

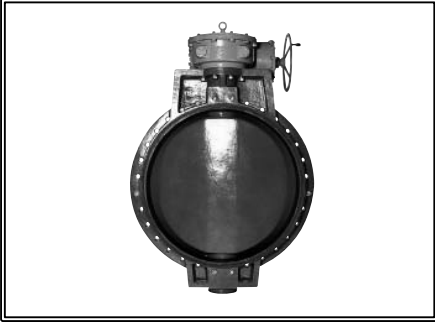
PDCPD BUTTERFLY VALVES

For the Owner and the Installing Contractor

ASAHI AV

Serial No.: UA-010E

User's Guide



Read and use the information contained within these documents.

This User's Guide contains information important to the proper installation, maintenance and safe use of the PDCPD BUTTERFLY VALVES store in an easily accessible location.

Warning & Caution Signs



Warning

This symbol reminds the user to take caution due to the potential for serious injury or death.



Caution

This symbol reminds the user to take caution due to the potential for damage to the valve if used in such a manner.

Prohibited & Mandatory Action Signs



Prohibited: When operating the valve, this symbol indicates an action that should not be taken.



Mandatory action: When operating the valve, this symbol indicates mandatory actions that must be adhered to.

General Information for Transportation, Unpacking and Storage



Warning



-When suspending and supporting a valve, take care and do not stand under a suspended valve.



Caution



-This valve is not designed to handle impacts of any kind. Avoid throwing or dropping the valve.

-Avoid scratching the valve with any sharp object.

-Do not over-stack cardboard shipping boxes. Excessively stacked packages may collapse.

-Avoid contact with any coal tar creosote, insecticides, vermicides or paint.

(The force of swelling may damage the valve.)

-When transporting a valve, do not carry it by the handle.



-Store products in their corrugated cardboard boxes. Avoid exposing products to direct sunlight, and store them indoors (at room temperature). Also avoid storing products in areas with excessive temperatures.

(Corrugated cardboard packages become weaker as they become wet with water or other liquid. Take care in storage and handling.)

-After unpacking the products, check that they are defect-free and meet the specifications.

Inspection Items



Caution



☐ Check for flaw, crack, or deformation on the valve.

☐ Check for leaks to the outside or inside.

☐ Check for the smoothness of handle operation.

☐ Check that all fasteners are tight.

☐ Ensure that the seat flange is not excessively protruded or retracted.

General Operating Instructions



Warning



-Using a positive-pressure gas with our plastic piping may pose a dangerous condition due to the repellent force particular to compressible fluids even when the gas is under similar pressures used for liquids. Therefore, be sure to take the necessary safety precautions such as covering the piping with protective material. For inquiries, please contact us. For conducting a leak test on newly installed piping, be sure to check for leaks under water pressure. If absolutely necessary to use a gas in testing, please consult your nearest service station beforehand.

-Be sure to conduct a safety check on all hand and power tools to be used before beginning work.

-Wear protective gloves and safety goggles as fluid remain in the valve even if the pipeline is empty.

(You may be injured.)



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General Operating Instructions

- Caution**  -Do not step on or apply excessive weight on valve. (It can be damaged.)
- When installing a pipe support by means of a U-band or something similar, take care not to overtighten it. (Excessive tension may damage it.)
- The installed valve must never be opened or closed when foreign matter such as sand is present in the pipeline.
- Do not use the valve to fluid containing slurry. (The valve will not operate properly.)
- Do not use the valve in conditions where the fluid may have crystallized. (The valve will not operate properly.)
- !** -Keep the valve away from excessive heat or fire. (It can be damaged, or destroyed.)
- Always operate the valve within the pressure vs. temperature range. (The valve can be damaged or deformed by operating beyond the allowable range.)
- Select a valve material that is compatible with the media. For chemical resistance information, refer to "CHEMICAL RESISTANCE ON ASAHI AV VALVE". (Some chemicals may damage incompatible valve materials.)
- Allow sufficient space for maintenance and inspection.
- Keep the valve out of direct sunlight, water and dust. Use cover to shield the valve. (The valve will not operate properly.)
- Perform periodic maintenance. (Leakage may develop due to temperature changes or periods of prolonged storage, rest, or operation.)
- Wear protective gloves and safety goggles as fluid remain in the valve even if the pipeline is empty. (You may be injured.)
- When operating the handle, be sure to do so with your hand. (Using a tool may damage the handle.)

Installation Procedure

PDCPD BUTTERFLY VALVE (700mm(28")-1200mm(48"):Gear type)

Refer to the following details.

- Warning**  -Lift the valve up by looping a belt around the gearbox(Fig 1). The eyebolt in the gearbox is designed to support the weight of gearbox (about 500kg), so avoid lifting up the whole valve with the eyebolt. Use it just as a support to stand the valve upright.
- Caution**  -When installing pipes and valves, ensure that they are not subjected to tension, compression, bending, impact, or other excessive stress.
- Take care not to over-tighten the Bolt, Nut.(The valve can be damaged.)
- Do not install the valve with the disc fully closed. (The disc may pinch into the seat, resulting in a high operating torque and preventing the valve from operating properly.)
- !** -Use flat faced flanges for connection to AV Valves.
- Ensure that the mating flanges are of the same standards.
- Care must be used during piping installation to ensure that the pipes or flanges are properly aligned so that the valve disc does not contact them in any setting. Misalignment will result in damage to the valve (Fig.2, Table 1).
- The gasket is un-necessary. (The seat carries out of the role of the gasket)

Fig.1

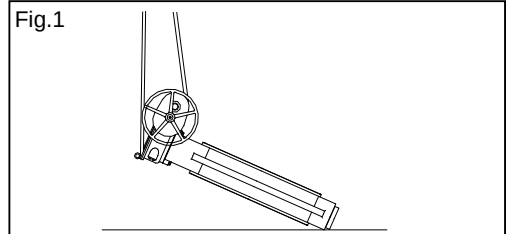


Fig.2

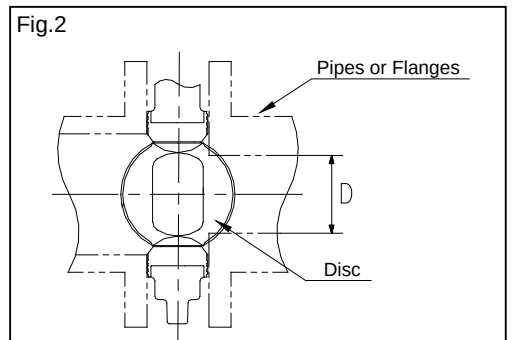


Table1 <Inside Diameter of the Connection Part>

Nominal Size mm (inch)	Diameter D mm (inch)
700 (28")	649 (25.55")
800 (32")	743 (29.25")
900 (34")	848 (33.39")
1000 (36")	936 (36.85")
1100 (44")	1054 (41.50")
1200 (48")	1136 (44.72")

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Installation Procedure

Caution -Tighten the bolt-nuts of the valve and the flange on the penetrated bolt at first, and then tighten the bolt-nuts on the inserted metal parts.

! -The valve disc is in the position indicated by solid lines in figure to the right prior to shipment from the factory. If the valve is opened or closed after unpacking, it must be reset in this position before installation. Failure to do so will result in damage to the surface of the valve seat during handling and installation.

-When you insert a valve between flanges, please insert after extending the fields of flanges fully. (If you insert a valve by force without fully extending fields of flanges, a liner may be turned over and suffer a crack.)

-Tighten the bolts and nuts gradually with a torque wrench in a diagonal manner.

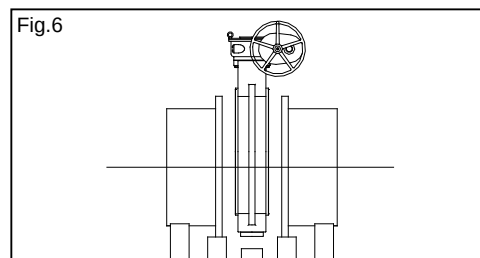
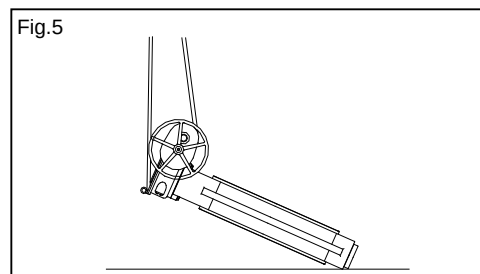
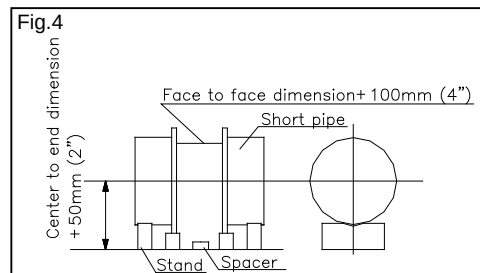
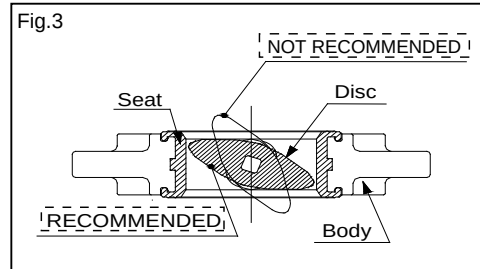
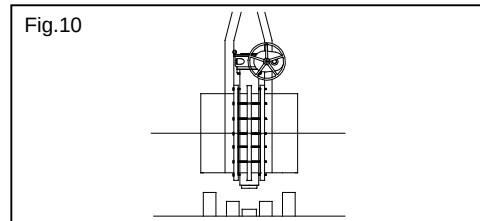
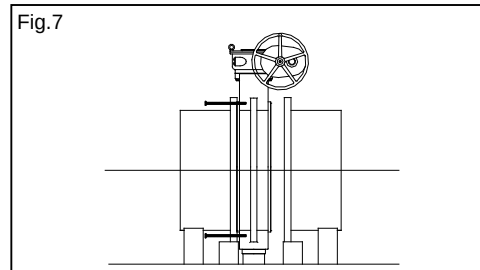


Table 2 <Face to face Dimension> Unit: mm(inch)

Nominal Size	Dimension
700 (28")	210 (8.28")
800 (32")	240 (9.45")
900 (36")	240 (9.45")
1000 (40")	300 (11.81")
1100 (44")	300 (11.81")
1200 (48")	350 (13.80")



1. Connection with short pipes

1-1. Install the valve between flanges and open the valve slightly.(Fig.3)

1-2. Set the short pipes(Fig.4).

Set the short pipes with suitable stands so that the center of the valve in the upright position aligns with that of the short pipe. Using a cloth, wipe foreign matter away from the flange surfaces of the short pipes.

1-3. Cleaning: Stand the valve upright(Fig.5).

Wind the nylon sling around the head part of the body and gradually raise it up. After standing the valve upright, wipe foreign matter away from the seat with a cloth.

1-4. Lower the valve gradually between the short pipes on to the spacer.

Lower the valve carefully without damaging the flange surfaces of short pipes.

1-5. Connect the valve temporary with one of short pipes(Fig.7).

Match the bolt hole of the short pipe with that of the valve, and put four stud bolts into the inserted metal parts, then tighten nuts lightly with hand.

1-6. Set another short pipe with the valve(Fig.8).

Loop the short pipe and tighten nuts as the same procedure as Figure 8.

1-7. Put the bolts into the penetrated bolt holes and plumb in(Fig.9).

Move the pipe gradually to match holes one another, and set nuts.

1-8. Tighten the nuts(Table 3).

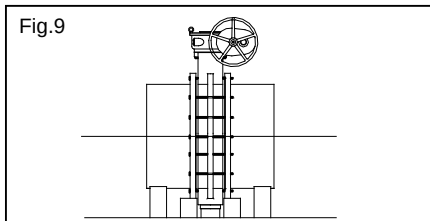
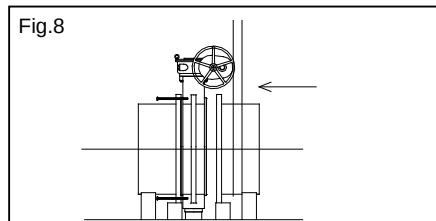
Tighten the nuts in a diagonal manner.

All penetrated bolts should be tightened first, and the inserted metal parts will be tightened after.

2. Installation: Using the nylon sling, lift up around the flange sides of both short pipes to set in the required position. Hook a wire on the eyebolt so that the whole valve can not be turned(Fig.10).

Table 3 <Recommended torque value>

Nominal Size	700, 800	900, 1000	1100	1200
mm (inch)	(28", 32")	(36", 40")	(44")	(48")
Torque value	130 (1152)	170 (1506)	200 (1772)	220 (1950)
N·m (lb·inch)				



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Operating Procedure

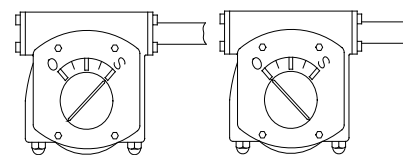


! -When operating the handle, be sure to do so with your hand.

In case of Gear Type, the indicator shows the position of the disc on the top of gear box.

For the full-shut (close) position, the indication shows Shut (S).

For the full-opened position, the indication shows Open (O).



Full-closed position

Full-opened position

Handling of Residual and Waste Materials



! Make sure to consult a waste treatment dealer for recommendations on the proper disposal of plastic valves.

(Poisonous gas is generated when the valve is burned improperly.)

Product Warranty

Be sure to read the following description of our product warranty.

- Always observe the specifications of and the precautions and instructions on using our product.

- We always strive to improve product quality and reliability, but cannot guarantee perfection. Therefore, should you intend to use this product with any equipment or machinery that may pose the risk of serious or even fatal injury, or property damage, ensure an appropriate safety design or take other measures with sufficient consideration given to possible problems. We shall assume no responsibility for any inconvenience stemming from any action on your part without our written consent in the form of specifications or other documented approval.

- The related technical documents, operation manuals, and other documentation prescribe precautions on selecting, constructing, installing, operating, maintaining, and servicing our products.

For details, consult with our nearest distributor or agent.

- Our product warranty extends for one and a half years after the product is shipped from our factory or one year after the product is installed, whichever comes first. Any product abnormality that occurs during the warranty period or which is reported to us will be investigated immediately to identify its cause. Should our product be deemed defective, we shall assume the responsibility to repair or replace it free of charge.

- Any repair or replacement needed after the warranty period ends shall be charged to the customer.

- The warranty does not cover the following cases:

(1) Using our product under any condition not covered by our defined scope of warranty.

(2) Failure to observe our defined precautions or instructions regarding the construction, installation, handling, maintenance, or servicing of our product.

(3) Any inconvenience caused by any product other than ours.

(4) Remodeling or otherwise modifying our product by anyone other than us.

(5) Using any part of our product for anything other than the intended use of the product.

(6) Any abnormality that occurs due to a natural disaster, accident, or other incident not stemming from something inside our product.

Inquiries

As for details, refer to the User's manual.

PDCPD BUTTERFLY VALVE : H-V037E



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