

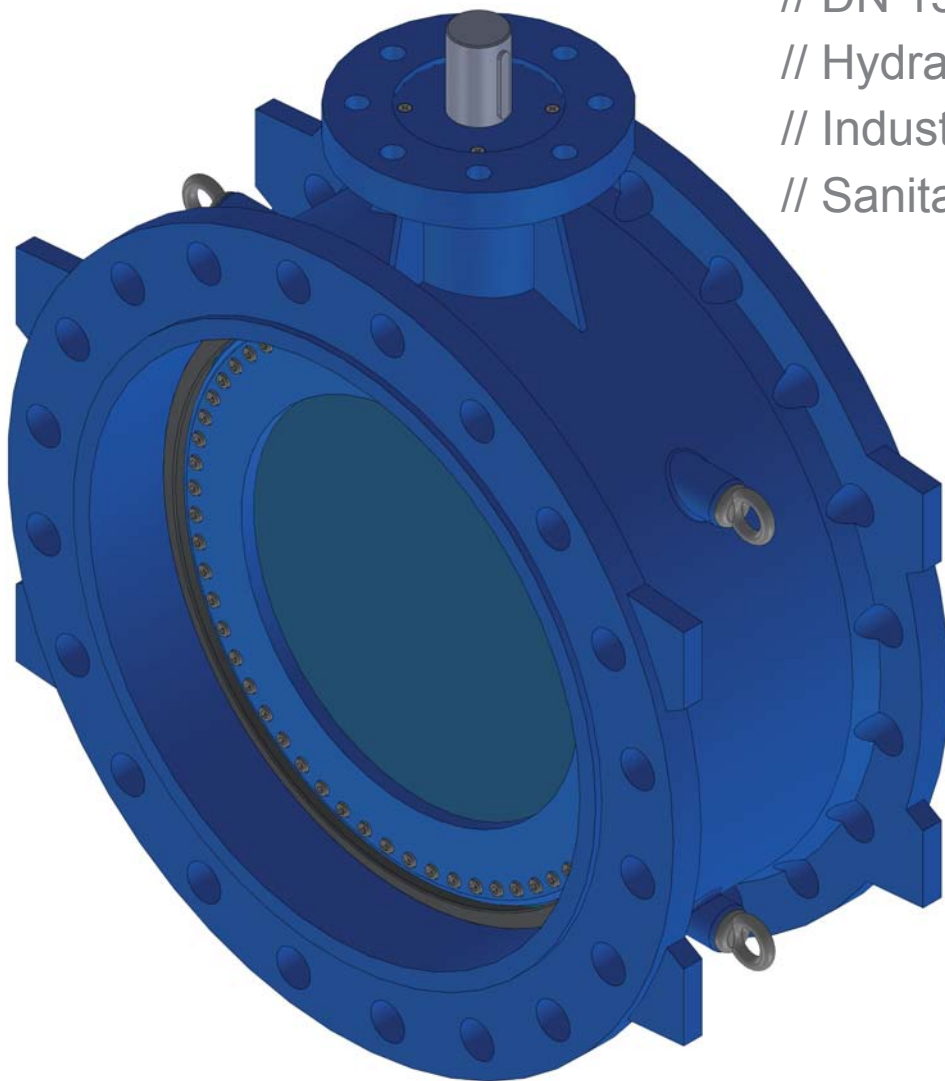


ABO valve

GRIP THAT HOLDS

SERIES 2E-3

- // PN 10/16/25/40
- // DN 150 - 3000 (6" – 118")
- // Hydraulic equipment
- // Industrial piping
- // Sanitary installations



DOUBLE OFFSET FLANGED
BUTTERFLY VALVES

GENERAL INFORMATION

GENERAL CHARACTERISTICS

- DN 150 – 3000 (PN10/16/25/40)
- Double flanged design, double eccentricity
- On/off or regulating device
- Bi-directional sealing, standard & optional body seat
- Welded disc seat
- Stainless steel sealing
- Electrostatically applied coating
- Easy repair & maintenance
- Easy installation & mounting
- WRAS approval as option

APPLICATIONS:

Double flanged butterfly valves Series 2E are suited for wide range of industrial applications including:

- Sanitary installations
- Industrial piping
- Hydraulic equipment
- Chilled water, potable water, waste water
- Irrigation & Drainage systems
- Sewage piping systems
- Desalination

The butterfly valves are not suitable for throttling. Disc's shafts should be always installed in horizontal position.

STANDARDS

LEAK TEST:

- EN 12266-1
- ISO 5208
- API 598

FACE TO FACE ACC.:

- EN 558-1/14
- ISO 5752-14
- EN 558-1/13

END CONNECTION:

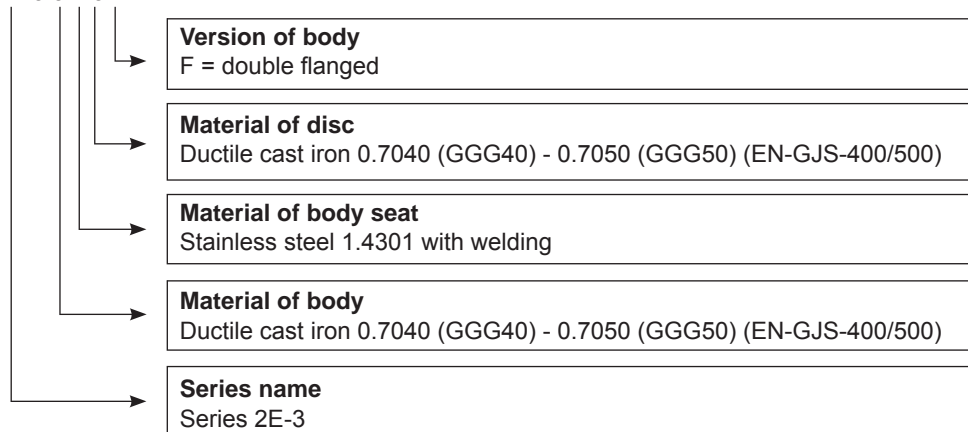
- EN 1092
- DIN PN10/PN16/PN25/PN40
- ASME B16.5 CLASS 150

TOP FLANGE:

- EN ISO 5211

TYPE DESIGNATION

2 E - 3 3 4 3 F



INSTALLATION BETWEEN FLANGES (DN 150 – 3000)

PN/DN	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1400	1500	1600	1800	2000	2200	2400	2500	2600	3000	
PN 10																										
PN 16																										
PN 25																										
PN 40																										

standard not available

PRODUCT QUALITY AND CONTROL

ABO production facilities are certified in accordance to ISO 9001 quality system, which ensures product quality and precision in manufacturing as well as strict product testing. Quality control guidelines and procedures include number of steps in 3 main areas: Incoming materials control, In-production control and After-production control.

- Test procedures are established according to: EN 12266-1, ISO 5208, API 598, ANSI/FCI 70-2
- Manufacture according to the requirements of the European Directive 97/23/CE – Equipment under pressure (Category III, modul H)
- All ABO valves pass pressure tests to 110% of rated pressure to ensure bubble tight shutoff
- All actuators are calibrated and cycle tested before shipment
- Material Traceability Rule – Certification is provided for all supplied valves as per customer's request
- Positive Material Identification – All materials are subjected to PMI testing in order to verify Material Traceability Certificate

Certificates - Complete list of certificates can be found on www.abovalve.com.

DESIGN BENEFITS

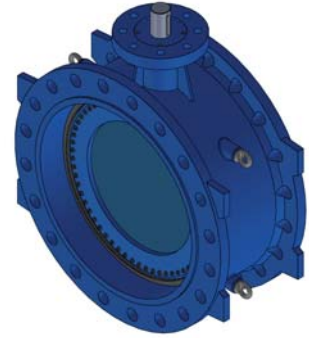
EASY SEAT REPLACEMENT

Possibility of replacement of the profile sealing ring without disassembling the disc.



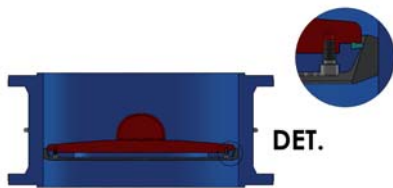
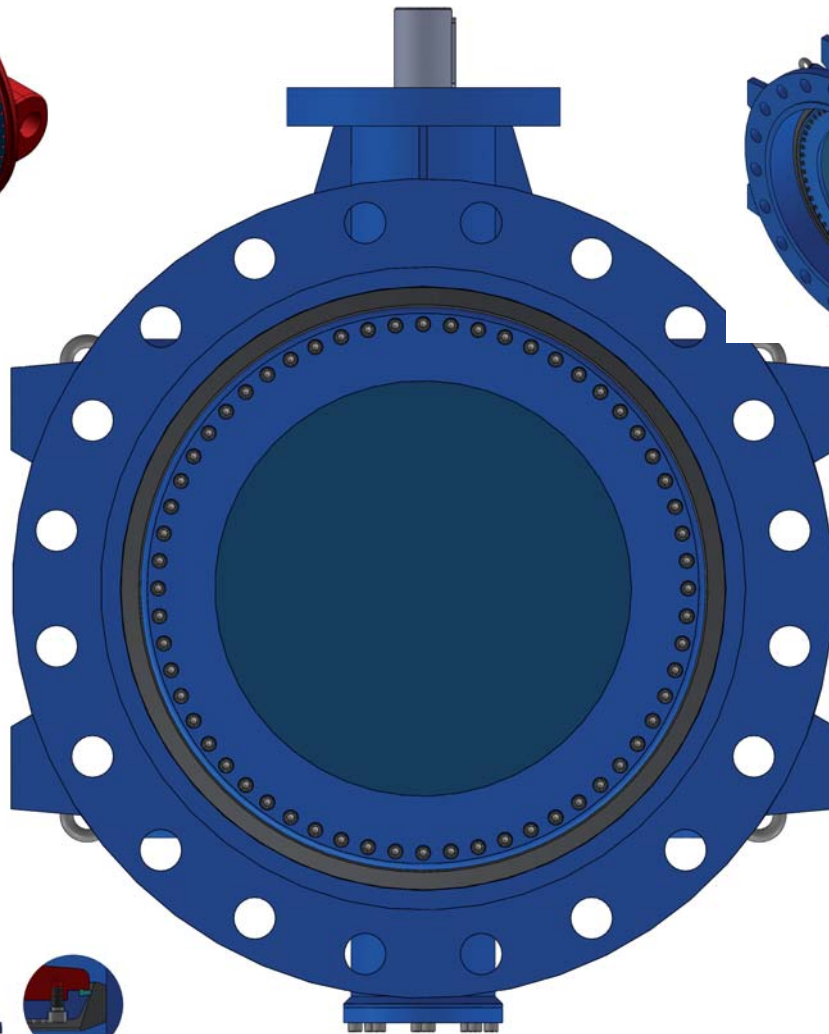
INTERNATIONAL STANDARD COMPATIBILITY

Top flange acc. to ISO 5211 allows direct installation of manual gearboxes or actuators.



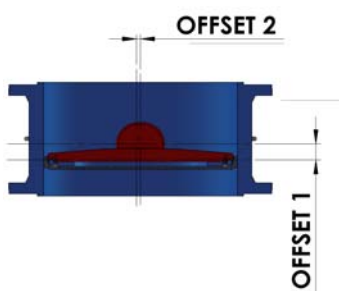
IMPROVED SEALING PERFORMANCE

Automatic sealing system with enclosed and pressure-supported profile sealing ring.



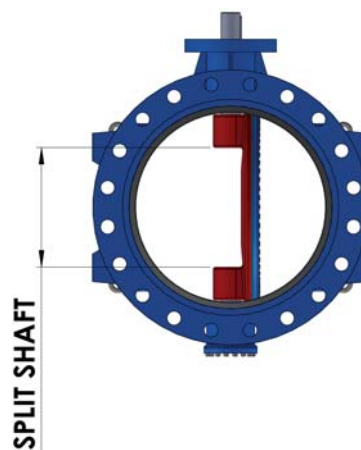
SPLITTED STEM

Splitted stem allows higher flow rate and Kv value and lower pressure drop.



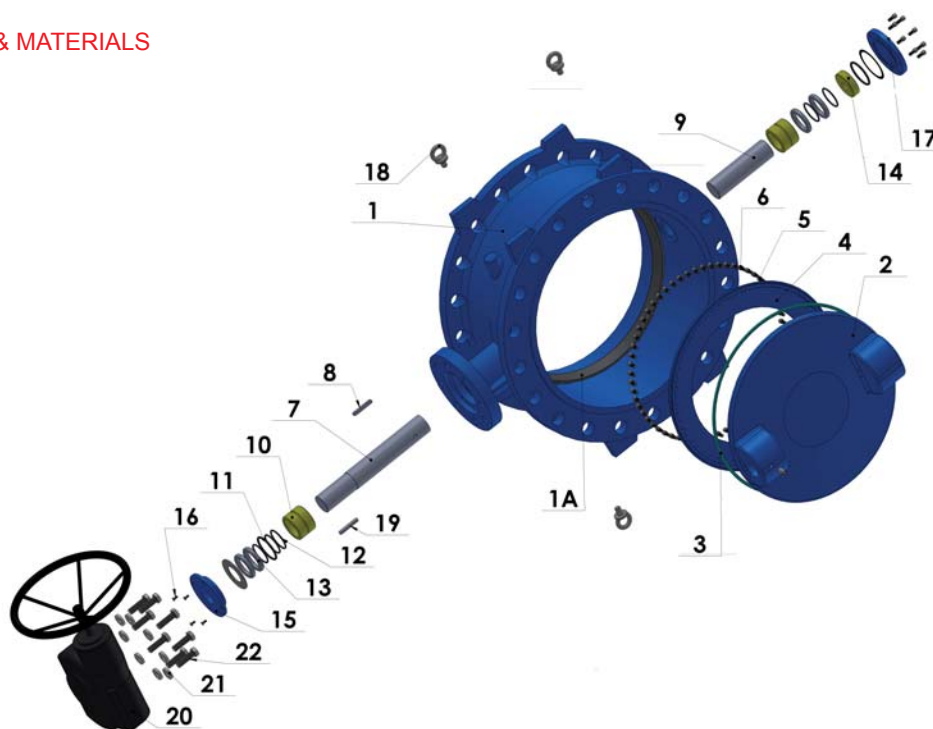
DOUBLE OFFSET

Double offset design ensures perfect tightness and function of the valve, especially in case of water hammer. This offset results in friction during the first 10 degrees of opening and final 10 degrees of closing.



MATERIALS & TECHNICAL INFORMATION

DRAWING & MATERIALS



Item	Name	Material
1	Body	Ductile cast iron 0.7040 (GGG40) - 0.7050 (GGG50) (EN-GJS-400/500)
1A	Body seat	Stainless steel 1.4301 with welding
2	Disc	Ductile cast iron 0.7040 (GGG40) - 0.7050 (GGG50) (EN-GJS-400/500)
3	Disc sealing ring	EPDM
4	Retaining ring	Steel 1.0037
5	Bolt	Stainless steel A4
6	Setscrew	Stainless steel A4
7	Shaft	Stainless steel 1.4021
8	Key	Steel 1.1141
9	Shaft	Stainless steel 1.4021

10	Bushing	Bronze 2.0936
11	O-ring	NBR
12	O-ring	NBR
13	Adjustment ring	Delrin
14	Adjustment ring	Delrin
15	Cover	Steel 1.0037
16	Bolt	Steel A4
17	Cover	Steel 1.0037
18	Eye bolt	Steel A21CWCB
19	Key	Steel 1.0037
20	Gearbox	Grey cast iron GG 25 0.6025
21	Washer	Steel 1.0037
22	Bolt	Steel 8.8 A4

Execution in other material types can be provided upon request. Choice of the seat and disc materials for various media will be recommended upon specific enquiry.

OPERATING TORQUES UPON WORKING PRESSURE (NM)

DN	150	200	250	300	350	400	450	500	600	700	800	900
PMA 10 bar	156	234	429	468	815,1	1313	1372	1950	4680	6318	10576	15535
PMA 16 bar	195	286	455	650	1430	1950	2600	2860	7800	11700	15600	20865
PMA 25 bar	150	429	858	1040	2488	4230	5495	6864	11700	25512	26400	38532

DN	1000	1100	1200	1300	1400	1500	1600	1700	1800	2000	2200
PMA 10 bar	24518	29640	30396	35230	37700	44525	65000	74100	100035	122330	169000
PMA 16 bar	33800	39000	58500	71500	65000	71500	117000	123500	125000	234000	247000
PMA 25 bar	52858	-	71500	-	104000	-	144000	-	180000	270000	289001

The given torque values include the 30% safety factor.

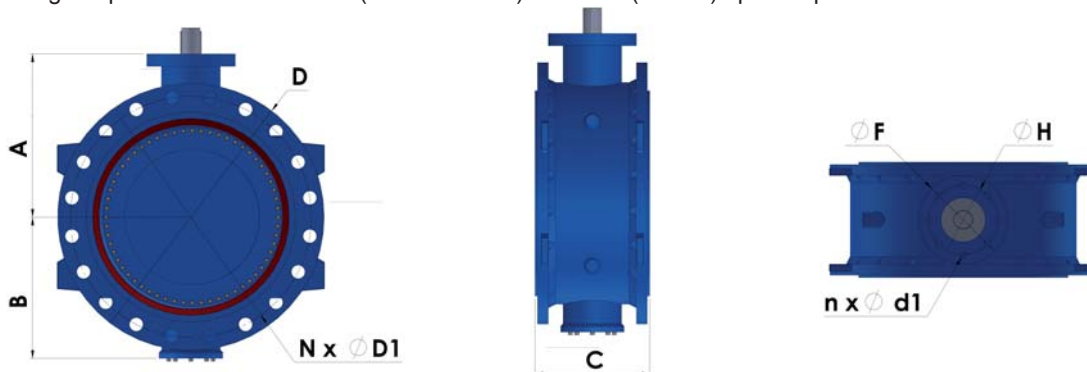
COATING

Epoxy coating is applied for excellent corrosion resistance. The coating is electrostatically applied (inside and outside) thickness 250 µ. ABO epoxy coating is executed in blue finish RAL 5005.

WORKING CONDITIONS, DIMENSIONS DN 150 - 3000 (6" - 118"), PN 10

WORKING CONDITIONS

- Working pressure: 10, 16 bar
- Working temperature: 0°C to +70°C (32°F – 158 °F) ≥ 70 °C (158 °F) upon request



DN		PN	D	C	A	B	N x D1	„Free Shaft Weight“	Ø H	n x Ø d1	ISO 5211	Ø F
mm	inch	bar	mm	mm	mm	mm	mm - n x mm	kg				
150	6"	10	285	210	345	142	Ø240-8xØ23	26	102	4 x 10,5	F10	125
200	8"	10	340	230	388	175	Ø295-8xØ23	49	102	4 x 10,5	F10	125
250	10"	10	395	250	406	201	Ø350-12xØ23	63,5	102	4 x 10,5	F10	125
300	12"	10	445	270	448	235	Ø400-12xØ23	79	102	4 x 10,5	F10	125
350	14"	10	505	290	567	260	Ø460-16xØ23	144	140	4 x 18	F14	175
400	16"	10	565	310	600	302	Ø515-16xØ28	148	140	4 x 18	F14	175
450	18"	10	615	330	610	330	Ø565-20xØ28	239	165	4 x 23	F16	210
500	20"	10	670	350	665	372	Ø620-20xØ28	251	165	4 x 23	F16	210
600	24"	10	780	390	735	425	Ø725-20xØ31	325	165	4 x 23	F16	210
700	28"	10	895	430	872	458	Ø840-24xØ31	488	254	8 x 18	F25	300
800	31"	10	1015	470	954	520	Ø950-24xØ34	606	254	8 x 18	F25	300
900	35"	10	1115	510	1004	600	Ø1050-28xØ34	878	298	8 x 23	F30	350
1000	39"	10	1230	550	1024	625	Ø1160-28xØ37	1359	356	8 x 33	F35	415
1200	47"	10	1455	630	1250	800	Ø1380-32xØ41	1949	356	8 x 33	F35	415
1400	55"	10	1675	710	1362	910	Ø1590-36xØ44	300	356	8 x 33	F35	560
1600	63"	10	1915	790	1510	1100	Ø1820-40xØ49	3689	483	12 x 40	F48	560
1800	71"	10	2115	870	1370	1260	Ø2020-44xØ49	4366	603	20 x 40	F48	686
2000	79"	10	2325	950	1715	1340	Ø2230-48xØ49	7500	603	20 x 40	F48	686
2200	87"	10	2550	950	-	1500	Ø2440-52xØ55	9925	603	20 x 40	F60	686
2400	94"	10	2760	950	-	1481	Ø2650-56xØ56	-	603	20 x 40	F60	686
2500	98"	10	2860	1150	-	1575	Ø2750-56xØ56	-	-	-	F60	-
2600	102"	10	2960	1150	-	1630	Ø2680-66xØ55	-	-	-	F60	-
3000	118"	10	3045	1150	-	1855	-	-	-	-	F60	-

Execution in other material types can be provided upon request. Choice of the seat and disc materials for various media will be recommended upon specific enquiry. Max. temperatures for each material of seat are accepted only for a specific medium and short time exposure. Please always consult material selection with the manufacturer.



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Data subject to change.



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