

# BV12-HP DN50-600

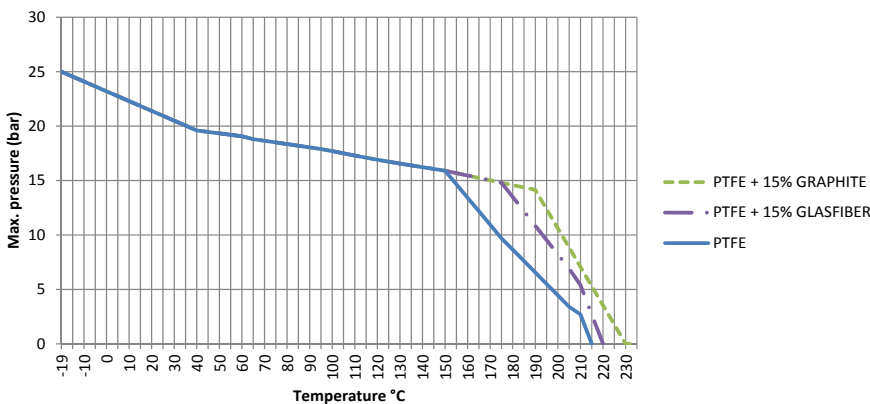
## Double offset butterfly valves



### TECHNICAL DESCRIPTION



- Double offset butterfly valve
- Design and manufacture acc. to EN 593- ASMEB16.34- API609
- Available pressure rates : PN10 - PN16 - PN25 - ANSI 150lbs
- Testing acc. to ISO 5208 - API 598
- Max. working pressure : DN50 to DN300 : 25 bar  
DN350 to DN600 according to the requested rating
- Shell{body} test pressure : DN50 to DN300 : 37,5 bar  
DN350 to DN600 according to the requested rating
- Seat test pressure : DN50 to DN300 27,5 bar  
DN350 to DN600 according to the requested rating
- Max. temperature depending of the seat :  
For PTFE see chart below. PTFE is standard, reinforced PTFE is optional  
For Inconel 718 seat max. 450°C, please respect pressure/temperature rating in accordance with EN1092-1, see below chart
- Leakage rates for both directions :  
PTFE seated acc. ANSI/FCI 70-2 class VI, tight shut off with zero leakage  
Inconel 718 seat : DN50 to DN300 : acc. ANSI.FCI 70-2 class V  
Inconel 718 seat : DN350 to DN600 : acc. ANSI.FCI 70-2 class IV
- Lug type for mounting between flanges, available connections :  
EN 1092-1 PN10 - EN 1092-1 PN16 - EN 1092-1 PN25 - ASME B16.5 150lbs
- Face to face acc. EN 558-1 series 20/API 609 cat.A/B ISO5752 tab 20
- Bare shaft execution with ISO 5211 mounting platform and square stem



Consideration PTFE stabilisation at high temperature :  
For the seat working at high temperature conditions consistently we recommend not to exceed following temperatures :

Max. temperature at prolonged use :

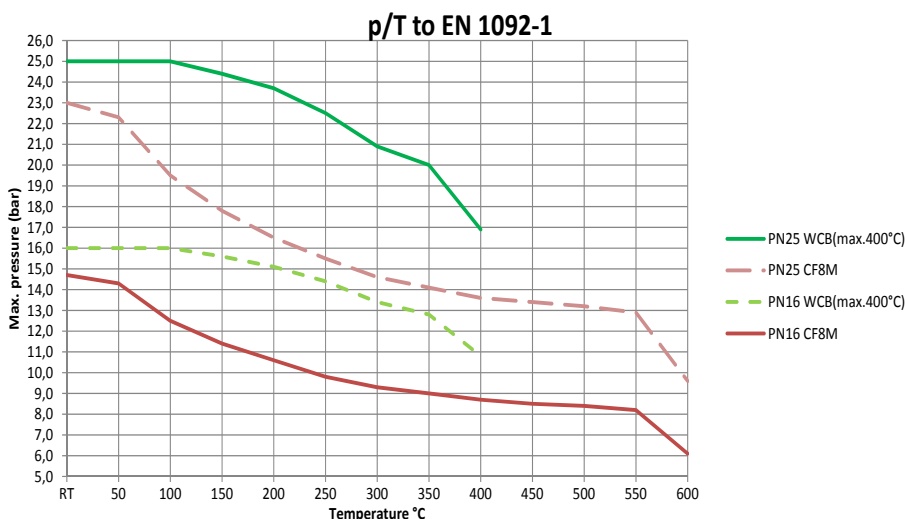
- PTFE : 160°C
- PTFE+15% glasfiber : 180°C
- PTFE+15% graphite : 210°C

Important remarks :

Disc edge must be hard chrome plated when equipped with PTFE+graphite or PTFE+glasfiber seat.

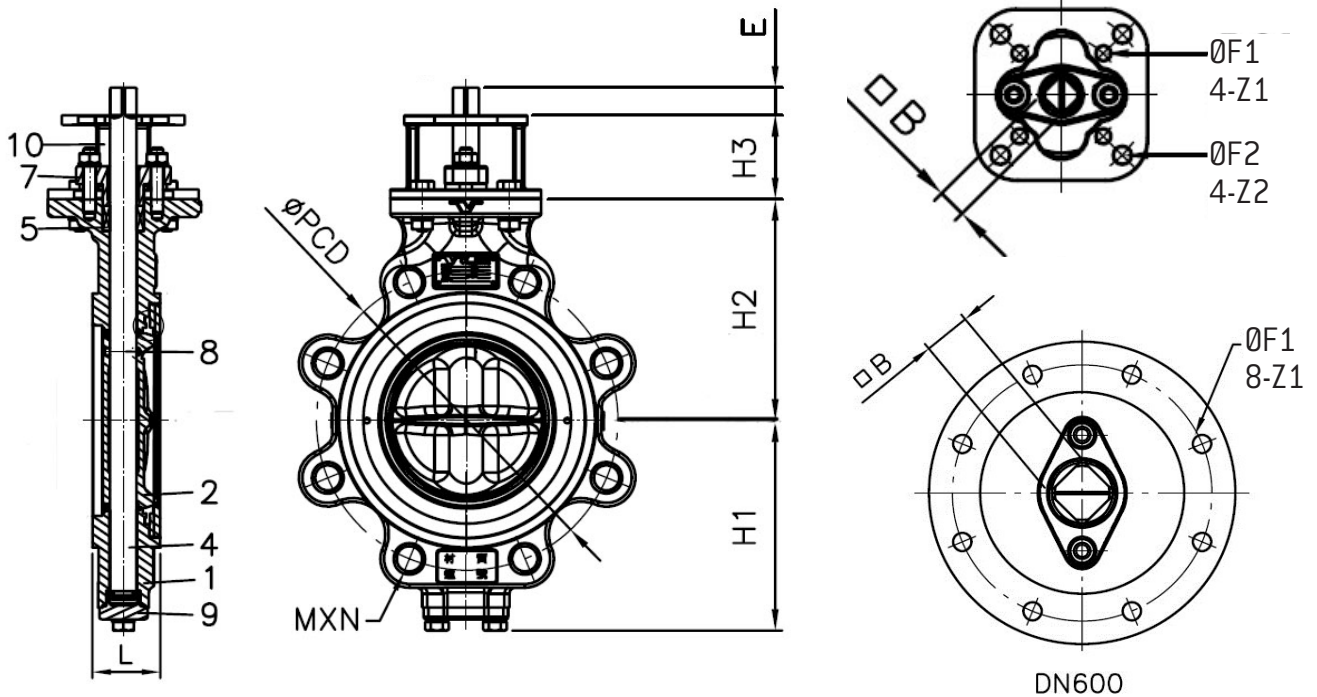
Standard packing for soft seated valves is PTFE, with pressure/temperature limitations as above mentioned. Please use PTFE+15% graphite packing when using PTFE+graphite or PTFE+glasfiber seat.

For working pressures above 16 bar please use SS630 (A564 Gr.630) stem.



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## Double offset butterfly valves



DN	SIZE	L	H1	H2	H3	E	□BxB	ØF1/ ØF2	ISO	4-Z1/Z2 (F25 8 holes)	Torque*(Nm) PTFE seat	Torque*(Nm) Inconel seat	weight (kg)
50	2"	43	98	118	60	18	11x11	50/70	F05/F07	4-07/ Ø10	20	65	4,2
65	2 1/2"	46	110	125	60	18	11x11	50/70	F05/F07	4-07/ Ø10	36	103	5,5
80	3"	46	128	140	70	23	14x14	70/102	F07/F10	4-010/Ø12	45	118	8,5
100	4"	52	150	157	70	23	14x14	70/102	F07/F10	4-010/Ø12	61	157	14
125	5"	56	163	170	70	23	17x17	70/102	F07/F10	4-010/Ø12	89	183	18
150	6"	56	176	185	70	23	17x17	70/102	F07/F10	4-010/Ø12	118	233	19,5
200	8"	60	206	220	80	28	19x19	102/125	F10/F12	4-012/Ø14	182	334	31
250	10"	68	238	260	80	28	22x22	102/125	F10/F12	4-012/Ø14	314	471	47
300	12"	78	269	290	100	37	27x27	125/140	F12/F14	4-014/Ø18	540	736	67
350	14"	78	306	326	100	37	27x27	125/140	F12/F14	4-014/Ø18	981	1021	103
400	16"	102	342	370	120	47	36x36	140/165	F14/F16	4-018/Ø22	1178	1492	178
450	18"	114	370	395	120	47	36x36	140/165	F14/F16	4-018/Ø22	1472	1806	198
500	20"	127	399	430	120	56	46x46	140/165	F14/F16	4-018/Ø22	2061	2355	265
600	24"	154	455	490	150	56	46x46	254/-	F25	8-018	2659	2943	486

\*approx shut-off torque for water of 20°C at 15 bar Δp, 30% safety factor already included

DN	SIZE	ØC	PN10		PN16		PN25		A 150 lbs	
			PCD	M x N	PCD	M x N	PCD	M x N	PCD	M x N
50	2"	58	125	M16 x 4	125	M16 x 4	125	M16 x 4	120,7	5/8"-11UNC x 4
65	2 1/2"	78	145	M16 x 8	145	M16 x 8	145	M16 x 8	139,7	5/8"-11UNC x 4
80	3"	92	160	M16 x 8	160	M16 x 8	160	M16 x 8	152,4	5/8"-11UNC x 4
100	4"	110	180	M16 x 8	180	M16 x 8	190	M20 x 8	190,5	5/8"-11UNC x 8
125	5"	135	210	M16 x 8	210	M16 x 8	220	M24 x 8	215,9	3/4"-10UNC x 8
150	6"	162	240	M20 x 8	240	M20 x 8	250	M24 x 8	241,3	3/4"-10UNC x 8
200	8"	205	295	M20 x 8	295	M20 x 12	310	M24 x 12	298,5	3/4"-10UNC x 8
250	10"	258	350	M20 x 12	355	M24 x 12	370	M27 x 12	362	7/8"-9UNC x 12
300	12"	303	400	M20 x 12	410	M24 x 12	430	M27 x 16	431,8	7/8"-9UNC x 12
350	14"	360	460	M20 x 16	470	M24 x 16	490	M30 x 16	476	1"-8UNC x 12
400	16"	410	515	M24 x 16	525	M27 x 16	550	M33 x 16	539,8	1"-8UNC x 16
450	18"	460	565	M24 x 20	585	M27 x 20	600	M33 x 20	577,9	1 1/8"-8UN x16
500	20"	510	620	M24 x 20	650	M30 x 20	660	M33 x 20	635	1 1/8"-8UN x20
600	24"	610	725	M27 x 20	770	M33 x 20	770	M36 x 20	749,3	1 1/4"-8UN x20

Industriepark Mechelen Noord 1 | Blokhuisstraat 24 | 2800 Mechelen | Belgium  
tel. +32/(0)15 29 40 70 | fax +32 (0) 15 20 14 13 | info@belven.com | www.belven.com

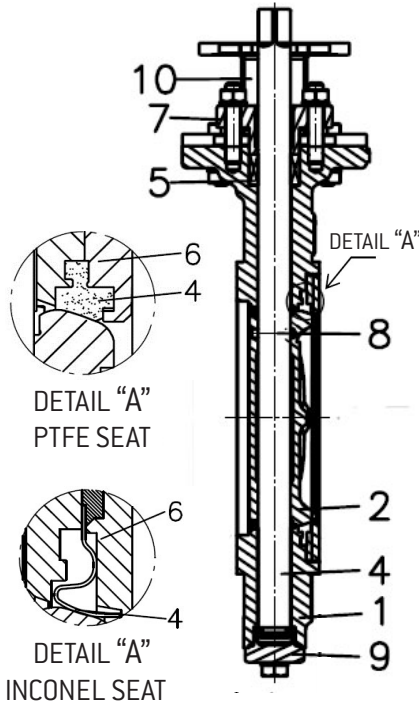
We keep the right to change the mentioned dimensions, weights, values and materials at any time without prior or direct notice.



COMPANY APPROVED

# BV12-HP DN50-600

## Double offset butterfly valves



ITEM	NAME	4463T*	4463M*	4466T	4466M	6666T	6666M
1	BODY	A216 WCB	A216 WCB	A216 WCB	A216 WCB	A351 CF8M	A351 CF8M
2	DISC	A351 CF8	A351 CF8	A351 CF8M	A351 CF8M	A351 CF8M	A351 CF8M
3	STEM	A182 F304	A182 F304	A182 F316	A182 F316	A182 F316	A182 F316
4	SEAT	PTFE	INCONEL 718	PTFE	INCONEL 718	PTFE	INCONEL 718
5	GLAND PACKING	PTFE	GRAPHITE	PTFE	GRAPHITE	PTFE	GRAPHITE
6	RETAINER	A351 CF8	A351 CF8	A351 CF8M	A351 CF8M	A351 CF8M	A351 CF8M
7	GLAND	A351 CF8	A351 CF8	A351 CF8	A351 CF8	A351 CF8M	A351 CF8M
8	PIN	A182 F316	A182 F316	A182 F316	A182 F316	A182 F316	A182 F316
9	BOTTOM COVER**	A216 WCB	A216 WCB	A216 WCB	A216 WCB	A351 CF8M	A351 CF8M
	BOTTOM COVER SEAL	PTFE	GRAPHITE	PTFE	GRAPHITE	PTFE	GRAPHITE
10	YOKE***	A216 WCB	A216 WCB	A216 WCB	A216 WCB	A351 CF8M	A351 CF8M

All bolts, nuts and studs are made of stainless steel 304 (A193 Gr. B8/A194 Gr.8)

\* DN50 is not available in 4463, please select 4466

\*\* up to DN350 bottom cover is A351 CF8M

\*\*\* 24" yoke made of ASTM A536 65-45-12

### KV-VALUES

DN	SIZE	KV-VALUE AT 10°----->90° VALVE OPENING								
		10°	20°	30°	40°	50°	60°	70°	80°	90°
50	2"	0,9	1,7	5,2	10,3	17,2	27,5	43	53	57
65	2 1/2"	0,9	9,5	23	34,4	51,6	71,4	91	115	120
80	3"	1,7	17,2	43	63	95	132	172	215	224
100	4"	3,4	27,5	69	103	155	215	275	344	361
125	5"	6,0	47,3	121	172	258	370	473	585	619
150	6"	9,5	77,4	198	292	439	611	783	980	1032
200	8"	17,2	129	335	482	731	1023	1307	1634	1720
250	10"	25,8	206	516	748	1127	1582	2030	2528	2666
300	12"	34,4	310	791	1144	1720	2408	3096	3870	4085
350	14"	47,3	387	972	1410	2150	3010	3870	4730	5031
400	16"	64,5	559	1376	1978	3010	4214	5418	6751	7138
450	18"	81,7	688	1720	2494	3784	5246	6794	8514	8944
500	20"	107,5	860	2322	3354	5074	7052	9030	11180	11868
600	24"	172	1462	3784	5418	8170	11438	14620	18318	19350

### OPERATING OPTIONS

- GEARBOX : aluminium gearbox or special gearbox upon request
- AUTOMATED : pneumatic actuator (double or single acting), electric actuator (single phase or 3-phase)
- ACCESSORIES : stem extensions, visual indicators, solenoid valves, limit switches, positioners, manual override ...

### OTHER OPTIONS

- Higher pressure classes upon request
- Wafer type, double flanged type, welded connections
- Other body, disc, stem and seat material, internal polished execution
- High temperature executions : 210°C to 500°C
- Low temperature executions : -100°C to -50°C
- Emission Test

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