

# Prefab joint 15~100mm

## User's Manual



Thank you for choosing our product.

This instruction manual contains important information for safe use of our product, so please be sure to read it before handling the product.

After reading this manual, please be sure to keep it in a place where the user can see it at any time.

## ASAHI YUKIZAI CORPORATION

## -SAFETY PRECAUTIONS-



This instruction manual is written on the assumption that the person who handles our products has a basic knowledge of our products, electrical equipment, machinery, control, etc., and it contains technical terms depending on the handling contents.

Please read this manual carefully and fully understand the contents and observe the safety precautions for proper use.



In this manual, the warning, caution, prohibition, and enforcement are categorized together with the symbol to inform the situation and scale of human injury or property damage.

Failure to observe this precaution may result in unexpected failure or damage. Be sure to observe this precaution.

### <WARNING/CAUTION indications>

 <b>Warning</b>	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 <b>Caution</b>	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.

### <Prohibited/Forced display>

 <b>Prohibition</b>	In the handling of the product, it is prohibited to do it in "Do not do it".
 <b>Forcing</b>	In the handling of the product, it is forced by "contents to be carried out without fail".

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## 1. Our product warranty coverage

Unless otherwise stated in the Contract or Specifications, etc., the warranty for the piping material products (hereinafter referred to as "applicable products") such as valves manufactured or sold by us is as follows.

### Applicable to

This warranty applies only when the product is used in Japan. If you intend to use the product overseas, please contact us.

### Warranty Period

The warranty period is one year after delivery.

### Guaranteed range

In the event of failure or malfunction due to our responsibility during the above warranty period, we will replace or repair the product with a substitute free of charge.

Provided, however, that even within the warranty period, the warranty shall not apply to any of the following cases (charged service).




- ▶ When the storage, operating conditions, precautions, etc. described in the specifications, instruction manual, etc. are not adhered to in the construction, installation, handling, maintenance, etc.
- ▶ Defects, such as the design of the customer's equipment or software, caused by other than the target product.
- ▶ The fault is due to modification or secondary processing of the product by something other than us.
- ▶ In the case of a failure which can be deemed to have been avoided if the periodic inspection described in the instruction manual, etc. or the maintenance or replacement of consumable parts has been performed normally.
- ▶ The component is used for purposes other than the product's intended use.
- ▶ Failure or malfunction due to causes that could not be foreseen by our level of science and technology at the time of shipment.
- ▶ The fault is due to an external factor that is not our responsibility, such as natural disaster or disaster.

### Disclaimer



- ▶ The warranty will not cover secondary damage (damage to equipment, loss of opportunity, loss of profit, etc.) or any other damage caused by the failure of our product.
- ▶ Although we strive to improve the quality and reliability of our products, we do not guarantee their integrity. Especially when using this product for equipment that may infringe human life, body or property, take appropriate safety design measures, etc., with full consideration of problems that may normally occur. We assume no responsibility for such use if we have not obtained our consent in advance in writing of specifications, etc.
- ▶ Please observe the product specifications and precautions when using our products. We shall not assume any responsibility for any damage to the customer caused by the customer's negligence. However, this does not apply to damage caused by a defect in our product.




## 2. Safety Instructions

### Unpacking, Transportation and Storage

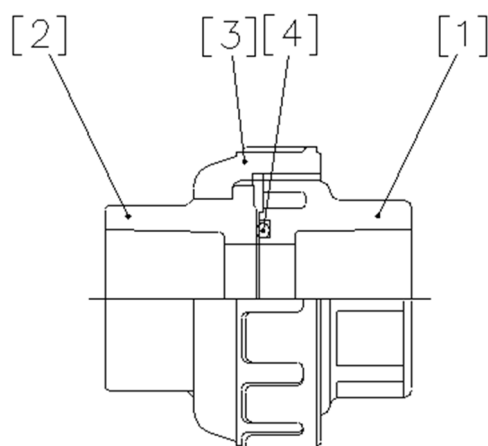
 <b>Caution</b>	
 <b>Prohibition</b>	<p><b>Otherwise, the product may be damaged or leak.</b></p> <ul style="list-style-type: none"> <li>▶ Do not subject the product to impact by throwing, dropping or hitting.</li> <li>▶ Do not step on the package or place heavy objects on it.</li> <li>▶ Do not scratch or pierce the product with a sharp object such as a knife or hand hook.</li> <li>▶ Do not pile up cardboard boxes forcefully to prevent the load from collapsing.</li> <li>▶ Avoid contact with coal tar, creosote (a wood preservative), white pesticides, insecticides, paints, etc.</li> </ul>
 <b>Forcing</b>	<p><b>Otherwise, the product may be damaged or leak.</b></p> <ul style="list-style-type: none"> <li>▶ Keep in cardboard until just before piping, and store indoors (at room temperature) away from direct sunlight. Also, avoid storing the product in places of high temperature. (The strength of cardboard packaging decreases when it gets wet. Be very careful when storing and handling it.)</li> <li>▶ After unpacking, make sure that the product is correct and that it meets the specifications.</li> </ul>

**Product Handling**

 <b>Warning</b>	
 <b>Forcing</b>	<p><b>Serious injury can result.</b></p> <ul style="list-style-type: none"> <li>▶ If positive pressure gas is used for our resin piping material, a dangerous condition may occur due to the repulsive force peculiar to compressible fluids even if the pressure is the same as the water pressure. Therefore, be sure to take safety measures for the surrounding area, such as covering the piping with protective materials. If you have any questions, please contact us separately.</li> <li>▶ When conducting a pipe leak test after completion of piping construction, be sure to check with water pressure. Contact us in advance if you are unavoidable to test with a gas.</li> </ul>

 <b>Caution</b>	
 <b>Prohibition</b>	<p><b>Otherwise, the product may be damaged or leak.</b></p> <ul style="list-style-type: none"> <li>▶ Do not step on the product or place heavy objects on it.</li> <li>▶ Keep away from fire and hot objects.</li> </ul>
 <b>Forcing</b>	<p><b>Otherwise, the product may be damaged or leak.</b></p> <ul style="list-style-type: none"> <li>▶ Keep the pressure and temperature of the fluid within the allowable range. (The maximum allowable pressure includes water hammer pressure.)</li> <li>▶ Secure sufficient space for maintenance and inspection when piping.</li> <li>▶ Use a product of suitable material for the operating conditions. (Depending on the type of chemical liquid, the parts may be damaged. Contact us in advance for details.)</li> <li>▶ Avoid any place where water or dust is constantly splashed or where the product is exposed to direct sunlight, or provide a cover or the like to cover the entire area. (The fitting will not work properly.)</li> <li>▶ Perform maintenance periodically by referring to "7. Inspection items". Pay particular attention to temperature changes and aging during long-term storage or shutdown or use.</li> </ul>

### 3. Name of each part



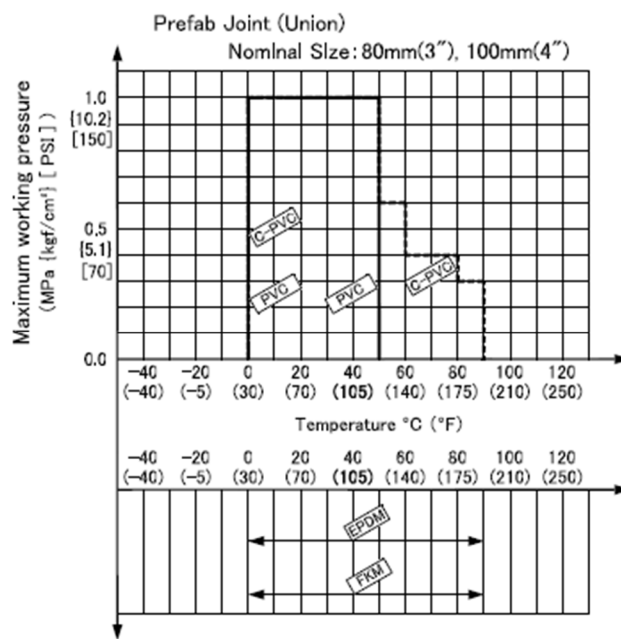
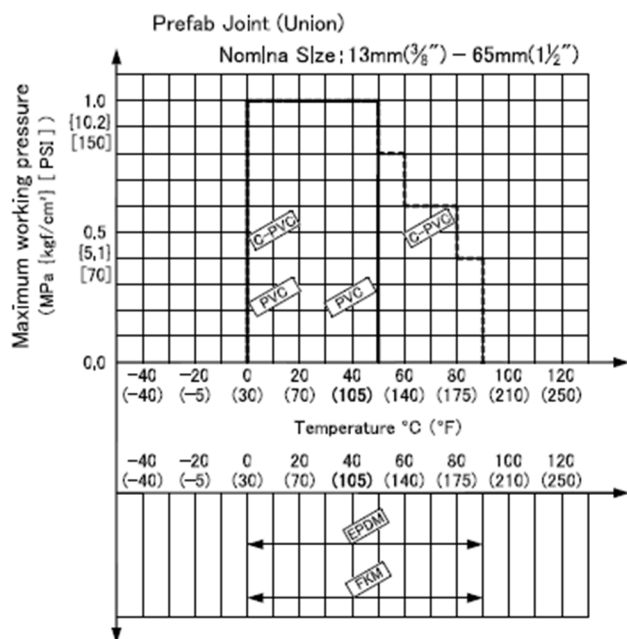
[1]	Body	[3]	Union nut
[2]	End connector	[4]	O-ring

## 4. Product Specifications

### Model number table

TYPE	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE
J P F	*	*	*	J	* * *
<b>JPF</b> PREFAB JOINT (UNION)	<b>U</b> PVC <b>C</b> C-PVC	<b>E</b> EPDM <b>V</b> FKM	<b>T</b> SOCKET <b>N</b> THREADED	<b>J</b> JIS	<b>013</b> 13mm <b>016</b> 16mm <b>020</b> 20mm <b>025</b> 25mm <b>030</b> 30mm <b>040</b> 40mm <b>050</b> 50mm <b>065</b> 65mm <b>075</b> 75mm <b>100</b> 100mm


### Relationship between maximum allowable pressure and temperature







## 5. Piping method




### Warning




 <b>Prohibition</b>	<p><b>Serious injury can result.</b></p> <ul style="list-style-type: none"> <li>▶ Be sure to perform safety inspections of the machine tool and power tool beforehand.</li> <li>▶ Wear appropriate protective equipment according to the type of work being performed.</li> </ul>
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### Caution

 <b>Prohibition</b>	<p><b>Otherwise, the product may be damaged or leak.</b></p> <ul style="list-style-type: none"> <li>▶ Do not over-tighten when piping support is removed with a U-band, etc.</li> <li>▶ Do not overtighten the Union nut.</li> <li>▶ Do not use a pipe wrench to tighten the Union nut.</li> <li>▶ Be sure to check that the Union nut is fully tightened before the water flow test.</li> <li>▶ Tighten the Union nut paying attention to the shaft misalignment and face-to-face dimension.</li> <li>▶ When connecting a resin fitting to metal piping, ensure that no piping stress is applied to the resin fitting.</li> </ul>
 <b>Forcing</b>	<p><b>Otherwise, the product may be damaged or leak.</b></p> <ul style="list-style-type: none"> <li>▶ When installing the product, avoid applying excessive stress such as tension, compression, bending and impact to the piping and fittings.</li> <li>▶ Fix the End connector during piping work or disassembly and reassembly.</li> </ul>

**Socket end**

 <b>Warning</b>	
 <b>Prohibition</b>	<b>Serious injury can result.</b> ▶ When using adhesives, provide adequate ventilation, and prohibit the use of open flames and do not inhale odors directly.
 <b>Forcing</b>	<b>There is a danger of injury.</b> ▶ If the adhesive adheres to the skin, remove it immediately. ▶ If you feel worse or feel unusual when using the adhesive, promptly seek a doctor's diagnosis and take appropriate action.

 <b>Caution</b>	
 <b>Prohibition</b>	<b>Otherwise, the product may be damaged or leak.</b> ▶ Do not apply too much adhesive. (Solvent cracks may occur.) ▶ Never insert by tapping the connector.
 <b>Forcing</b>	<b>Otherwise, the product may be damaged or leak.</b> ▶ Be careful when constructing under low temperature, as solvent vapor is less likely to evaporate and tends to remain. ▶ After piping, open both ends of the pipe and use a blower (low-pressure type) to ventilate to remove the solvent vapor. ▶ The Union nut of this product is lightly tightened to make it easier to loosen. Be sure to remove the End connector before installation. (There is a risk of external leakage.) ▶ Use "ASAHI AV adhesive" depending on the material. ▶ Perform the water flow test after 24 hours or more have elapsed after completion of bonding.

Preparations	▶ ASAHI AV adhesive	▶ Belt Wrench
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**[Procedure]**




- 1) Loosen the Union nut [3] with a belt wrench.
- 2) Remove Union nut [3] and End connector [2].
- 3) Pass the Union nut [3] to the pipe side.
- 4) Wipe off the socket part of the End connector [2] with a waste cloth.
- 5) Apply adhesive evenly to the socket of the End connector [2] and the pipe insert.

Amount of adhesive used (reference)

DN (mm)	13	16	20	25	30	40	50	65	75	100
Amount used (g)	0.8	1.0	1.3	2.0	2.4	3.5	4.8	6.9	9.0	13.0

- 6) After applying the adhesive, quickly insert the pipe into the End connector [2] and hold it for at least 60 seconds.
- 7) Wipe off any protruding adhesive.
- 8) Check that the O-ring [4] is installed correctly.
- 9) Bring the End connector [2] and the Union nut [3] into contact with the body side so that the O-ring [4] does not come off.
- 10) Tighten the Union nut [3] by hand until it is tight.
- 11) Screw the Union nut [3] by 1/4 to 1/2 turn with a belt wrench to avoid damage.

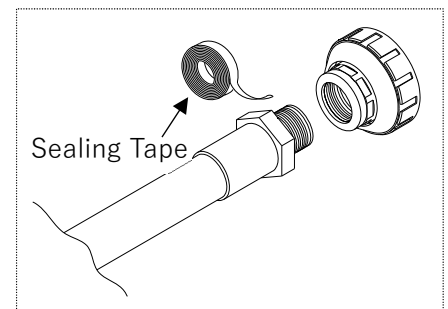
**Threaded end**

 <b>Caution</b>	
 <b>Prohibition</b>	<b>The product can be damaged, or leak.</b> ► Do not overtighten the screws at the joints.
 <b>Forcing</b>	<b>The product can be damaged, or leak.</b> ► The Union nut of this product is lightly tightened to make it easier to loosen. Be sure to remove the End connector before installation. (There is a risk of external leakage.) ► Make sure that the screws at the joints are made of resin. (Piping with metal screws may damage the End connector.) ► Use sealing tape for the sealing material of the screw-in part. If liquid sealant or liquid gasket is used, stress cracking (environmental stress cracking) may occur.

Preparations	► Sealing tape	► Belt Wrench	► Wrench
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**[Procedure]**

- 1) Wrap sealing tape around the male thread of the fitting, leaving approximately 3mm at the end.
- 2) Loosen the Union nut [3] with a belt wrench.
- 3) Remove Union nut [3] and End connector [2].
- 4) Tighten the male thread of the fitting and the End connector [2] by hand.
- 5) Screw on the End connector [2] with a wrench 1/2 to 1 turn to prevent scratching.
- 6) Check that the O-ring [4] is installed.
- 7) Bring the End connector [2] and the Union nut [3] into contact with the body side so that the O-ring [4] does not come off.
- 8) Tighten the Union nut [3] by hand until it is tight.
- 9) Screw the Union nut [3] by 1/4 to 1/2 turn with a belt wrench to avoid damage.





## 6. How to disassemble/assemble parts for replacement

### Warning

 <b>Forcing</b>	<p><b>Serious injury can result.</b></p> <ul style="list-style-type: none"> <li>▶ Be sure to perform safety inspections of the machine tool and power tool beforehand.</li> <li>▶ When installing piping, be sure to wear the appropriate protective equipment according to the operation details. (Risk of injury)</li> <li>▶ Attach protective gloves and goggles as some fluid remains in the product.</li> </ul>
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### Caution

 <b>Prohibition</b>	<p><b>Otherwise, the product may be damaged or leak.</b></p> <ul style="list-style-type: none"> <li>▶ Completely drain the fluid in the piping when replacing the product or replacing parts. If the fluid does not escape, reduce the fluid pressure to zero.</li> <li>▶ Do not overtighten the Union nut.</li> <li>▶ Do not use a pipe wrench to tighten the Union nut.</li> </ul>
 <b>Forcing</b>	<p><b>Otherwise, the product may be damaged or leak.</b></p> <ul style="list-style-type: none"> <li>▶ Fix the End connector during piping installation or disassembly and reassembly.</li> <li>▶ Be sure to check that the Union nut is fully tightened before the water flow test.</li> <li>▶ Tighten the Union nut paying attention to the shaft misalignment and face-to-face dimension.</li> <li>▶ When connecting a resin fitting to metal piping, ensure that no piping stress is applied to the resin fitting.</li> </ul>

Preparations	▶ Belt Wrench	▶ Protective glasses	▶ Protective gloves
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### [Procedure]



#### <Disassembly>

- 1) Completely drain the fluid in the piping.
- 2) Loosen the Union nut [5] with a belt wrench.
- 3) Remove the O-ring by hand so that it is not damaged.

#### <Assembly>

Follow the procedure from 3) in reverse.

## 7. Inspection item

 <b>Caution</b>	
 <b>Forcing</b>	<p><b>The product can be damaged, or leak.</b></p> <ul style="list-style-type: none"><li>▶ Maintenance should be performed every 3 to 6 months as a guide in order to keep the watch in normal condition and use it for a long time. Pay particular attention to temperature changes and aging during long-term storage or shutdown or use.</li><li>▶ When removing the product from the piping when replacing the product or parts, completely remove the fluid from the piping before starting work.</li><li>▶ If any trouble is found, take the appropriate action referring to "<b>8. Cause of malfunction and remedy</b>"</li></ul>

**Daily inspection**

Inspection items and methods	Guideline of judgment	Check point	Treatment method
External leakage (visual inspection)	No leakage	[Socket end] Adhesive construction section	Remove the product from the piping and redo the adhesive work. (Ref: 5. Piping method [socket end])
		[Screw-in type] Threaded connection	Remove the product from the piping and screw-in the product again. (Ref: 5. Piping method [Threaded end])
		Union nut of the product	① Retighten the Union nut ② Remove the product from the piping, check the O-ring and sealing surface, and replace the defective part. (Ref: 5. Piping method)
		Surface of the entire product	Remove the product from the pipe and replace the product. (Ref: 6. How to disassemble/assemble for parts replacement)
Internal leakage (visual and measurement)	No leakage	Leakage to secondary side	Remove product from piping and replace product or defective part (Ref: 6. How to disassemble/assemble for parts replacement)
Abnormal noise (hearing)	No abnormal noise	Product	Remove the product from the piping and replace it. (Ref: 6. How to disassemble/assemble for parts replacement)
		Piping around the product	Reconfirm the conditions of use (Ref: 2. Safety Instructions)

**Periodic inspection**
**●Guideline for the inspection cycle: 3 months**

Inspection items and methods	Guideline of judgment	Check point	Remedy for malfunctions
Vibration (palpation)	No difference from other parts	Product	Recheck the operating conditions and remove the source of vibration. (Ref: 2. Safety Instructions)
			Remove the product from the piping and replace it. (Ref: 6. How to disassemble/assemble for parts replacement)
		Piping around the product	Recheck the operating conditions and remove the source of vibration. (Ref: 2. Safety Instructions)

**●Guideline of the inspection cycle: 6 months**

As inspection items Inspection method	Guideline of judgment	Check point	Remedy for malfunctions
Product damage	No scratches, cracks, or deformation	Appearance of the product	Remove the product from the piping and replace it. (Ref: 6. How to disassemble/assemble for parts replacement)



## 8. Cause of malfunction and remedy

### Caution

**There is a danger of injury.**

- ▶ If any malfunction is found, immediately stop using the product and take appropriate action.
- ▶ When removing the product from the piping when replacing the product or parts, completely remove the fluid from the piping before starting work.

Condition	Cause	Treatment method
There is external leakage.	Loose Union nut	Retightening the Union nut (Ref: 5. Piping method)
	O-ring scratched or worn	Replacing the O-ring
Fluid leaks from product (external leak)	Union nut is loose	Retighten the Union nut (Ref: 5. Piping method)
	O-ring is scratched, worn, melted, or altered	Stop using the product immediately, remove the product from the piping, and replace the relevant parts. (Ref: 6. How to disassemble/assemble for parts replacement)
	Scratches or wear are found on the O-ring or fixing surface.	Stop using the product immediately, remove the product from the piping, and replace the relevant parts. (Ref: 6. How to disassemble/assemble for parts replacement)
	Have cracks or breaks	Stop using the product immediately, remove the product from the piping, and replace it. (Ref: 6. How to disassemble/assemble for parts replacement)

## 9. Disposal method of residual materials and waste materials

 <b>Warning</b>	
 <b>Forcing</b>	<p><b>When burnt, toxic gas is generated.</b></p> <p>▶ When disposing of the product or parts, please dispose of them according to the guidelines of each local authority by a professional disposal company.</p>

## Inquiries

Contact the nearest dealer, our sales office, or our web website for inquiries about this product.

### [User's Manual]

Prefab joint  
15~100mm



<https://www.asahi-yukizai.co.jp/en>

Please note that the content of this manual is subject to change without notice.

**March 2024**

[User's Manual] Prefab joint 15~100mm