



Type-75 Butterfly Valve

Standard Features (Sizes 18" – 24")

- Standard model (18" - 24") has polypropylene body, disc and EPDM seat
- 403 stainless steel stem has full engagement over the entire length of the disc and is a non-wetted part totally isolated from the media
- Bubble-tight seating
- Only abrasion resistant, solid plastic disc and elastomeric liner are wetted parts
- Rotork gear operator

Options:

- Pneumatically and electrically actuated with accessories
- Lug style (stainless steel 304 and 316) as blocking and end of line applications
- Stems in 316 stainless steel, titanium, Hastelloy C[®] ‡
- 2" square nut on gear
- Stem extensions (single stem and two-piece stem)
- Locking device
- Chain operators
- Manual limit switch

Caution

- Never remove valve from pipeline under pressure.
- Always wear protective gloves and goggles.

FOR TROUBLESHOOTING, REFER TO PAGE 47.

Specifications

- Sizes:** 18" – 24"
- Models:** Wafer or Lug Style
- Operators:** Gear
- Bodies:** PP and PVDF
- Discs:** PP and PVDF
- Seats:** EPDM, FKM and Nitrile
- Seals:** Same as seating material
- Stems:** 403 and 316 stainless steel, Titanium, Hastelloy C[®] ‡

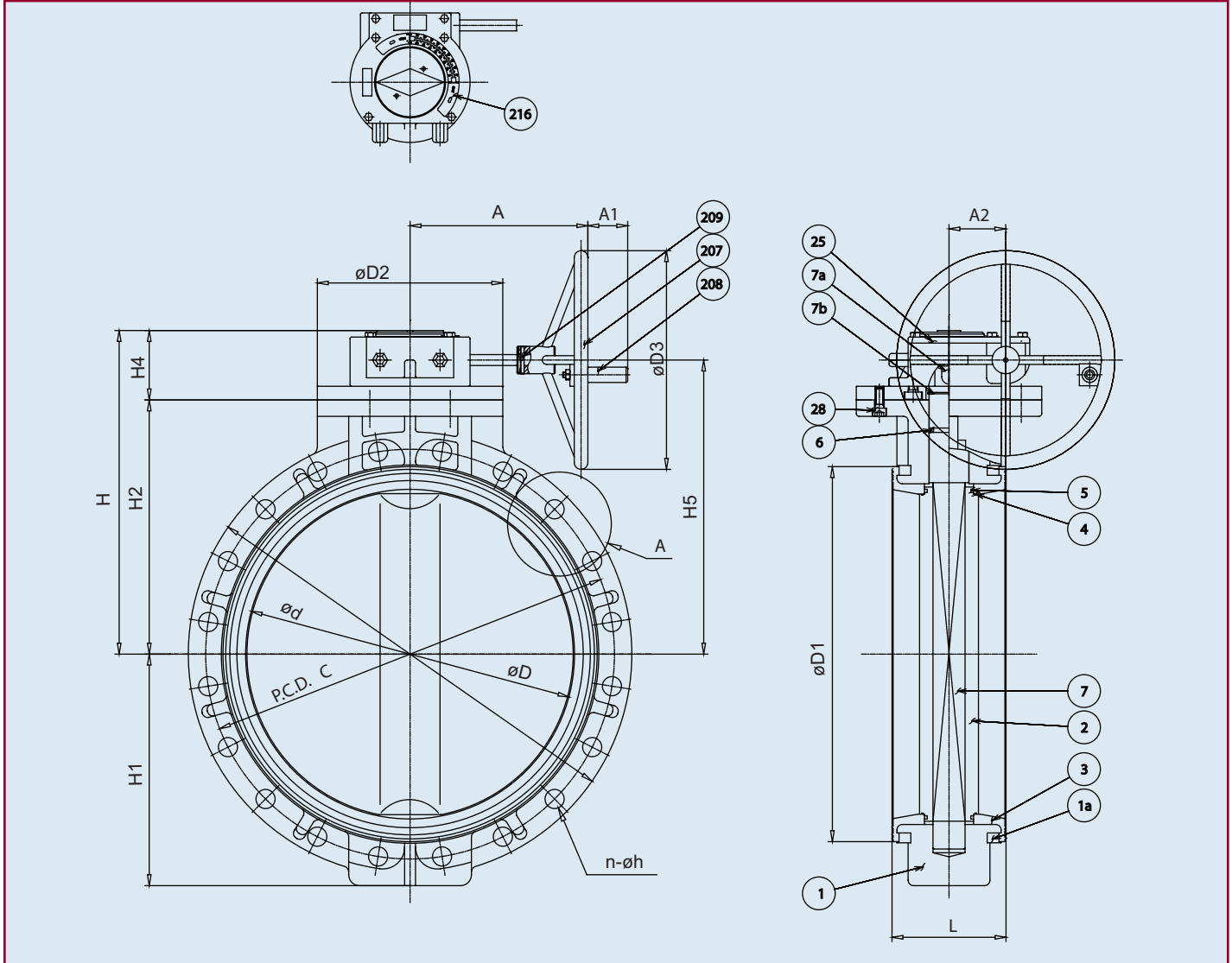
‡ Trademark of Cabot Corporation

Parts List (Sizes 18" – 24")

PARTS			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Body	1	PP, PVDF
2	Disc	1	PP, PVDF
3	Seat	1	EPDM, FKM, Others
4	O-Ring (A)	2	EPDM, FKM, Others
5	O-Ring (B)	2	EPDM, FKM, Others
6	O-Ring (C)	1	EPDM, FKM, Others
7	Stem	1	Stainless Steel, [SUS 403]
7a	Key (A)	1	Carbon Steel [S45C]
7b	Snap Ring	1	Stainless Steel [SUS 304]
25	Gear Box	1	Cast Iron [FC250] Etc.
28	Bolt (C)	4	Stainless Steel [SUS 304]
207	Handle (C)	1	Cast Iron [FC250]
208	Handle Grip	1	Nylon, Etc.
209	Spring Pin	1	Stainless Steel [SUS 304]
216	Scale Plate	1	Stainless Steel [SUS 304]
1a	Ring	2	Chromized Steel [SS400] with Epoxy Powdercoat

Sample Specification

All solid thermoplastic Type-75 butterfly valves (18" through 24") shall be of the lined body design and bubble-tight seal (meeting or exceeding Class VI as defined by American National Standard Institute) with only the liner and disc as wetted parts. The disc shall be of solid, abrasion resistant plastic, have double O-ring seals on top and bottom trunnions of the same material as the valve liner. Liner shall be molded and formed around the body, functioning as a gasket seal with convex ring design on each side of the valve for lower bolt tightening torque. Stem shall be of 403 stainless steel, non-wetted and have engagement over the full length of the disc. PP shall conform to ASTM D4101 Cell Classification PPO210B67272 and PVDF conforming to ASTM D3222 Cell Classification Type II. PP and PVDF bodies shall be rated to 75psi, size 18", and 50psi, sizes 20" and 24" at 70° F. Butterfly valves shall be wafer or lug style, as manufactured by Asahi/America, Inc.



Dimensions (Sizes 18" - 24") (in.)

NOMINAL SIZE		ANSI CLASS 150					D													Gear Box Type
INCHES	mm	d	C	n	h	PP	PVDF	D1	D2	D3	L	H	H1	H2	H3	A	A1	A2		
18	450	17.80	22.75	16	1.25	24.92	24.80	20.67	13.39	15.75	7.05	12.40	12.40	14.57	5.00	12.83	2.97	4.11	AB1250N	
20	500	19.76	25.00	20	1.25	26.89	26.77	22.64	13.39	15.75	7.48	13.78	13.78	15.75	5.00	12.83	2.97	4.11		
24	600	23.74	29.50	20	1.38	31.22	31.10	27.01	13.39	15.75	8.23	16.69	16.69	18.31	5.00	12.83	2.97	4.11		

Cv Values Wt.(lbs.)/Vacuum Service/ Pressure vs. Temperature (psi, water)*

NOMINAL SIZE		Cv (at various opening degrees)			NOMINAL SIZE		Gear	NOMINAL SIZE		VACUUM SERVICE (INCHES OF MERCURY)	BODY		PP		PVDF					
INCHES	mm	30°	60°	90°	INCHES	mm		INCHES	mm		DISC	PP	NOMINAL SIZE		PVDF					
		-5° F		141° F								-5° F		141° F		176° F		211° F		
		140° F		175° F								140° F		175° F		210° F		250° F		
18	450	1100	5020	10890	18	450	195	18	450	-19.69	18	450	75	45	75	45	30	15		
20	500	1448	6620	14060	20	500	232	20	500	-19.69	20	500	75	45	75	45	30	15		
24	600	2130	9180	18500	24	600	285	24	600	-19.69	20-24	500-600	50	30	50	30	25	15		

* For lug style data consult factory.

* FKM seat butterfly valves have a lower temperature limit of 23° F

Type-57, 57L, 56 & 75 Butterfly Valves

1.0 SCOPE:

All requirements are for Type-57, 57L, 56 & Type-75 Butterfly Valves and accessories.

2.0 MATERIALS:

U-PVC – Conforming to ASTM D1784 Cell Classification 12454 A
Polypropylene – Conforming to ASTM D4101 Cell Classification PP0210B67272
PVDF – Conforming to ASTM D3222-91A Cell Classification Type II
FKM – Viton® Fluorocarbon Rubber
EPDM – Ethylene Propylene Diene Terpolymer Rubber
Nitrile – Nitrile Butadiene Rubber

3.0 VALVES:

All Butterfly valves shall be PVC, PP or PVDF body with either PP, PVC, or PVDF disc and either EPDM, Nitrile, or FKM seat & seals. The liner shall be full seat design fully molded around the body where as only the Disc and Seat are wetted parts and feature raised convex rings on the face and be utilized as the mating flange gaskets. Valves shall accept flat faced flanges in accordance with ANSI B16.5 bolt pattern for 150 lb flanges. Valve stem shall be either 316 SS (sizes 1-1/2" – 12"), or 403 SS (sizes 14" – 24"), be non-wetted, and have engagement over the full length of the disc. The valve lever handle (sizes 1-1/2" – 8") shall have a molded provision for a padlock. Valves sizes 1-1/2" – 16" shall feature a molded ISO bolt pattern for accessory mounting. Type-56 Sizes 1-1/2" – 16", or Type-75 Sizes 18" – 24".

3.1 Operators

Type-57, 57L & 56 1-1/2" – 16" (Lever Type standard sizes 1-1/2" – 8")
(Gear Type standard sizes 8" – 16", optional for sizes smaller than 8")
Type-75 18" – 24" (Gear Type only standard)
Lever Handle to be Asahi Standard valve handle
Gear-Operator to be Asahi Plasgear™ all plastic construction with SS trim submersible type
Gear-operator for valves sizes 1-1/2" – 16" Type-57, 57L, & 56 or Spero Cast Iron with Epoxy coating type for 18" – 24" Type-75.

3.2 Approved Manufacturer

Valves shall be provided by Asahi/America, Inc. of Malden, MA with no approved equals.
Manufacturer must be ISO-9001 certified.

3.3 Pressure vs. Temperature

Valves shall have a pressure rating of:
150 psi at 70° F sizes 1-1/2" – 10"
100 psi at 70° F sizes 12" & 14"
85 psi at 70° F size 16"
75 psi at 70° F sizes 18" - 24"

4.0 ACCESSORIES:

4.1 Stem Extensions

Stem extensions where required should be designed, built and provided by the Asahi/America, Inc., and be 1 of 5 styles:
Style LBF-A Two piece extension with outer housing 100% sealed either free standing or supported design.
Style GBF-A Two piece extension with outer housing 100% sealed either free standing or supported design.
Style LBF-B Single piece extension either free standing or supported design
Style GBF-B Single piece extension either free standing or supported design.

Style GBF-C Single piece extension for the gear handwheel only either free standing or supported design.

4.2 Actuation

Actuation where required should be designed, built and provided by Asahi/America, Inc., and be either pneumatic (Series 79P) or electric (Series 94, 92, or 87) type. All actuation accessories to be provided and installed by Asahi/America, Inc. in accordance with manufacturers requirements.

4.3 Lugs

Lugs where required should be factory installed by Asahi/America, Inc. Materials of construction shall be 304 SS or 316 SS.

4.4 Operating Nuts

Where required 2" square operating nuts can be installed on Lever type or Gear type Butterfly valves. On Gear type valves, the gear operator must remain on top of valve body and only the handwheel from gear-operator is replaced by 2" square operating nut. Materials of construction – Anodized Aluminum.

4.5 Chain Operators

Where required for overhead applications, chain operators manufactured by Babbitt Steam may be installed on Gear-operated butterfly valves. Chain must be weldless loop style chain supplied from Babbitt Steam.

Materials of construction: Chain Operator – Cast Iron
 Chain – Hot Galvanized steel, others by request.

5.0 INSTALLATION PROCEDURES:

All valve joints shall be prepared using flanged connections to accept either wafer style or lugged butterfly valves. The bolt diameters and torque values should be according to manufacturers standard and requirements put forth in Type-57, 57L, 56 or Type-75 Butterfly valve Operation and Maintenance manuals. All accessories should be installed in accordance with the manufacturers requirements as well as any facility requirements.

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