# **ROUGH IN VALVES**

# **Installation Manual**

MB439 - SV9INC.219 US/EU

MB440 - SV9INC.220 US/EU

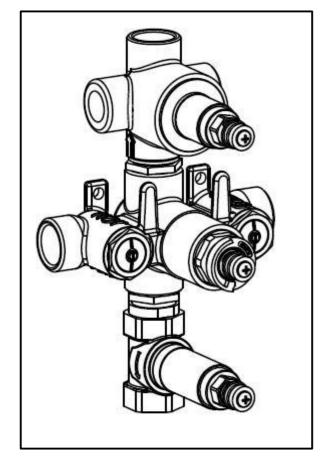
MB441 - SV9INC.221 US/EU

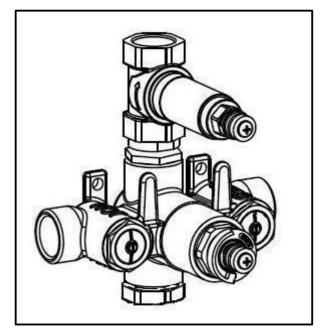
MB442 - SV9INC.222 US/EU

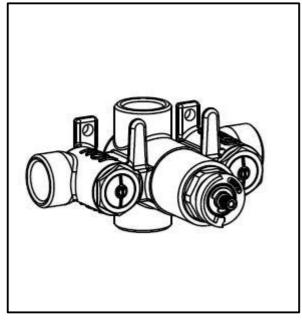
MB443 - SV9INC.223 US/EU

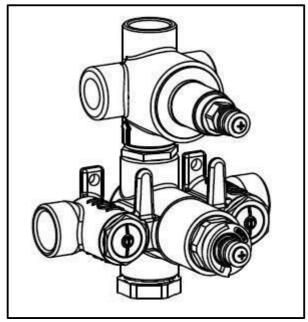
MB444 - SV9INC.224 US/EU

MB446 - SV9INC.229 US/EU









#### GENERAL FEATURES

This mixer is suitable for all water heating systems provided it is installed correctly by a competent and qualified installer.

#### OPERATING SPECIFICATIONS

#### **Hot water supply temperature:**

Maximum: 85°C (185° F) Recommended: 65°C (149° F)

Minimum: 5°C (41°F)

Minimum difference between hot and mixed temperature 10°C (50° F)

The temperature of the inlet hot water must be higher than the maximum mixed water temperature required from the outlet.

#### **Working pressures**

Maximum: 10 bar (145 psi) Minimum: 0,1 bar (1,5 psi)

Hot and cold operating pressures should be kept as balanced as possible in order to maintain maximum efficiency.

When the supply pressure is higher than 5 bar (72 psi) a pressure reducing valve Keep a gap in the wall between Ø125 and Ø130 mm (Ø4 7/8" and Ø5 1/8") for allowing removal of protection cover and for future maintenance access.

#### **TECHNICAL DATA**

The mixer is supplied with covers for the installation at a depth from 51 to 67 mm from (2" to 2+5/8") the centre of the mains tube to the finished wall.

The temperature control knob is pre-set from the manufacturer at  $38^{\circ}$ C ( $100^{\circ}$  F) with stop at  $44^{\circ}$ C +/-2°C. ( $111^{\circ}$  F +/-  $36^{\circ}$  F)

The mixer ports are supplied with a female thread G \(^3\)4" or NPT \(^3\)4".

#### PLUMBING RECOMMENDATIONS

- ◆ An independent hot and cold water supply is required for the shower system.
- ♦ The recommended pipe work should be minimum 22 mm (0+7/8") for low pressure systems.
- ◆ If more than one shower mixer is installed, the minimum feed should be 28mm (1+3/32") (ensure adequate end constant supply of both hot and cold water)
- ♦ READ CAREFULLY THIS MANUAL BEFORE USING YOUR MIXER AND KEEP IT AT HAND FOR FUTURE REQUIREMENTS

#### **GENERAL FEATURES ONLY FOR MB446**

This Volume control is suitable for all plumbing systems if installed correctly by a competent and qualified installer.

#### **OPERATING SPECIFICATIONS**

#### **Hot water supply temperature:**

Maximum: 85°C (185° F) Recommended: 65°C (149° F)

Minimum: 5°C (41°F)

#### **Working pressures**

Maximum: 10 bar (145 psi) Minimum: 0,1 bar (1,5 psi)

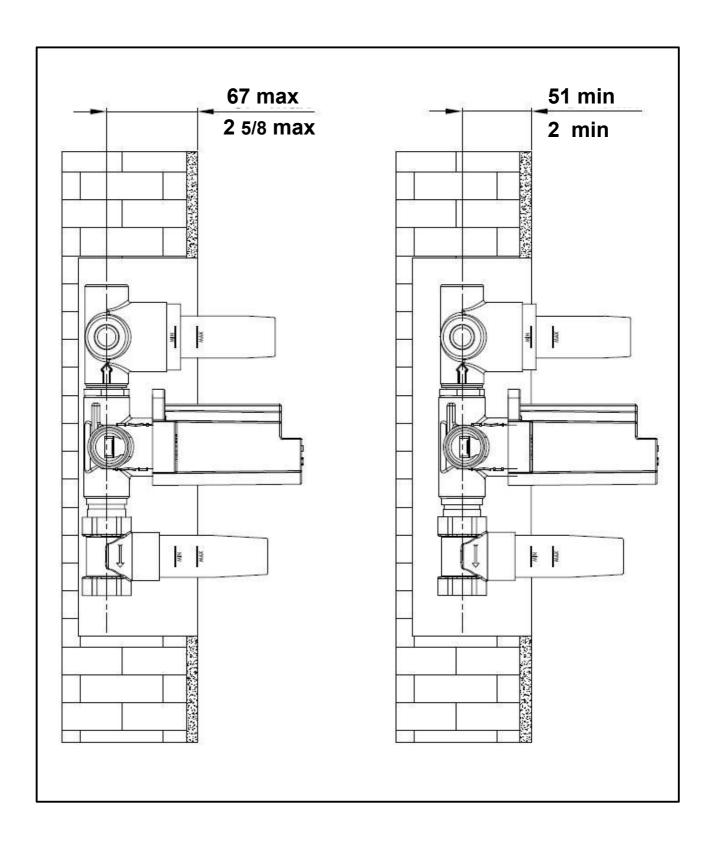
#### **TECHNICAL DATA**

The mixer is supplied with covers for the installation at a depth from 51 to 67 mm (2" to 2+5/8") from the centre of the mains tube to the finished wall. The connection ports are supplied with a female thread G  $\frac{3}{4}$ " or NPT  $\frac{3}{4}$ ".

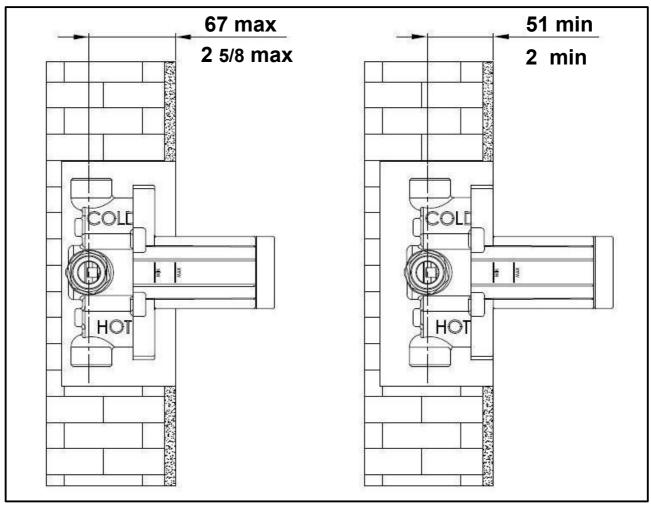
#### PLUMBING RECOMMENDATIONS

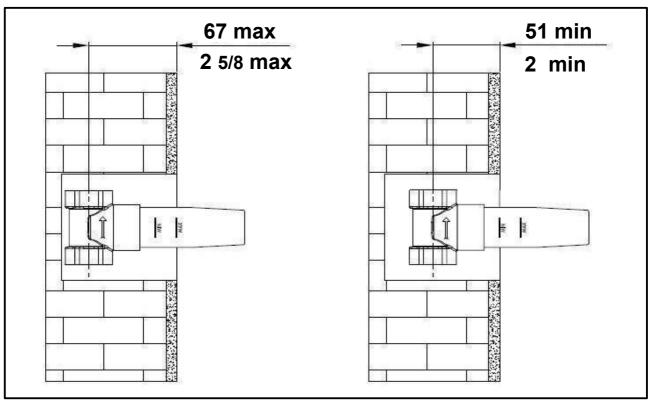
- ♦ The recommended pipe work should be minimum 22 mm (0+7/8") for low pressure systems.
- ♦ READ CAREFULLY THIS MANUAL BEFORE USING YOUR MIXER AND KEEP IT AT HAND FOR FUTURE REQUIREMENTS

Min and Max positions respect to the finished wall Take into account also the thickness of tiles, marble, etc

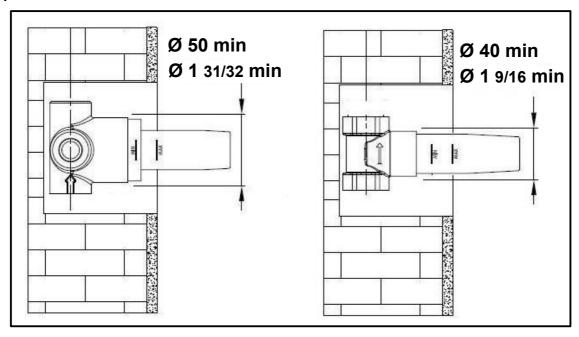


Min and Max positions respect to the finished wall Take into account also the thickness of tiles, marble, etc



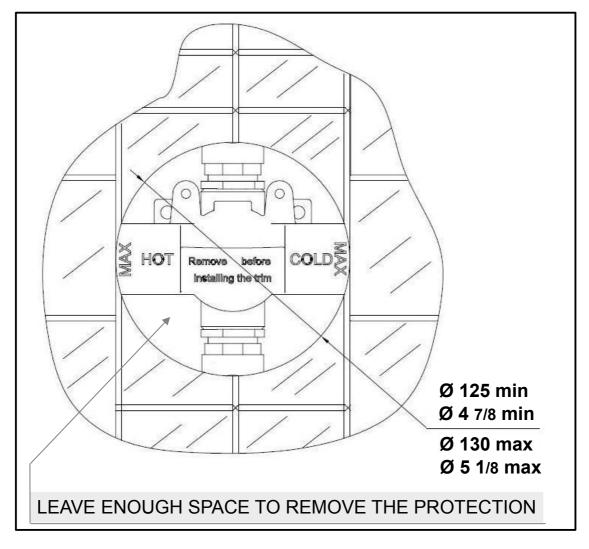


#### Wall gap measurement for Diverter and Volume control

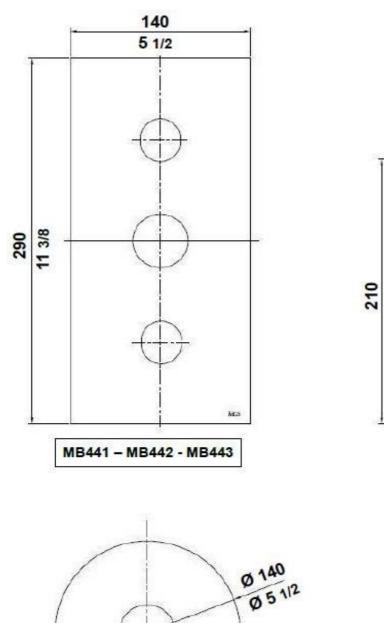


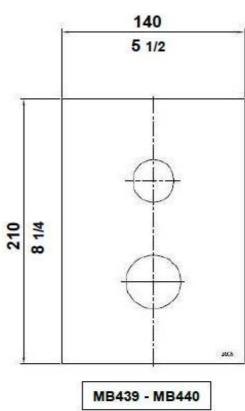
### Wall gap for Thermostatic mixer

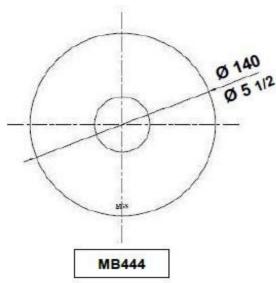
Keep a gap in the wall between Ø125 and Ø130 mm (Ø4 7/8" and Ø5 1/8") for allowing removal of protection cover and for future maintenance access.

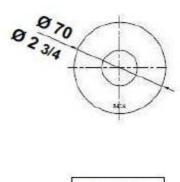


# Trim plate measurements according to indicated models









MB446