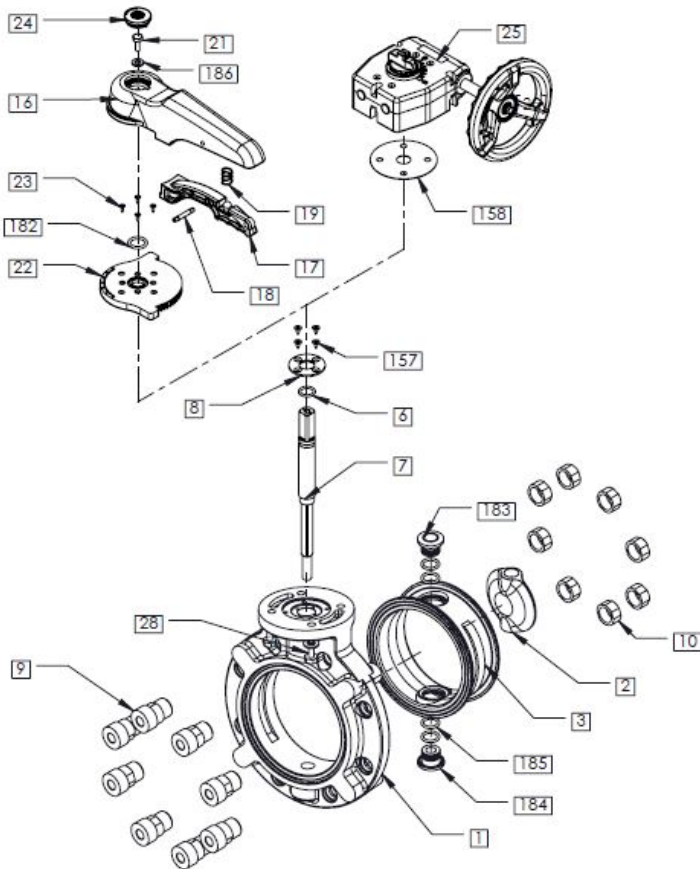


Butterfly Valve Type-57P Lug

Parts Identification



Item	Qty	Description
1	1	Body
2	1	Disc
3	1	Seat
6	1	O-ring (C)
7	1	Stem
8	1	Stem Retainer
9	Set	Lug Outsert
10	Set	Lug nut
16	1	Handle
17	1	Handle Lever
18	1	Pin
19	1	Spring
21	1	Bolt
22	1	Indicator Plate
23	4	Screw
24	1	Cap
25	1	Plasgear™
28	4	Bolt
157	4	Screw
158	1	Gasket
183	1	Seat Bushing
184	1	Seat Bushing
185	4	O-ring
186	1	Washer

Installation Procedure

Caution

- 1) The valve disc is set in the position indicated by the solid lines in Fig. 1 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 may result in damage to the surface of the valve seat during handling and installation.
- 2) The valve must not be dropped or come in contact with other objects, as the sealing surfaces of the disc and or valve seat may be damaged.
- 3) Care must be used during piping installation to ensure that pipe or flanges are properly aligned so that the valve disc does not come in contact with them. Misalignment as shown in Fig. 2 will result in damage to the valve.
- 4) The installed valve must never be opened or closed when foreign matter such as sand is present in the pipeline.

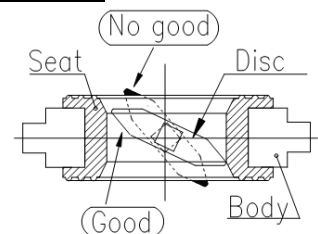


Fig. 1

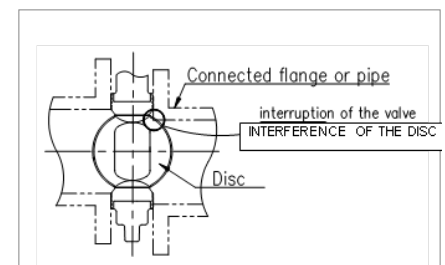


Fig. 2

Butterfly Valve Type-57P Lug

Nominal Size	Diameter D
1-1/2" (40mm)	1.22" (31mm)
2" (50mm)	1.69" (43mm)
2-1/2" (65mm)	2.24" (57mm)
3" (80mm)	2.64" (67mm)
4" (100mm)	3.58" (91mm)
5" (125mm)	4.53" (115mm)
6" (150mm)	5.39" (137mm)
8" (200mm)	7.05" (179mm)
10" (250mm)	9.09" (231mm)
12" (300mm)	11.02" (280mm)
14" (350mm)	13.11" (333mm)

Procedure

- 1) Install the valve between flanges with valve slightly open. Fig. 4
- 2) Insert bolts, nuts, washers and tighten the bolts and nuts temporarily by hand.
- 3) Open the valve fully to check for pipe interference before fully tightening the bolts.

The parallelism and axial misalignment of the flange surface should be under the values shown in the below table to prevent damage to the valve.

Unit: Inch		
Nom. Size	Axial Misalignment	Parallelism (a – b)
1-1/2"-3"	0.04	0.03
4"-6"	0.04	0.04
8" – 14"	0.06	0.04

Refer to Fig. 5

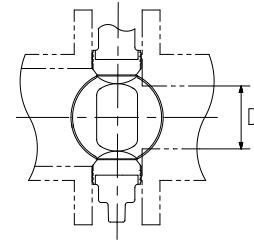


Fig. 3

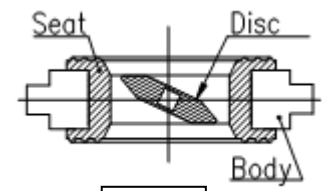


Fig. 4

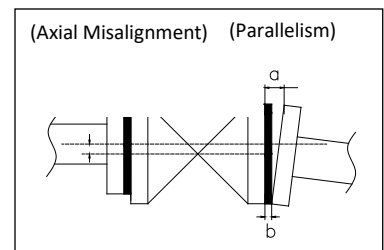


Fig. 5

- 4) Tighten the bolts and nuts gradually using a torque wrench to the specified torque value in a diagonal manner. Fig. 6

Recommended torque value		Unit: Inch-lbs		
Nominal Size	1-1/2" (40mm)	2", 2-1/2" (50, 65mm)	3", 4" (80, 100mm)	
Torque Value	177	200	266	
Nominal Size	5", 6" (125, 150mm)	8", 10" (200, 250mm)	12", 14" (300, 350mm)	
Torque Value	355	488	532	

Caution : Avoid excessive tightening. (The valve can be damaged.)

NOTE: See Pressure VS. Temperature data detailed below
See Lug internal thread diameter and pitch information
See mating flange Bolt Length Information detailed below

Installation Procedure for Handle

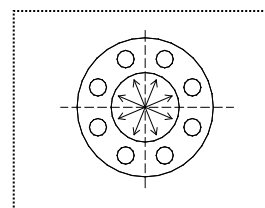


Fig. 6

Butterfly Valve Type-57P Lug

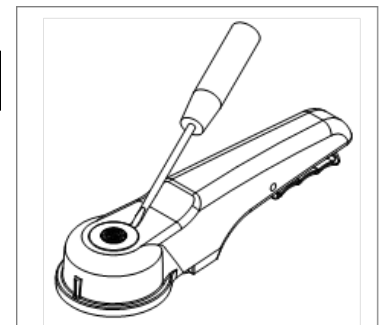
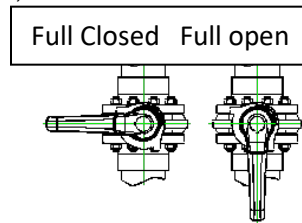
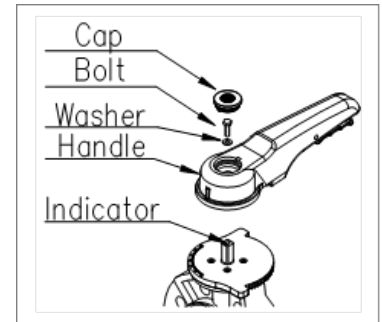
Install the handle on the valve stem. Set the direction to correspond with the indication line at the top of the stem, which should agree with the disc position.

- 1) Secure the handle at the top of the stem with the enclosed bolt and washer using a socket wrench.
- 2) Set the cap on top of the handle, aligning the marks and gently strike with a plastic hammer until seated.

Nominal Size	1-1/2" – 4"	5" - 8"
Bolt size	M6 X 15mm Long	M8 X 15mm Long
Socket size	10mm	13mm

Removal Procedure

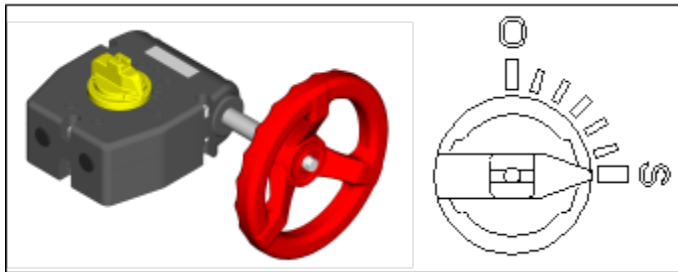
- 1) To remove cap, insert a flat head screwdriver into the indentation and pry up
- 2) Remove the bolt and washer using a socket wrench, then remove handle.



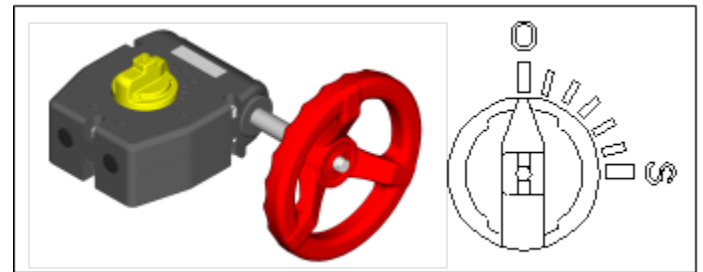
Adjustment for the travel stop Gear type

The adjustments for Full Open and Full Closed positions are preset at the factory. If adjustment is required refer to the following procedure:

Full Shut (Closed) position



Full Open position

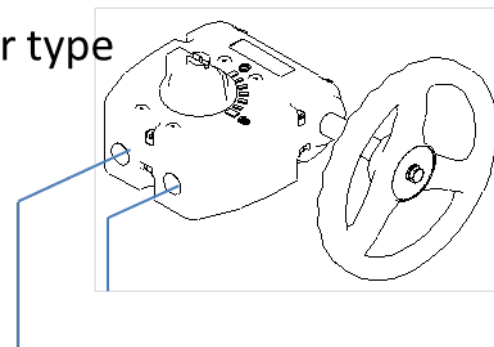


Adjustment for Full Closed (Open)

- 1) Remove protective rubber caps
- 2) Loosen stop bolt with allen key
- 3) Adjust disc to desired position
- 4) Tighten stop bolts at end positions
- 5) Replace protective rubber caps

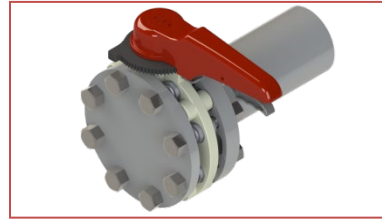
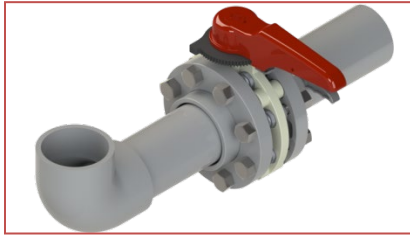
Note: You can only adjust 1 stop bolt at a time at the end of travel in each position. If stop bolt is hard to turn, rotate hand wheel 1 turn in opposite direction to relieve pressure on gear, then reset disc position and tighten stop bolt.

Gear type



Adjuster Full open

Butterfly Valve Type-57P Lug



Installed Between 2 Flanges

Blind Flange installed

When valves are installed as pictured above, full pressure rating detailed below applies

**Pressure vs. Temperature (psi, water, non-shock)*

Body		PVC			CPVC				PP		PVDF			
Disc		PVC	PP, PVDF		CPVC				PP, PVDF		PVDF			
Nominal Size		30°F 120°F	30°F 120°F	121°F 140°F	30°F 140°F	141°F 160°F	161°F 176°F	177°F 195°F	-5°F 140°F	141°F 175°F	-5°F 140°F	141°F 175°F	176°F 210°F	211°F 250°F
Inches	mm													
2"	50	150	150	70	150	120	100	55	150	100	150	100	85	75
2-1/2"	65	150	150	70	-	-	-	-	150	100	150	100	85	75
3"	80	150	150	70	150	120	100	55	150	100	150	100	85	75
4"	100	150	150	45	150	120	100	55	150	100	150	100	85	75
6"	150	150	150	45	150	120	100	55	150	100	150	100	85	75
8"	200	150	150	40	150	120	100	55	150	85	150	100	75	60
10"	250	150	150	40	-	-	-	-	150	85	150	85	75	60
12"	300	100	100	30	-	-	-	-	100	60	100	60	45	30
14"	350	100	100	30	-	-	-	-	100	45	100	45	30	15

**Pressure table applies when downstream mating flange or blind flange is properly attached and torqued*

FKM seat butterfly valves have a low temperature limit of 23°F regardless of body/disc material

Butterfly Valve Type-57P Lug



No Blind or mating flange installed

When valve is installed with no blind or mating flange attached, pressure rating is reduced as below

**Pressure vs. Temperature (psi, water, non-shock)

Body		PVC			CPVC			PP		PVDF			
Disc		PVC	PP, PVDF		CPVC			PP, PVDF		PVDF			
Nominal Size		30°F	30°F	121°F	30°F	141°F	176°F	-5°F	141°F	-5°F	141°F	176°F	211°F
Inches	mm	120°F	120°F	140°F	140°F	175°F	195°F	140°F	175°F	140°F	175°F	210°F	250°F
2"	50	110	110	75	110	75	40	110	75	110	75	65	55
2-1/2"	65	110	110	75	-	-	-	110	75	110	75	65	55
3"	80	***	***	***	110	75	40	110	75	110	75	65	55
4"	100	***	***	***	110	75	40	110	75	110	75	65	55
6"	150	***	***	***	110	75	40	110	75	110	75	65	55
8"	200	***	***	***	110	75	40	110	65	110	65	55	45
10"	250	***	***	***	-	-	-	110	65	110	65	55	45
12"	300	***	***	***	-	-	-	75	45	75	45	35	25
14"	350	75	75	30	-	-	-	75	35	75	35	25	12

**Pressure table applies only when no downstream flange is attached.

*** See Type-57L overmolded Lug body valve

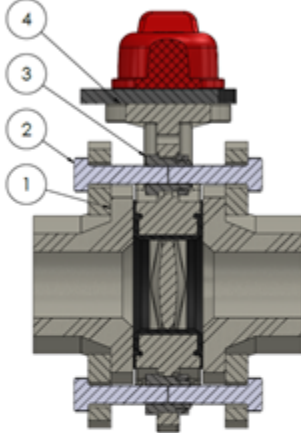
FKM seat butterfly valves have a low temperature limit of 23°F regardless of body/disc material

Butterfly Valve Type-57P Lug

Mating Flange Lug bolt Length Information

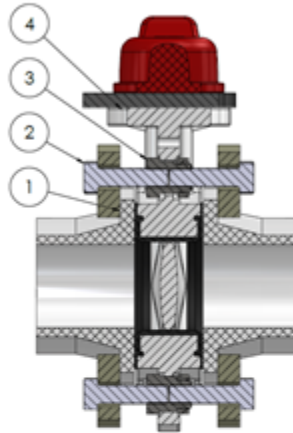
PP Stub End and backing ring flange type

Item	Description
1	PP Stub end with backing ring
2	Lug assembly
3	T-57P Valve
4	Mating flange bolt



PVDF Stub End and backing ring flange type

Item	Description
1	PVDF Stub end with backing ring
2	Lug assembly
3	T-57P Valve
4	Mating flange bolt



PP Stub end with Backing Ring			
Valve Size	Total flange Depth	Flange Tolerance	Recommended Bolt
2"	1.29"	+/- 0.25"	5/8" - 11 UNC X 2.00"
2-1/2"	1.46"	+/- 0.25"	5/8" - 11 UNC X 2.25"
3"	1.46"	+/- 0.25"	5/8" - 11 UNC X 2.25"
4"	1.54"	+/- 0.25"	5/8" - 11 UNC X 2.50"
6"	1.64"	+/- 0.65"	3/4" - 10 UNC X 2.75"
8"	2.07"	+/- 0.65"	3/4" - 10 UNC X 3.50"
10"	2.51"	+/- 1.45"	7/8" - 9 UNC X 4.00"
12"	2.69"	+/- 1.45"	7/8" - 9 UNC X 4.50"
14"	2.74"	+/- 1.62"	1" - 8 UNC X 4.50"

PVDF Stub end with Backing Ring			
Valve Size	Total flange Depth	Flange Tolerance	Recommended Bolt
2"	1.04"	+/- 0.25"	5/8" - 11 UNC X 1.75"
2-1/2"	1.21"	+/- 0.25"	5/8" - 11 UNC X 2.00"
3"	1.21"	+/- 0.25"	5/8" - 11 UNC X 2.00"
4"	1.29"	+/- 0.25"	5/8" - 11 UNC X 2.25"
6"	1.39"	+/- 0.65"	3/4" - 10 UNC X 2.50"
8"	1.82"	+/- 0.65"	3/4" - 10 UNC X 3.25"
10"	2.01"	+/- 1.45"	7/8" - 9 UNC X 3.50"
12"	2.19"	+/- 1.45"	7/8" - 9 UNC X 4.00"
14**	TBD	TBD	1" - 8 UNC X TBD

*Asahi does not offer 14" PVDF stub ends.

Directions for Bolt size Charts

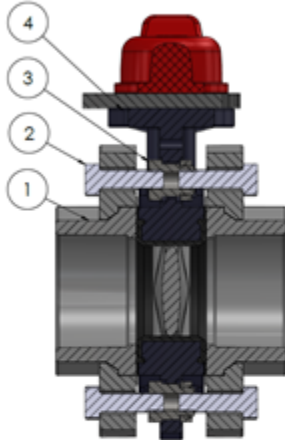
- Check the size and the materials of the piping system you are installing
- Measure the total depth of the flange (or stub end and backing ring)
- Compare the depth of your flange to the dimensions listed in the table
- If the measured depth is within the tolerance range for that size, use the recommended bolt length
- If the measured depth is outside the tolerance range, contact Asahi/America technical support

Butterfly Valve Type-57P Lug

Mating Flange Lug bolt Length Information

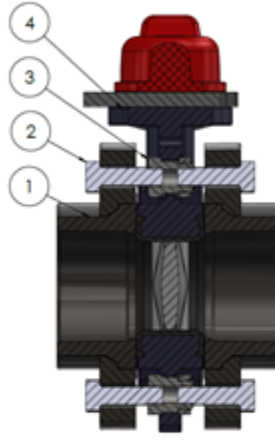
PVC 1pc or Vanstone flange type

Item	Description
1	PVC Flange 1pc or Vanstone type
2	Lug assembly
3	T-57P Valve
4	Mating flange bolt



Metal flange type

Item	Description
1	Metal flange
2	Lug assembly
3	T-57P Valve
4	Mating flange bolt



PVC Flange 1pc or Vanstone type			
Valve Size	Total flange Depth	Flange Tolerance	Recommended Bolt
2"	0.79"	+/- 0.25"	5/8" - 11 UNC X 1.50"
2-1/2"	0.96"	+/- 0.25"	5/8" - 11 UNC X 1.75"
3"	0.96"	+/- 0.25"	5/8" - 11 UNC X 1.75"
4"	1.04"	+/- 0.25"	5/8" - 11 UNC X 2.00"
6"	1.39"	+/- 0.65"	3/4" - 10 UNC X 2.50"
8"	1.57"	+/- 0.65"	3/4" - 10 UNC X 3.00"
10"	1.76"	+/- 1.45"	7/8" - 9 UNC X 3.25"
12"	1.94"	+/- 1.45"	7/8" - 9 UNC X 3.75"

1 pc Metal flange types			
Valve Size	Total flange Depth	Flange Tolerance	Recommended Bolt
2"	0.54"	+/- 0.25"	5/8" - 11 UNC X 1.25"
2-1/2"	0.71"	+/- 0.25"	5/8" - 11 UNC X 1.50"
3"	0.71"	+/- 0.25"	5/8" - 11 UNC X 1.50"
4"	0.79"	+/- 0.25"	5/8" - 11 UNC X 1.75"
6"	0.89"	+/- 0.65"	3/4" - 10 UNC X 2.00"
8"	1.07"	+/- 0.65"	3/4" - 10 UNC X 2.50"
10"	1.26"	+/- 1.45"	7/8" - 9 UNC X 2.75"
12"	1.44"	+/- 1.45"	7/8" - 9 UNC X 3.25"
14"	1.49"	+/- 1.62"	1" - 8 UNC X 3.25"

Directions for Bolt size Charts

- Check the size and the materials of the piping system you are installing
- Measure the total depth of the flange (or stub end and backing ring)
- Compare the depth of your flange to the dimensions listed in the table
- If the measured depth is within the tolerance range for that size, use the recommended bolt length
- If the measured depth is outside the tolerance range, contact Asahi/America technical support

Butterfly Valve Type-57P Lug

Operating procedure

- Open and Close the valve by turning handle slowly. Turn clockwise to Close, counterclockwise to Open.
- Lever Type – The direction of the handle is the same as the disc
 For full Closed position, the handle is perpendicular to the piping
 For Full Open position, the lever handle is parallel to the piping system.
- Gear type
 For full Closed, the indicator shows Shut.
 For full Open, the indicator shows Open.

General operating Instructions

- Operate the valve within the pressure vs. Temperature range as per table below, otherwise the valve can be damaged
- Select a valve material that is suitable for the media. (Refer to Chemical Resistance on AV Valve)
- Do not step on valve or apply excessive weight (the valve can be damaged)
- Allow sufficient space for maintenance and inspection
- Keep the valve away from excessive heat or fire. (Valve can become deformed or destroyed)
- Make sure to properly dispose of used valves. (Poisonous gas is generated when burned improperly)

Caution: Do not attempt to repair or replace parts while valve is under pressure.

Refer to Asahi/America Type-57P Operation and Maintenance manual for Disassembly/Assembly or valve repair.

General Instructions for Transportation, Unpacking and Storage

- Keep the valve packed in original carton box as delivered until installation
- Keep the valve away from any coal, tar, creosote (antiseptic for wood) termite insecticide, vermicides and paint. (Could cause swelling and damage to the valve)
- Do not impact or drop the valve (It can be damaged)

Visual Maintenance Inspection

- 1) Check for flaws, cracks, or deformation of the valve.
- 2) Check for any leaks to the outside of the valve.
- 3) Check for seat/disc deformation due to improper installation of the valve.
- 4) Check for smoothness of handle operation.

Troubleshooting

Problem	Cause	Treatment
Fluid leaks in the closed Position	1) Travel stop is not properly set 2) The seat is damaged or worn 3) Foreign materials are trapped 4) the disc is damaged or worn 5) Flange bolt torque uneven/wrong	Adjust the stop Replace the seat Remove material Replace the disc Adjust and retighten
Fluid leaks to the outside	1) The seat is damaged or worn 2) Flange bolts are not tight or unevenly torqued	Replace the seat Properly torque flange bolts
The Handle does not operate smoothly	1) Foreign materials on disc/seat 2) Gear-op is damaged 3) Flange bolts are overtightened	Remove the materials Repair and Replace Adjust and Torque bolts
Valves do not operate	1) The gear-operator is damaged 2) The stem is damaged	Replace Gear operator Replace the stem