

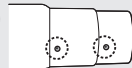
INSTALLATION MANUAL

DB68-00000A(1)

- Please read 'Safety Precautions' described in the installation manual of the air conditioner.
- Check the following parts in the package.
 - For further information of the piping material and size of the refrigerant pipes, refer to the installation manual of the air conditioner.

Requirement

- Condensate may occur on the heat insulation surface according to the atmosphere inside of the ceiling.
- If the inside of the ceiling has high temperature or humidity rate is more than 80%, please add proper insulation to prevent water drops.
- The stopper area of the pipe or socket should be spread with a welding material. EX)



Branch joints

Y-joint

Name	Model	MXJ-YA1509M	MXJ-YA2512M	MXJ-YA2812M	MXJ-YA2815M	MXJ-YA3419M	MXJ-YA4119M	MXJ-YA4422M
Liquid side		 ① x 2 EA	 ① x 2 EA	 ① x 2 EA	 ② x 2 EA	 ① x 2 EA ② x 2 EA	 ② x 2 EA ① x 1 EA	 ① x 1 EA ③ x 2 EA
Gas side		 ② x 2 EA	 ③ x 2 EA ⑧ x 2 EA	 ③ x 1 EA ⑦ x 1 EA	 ③ x 1 EA ⑦ x 1 EA	 ⑨ x 1 EA ⑩ x 1 EA ⑫ x 1 EA	 ③ x 1 EA ⑤ x 1 EA ⑨ x 1 EA	 ③ x 1 EA ⑤ x 1 EA ④ x 1 EA

Reducer

①	②	③	④	⑤	⑥	⑦
 ID Ø12.7 OD Ø19.05 ID Ø16.1 OD Ø25.4	 ID Ø19.05 OD Ø25.4 ID Ø16.1 OD Ø25.4	 ID Ø25.4 OD Ø31.75 ID Ø16.1 OD Ø31.75	 ID Ø31.75 OD Ø38.1 ID Ø16.1 OD Ø38.1	 ID Ø38.1 OD Ø41.28 ID Ø16.1 OD Ø41.28	 ID Ø41.28 OD Ø44.6 ID Ø16.1 OD Ø44.6	 ID Ø44.6 OD Ø48.9 ID Ø16.1 OD Ø48.9
⑧	⑨	⑩	⑪	⑫		
 ID Ø48.9 OD Ø50.8 ID Ø16.1 OD Ø50.8	 ID Ø50.8 OD Ø54.9 ID Ø16.1 OD Ø54.9	 ID Ø54.9 OD Ø59.2 ID Ø16.1 OD Ø59.2	 ID Ø59.2 OD Ø63.5 ID Ø16.1 OD Ø63.5	 ID Ø63.5 OD Ø68.7 ID Ø16.1 OD Ø68.7		

Model name	Total indoor unit's capacities
MXJ-YA1509M	15.0 kW (51 MBH) and below
MXJ-YA2512M	Over 15.0~40.6 kW (51~138 MBH) and below
MXJ-YA2812M	Over 40.6~46.4 kW (138~160 MBH) and below
MXJ-YA2815M	Over 46.4~69.6 kW (160~240 MBH) and below
MXJ-YA3419M	Over 69.6~98.6 kW (240~336 MBH) and below
MXJ-YA4119M	Over 98.6~139.2 kW (336~468 MBH) and below
MXJ-YA4422M	Over 139.2 kW (468 MBH)

Y-joint for HR (High pressure gas)

Name	Model	MXJ-YA1500M	MXJ-YA2500M	MXJ-YA3100M	MXJ-YA3800M
Liquid side		 ① x 2 EA	 ① x 2 EA ② x 1 EA	 ③ x 1 EA ④ x 1 EA	 ③ x 2 EA
Gas side		 ③ x 4 EA ⑤ x 1 EA	 ③ x 8 EA ⑥ x 1 EA	 ③ x 8 EA ⑥ x 1 EA	 ③ x 8 EA

Reducer

①	②	③	④	⑤	⑥
 ID Ø22.2 OD Ø28.7 ID Ø16.1 OD Ø28.7	 ID Ø28.7 OD Ø31.75 ID Ø16.1 OD Ø31.75	 ID Ø31.75 OD Ø38.1 ID Ø16.1 OD Ø38.1	 ID Ø38.1 OD Ø41.28 ID Ø16.1 OD Ø41.28	 ID Ø41.28 OD Ø44.6 ID Ø16.1 OD Ø44.6	 ID Ø44.6 OD Ø48.9 ID Ø16.1 OD Ø48.9
⑦	⑧	⑨	⑩	⑪	⑫
 ID Ø48.9 OD Ø50.8 ID Ø16.1 OD Ø50.8	 ID Ø50.8 OD Ø54.9 ID Ø16.1 OD Ø54.9	 ID Ø54.9 OD Ø59.2 ID Ø16.1 OD Ø59.2	 ID Ø59.2 OD Ø63.5 ID Ø16.1 OD Ø63.5	 ID Ø63.5 OD Ø68.7 ID Ø16.1 OD Ø68.7	 ID Ø68.7 OD Ø72.9 ID Ø16.1 OD Ø72.9
Model name	Total indoor unit's capacities	The maximum quantity of connection			
MXJ-HA2512M	46.4 kW (160 MBH) and below	4			
MXJ-HA3115M	69.6 kW (240 MBH) and below	8			
MXJ-HA3819M	Over 69.6 kW (240 MBH)	8			

Header joint

Name	Model	MXJ-HA2512M	MXJ-HA3115M	MXJ-HA3819M
Liquid side		 ① x 4 EA ② x 1 EA ⑦ x 1 EA	 ① x 8 EA ④ x 1 EA ⑦ x 1 EA	 ① x 8 EA ⑦ x 1 EA
Gas side		 ③ x 4 EA ⑤ x 1 EA	 ③ x 8 EA ⑥ x 1 EA	 ③ x 8 EA

Reducer

①	②	③	④	⑤	⑥
 ID Ø22.2 OD Ø28.7 ID Ø16.1 OD Ø28.7	 ID Ø28.7 OD Ø31.75 ID Ø16.1 OD Ø31.75	 ID Ø31.75 OD Ø38.1 ID Ø16.1 OD Ø38.1	 ID Ø38.1 OD Ø41.28 ID Ø16.1 OD Ø41.28	 ID Ø41.28 OD Ø44.6 ID Ø16.1 OD Ø44.6	 ID Ø44.6 OD Ø48.9 ID Ø16.1 OD Ø48.9
⑦	⑧	⑨	⑩	⑪	⑫
 ID Ø48.9 OD Ø50.8 ID Ø16.1 OD Ø50.8	 ID Ø50.8 OD Ø54.9 ID Ø16.1 OD Ø54.9	 ID Ø54.9 OD Ø59.2 ID Ø16.1 OD Ø59.2	 ID Ø59.2 OD Ø63.5 ID Ø16.1 OD Ø63.5	 ID Ø63.5 OD Ø68.7 ID Ø16.1 OD Ø68.7	 ID Ø68.7 OD Ø72.9 ID Ø16.1 OD Ø72.9
Model name	Total indoor unit's capacities	The maximum quantity of connection			
MXJ-HA2512M	46.4 kW (160 MBH) and below	4			
MXJ-HA3115M	69.6 kW (240 MBH) and below	8			
MXJ-HA3819M	Over 69.6 kW (240 MBH)	8			

Outdoor joint

Name	Model	MXJ-TA3819M	MXJ-TA4422M
Liquid side		 ① x 2 EA ④ x 1 EA	 ① x 2 EA ⑤ x 2 EA
Gas side		 ② x 1 EA ③ x 1 EA	 ⑥ x 1 EA

Reducer

①	②	③	④	⑤	⑥
 ID Ø19.05 OD Ø25.4 ID Ø16.1 OD Ø25.4	 ID Ø25.4 OD Ø31.75 ID Ø16.1 OD Ø31.75	 ID Ø31.75 OD Ø38.1 ID Ø16.1 OD Ø38.1	 ID Ø38.1 OD Ø41.28 ID Ø16.1 OD Ø41.28	 ID Ø41.28 OD Ø44.6 ID Ø16.1 OD Ø44.6	 ID Ø44.6 OD Ø48.9 ID Ø16.1 OD Ø48.9
⑦	⑧	⑨	⑩	⑪	⑫
 ID Ø48.9 OD Ø50.8 ID Ø16.1 OD Ø50.8	 ID Ø50.8 OD Ø54.9 ID Ø16.1 OD Ø54.9	 ID Ø54.9 OD Ø59.2 ID Ø16.1 OD Ø59.2	 ID Ø59.2 OD Ø63.5 ID Ø16.1 OD Ø63.5	 ID Ø63.5 OD Ø68.7 ID Ø16.1 OD Ø68.7	 ID Ø68.7 OD Ø72.9 ID Ø16.1 OD Ø72.9
Model name	Total outdoor unit's capacities				
MXJ-TA3819M	Below 48HP (468 MBH)				
MXJ-TA4422M	Above 50HP (488 MBH)				

Outdoor joint for HR (High pressure gas)

Name	Model	MXJ-TA3100M	MXJ-TA3800M
Liquid side		 ① x 1 EA ③ x 1 EA	 ② x 1 EA ③ x 1 EA
Gas side		 ② x 1 EA ③ x 1 EA	 ② x 1 EA ③ x 1 EA

Reducer

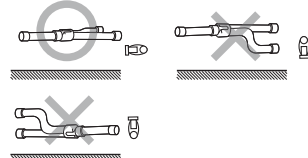
①	②	③

Connecting Method

Installing the Y-joint

Install the Y-joint 'horizontally' or 'vertically'.

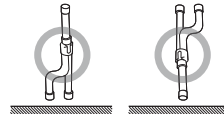
<Install horizontally>



<Using reducer>

- Use connection part of Y-joint or provided reducer by cutting them in accordance with diameter of connecting pipe.
- Make certain 10~15mm or more for reducer which connected with pipe.
- Remove burr on cut part of reducer. It is impossible to connect reducer with pipe, if pipe is deformed or reducer is untrimmed.

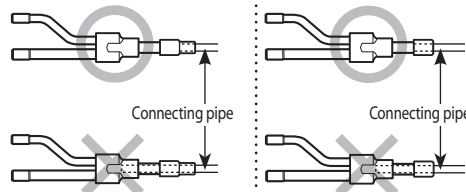
<Install vertically>



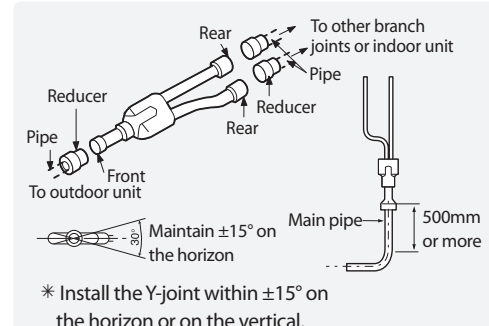
CAUTION
◆ Keep a minimum distance of 500mm or more before connecting a branch joint.

<Insertion depth of the connecting pipe>

- * Basic specification
- * When cutting the connection part

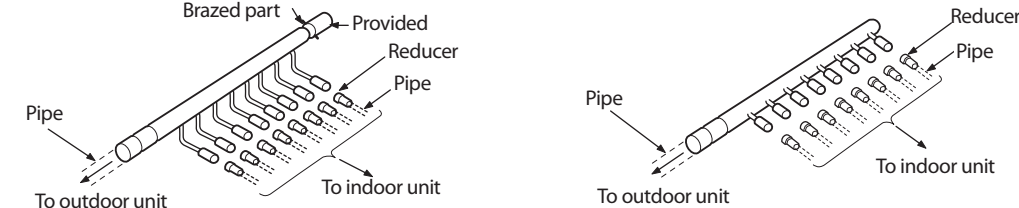


CAUTION
◆ Do not insert the pipe deeply into the Y-joint. (Do not insert more than 70mm.)



Installing the Header joint

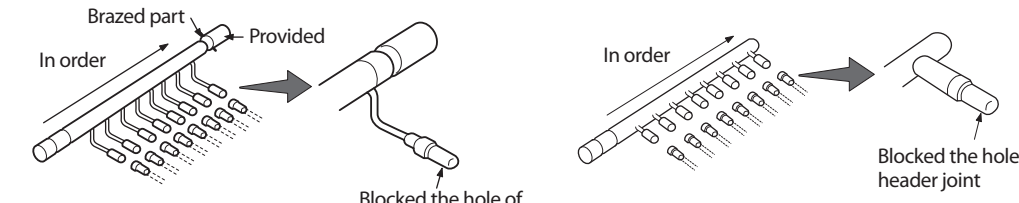
1. Select the reducer fitted on the diameter of the pipe.



<Liquid side>

<Gas side>

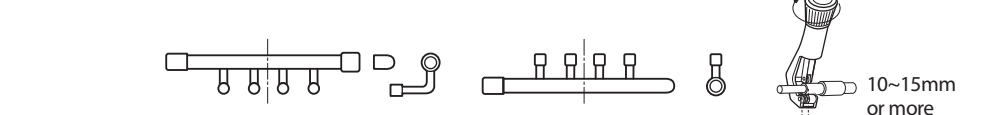
2. Block the reducer that is not used by brazing the cap if the number of connected indoor unit is fewer than header joint holes.



<Liquid side>

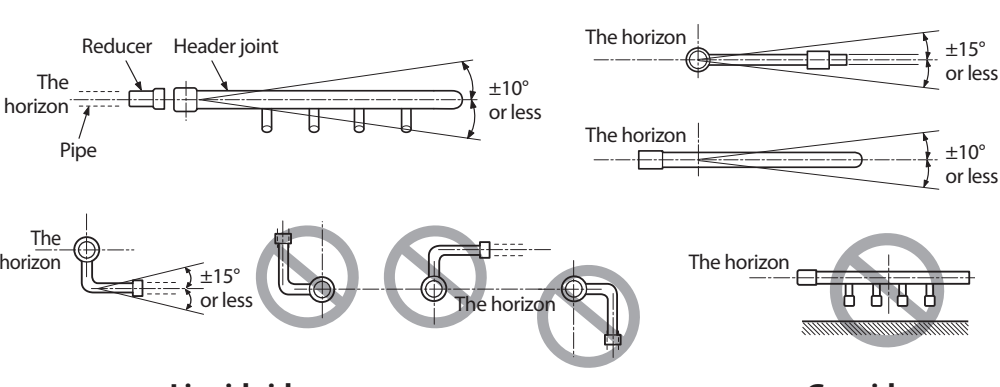
<Gas side>

NOTE Connect the header joint to the pipe by cutting the provided reducer properly.



- CAUTION
◆ Connect the header joint in order respecting the number of the indoor unit.
- ◆ Connect the indoor unit as the highest capacity comes first.

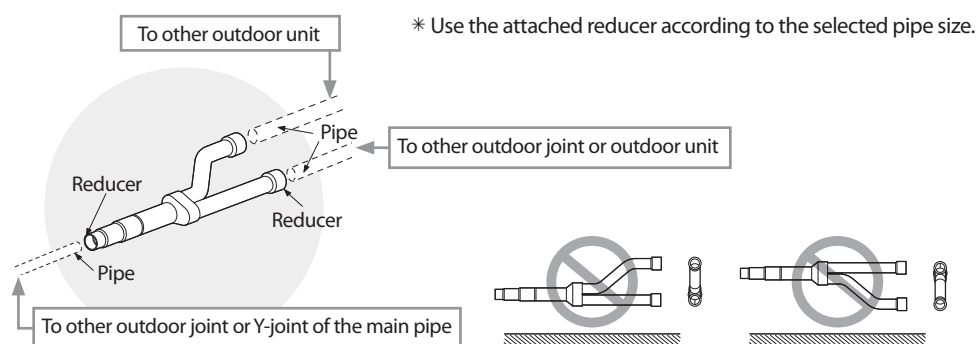
3. Install the header joint horizontally.



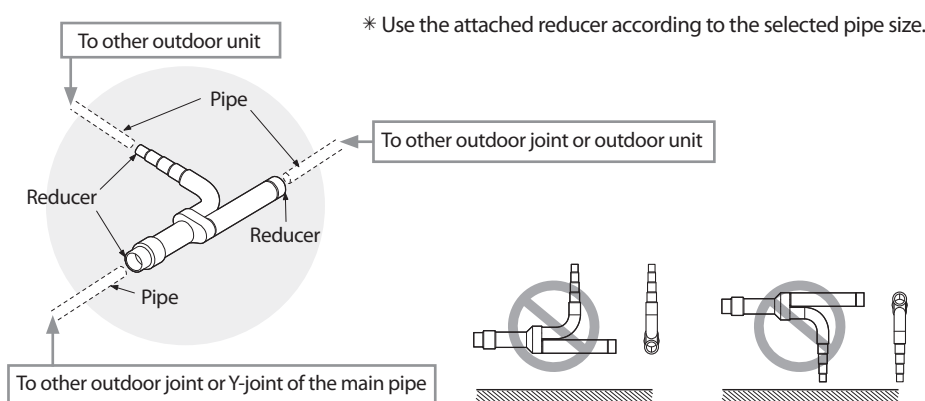
<Liquid side>

<Gas side>

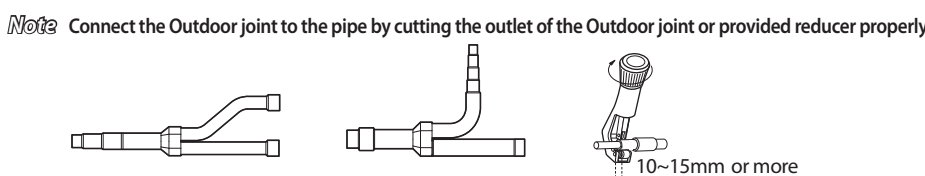
Installing the Outdoor joint



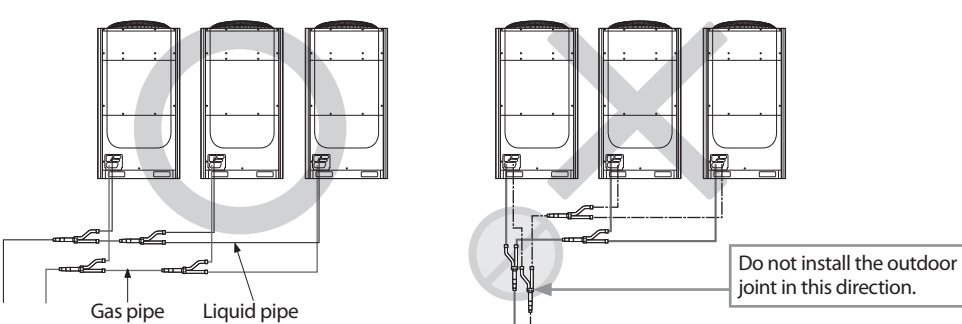
<Liquid side>



<Gas side>



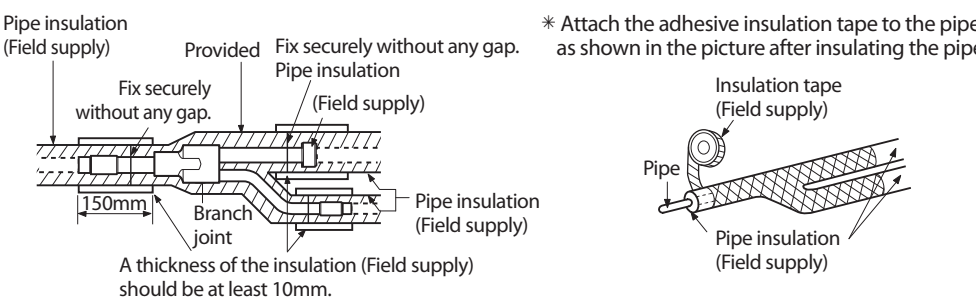
Installation of outdoor joints



Insulating the branch joint

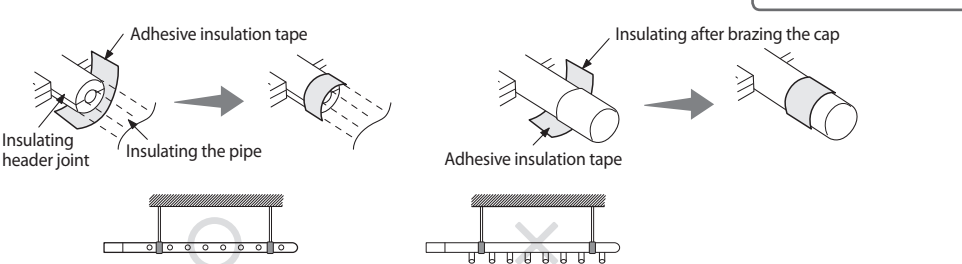
Y-joint & liquid side & gas side of the outdoor unit

- ◆ Attach the insulation provided with a branch joint to the insulation supplied in the field without a gap. Wrap the connected part with an insulation (Field supply) of a thickness of at least 10mm.
- ◆ Use an insulation with the heat resisting temperature over 120°C. Wrap the branch joint with an insulation of a thickness of at least 10mm.
- ◆ When insulating in high humidity (higher than 30°C, 80%), wrap the supplied insulation with more than 10mm of extra insulation such as Polyethylene Foam or other similar material.
- ◆ Wrap the connected part between the Outdoor joint and the gas side of the outdoor unit to prevent it from frosting wrap gas side pipe of the outdoor unit wholly to prevent it from dewing



Header joint

- ◆ Cover the connected part and fasten the header joint using a cable tie.
- ◆ Insulate the header joint and the brazed part and wrap the connected part with an adhesive insulation tape to prevent it from dewing.



安装手册

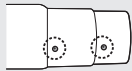
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请仔细阅读空调器安装手册中“安全注意事项”的内容。
· 请检查包装中的下列部件。
· 管道的材料和冷煤管的尺寸请参照空调器安装手册。

要求事项

- 根据天花板的空气条件可能会出现绝缘材料表面结露现象。
- 如果天花板内部存在高温或湿度大于 80%，应增加适当的绝缘以防止滴水。
- 配管或承口的堵塞部分应与焊接材料相分离。

EX)



分歧管接头

Y形接头

名称	型号	MXJ-YA1509M	MXJ-YA2512M	MXJ-YA2812M	MXJ-YA2815M	MXJ-YA3419M	MXJ-YA4119M	MXJ-YA4422M
液体侧								
气体侧								

承口

型号	室内机总容量
MXJ-YA1509M	< 15.0 kW (51 MBH)
MXJ-YA2512M	> 15.0~40.6 kW (51~138 MBH)
MXJ-YA2812M	> 40.6~46.4 kW (138~160 MBH)
MXJ-YA2815M	> 46.4~69.6 kW (160~240 MBH)
MXJ-YA3419M	> 69.6~98.6 kW (240~336 MBH)
MXJ-YA4119M	> 98.6~139.2 kW (336~468 MBH)
MXJ-YA4422M	> 139.2 kW (139.2 MBH)

HR Y形接头 (高压气体)

型号	MXJ-YA1500M	MXJ-YA2500M	MXJ-YA3100M	MXJ-YA3800M
液体侧				
气体侧				

承口

歧管接头

名称	型号	MXJ-HA2512M	MXJ-HA3115M	MXJ-HA3819M
液体侧				
气体侧				

承口

户外接头

名称	型号	MXJ-TA3819M	MXJ-TA4422M
液体侧			
气体侧			

承口

HR户外接头 (高压气体)

型号	MXJ-TA3100M	MXJ-TA3800M
液体侧		
气体侧		

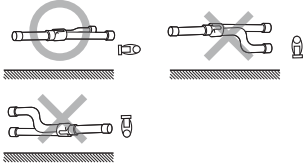
承口

连接方法

安装Y形接头

“水平”或“垂直”安装Y形接头。

<水平连接>

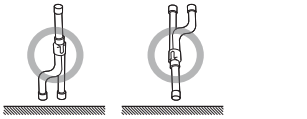


<使用承口>

- 请根据连接配管的直径切割Y形接头 (岔管) 的连接部分或者提供的承口后使用。
- 确保连接配管的承口间隙为 10-15mm 以上。
- 去除切割承口截面上的毛刺。
- 如果配管变形或承口不整齐，无法连接承口和配管。

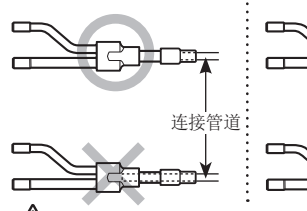
在连接分支接头之前，保持最小 500mm 以上的距离。

<垂直连接>

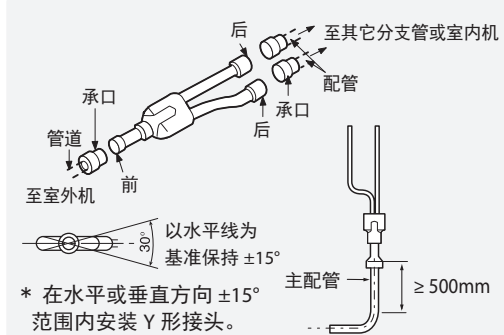


<插入连接管道深度>

* 基本规格



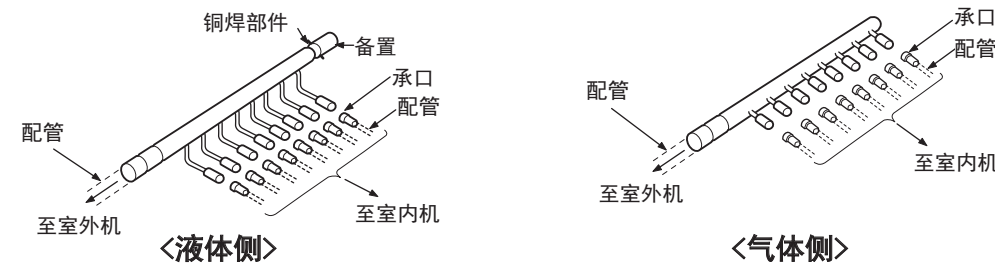
* 切割连接部分时



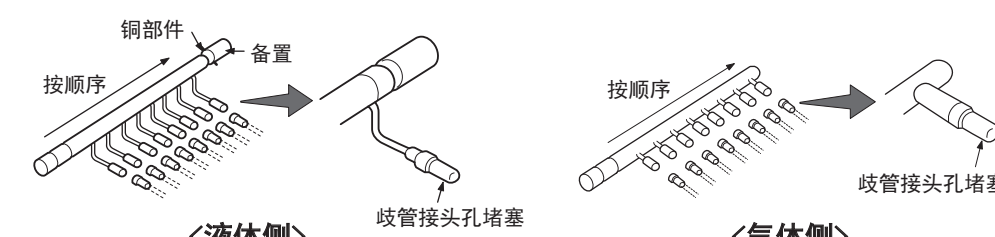
请勿将配管过深的插入 Y 形接头。(请勿使插入深度超过 70 毫米。)

安装歧管接头

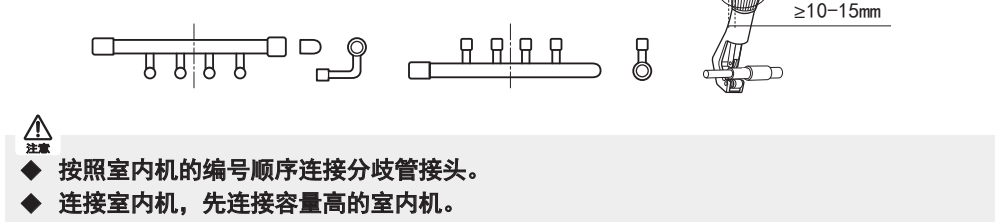
1. 选择与管道直径匹配的承口。



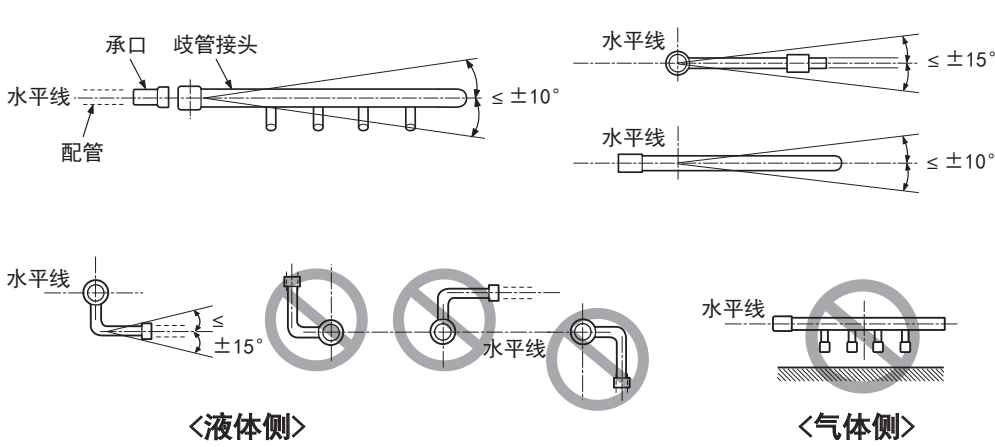
2. 如果连接的室内机数量少于歧管连接孔时，用焊接堵头封住不使用的接口。



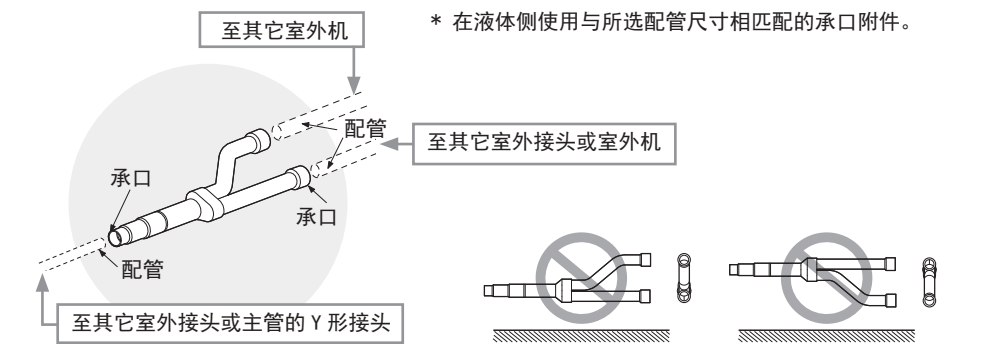
适当切割提供的承口将歧管接头连接到配管上。



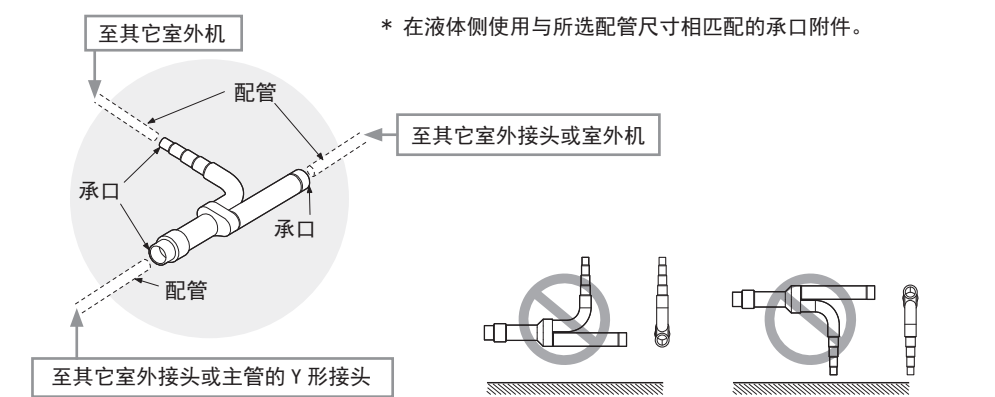
3. 水平安装分歧管接头。



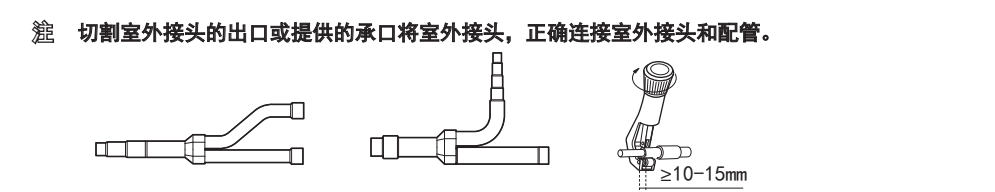
安装室外机接头



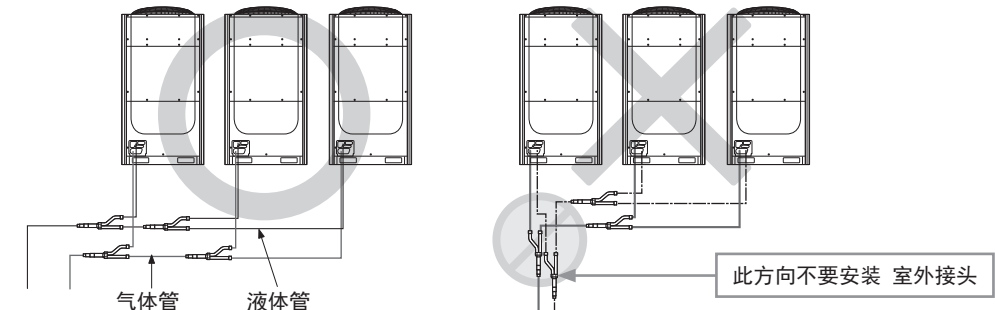
<液体侧>



<气体侧>



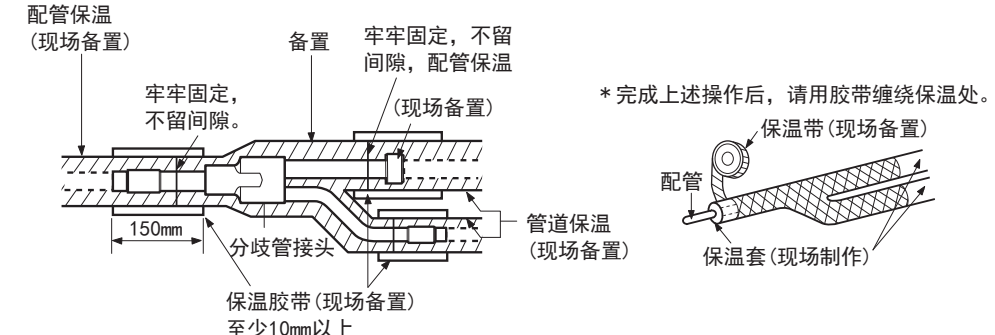
室外接头安装



分支接头保温

Y形接头和室外机液体侧和气体侧接头保温

- ◆ 将随分支接头提供的保温材料安装到与现场配置的保温材料连接到一起，不要留有间隙。至少要使用10mm厚的保温材料 (现场配置) 保温连接部件。
- ◆ 使用可耐120℃以上高温的保温材料。分支接头保温厚度至少为10mm。
- ◆ 当在高温度 (30℃, 80% 以上) 下进行绝缘时，请再另外用 10mm 的聚乙烯泡沫或类似材料将随供的绝缘部分缠绕。
- ◆ 包缠室外接头和室外机气侧之间的连接部件，以防止结霜。包缠油平衡接头和这个室外机的气侧管路以防止结霜。



分歧管接头

- ◆ 用电缆扎带扎紧分歧管接头并封住连接部位。
- ◆ 分歧管接头和焊接部位保温，用保温胶带缠绕连接部位以防止结霜。

