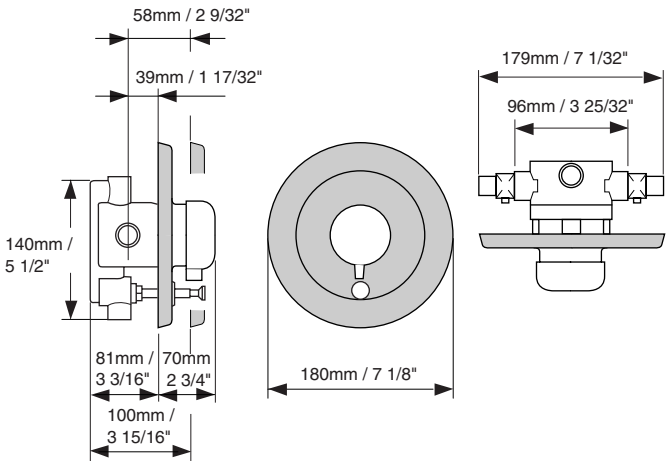
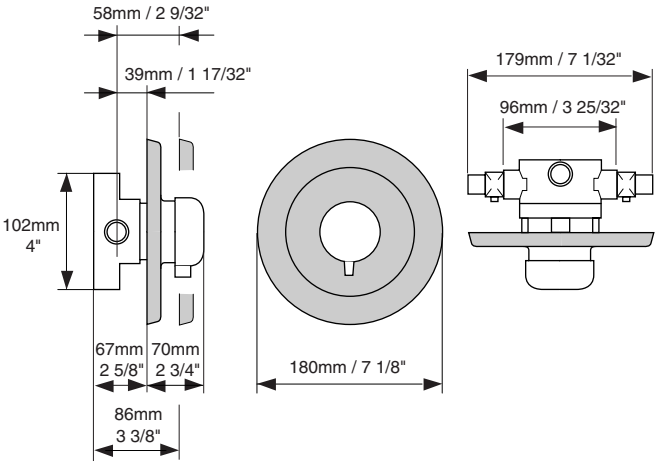
Standard installation
Back-to-back installation
Dimensions

1

Standard installation: Back-to-back installation:
Shower only Tub / shower



Back-to-back installation:
In back-to-back installations, cartridge must be rotated 180° to ensure proper valve operation.



Rough in

2



3 port valve, shower only:
Position valve with outlet up. Finished wall must be within the dimensions shown on finished wall template.



4 port valve, tub and shower:
Position valve with shower outlet marked "S" up and the tub outlet marked "T" down. Finished wall must be within the dimensions shown on finished wall template.



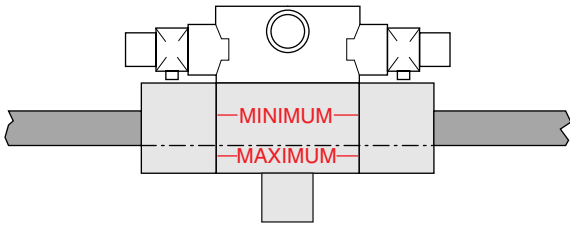
Finished wall template must remain intact for finished wall surface measurements and as a template for plastering and / or tiling.



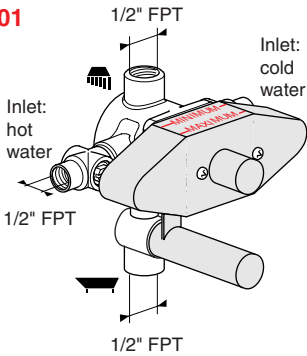
It is not necessary to remove the pressure balancing cartridge from the valve during normal soldering of connections, using propane-butane gas. Do not use OXYGEN-ACETYLENE!



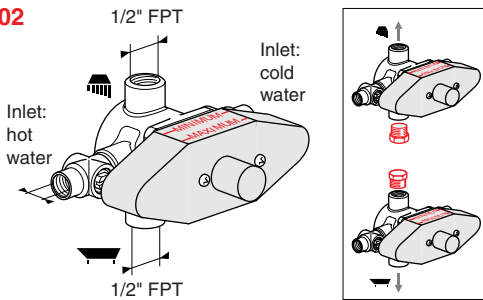
When soldering connections, do not use excessive heat!
To test the pipe joints, pressurize both hot and cold inlets!



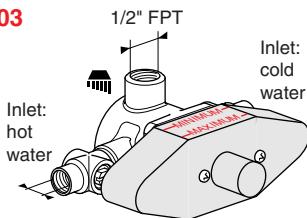
K.37.P4.01



K.37.P4.02



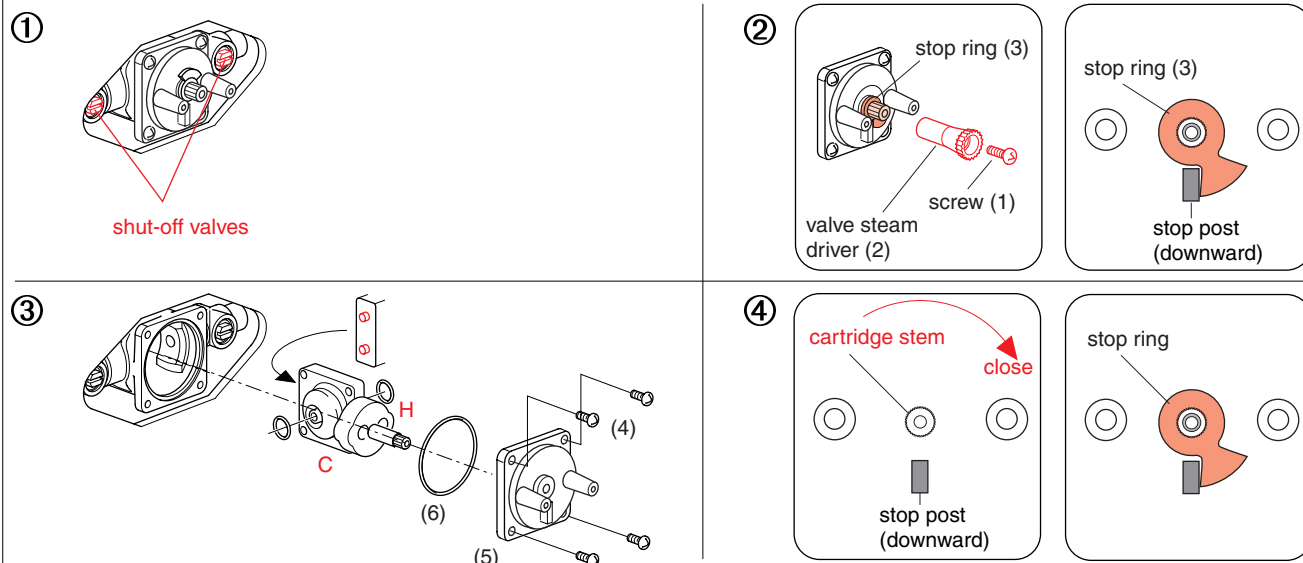
K.37.P4.03



Installation Back-to-back

(if applicable)

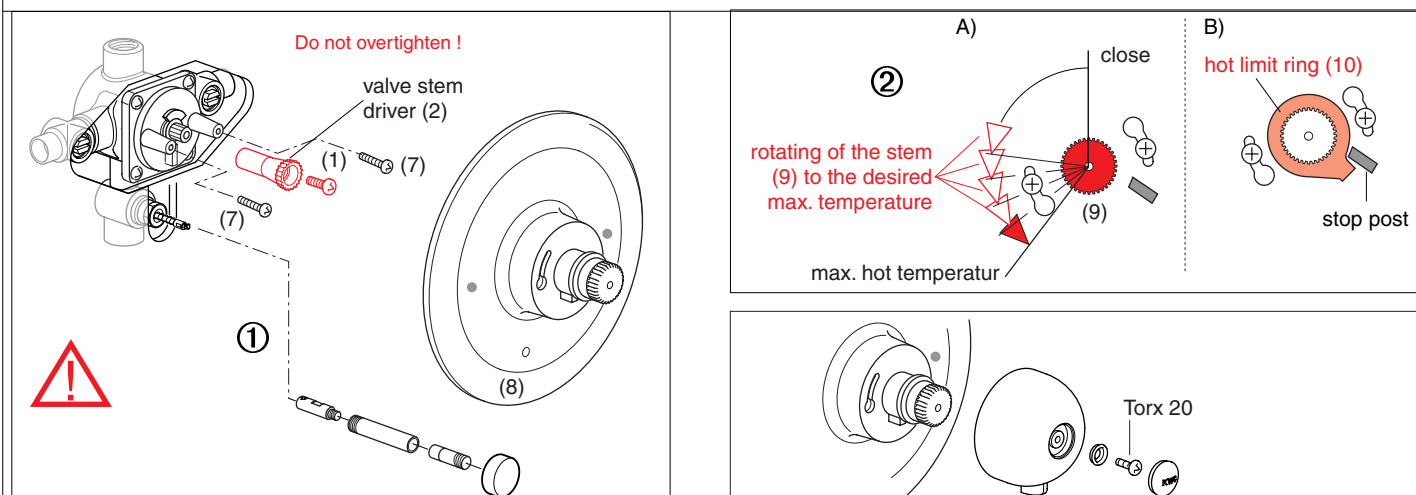
3



- ① Close shut-off valves:**
 - Once shower enclosure is completed, remove the finished wall template.
 - If the valve body is equipped with service stop valves close the hot and cold water supplies. Otherwise, shut the supply at the nearest source.
- ② Remove valve stem driver and stop ring:**
 - Remove the screw (1) to remove the plastic valve stem driver (2).
 - Remove stop ring (3) note position.
- ③ Turn cartridge for back-to-back installation:**
 - Remove the four cover screws (4) and the valve cover (5) with O-ring (6).
 - Pull the cartridge out. Do not damage the O-ring seals.
 - Rotate the cartridge 180° turning it upside down. Place it into the valve body. Note position of hot ("H") and cold ("C") markings on the cartridge: "H" hot will now be on the right and "C" cold on the left. Two alignment pins located on the rear of the cartridge must sit in the locating holes within the valve body. Cartridge is correctly engaged when pushing the cartridge, it will not rotate.
- ④ Fix stop ring on closed position:**
 - Put the O-ring on the valve cover. Make sure the surface of the valve cover, on which the O-ring will sit, and the O-ring are both clean.
 - Position the valve cover with stop post facing down. Seat the cover to the body. Do not pinch the O-ring. The assembly should fit together with a minimum of pressing force.
 - Tighten up the cover screws diagonally, first lightly and then more firmly.
- ④ Fix stop ring on closed position:**
 - Close the valve by turning the cartridge stem clockwise.
 - Position the stop ring on the stem as shown in figure 4.
 - Install plastic stem driver (2) with screw (1).

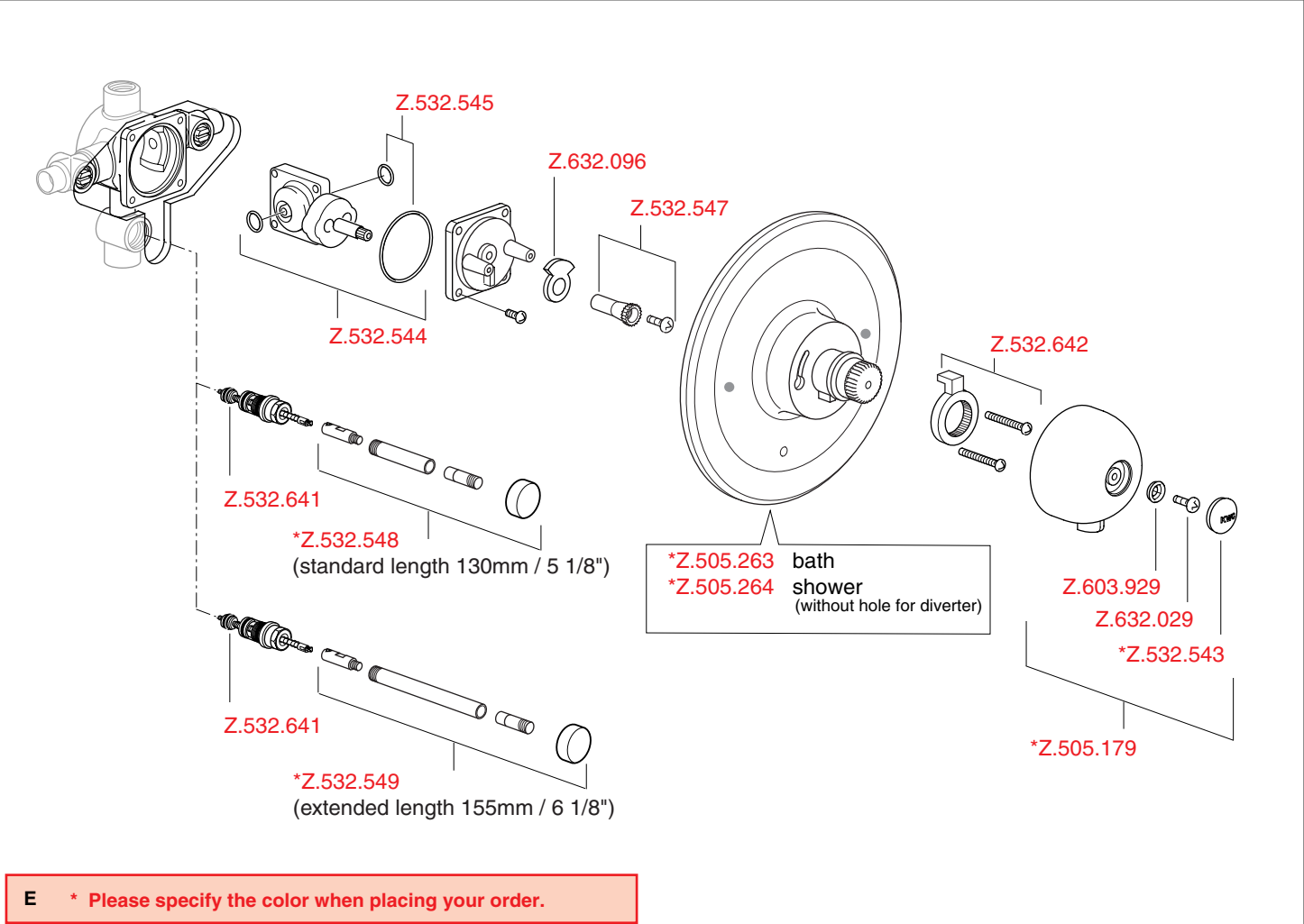
Installation of the trim set and setting the hot limit stop

4



- ① Installation of the escutcheon (8):**

Install escutcheon screws (7) into valve cover posts. Slide the escutcheon (8) over the screw heads and rotate escutcheon counterclockwise. Tighten the screws (7) so the escutcheon is firmly pressed against the wall and does not rotate. **Do not overtighten!**
- ② Setting hot limit stop:**
 - A) Rotate escutcheon driver stem (9) counterclockwise until a desired and safe hot water temperature is reached (**recommended maximum is 110°F / 43°C**)
 - B) Place the hot limit ring (10) over the splines on the stem (9) with the hot limit ring resting against the stop post on the escutcheon. Closing the valve while rotating the stem (9) clockwise until it stops,
- ③ Install the handle.**



Trouble shooting

Malfunction:	Cause:	Remedy:
Hot and cold reversed	Hot and cold water supplies have been connected in reverse.	Rotate cartridge as described in "Back-to-back installation".
Tub filler shower head drips after shutting off the valve.	Water remains in the shower piping. (This is normal) Incorrect setting of the stop ring causing a partially opened cartridge. Cartridge inlet O-ring seal is faulty.	Allow approximately 3 - 5 minutes to drain column, or push lever on tub spout to the tub fill position * . Reset the hot limit stop ring as described in rough-in installation. Check the O-ring for cuts or damage and replace if necessary.
Shower insufficiently hot	Hot limit stop incorrectly set.	Refer to the instruction: Check hot water temperature.
No flow of hot or cold water	Either the hot or cold side is not fully pressurized. Debris caught inside the inlet of the cartridge. No engagement between escutcheon and plastic driver.	Be sure service stops are both fully open and system is pressurized. Remove cartridge and flush out or remove any debris lodged inside the hot or cold inlets. Install either the 1/2" or 3/4" extension kit.
Valve body too deep in wall	Improper installation.	Install either the 1/2" or 3/4" extension kit.

 **Never try to stop dripping by applying excessive force to the handle when closing the valve!**