ABO valve

ABsOlute flow control

SERIES 600

// PN 6 / 10 / 16 / Class 150
// DN 32 - 200 (1“ ¼ - 8“)
// General applications
// Potable water, HVAC
// Heating, gas

CE TÜV SÜD

INTERFLANGES BUTTERFLY VALVES FOR GENERAL APPLICATION

GENERAL INFORMATION, MATERIALS

BUTTERFLY VALVES SERIES 600 ARE MANUFACTURED IN DN 32 ÷ DN 200 (1“ ¼ - 8“).

TYPE DESIGNATION:

6 1 0 B G — Valves for GAS
- Version of body: B = wafer, T = lug
- Material of disc – see table below
- Material of seat – see table below
- Series 600

GENERAL APPLICATIONS:

Butterfly valves series 600 are suitable for many applications where tight shut-off is required, such as:
- General and industrial applications
- Potable water
- Heating
- Gas
- HVAC (Heating, Ventilating & Air Conditioning)

MAX. WORKING PRESSURE	
DN 32 ÷ 200 (1“¼ - 8“)	16 bar (232 psi)

INSTALLATION BETWEEN FLANGES (DN 32-200)

Vers.		32/40	50	65	80	100	125	150	200
B	PN 6								
	PN10								
	PN16								
	Class 150								
T	PN 6	•	•	•	•	•	•	•	•
	PN10								
	PN16								•
	Class 150	•	•	•	•	•	•	•	•

standard

upon request •

*For JIS 5K/10K, please consult with manufacturer.

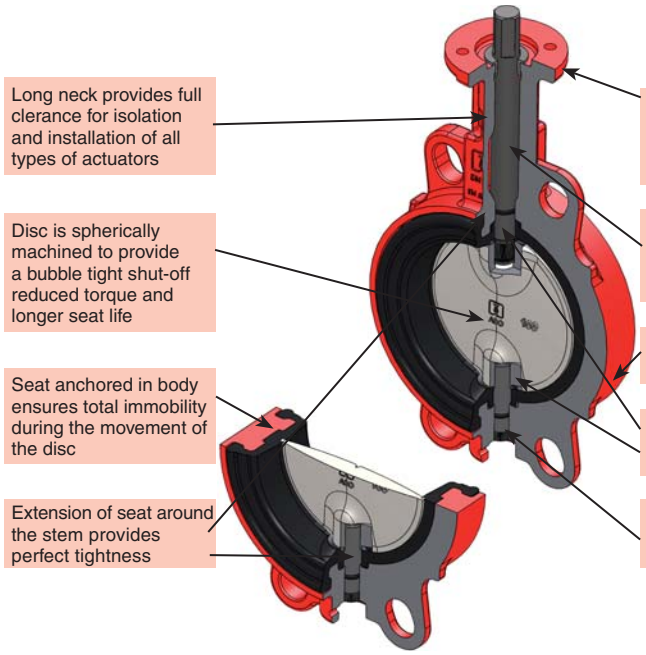
LEAK TEST:
- EN 12266-1, CLASS A (SUBSTITUTES DIN 3230 - LEAK 1)
- ISO 5208, CLASS A
- API 598, TABLE 5

FACE TO FACE ACC.:
- EN 558, SERIES 20
- ISO 5752, SERIES 20
- API 609, TABLE 2

CONNECTION BETWEEN FLANGES:
- EN 1092-1
- DIN 2631

TOP FLANGE:
- EN ISO 5211

WORKING STANDARD:
- EN 593 + A1



NON - DEMOUNTABLE VERSION DN 32 ÷ DN 200 (1“ ¼ - 8“)

Marking: 600B - wafer type / 600T - lug type

Fixed connection between stem and disc

Lower stem fixed in body

600 B, T

GENERAL INFORMATION

- Concentric design
- Shut-off and regulating device
- Split shaft
- Pressed connections - non - demountable version
- Long neck of the body according to Heating Systems Regulation standards
- Orange epoxy painting RAL 2002 - 80 µm*
- Vacuum max 0,2 bar absolute

*Based on customer‘s request, higher degree of coating can be provided.

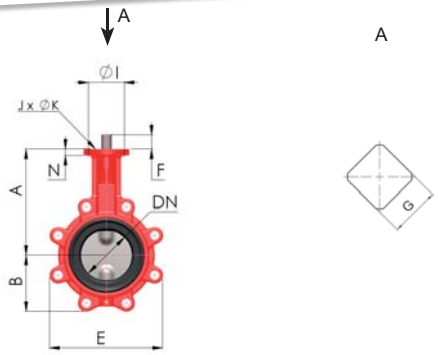
MATERIAL SPECIFICATION		
1	Body	Cast iron 0.6025 (GG25) epoxy coated*
2	Disc	0 - Brass 2.0402 1 - Aluminium bronze 2.0966 2 - Stainless steel 1.4308 (CF8) 3 - Ductile iron 0.7040 (GGG40) epoxy coated 4 - Stainless steel 1.4408 (CF8M)
3	Seat	1 - NBR: - 10 °C + 100 °C
		2 - EPDM: - 10 °C + 125 °C
4	Stem	Stainless steel 13% Cr
5	Pivot	Stainless steel 13% Cr
6	Bushing	Delrin
7	Pivot O-ring	NBR (for gas)
8	Stem O-ring	NBR (for gas)

*Version T, DN 32 - 40, DN 200 - Body: Ductile iron 0.7040 (GGG40) epoxy coated

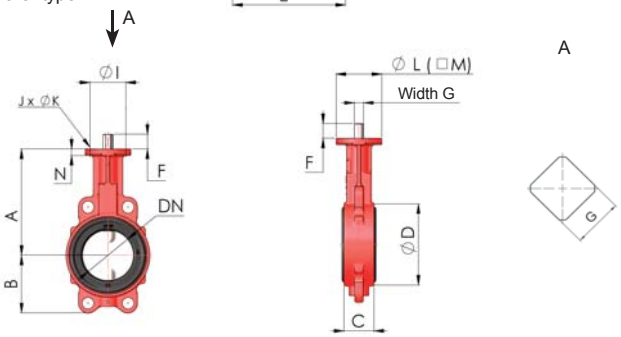
Note: Choice of the seat and disc materials for various media will be recommended upon specific enquiry. The above mentioned max. temperatures for each material of seat are accepted only for a specific medium and short time, please consult any specific application with the manufacturer!

DIMENSIONS DN 32-200 (1“¼ - 8“)

Lug type T



Wafer type B



DN		mm	32	40	50	65	80	100	125	150	200
		inch	1˝1/4	1˝1/2	2˝	2˝1/2	3˝	4˝	5˝	6˝	8˝
Version	B	A	136	136	146	153,5	163	172,5	192,5	205	234
	T										
Valve dimensions		B	54	54	64	72	89	100	118	128	166
		C	33	33	43	46	46	52	56	56	60
		D	78	78	96	113	128	150	184	212	268
		E	110	110	116	131	173	192	235	258	325[1]
Endshaft dimensions		F	25	25	25	25	25	25	25	25	25
		G	14								17
ISO TOP Flange		I	50						50/70[2]		70
		J	4								
		K	7						7/9[2]		9
Flange dimensions		L	-	-	70				70	70	-
		M	70	70	-	-	-	-	70[2]	70[2]	75
		N	8	8	8	8	8	8	9,5	9,5	14
Weight	Type B		1,9	1,9	2,7	3,2	3,7	4,7	6,7	8,4	13,3
	Type T		2,3	2,3	3,0	3,7	4,8	6,1	9,2	10,2	15,3
ISO Flange			F05[3] / F07						F05 / F07*		F07

Dimensions mentioned in mm, weight in kg. *For version T
[1]For PN 10 308 mm [2]Dimensions for version T [3]Standard

Torques mentioned at the right are valid for valves with EPDM seat and stainless disc only, and under the condition that the working medium is water 20 °C. Torque performance for other valves and media is available upon request.

OPERATING TORQUES UPON WORKING PRESSURE (NM)*

DN	32/40	50	65	80	100	125	150	200
PMA 6 bar	6	8	15	20	38	55	70	100
PMA 10 bar	8	10	17	25	46	70	80	125
PMA 16 bar	10	12	20	30	55	85	100	150

Operating conditions:
Seat EPDM: - 10°C to 125°C
General application: water, heating systems, air-conditioning
Seat NBR: - 10°C to 100°C
For transport of hydrocarbons, oil, air with oil content, sea water etc.
ABO butterfly valves series 600 can be used from minimal temperature of - 10 °C.

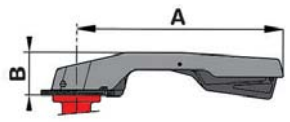
When temperature of medium increases over 120 °C the max. allowed pressure falls:
• from 16 bar to 14,4 bar
• from 10 bar to 9 bar

DESIGNATION OF BUTTERFLY VALVES - ABO SERIES 600

SEAT	DISC				
	Brass	Aluminium bronze	Stainless steel 1.4308 (CF8)	Ductile iron	Stainless steel 1.4408 (CF8M)
EPDM T - 10°C + 125°C	620	621	622	623	624
NBR - 10°C + 100°C	610	611	612	613	614
EPDM E - Drinking water + 80°C	-	-	622	623	624

Actuation options:
• Handlever
• Manual gearbox with handwheel
• Electric actuator 24V, 230V, 400V
• Pneumatic actuator
- single acting
- double acting

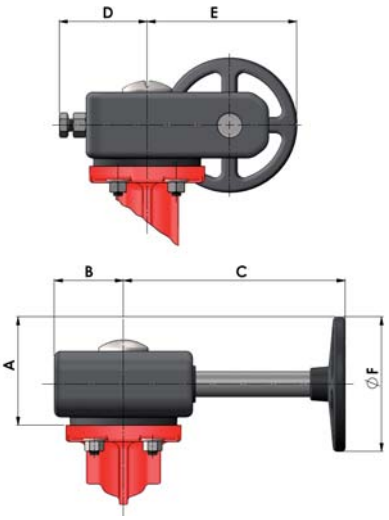
HANDLEVER



DN	32 - 80	100 - 150	200
A	200	273	362
B	76	78	73
Weight	0,35	0,4	1,45

MANUAL GEARBOX WITH HANDWHEEL

DN 32 ÷ 200



DN	32 – 150	200
A	89	89/127**
B	51	51
C	152	152/185**
D	44	44
E	101	101/138,5**
F	125	125/200*
Weight	1,6	1,6
Wheel	SR5	SR5/SR8*

Dimensions mentioned in mm, weight in kg.
Valid for SE Series.
*Optional
**Acc. to handwheel choice

Handlever options
Handlever and gearbox can be supplemented with contacts for signalisation of endpositions.

Colour options
According to customer's request, it is possible to modify the appearance of the colour of butterfly valves ABO.

SERIES 600 FOR GAS

ABO Series 600 Gas butterfly valves can be used for on/off as well as regulation servise for such medias as natural gas, propane, butane, and also coal gas. ABO Series 600 Gas butterfly valves are suitable for placement in pipelines as well as gas stations.
ABO Series 600 Gas butterfly valves can be easily distinguished from other types and valve series as the upper part of the lever is clearly marked in yellow colour. Further, every valve is provided with an identification plate that identifies the valve series as well as production number.

PRODUCT FEATURES:
- Wafer/Lug type butterfly valve with con-centric design
- Split shaft design in order to reach higher Kv/Cv
- Pressed connections
- Approved and registered for gas by: SZÚ Brno
- Types:
  - Wafer type between flanges PN 6, 10, 16 (Class: 150)
  - Lug type between flanges PN 10/16 (Class: 150)

PRODUCT INFO:
- Range: DN 32 (1“ ¼) - DN 200 (8“)
- Temperature range: from 0°C up to + 80°C
- Maximum working pressure: 6 bar
- Gas Series continues in Series 900 which offers bigger DN valves, approved by DVGW

Note: In the case of other working conditions please contact your ABO office.

TYPE	VERSION OF BODY	RANGE	MATERIALS OF COMPONENTS			TEMPERATURE RANGE
			BODY	SEAT	DISC	
610 BG 612 BG 613 BG 614 BG	wafer type	DN 32 - 200	Cast iron 0.6025 (GG25) epoxy coated*	NBR	- Brass 2.0402 - Stainless steel 1.4308 (CF8) - Ductile iron 0.7040 (GGG40) epoxy coated - Stainless steel 1.4408 (CF8M)	0 - 80°C
610 TG 612 TG 613 TG 614 TG	lug type					

*Version T, DN 32 - 40, DN 200 - Body: Ductile iron 0.7040 (GGG40) epoxy coated

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Data subject to change.