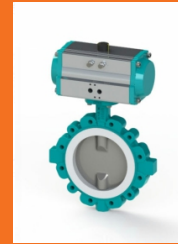


Butterfly Valves / PTFE/PFA-lined

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ANC VALVE

PTFE/PFA-LINED BUTTERFLY VALVE

TECHNICAL DATA

Nominal diameter:	DN50-DN1000
Face-to-face:	GB/T 12221 ASNE B16.1 JIS B2002 EN 558 Series 20(DIN3202 T3 K1) ISO 5752 Series 20 API 609 Table 1 BS 5155.Tab.6 Series 4 NF E 29-305.1
Flange accommodation:	HG/T 20592-2009 PN 10/16 DIN 2501 PN10/16 ANSI B16.5.Class 150 JIS B2212.10K AWWA C 207 BS 10 Talbe D and E
Flange Surface Design:	DIN 2526 Form A-E ANSI B 16.5 RF,FF
Top fl ange:	EN ISO 5211
Marking:	DIN EN 19
Tightness check:	DIN 3230 T3 BO(Leakage rate A) API 598 Table 5 and ANSI B 16-104,Class VI
Temperature range:	-40°C-+200°C (depending on operation pressure)
Operating pressure:	Max.10 bar(16 bar for special version)
Vacuum:	up to 1 mbar absolute (with silicon elastomer inserts) from -10°C bis +160°C



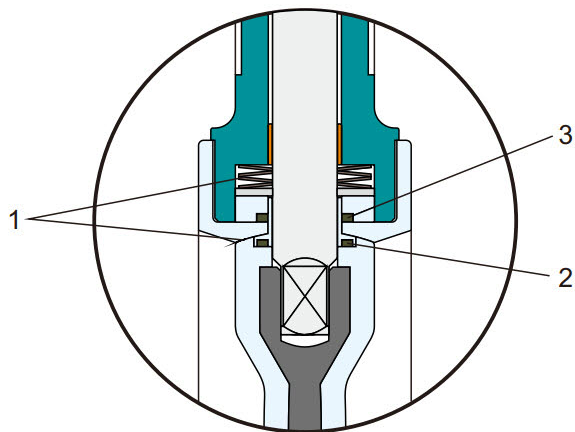
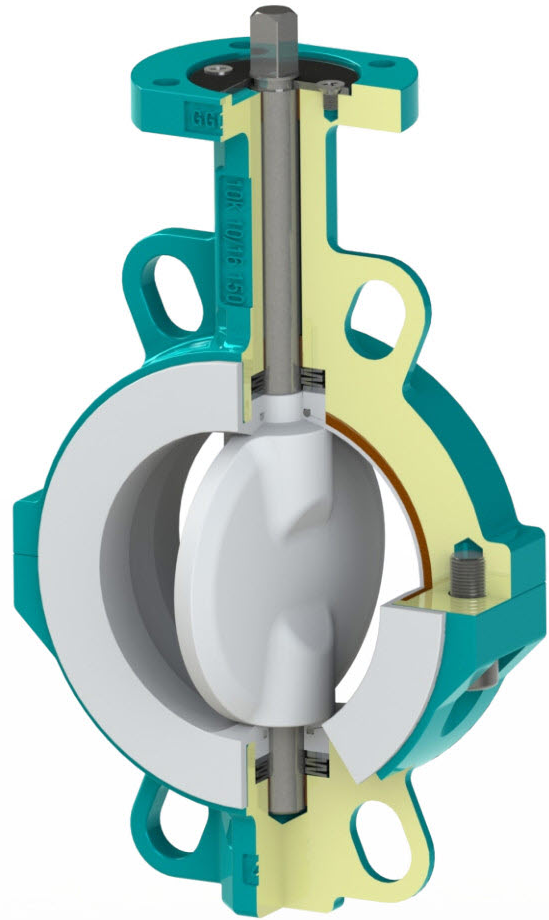
PTFE/PFA-LINED BUTTERFLY VALVE

FEATURES

- PTFE/PFA-lined butterfly valve for chemically toxic and highly corrosive media ;
- Double shaft seal ;
- Splitted body design ;
- Isolation height according to plant prescription ;
- Can be installed in any desired position ;
- Maintenance-free ;
- Removable, can be separated for recycling.

Example fields of application

- Chemically toxic and highly corrosive media ;
- High-purity water and high-purity chemicals ;
- Pharmaceutical industry ;
- Adhesives, paper industry, fuel transport ;
- Food and beverage industry ;
- Paint manufacture and processing ;
- Hazardous materials transportation ;
- Chlorine production ;
- Ore processing.



Safety seal at both shaft ends:

1. Primary sealing by means of a bellville spring washer, transmitting prestress on the spherical segment area.

2. Secondary Seal, This seal capsule fully isolates the valve body and stem from the line media. The Seal Capsule is made of a virgin PTFE enclosing the internal energizer. The capsule fits into grooves machined in the upper and lower disc hubs. When compressed between the disc and seat during assembly, the capsule becomes energized, exerting both upward and downward pressure on disc and seat surfaces.

3. The third layer of sealing is in the middle of the valve rod, it uses the coordination of a pressure slider and an O ring; through the extrusion during the assembly of elastic disc spring and valve, it transfers the pre-pressure to the axial direction to make the O sealing ring tightening the valve seat to bulge out of the lining.

PTFE/PFA-LINED BUTTERFLY VALVE

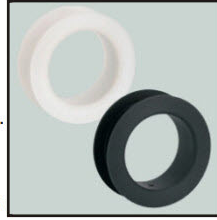
LINING MATERIALS



PTFE seat liners:

Isostatically molded virgin PTFE with a minimum thickness of 3mm. PTFE high density liners have a high specific gravity of at least 2.16 g/cm³.

Operating temperature: -40°C to +200°C



TFM and TFM conductive seat liners:

TFM(or enhanced PTFE)has the ultimate resistance against permeation and an improved resistance against cold flow. conductive TFM is available to prevent harmful electrostatic discharge.

Operating temperature: -40°C to +200°C



PFA and PFA conductive:

Injecion molded PFA with a minimum thickness of 3mm.CRD has a track record of many years of PFA injection molding technology,achieve a perfect bonding between PFA and the metal surface.

Operating temperature: -40°C to +200°C



UHMWPE:

The material provides maximum abrasion and wear resistance and a high impact resistance. It makes UHMWPE the ideal choice for highly abrasive chemical applications.

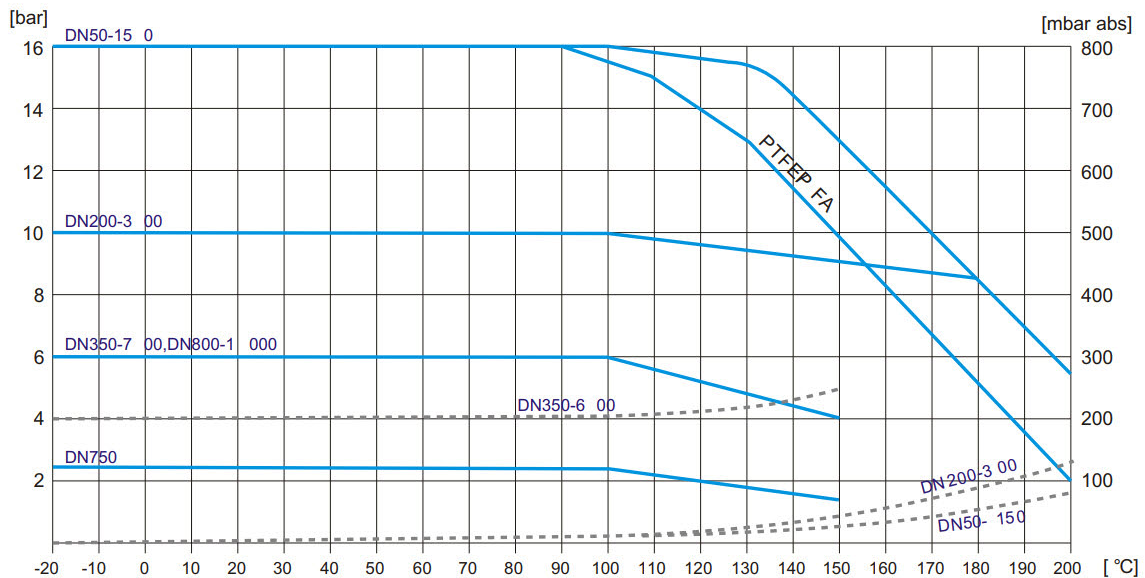
Operating temperature: -40°C to +80°C

TORQUE

The torque values specified (Md) are based on dry media and are measured with air at a temperature of 20 °C ;
The values specified are based on the initial breakaway torque (disc disengages from seat, torque then drops).
Regarding the dimensioning of actuators, please contact our engineers.

DN(mm)	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1000
Siez(inch)	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	30	32	36	40
MD(Nm)	25	40	59	75	90	157	270	375	510	675	900	1100	1300	1750	2100	2500	3100	4000	5000

PRESSURE/TEMPERATURE DIAGRAM



PTFE/PFA-LINED BUTTERFLY VALVE

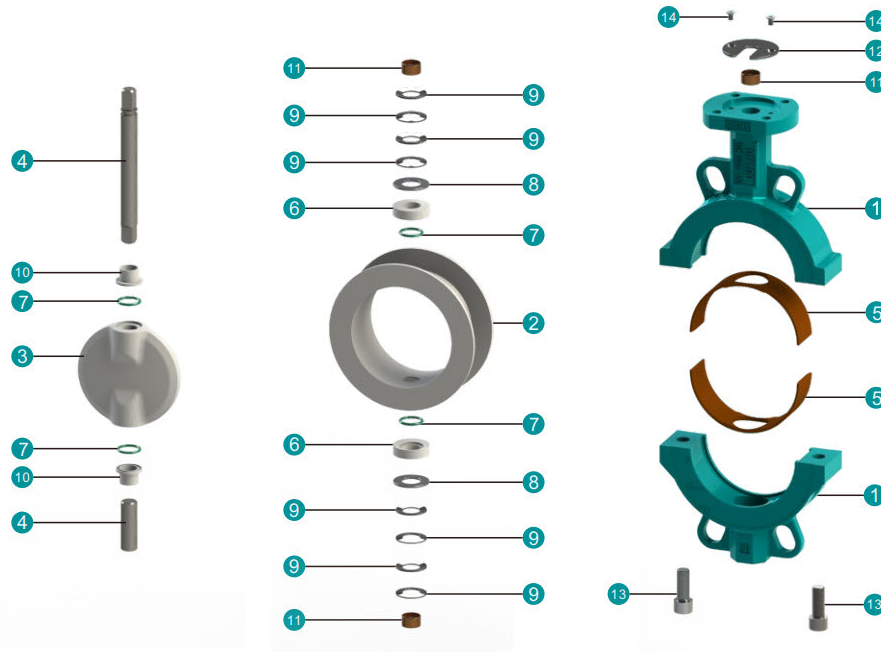
KV value

- The Kv-value [m³ per hour] is the flow of water at a temperature of 5°C to 30°C (41°F to 86°F) at Δp of 1 bar ;
- Permissible velocity of flow :
 Vmax 4,5 m/s for liquids
 Vmax 70 m/s for gases;
- The throttle function is linear at an angle 30° to 70°;
- Avoid cavitation For further values, please contact our engineers.

DN (mm)	SIZE (inch)	20°	30°	40°	50°	60°	70°	80°	90°
50	2	5	11	24	42	64	92	118	134
65	2 1/2	8	19	41	70	108	155	200	227
80	3	15	33	72	125	190	270	335	392
100	4	20	48	95	165	255	385	485	585
125	5	38	82	165	255	455	645	815	1015
150	6	60	130	235	395	645	955	1220	1495
200	8	95	230	465	795	1180	1815	2410	3050
250	10	175	350	710	1160	1610	2420	3650	4510
300	12	265	522	995	1720	2665	3965	5960	7210
350	14	350	660	1180	1800	2880	4550	7180	8760
400	16	510	985	1480	2450	4230	6550	9250	11350
450	18	665	1255	2230	3850	6250	9200	12250	14900
500	20	890	1620	2980	5350	8150	11800	15560	18000
600	24	970	2150	4180	7420	11350	16450	21200	24500
700	28	1060	2560	4868	8412	14359	23901	37638	48633
750	30	1217	2939	5588	8675	16484	27437	43207	55829
800	32	1402	3328	6351	11169	19073	32074	51820	63905
900	36	1915	4259	7897	13849	23887	41112	66771	81016

PTFE/PFA-LINED BUTTERFLY VALVE

MATERIAL SPECIFICATION AND PARTS LIST



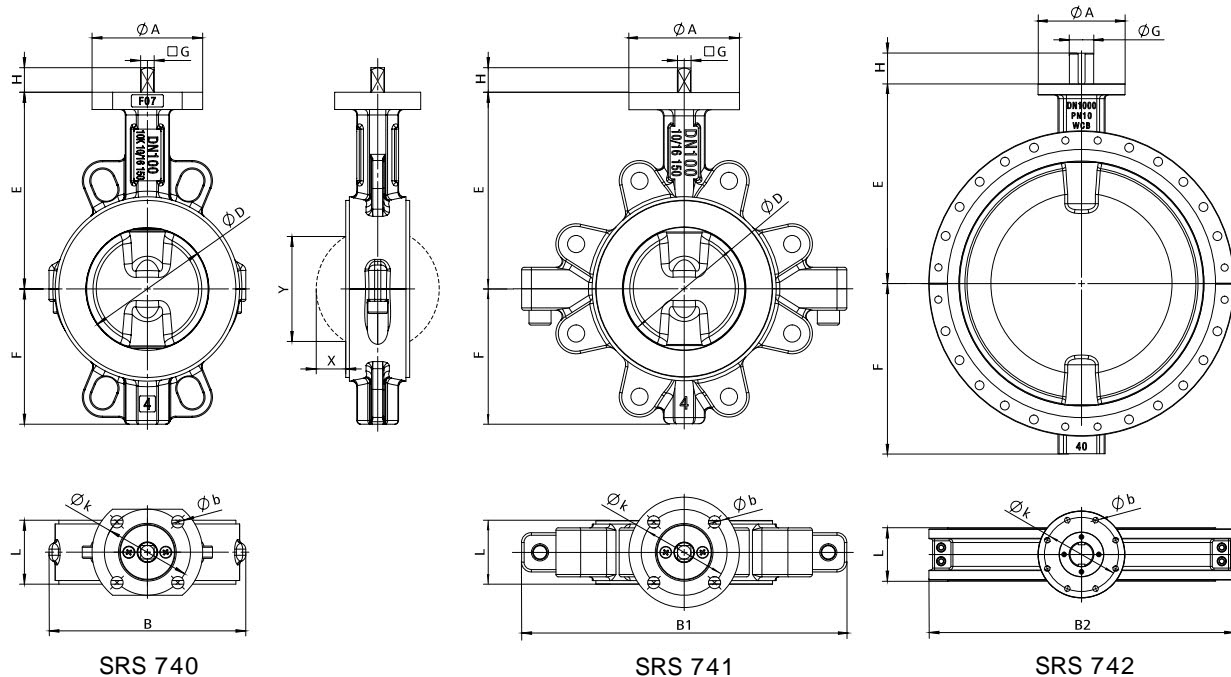
Wafer type process valve DN50-DN300(2"-12")

Parts No.	Description	ASTM	DIN	Parts No.	Description	ASTM	DIN	
1	Body			5	Elastomer insert			
	Ductile Iron	A395	GGG-40		Silicon	VMQ	MVQ	
	Carbon Steel	A216		6	Guide ring			
	Stainless Steel	CF8	X5CrNi189		Stainless Steel	304	X5CrNi189	
		CF8M	X5CrNiMo17 12	7	O-Ring			
		CF3M	X2CrNiMo18 143		Silicon	FKM	FPM	
2	Seat			8	Pressure Ring			
	Teflon	PTFE	PTFE		Stainless Steel	304	X5CrNi189	
			PFA	PFA	9	Belleville spring washer		
			FEP	FEP		Springsteels	H2600	60SiCr7
		TFM	TFM	10	Primary seal			
		UHMWPE	UHMWPE		Teflon	PTFE	PTFE	
3	Disc			11	DU-bearing			
	CS/Teflon	WCB/PTFE			PTFE coated			
			WCB/PFA		12	Stem retainer plate		
	Stainless Steel	CF8	X5CrNi189	13		Screw		
		CF8M	X5CrNiMo17 12	14	Stainless Steel	B8M	A4-70	
		CF3M	X2CrNiMo18 143		Screw			
4	Stem				Stainless Steel	B8M	A4-70	
	Alloy Steel	420	X20Cr13					
		630	X5CrNiCuNb174					

Subject to change without notice

PTFE/PFA-LINED BUTTERFLY VALVE

* SRS 740/741/742 with bare shaft end acc. to EN ISO 5211



DN (mm)	SIZE (inch)	D	E	F	H	L	A	k	b	G	X	Y	B	B1	B2	SRS 740 [kg]	SRS 741 [kg]	SRS 742 [kg]
50	2	50	134	68	20	43	65	50	4x8	9	4	26	100	160	-	2.9	3.5	-
65	2 1/2	65	145	78	20	46	65	50	4x8	9	10	46	120	176	-	3.4	4.3	-
80	3	80	150	80	20	46	65	50	4x8	9	16	64	135	230	-	3.6	6.2	-
100	4	100	160	110	20	52	90	70	4x10	11	24	85	165	210	-	5	8	-
125	5	125	178	130	20	56	90	70	4x10	14	35	112	195	234	-	7.9	10.8	-
150	6	150	197	140	20	56	90	70	4x10	14	47	139	225	269	-	9.7	13.7	-
200	8	200	239	175	20	60	125	102	4x12	17	70	191	280	360	-	14.1	23.5	-
250	10	250	278	215	30	68	125	102	4x12	22	91	241	330	435	-	22.8	32.3	-
300	12	300	315	250	30	78	150	125	4x14	22	111	290	380	500	-	32.9	50	-
350	14	350	350	255	35	78	150	125	4x14	27	131	330	425	564	-	50	87	-
400	16	400	380	285	35	102	150	125	4x14	27	149	387	470	620	-	68	98	-
450	18	450	425	320	65	114	175	140	4x18	48	168	436	520	-	630	100	-	140
500	20	500	450	360	65	127	175	140	4x18	48	187	484	580	-	700	122	-	175
600	24	600	555	415	80	154	210	165	4x22	60	223	580	680	-	820	180	-	275
700	28	700	605	480	80	165	210	165	4x22	72	269	684	-	-	930	-	-	423
750	30	750	630	490	80	165	210	165	4x22	72	280	726	-	-	970	-	-	383
800	32	800	660	550	110	190	300	254	8x18	80	307	781	-	-	1060	-	-	670
900	36	900	710	600	130	203	350	298	8x22	98	349	877	-	-	1160	-	-	880

Subject to change without notice

anc corporation

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