

SBP PTFE-Lined Butterfly Valves

NPS 1" – 42" · wafer or lug · Class 150

swissfluid
USA

A PTFE-lined butterfly valve for shut-off, flow control and throttling of corrosive and abrasive media, liquid, powdery or gas. Two-piece cast body in wafer or lug style, a one-piece disc and shaft, solid or PFA-encapsulated, a reinforced liner whose wide, chambered flange face needs no additional gaskets, and a bare Double-D shaft on an ISO 5211 top flange as standard. Supplied bare or complete with locking handle, manual gearbox or double- or single-acting pneumatic actuator.

Design

Sizes	NPS 1" – 42", wafer (SBPW) or lug (SBPL). Wafer 1" – 1½", 18" and 30" – 42" are lug bodies with drilled-through holes.
Body	Cast steel WCB (1.0619), RAL 5005 signal-blue epoxy coated, or stainless CF8M (1.4408); 316L to order.
Liner	PTFE standard; PTFE-T (modified), PTFE-AS (conductive), PVDF or UHMWPE to order. Min. 3 mm thick, optimized and reinforced shape, with FPM backing (EPDM or VMQ to order).
Disc and shaft	One piece, solid or encapsulated min. 3 mm, with polished sealing surface. PFA-encapsulated duplex (1.4462) standard; PFA-AS, PVDF, PP or ETFE encapsulation, or solid duplex, 316L, titanium Gr. 2 and Gr. 7 and alloy C, to order.
Shaft seal and bearings	Dynamic shaft seal: FPM elastomer inserts and pads, 316L pressure and guide rings, Belleville springs in spring steel. Triple PTFE-lined steel-backed shaft bushing. Double-D shaft to EN 12116 with rated breaking point.
Connections	Flanges to ASME B16.5 Class 150; Class 300, PN10, PN16 and JIS 10K to order. Face-to-face to ASME B16.10. ISO 5211 top flange with O-ring: DD drive to 16", one keyway 18" – 24", two keyways 90° offset 28" – 42".
Pressure	0.01 psi (vacuum) to 232 psi, depending on size, liner and temperature. Rated pressure steps down by size band (1" – 6", 8" – 12", 14" – 24", 28" – 36", 42") and with liner at temperature; see the pressure-temperature charts.
Temperature	–40 °F to +450 °F depending on liner. Low-temperature or austenitic steels required below +14 °F.
Compliance	Bubble-tight shut-off; pressure and tightness testing to EN 12266-1 leakage rate A / API 598; marking to EN 19; certificates to EN 10204 3.1 / 2.2 / 2.1; conformity with the European Pressure Equipment Directive (PED).

Source: Swissfluid USA PM 51 us 2021-01.



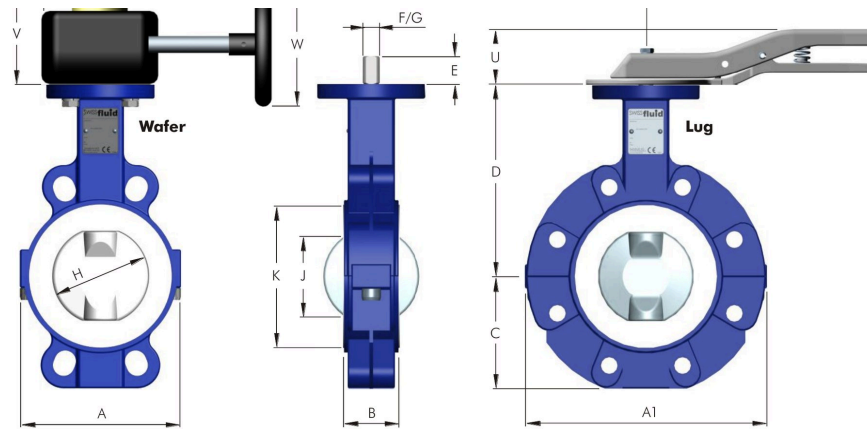
Main features

- Heavy-duty, compact, maintenance-free construction
- Bubble-tight across the full pressure and temperature range
- Wide choice of liner and disc materials for economical performance
- Shaft sealing built for automated service and high operating pressures
- No additional flange gaskets: wide, chambered flange sealing surface
- One-piece disc and shaft for hysteresis-free control; polished sealing surface, low torque
- Streamline flow contour for maximum capacity
- Class 150 flanges (DIN optional) for existing piping

SBP PTFE-Lined Butterfly Valves

Dimensions, Options

swissfluid
USA



Dimensions, inches · wafer and lug bodies

Size	A wafer	A1 lug	B width	C	D	ISO 5211	T lever
1"	—	4.53	1.30	1.81	3.43	F05	9.06
1¼"	—	4.53	1.30	1.81	3.43	F05	9.06
1½"	—	5.71	1.30	2.52	4.29	F07	9.06
2"	4.65	6.30	1.69	2.72	4.88	F07	9.06
2½"	4.72	7.09	1.81	3.11	5.67	F07	9.06
3"	5.28	7.95	1.81	3.66	6.26	F07	9.06
4"	6.38	9.13	2.06	4.21	7.24	F07	10.63
5"	7.28	10.59	2.20	4.69	7.83	F07	10.63
6"	9.76	11.38	2.20	5.12	8.23	F07	12.80
8"	10.75	13.74	2.37	6.22	9.41	F10	—
10"	12.91	15.75	2.68	7.80	10.39	F10	—
12"	14.88	18.50	3.09	9.02	10.39	F10	—

Face-to-face B to ASME B16.10 (wafer); the widths agree with EN 558-1 series 20 through 12". Flanges to ASME B16.5 Class 150.

Source: Swissfluid USA PM 51 us 2021-01.

Note. Never specify the same material for liner and disc encapsulation; torque rises considerably. Torques on the Swissfluid sheet are break-away values without actuator safety factors. 14" optionally 3.07 in face-to-face (ASME B16.10 wide).

Options

- **Liners** PTFE-T (modified), PTFE-AS (conductive), PVDF, UHMWPE
- **Disc materials** PFA-AS, PVDF, PP or ETFE encapsulation; solid duplex, 316L, titanium Gr. 2 or Gr. 7, alloy C
- **Polished disc** Polished disc execution
- **TA-Luft** TA-Luft execution
- **Thru holes** Drilled-through flange holes
- **Elastomers** FPM standard; EPDM, VMQ silicone
- **Flange connections** Class 300, PN10, PN16, JIS 10K
- **Bolting** B7 or titanium bolts
- **Paint** Special RAL color
- **Actuation** Locking handle, manual gearbox or SPA pneumatic actuator on an ISO mounting kit, with electro-pneumatic positioner, limit switch box, solenoid valve, NAMUR bracket, position indicator and manual override

SBP PTFE-Lined Butterfly Valves

Ordering code, Construction and service



Ordering code

Build a code from left to right; a standard valve is **SBPW · 4" · ANSI150# · G10 · A80 · E67 · U85 · DD**. Some selections require or exclude others; we check every code before it goes to the factory.

Product	SBPW wafer · SBPL lug
Size	1"-42" NPS · DN25-1000 metric
Flange	ANSI150# ASME Class 150 · ANSI300# ASME Class 300 · PN16 PN16 · PN10 PN10 · JIS 10K JIS 10K
Body	G10 WCB carbon steel · G15 CF8M stainless · G34 316L stainless
Liner	A80 PTFE · A81 PTFE-T modified · A82 PTFE-AS conductive · A88 PVDF · A90 UHMWPE
Elastomer	E60 EPDM · E67 FPM · E68 VMQ silicone
Disc	U85 PFA encapsulated · U86 PFA-AS encapsulated · U88 PVDF encapsulated · U89 PP encapsulated · U91 ETFE encapsulated · S16 solid duplex · S34 solid 316L · S40 solid Ti Grade 2 · S41 solid Ti Grade 7 · S43 solid alloy C
Shaft end	DD Double-D drive · SP square parallel · SR square 45° rotated
Options	Po polished disc · TA TA-Luft · Th thru holes · B7 B7 bolts · Ti titanium bolts · RAL special paint

Data and codes: Swissfluid USA PM 51 us 2021-01.

Construction. Two-piece wafer or lug body in WCB or CF8M, PTFE liner, PFA-encapsulated duplex disc and shaft, FPM elastomers, pads and inserts, 316L pressure and guide rings, Belleville springs in spring steel, three PTFE-lined steel-backed bushings, FPM top O-ring, A2-70 stainless body bolting, SS304 name plate.

Typical service. Chemical and petrochemical, pharmaceutical, semiconductor, pulp and paper, food processing, paint and pigments, fertilizers, mining and steel, desalination.

SBP PTFE-Lined Butterfly Valves

Ordering from LinedPipe.Com

swissfluid
USA

Size, series, lining, class and quantity are enough to start. For a quotation send the service conditions (media, concentration, temperature, pressure, flow), the end connections and the actuation you need; we will confirm the ordering code, the installation dimensions and a delivery time.

Request a quote

(251) 625-4949 · info@linedpipe.com · linedpipe.com/contact/
(the online quote form takes valves line by line and attachments).

What to tell us

- Series and size, full or reduced port, Class 150 or 300
- Lining and ball or disc material, seat and elastomer where they apply
- Body material: WCB carbon steel or CF8M stainless
- Topworks: bare stem, lever, gearbox, pneumatic or electric actuator, fail position, accessories
- Options: conductive lining, grounding strap, chlorine clean, customer tag, special bolting
- Certificates: EN 10204 3.1 material certificates and test reports on request

Dimensions

Face-to-face lengths in this catalog are stated against ASME B16.10 or EN 558-1 as noted; sizes marked * are not ASME B16.10 lengths (the note under each table says what they are). Confirm the installation length on the order acknowledgement before cutting pipe.

LinedPipe.Com

A DIVISION OF MARSPEC 

IN PARTNERSHIP WITH

swissfluid
USA

LinedPipe.Com

Marspec Technical Products, Inc.
24042 US Highway 98, Fairhope, AL 36532
(251) 625-4949
info@linedpipe.com · linedpipe.com

Swissfluid USA, Inc.

10303 Greenland Court
Stafford, TX 77477
swissfluid.com

Version 1.11 · Released 10-30-2026. Product data from Swissfluid literature as cited under each table; subject to change without notice. **Confirm critical dimensions with the order acknowledgement.**