



Serial No.	UA-009E-8
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Read and use the information contained within these documents.

This User's Guide contains very important information for the proper installation, maintenance and safe use of the GATE VALVE. Please store in an easily accessible location.

<Warning, Caution, Prohibited & Mandatory Action 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	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	
	<ul style="list-style-type: none"> - 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. (These chemicals may cause damage to the valve.) - When transporting a valve, do not carry it by the handle.
	<ul style="list-style-type: none"> - 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	
	<ul style="list-style-type: none"> - Please inspect the following items. <input type="checkbox"/> Check for flaw, crack, or deformation on the valve. <input type="checkbox"/> Check for leaks to the outside or inside. <input type="checkbox"/> Inspect the bolt & nut and be sure it is not loose. <input type="checkbox"/> Check for the smoothness of handle operation.

General Operating Instructions

Warning	
	<ul style="list-style-type: none"> - 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.

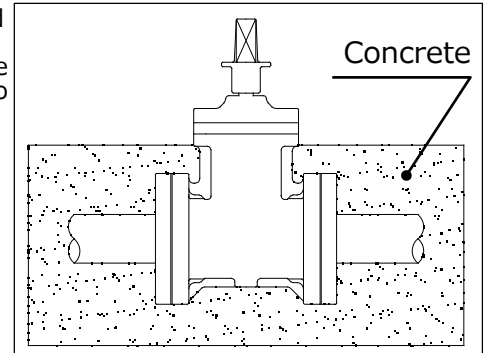
Caution	
	<ul style="list-style-type: none"> - Do not step on or apply excessive weight on valve. (It can be damaged.) - Keep the valve away from excessive heat or fire. (It can be damaged, or destroyed.) - When installing a pipe support by means of a U-type clamp or something similar, do not to over-tighten. (Excessive force may damage the pipe.) - Do not exert excessive force in open/close the valve. (The hand wheel can be damaged.) - Do not use the valve in conditions where the fluid may have crystallized. (The valve will not operate properly.) - Do not use the valve to fluid containing slurry. (The valve will not operate properly.)

General Operating Instructions

⚠ Caution



- Be sure to conduct a safety check on all hand and power tools to be used before beginning work.
- When conducting piping work, wear personal protective equipment appropriate to the contents of work. (Failure to do so may cause an injury.)
- When replacing valves and parts, completely eliminate pressure in the pipe, and Completely discharge fluid from line.
- 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 over periods of prolonged storage, rest or operation.) Refer to the instruction manual for inspection items. (No. H-V011-E)
- When installing pipes and valves, ensure that they are not subjected to tension, compression, bending, impact, or other excessive stress.
- When operating the hand wheel, be sure to do so with your hand. (Using a tool may damage the hand wheel.)
- Foreign matters such as sand may be left inside the pipeline after the installation of the valve. Therefore, clean inside the pipe before opening/closing the valve.
- When the GATE VALVE is laid underground or it exposes with concrete, Bury the GATE VALVE after putting the hand wheel into the state of the shut (close) position.



Installation Procedure



Flanged end

<Dimensions table of Bolt for piping>

Nom. size mm (inch)	JIS 10K (unit; mm)				ANSI Class150 (unit; inch)				DIN PN10 (unit; mm)			
	n	D	L	S	n	D	L	S	n	D	L	S
30 (1¼")	4	M16	70	38	4	W5/8"-11	2.56	1.50	4	M16	70	38
40 (1½")	4	M16	70	38	4	W5/8"-11	2.56	1.50	4	M16	70	38
50 (2")	4	M16	75	38	4	W5/8"-11	2.76	1.50	4	M16	75	38
65 (2½")	4	M16	75	38	4	W5/8"-11	2.95	1.50	4	M16	75	38
80 (3")	8	M16	75	38	4	W5/8"-11	2.95	1.50	8	M16	75	38
100 (4")	8	M16	75	38	8	W5/8"-11	3.15	1.50	8	M16	75	38
125 (5")	8	M20	85	46	8	W3/4"-10	3.35	1.81	8	M16	85	38
150 (6")	8	M20	90	46	8	W3/4"-10	3.15	1.81	8	M20	90	46
200 (8")	10	M20	90	46	6	W3/4"-10	3.35	1.81	6	M20	90	46
250 (10")	12	M22	90	50	12	W7/8"-9	3.74	1.97	12	M20	90	46
300 (12")	14	M22	100	50	10	W7/8"-9	3.74	1.97	10	M20	100	46
350 (14")	12	M22	110	50	8	W1"-8	3.94	1.97	12	M20	100	46

<Dimensions table of Insert bolt for piping>

Nom. size mm (inch)	JIS 10K (unit; mm)				ANSI Class150 (unit; inch)				DIN PN10 (unit; mm)			
	n	D	L	S	n	D	L	S	n	D	L	S
200 (8")	2	M20	55	46	2	W3/4"-10	2.17	1.81	2	M20	55	46
250 (10")	-	-	-	-	-	-	-	-	-	-	-	-
300 (12")	2	M22	55	50	2	W7/8"-9	2.36	1.97	2	M20	60	46
350 (14")	4	M22	60	50	4	W1"-8	2.36	1.97	4	M20	60	46

⚠ Caution	
	- Do not tighten the bolts and nuts for piping beyond the specified torque value. Otherwise, the valve may be damaged.
	<ul style="list-style-type: none"> - The parallelism and axial misalignment of the flange surface should be under the values shown in the table 1 to prevent damage the valve. (Refer to Fig. 1.) - Use flat faced flanges for connection to AV Valves. - Ensure that the mating flanges are of the same standards. - Be sure to use sealing gaskets (AV Gasket), bolts, nuts, and washers and tighten them to table 2 Specified torques. - When connecting an ASAHI AV Valve to metal piping, take care not to let the piping stress on the valve.

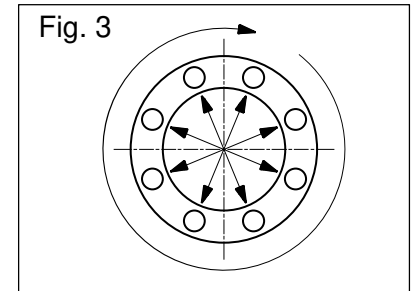
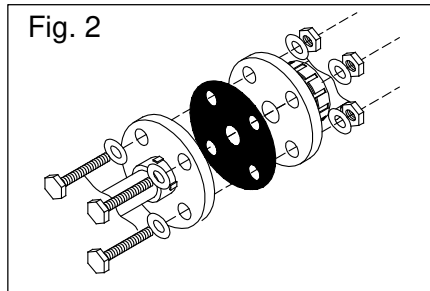
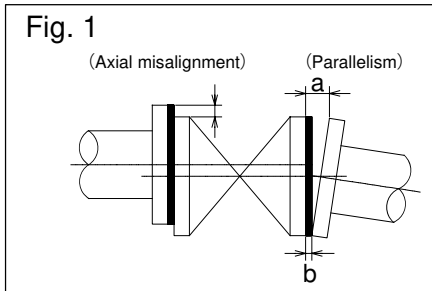
1. Confirm the flange face area is clean and free of dirt or foreign materials.
2. Set the AV gasket between the flanges. Insert washers and bolts from the pipe side, insert washers and nuts from the valve side, then temporarily tighten them by hand. (Refer to Fig. 2)
3. Tighten the bolts and nuts gradually with a torque wrench to the specified torque level in a diagonal manner. (Refer to Fig.3)
4. Tighten it more than 2 turns clockwise with specified torque. (Refer to Fig. 3)

[Table 1] Parallelism and axial misalignment of the flange



Nominal size	40-80mm [1½-3"]	100-150mm [4-6"]	200-350mm [8-14"]
axial misalignment	1.0mm [0.04"]	1.0mm [0.04"]	1.5mm [0.05"]
parallelism (a-b)	0.8mm [0.03"]	1.0mm [0.04"]	1.0mm [0.04"]

[Table 2] Specified torque value

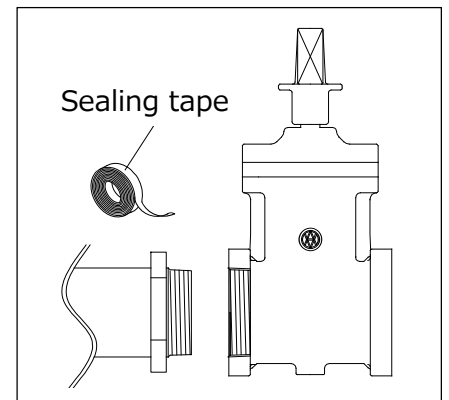
Nominal size	Unit; N-m [lbf-in]					
	30, 40mm [1¼, 1½"]	50, 65mm [2, 2½"]	80, 100mm [3, 4"]	125, 150mm [5, 6"]	200, 250mm [8, 10"]	300, 350mm [12, 14"]
Torque value	20 [177]	22.5 [200]	30 [266]	40 [354]	40 [354]	60 [532]



Threaded end

⚠ Caution	
	- Avoid excessive tightening. (The valve can be damaged.)
	<ul style="list-style-type: none"> - Make sure that the threaded connections are plastic x plastic. (Metallic threaded can cause damage.) - Wrap the threaded joints on our plastic piping with sealing tape. Using a liquid sealing agent or liquid gasket may cause stress cracks (Environmental Stress Cracking). Our product warranty shall not apply in case of said use, even when said use is unavoidable.

1. The sealing tape is wound to the Male threaded adapter. (2 to 3 complete wraps around the male threads are sufficient.)
2. Tighten the external thread of the joint and the valve hand tight, and using the spanner wrench, screw in the valve by turning 1/2 to 1 turns carefully without damaging it.



Handling of Residual and Waste Materials

 **Warning**



- 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.
- * Note that damage induced by a defect of our product is not covered by warranty.
- This guarantee applies to the use of our product only in Japan. If it is used overseas, please inquire with us separately.

Inquiries

For details, please consult with your nearest service station.
As for details, refer to the User's manual (No.H-V011-E).

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Information in this manual is subject to change without notice.

April 2020