

WAFER TYPE BUTTERFLY VALVE Z 611-C



Wafer type butterfly valve for shut-off and control services in the chemical industry.

TECHNICAL DATA

Nominal diameter:	DN 50 - DN 300
Face-to-face:	EN 558 Series 20 SO 5752 Series 20 API 609 Table 1
Flange accommodation:	EN 1092 PN 10/16 ASME Class 150
Flange Surface Design:	EN 1092 Form A/B ASME RF, FF
Top flange:	EN ISO 5211
Marking:	EN 19 PAS 1085
Tightness check:	EN 12266 (Leakage rate A) ISO 5208, Category 3
Temperature range:	-10°C to +120°C (depending on working pressure)
Operating pressure:	max. 16 bar

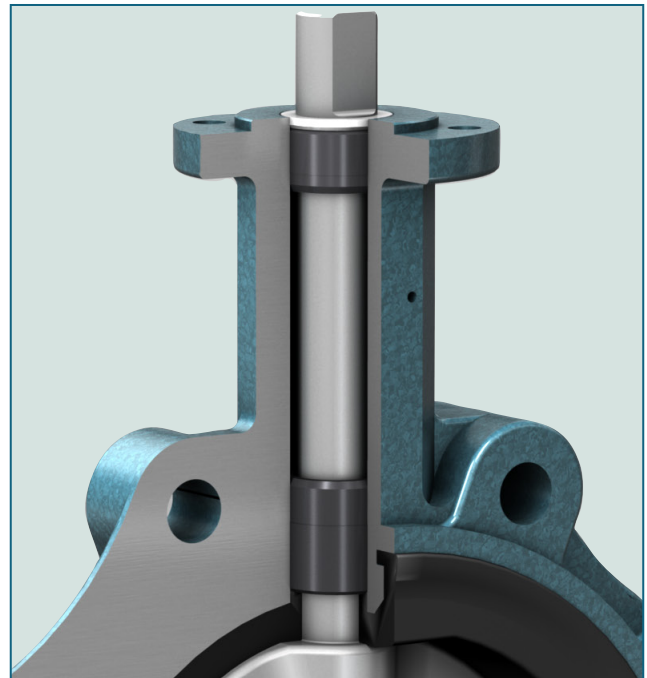
Valve Design
acc. to PAS 1085

FEATURES

- Environmental protection via EBRO-Safety seal
- Split body with stainless steel screws
- Isolation height according to plant prescription
- Can be installed in any desired position
- Maintenance-free
- Can be disassembled, material-specific recycling possible
- TA-Luft/ VDI 2440,RWTÜV certified

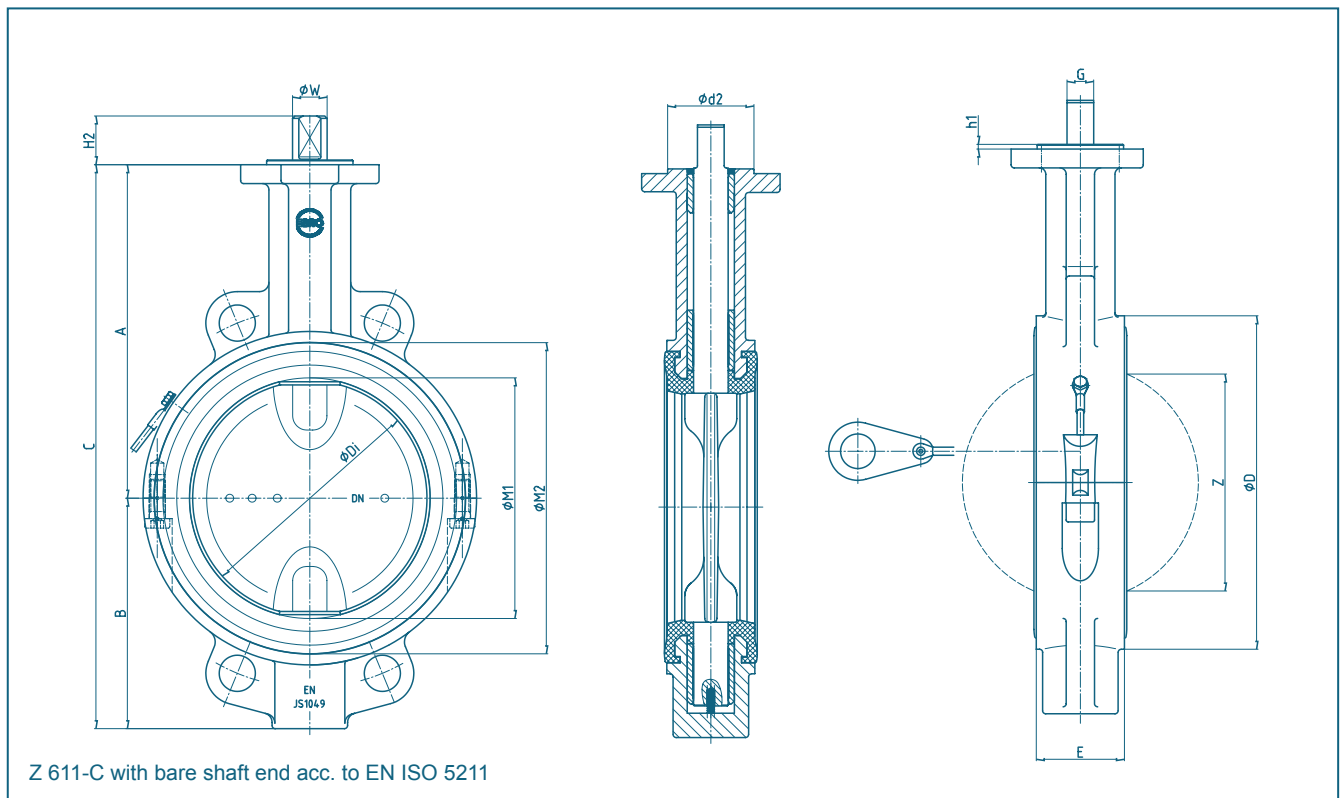
DESIGN FEATURES

- Optimized low torques
- FEM dimensioned components
- Valve neck for 100mm isolation
- Centering holes for easy installation
- Triple shaft bearing
- One-piece shaft and disc
- Double flat shaft acc. to EN standards



Safety seal acc. to TA-Luft/ VDI 2440,RWTÜV

WAFER TYPE BUTTERFLY VALVE Z 611-C

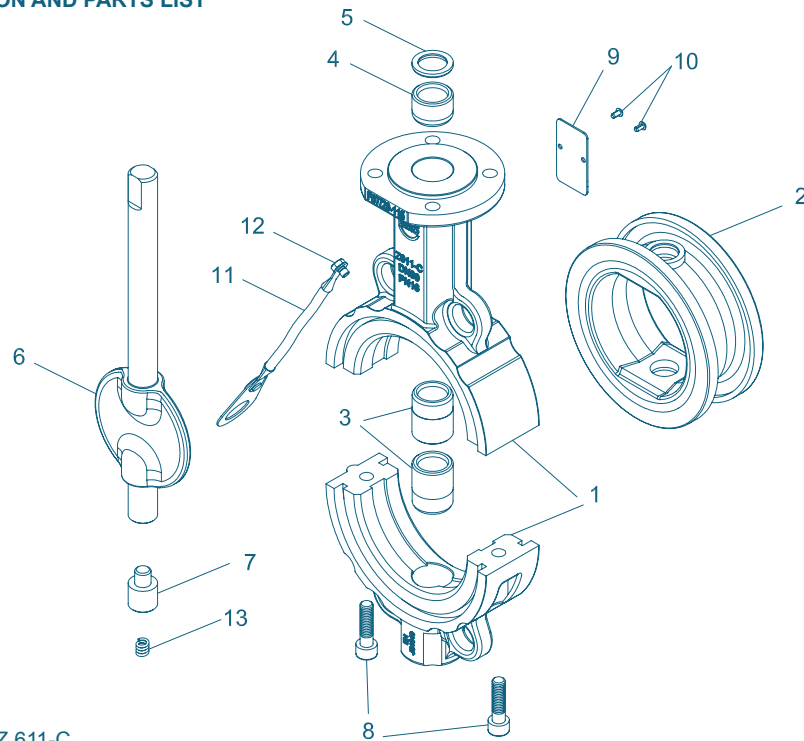


DN [mm]	Size [in]	Dimensions [mm]															Weight [kg]	
		A	B	C	ØD	ØDi	Ød2	E	ØF	Flange	G	h1	H2	ØM1	ØM2	ØW		Z
50	2	135	80,5	215,5	95	49	55	43	90	F07	11	3	22	53	86	14	25	3,2
65	2½	143,5	89	232,5	120	65	55	46	90	F07	11	3	22	68	106	14	42	4,0
80	3	165	100	265	138	79	55	46	90	F07	14	3	26	82,5	123	18	65	4,5
100	4	174	111	285	158	99	55	52	90	F07	14	3	26	102	145	18	85	6,0
125	5	195	124	319	190	124	55	56	90	F07	14	3	26	127	174	18	111	7,7
150	6	212	147	359	212	149	55	56	90	F07	17	3	31	153	198	22	139	10,0
200	8	238	172	410	268	199	70	60	125	F10	17	3	31	203	253	22	190	16,0
250	10	275	209	484	320	249	70	68	125	F10	22	3	40,5	253	305	28	240	24,5
300	12	303	234	537	370	299	85	78	150	F12	22	3	40,5	301	356	28	287	33,5

Subject to change without notice

WAFER TYPE BUTTERFLY VALVE Z 611-C

MATERIAL SPECIFICATION AND PARTS LIST



Wafer type butterfly valve Z 611-C

Pos.	Description	Material	Material-No.	ASTM	Pos.	Description	Material	Material-No.	ASTM
1	Body				8	Screw			
	Nodular Cast Iron	GJS-400-18U-LT	EN-JS 1049	A395		Stainless Steel	A4-70	1.4401	
2	Seat				9	Type plate			
	EPDM-C *					Stainless Steel	A2		
3	Bearing bush				10	Groove pin			
	Steel	42Cr Mo 4 V (nitrided)	1.7225			Stainless Steel	A2		
4	Bearing bush				11	Buttstrap			
	Steel	42Cr Mo 4 V (nitrided)	1.7225						
5	Scraper				12	Screw			
	PTFE	Polytetrafluorethylen	PTFE			Stainless Steel	A4-70	1.4401	
6	Shaft/Disc	one-piece			13	Spiral spring			
	St. Steel /St. Steel *	GX2CrNiMoN26-7-4	1.4469	EN 10213		Spring steel	X10CrNi 18-8	1.4310	301
7	Lower shaft stub (DN 50 - DN 80 only)								
	Stainless Steel		1.4462	EN 10088					

* Other materials upon request

Subject to change without notice

WAFER TYPE BUTTERFLY VALVE Z 611-C

TORQUE

- The values specified are based on the initial breakaway torque (disc engages from seat, torque than drops)

- Dynamic torque specification available upon request

Regarding the dimensioning of actuators, please contact our engineers.

DN (mm)	50	65	80	100	125	150	200	250	300
Size (in)	2	2½	3	4	5	6	8	10	12
Case of operation I									
MD (Nm) at Δp=3 bar	7	8	14	18	22	45	70	115	175
MD (Nm) at Δp=6 bar	8	9	16	22	28	53	95	190	220
MD (Nm) at Δp=10 bar	9	10	18	26	34	60	125	245	290
MD (Nm) at Δp=16 bar	10	14	23	30	48	80	165	330	380
Case of operation II									
MD (Nm) at Δp=3 bar	14	15	21	23	30	90	160	295	335
MD (Nm) at Δp=6 bar	15	16	23	27	35	96	170	345	360
MD (Nm) at Δp=10 bar	16	17	25	30	41	100	180	330	380
MD (Nm) at Δp=16 bar	16	19	31	37	51	105	210	400	430
MAST (Nm)*	105	105	250	250	250	484	484	1020	1020

Case of operation I: Fluid or lubricant media

*Maximum torques (Nm)

Case of operation II: Powder or gases (dry seat)

K_V-VALUES

- The K_V-value [m³ per hour] is the flow of water at a temperature of 5°C to 30°C (41°F to 86°F) at a 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 [in]	Opening angle α°							
		20°	30°	40°	50°	60°	70°	80°	90°
50	2	1,2	8	13	22	38	50	65	85
65	2½	2	9	22	42	77	115	170	215
80	3	8	24	50	95	150	240	330	420
100	4	13	28	65	130	180	340	550	800
125	5	26	65	130	230	350	530	870	1010
150	6	35	90	200	360	640	900	1350	2100
200	8	43	180	350	580	1000	1600	3000	4000
250	10	125	360	660	1100	1800	3100	5300	6400
300	12	200	550	1000	1600	2600	5000	7500	8500

Subject to change without notice