

2. System Design

■ Installing distribution joint

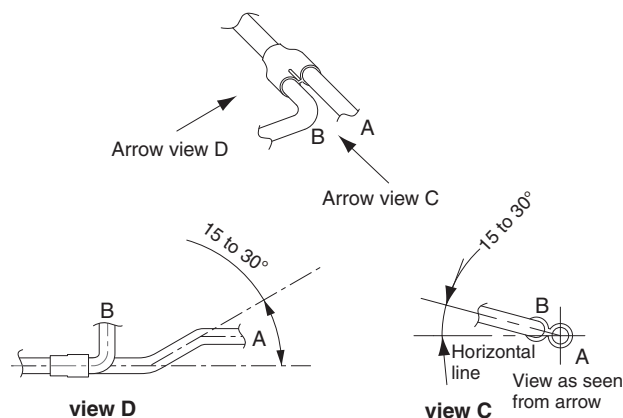
- (1) Refer to "HOW TO ATTACH DISTRIBUTION JOINT" enclosed with the optional distribution joint kit (CZ-P 680PH2, CZ-P1350PH2, CZ-P224BH2, CZ-P680BH2, CZ-P1350BH2).
- (2) When creating a branch using a commercially available T-joint (header joint system), orient the main tubing so that it is either horizontal (level) or vertical. In order to prevent accumulation of refrigerant oil in stopped units, if the main tubing is horizontal then each branch tubing length "B" should be at an angle that is greater than horizontal. If the main tubing is vertical, provide a raised starting portion for each branch.
When only one indoor unit is connected to the side of "A", install part "A" at a positive angle (15-30°) for the field tubing as shown in the figure.

[Header joint system]

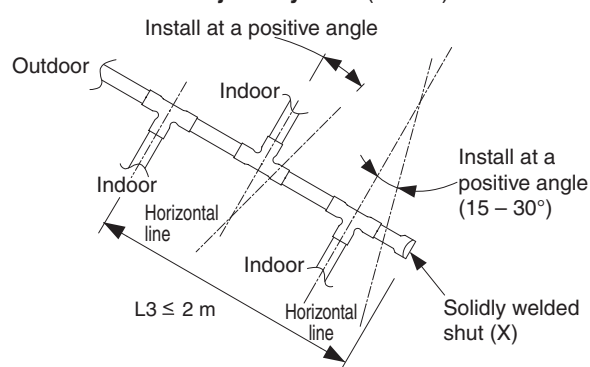
- Be sure to solidly weld shut the T-joint end (marked by "X" in the figure). In addition, pay attention to the insertion depth of each connected tube so that the flow of refrigerant within the T-joint is not impeded.
 - When using the header joint system, do not make further branches in the tubing.
 - Do not use the header joint system on the outdoor unit side.
- (3) If there are height differences between indoor units or if branch tubing that follows a distribution joint is connected to only 1 unit, a trap or ball valve must be added to that distribution joint. (When adding the ball valve, locate it within 40 cm of the distribution joint.) (Consult with the dealer separately concerning the ball valve.)

If a trap or ball valve is not added, do not operate the system before repairs to a malfunctioning unit are completed. (The refrigerant oil sent through the tubing to the malfunctioning unit will accumulate and may damage the compressor.)

Tube branching methods (horizontal use)

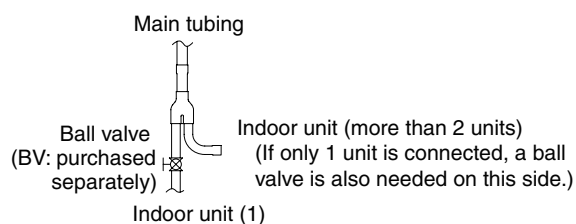


Header joint system (Indoor)

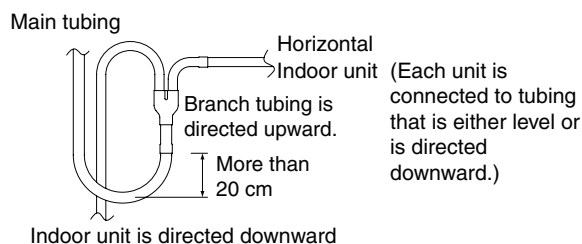


Types of vertical trap specifications

(When using ball valve)



(When not using ball valve)



7. Optional Parts

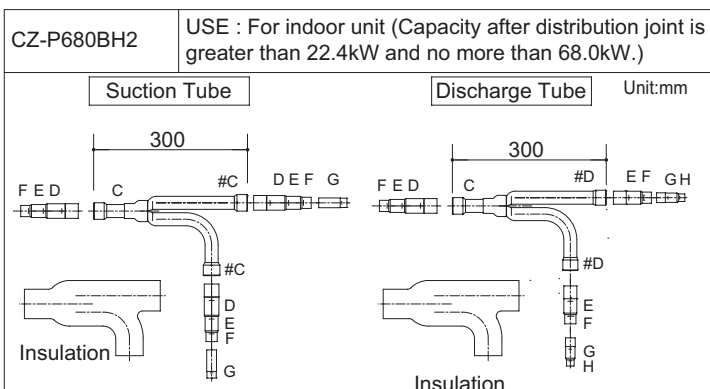
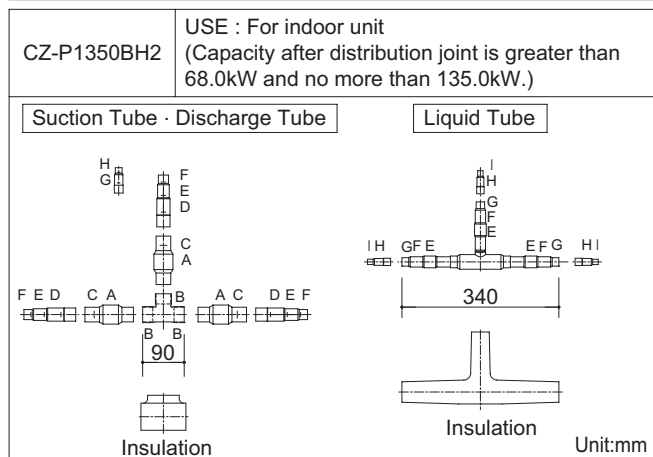
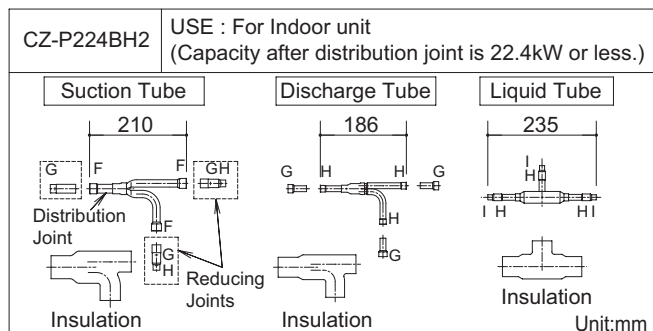
■ CZ-P224BH2, CZ-P680BH2, CZ-P1350BH2 (for R410A)

How to Attach Distribution Joint

1. Accompanying Parts

Check the contents of your distribution joint kit.

2. Distribution Joint Kits (with insulation)



- * Insulators for both the Suction tube and the Discharge tube are the same.
 - * Suction tube and Discharge tube are similar in sizes and both the tube entrances have the same diameter. So the both Distribution joints can fit into different tubes.
- Since the diameter of the tube ends for both Suction and Discharge tube are different, take care not to connect the distribution joint different. See the "#" marks on the above figures.

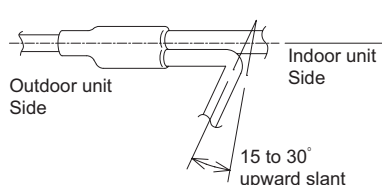
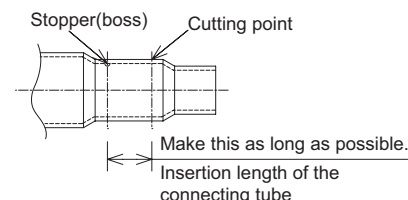
3. Making Branch Connections

- Using a tube cutter, cut the joints at the diameter required to match the outside diameter of the tubing you are connecting. (This is usually done at the installation site.) The tube diameter depends on the total capacity of the indoor unit. Note that you do not have to cut the joints if it already matches the tubing end size. For size selection of the tube diameter, refer to the installation instructions provided with the outdoor unit.

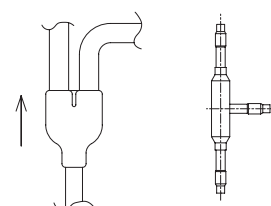
NOTE

Avoid forceful cutting that may harm the shape of the joints or tubing.
(Inserting the tubing will not be possible if the tube shape is not proper.)

- Cut off as far away from stopper as possible.
- After cutting the joints, be sure to remove burrs on the inside of the joints.
(If the joints have been squashed or dented badly, reshaped them using a tube spreader.)
- Make sure there is no dirt or other foreign substances inside the distribution joint.
- The distribution joint can be either horizontal or vertical.
In the case of horizontal, the L-shaped tubing must be slanted slightly upward (15° to 30°).
- When brazing, replace air inside the tube with nitrogen gas to prevent copper oxide from forming.
- To insulate the distribution joint, use the supplied tubing insulation.
(If using insulation other than that supplied, make sure that its heat resistance is 120 °C or higher.)
- For additional details, refer to the installation instructions provided with the outdoor unit.



In case of horizontal position



In case of vertical position
(directed upward or downward)