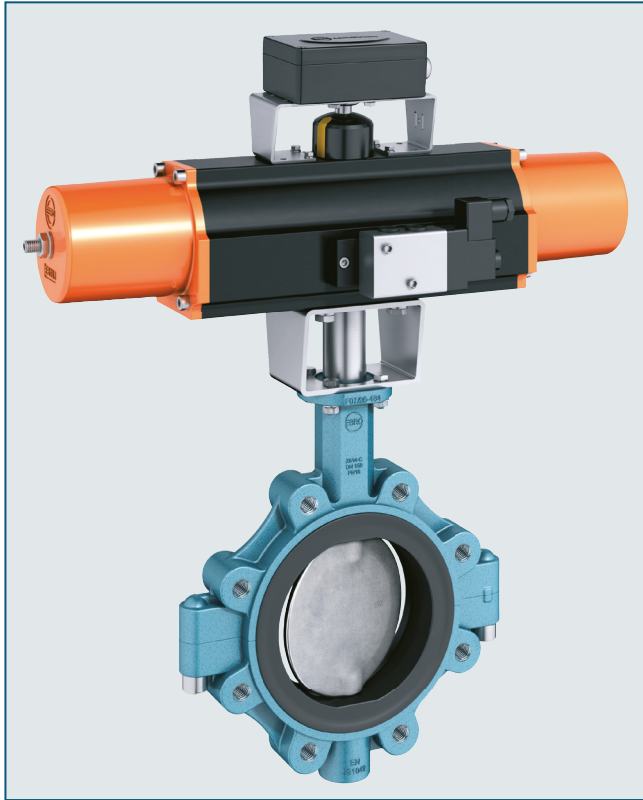


LUG TYPE BUTTERFLY VALVE Z 614-C



Lug 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

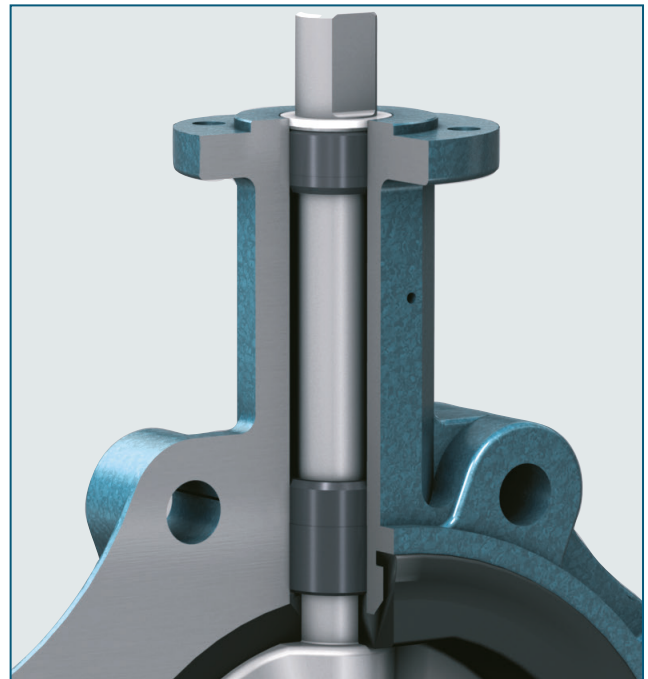
Valve Design
acc. to PAS 1085

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

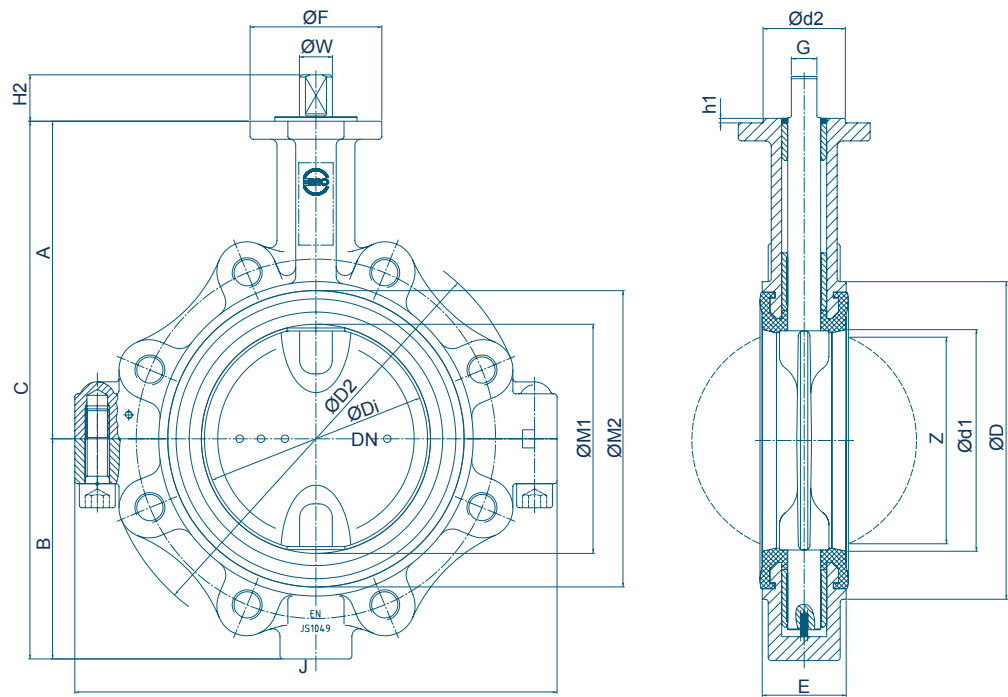
DESIGN FEATURES

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



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

LUG TYPE BUTTERFLY VALVE Z 614-C



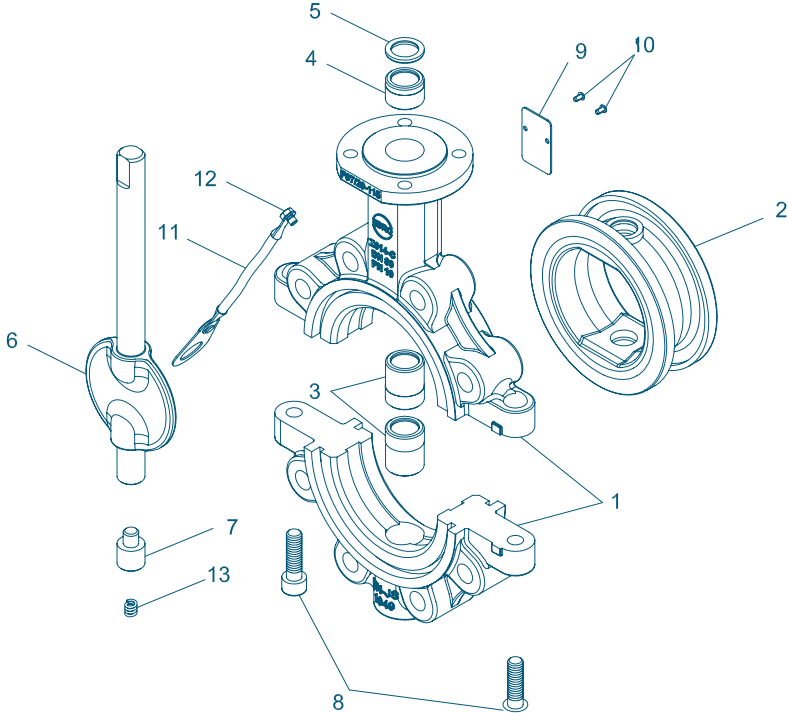
Z 614-C with bare shaft end acc. to EN ISO 5211

DN [mm]	Size [in]	Dimensions [mm]																		Weight [kg]
		A	B	C	ØD	ØD2	ØDi	Ød2	E	Flange	ØF	G	h1	H2	J	ØM1	ØM2	ØW	Z	
50	2	135	80,5	215,5	95	155	49	55	43	F07	90	11	3	22	167	53	86	14	25	3,7
80	3	165	100	265	138	192	79	55	46	F07	90	14	3	26	227	82,5	123	18	65	6,3
100	4	174	111	285	158	212	99	55	52	F07	90	14	3	26	266	102	145	18	85	8,5
150	6	212	147	359	212	280	149	55	56	F07	90	17	3	31	322	153	198	22	139	13,5
200	8	238	172	410	268	335	199	70	60	F10	125	17	3	31	390	203	253	22	190	21,5
250	10	275	209	484	320	395	249	70	68	F10	125	22	3	40,5	481	253	305	28	240	32,5
300	12	303	234	537	370	460	299	85	78	F12	150	22	3	40,5	558	301	356	28	287	48,5

Subject to change without notice

LUG TYPE BUTTERFLY VALVE Z 614-C

MATERIAL SPECIFICATION AND PARTS LIST



Lug type butterfly valve Z 614-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

LUG TYPE BUTTERFLY VALVE Z 614-C

TORQUE

- The values listed in the table are initial breakaway torques, taken with liquids and lubricant media.

- Please regard these as approximate values, as the objective value depends on different factors like pressure, medium, rubber, quality, temperature ... etc.

- Our engineers look forward to help you with exact values for your application.

- Powdery (non-lubricant) media
Md x 1,3

- Dry gases/high viscous media
Md x 1,2

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

Case of operation I: Fluid or lubricant media

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

*Maximum torques (Nm)

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

DN [mm]	Size [in]	Opening angle α°							
		20°	30°	40°	50°	60°	70°	80°	90°
50	2	3,84	10,1	20,7	34,4	49,7	65,2	79,5	91,2
80	3	15,6	20,6	51,4	102	165	234	304	368
100	4	24,9	39,8	96,5	183	288	398	503	589
150	6	76,5	97,3	197	375	629	957	1360	1830
200	8	137	187	373	697	1160	1760	2510	3400
250	10	227	271	563	1090	1850	2830	4010	5390
300	12	287	409	820	1550	2610	4050	5880	8120

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For further values, please contact our engineers.