

# PTFE LINED BUTTERFLY VALVES

SERIES 500 - 578 / 588 - WAFER (B) - LUG (T) - DN50 - DN400



SERIES 500  
CHEMICAL LINE  
ATEX DESIGN



## General features

- **Concentric design**
- Compact **PTFE „TRIM“**
- **588:** disc provided with 3 mm layer of conductive PTFE (to improve conductivity contains graphite)
- WAFER / LUG type (split body)
- **Bi-directional valve**
- Possible both vertical and horizontal pipe mounting
- Suitable as a closure and control valve
- Top flange according to standard ISO 5211
- PTFE coated steel bearings ensure accurate guidance of the top and bottom shaft
- Actuating stem sealing prevents media leaking to environs
- Easy assembly
- Easy installation
- **Working media**
- Purified industrial water
- Potable water
- Industrial cleaners
- Chemicals
- Beverages / Food
- Caustic / Toxic media
- Paper mill stock
- Drugs and pharmaceuticals
- Chlorine / Alkalines / Acids
- Dyes

## Basic information

**Body design**  
WAFER - with through holes  
LUG - with threaded holes

**Nominal size**  
578: DN50 - DN300  
588: DN50 - DN400

**Working pressure**  
6 bar / 10 bar

**Flange connection**  
PN6/PN/10/PN16/Class 150

**Body material**  
Ductile iron 0.7043 (GGG40.3)

**Disc**  
Duplex stainless steel  
1.4469 conductive PTFE coated  
Duplex stainless steel  
1.4469 with polished edges

**Seat type**  
Conductive PTFE

**Temperature rating**  
- 40 °C / +200 °C

**Hydraulic test**  
Class A

## Standards

**Leak test**  
EN 12266-1, Class A  
ISO 5208, Class A

**Face to face length**  
EN 558, Series 20  
ISO 5752, Series 20  
API 609 Tab. 1

**Flange connection**  
EN 1092-1  
ASME B16.5

**TOP flange**  
EN ISO 5211

**Working standard**  
EN 593

**Marking**  
EN 19

**ATEX desing**  
EN ISO 80079-36  
EN IEC 60079-0

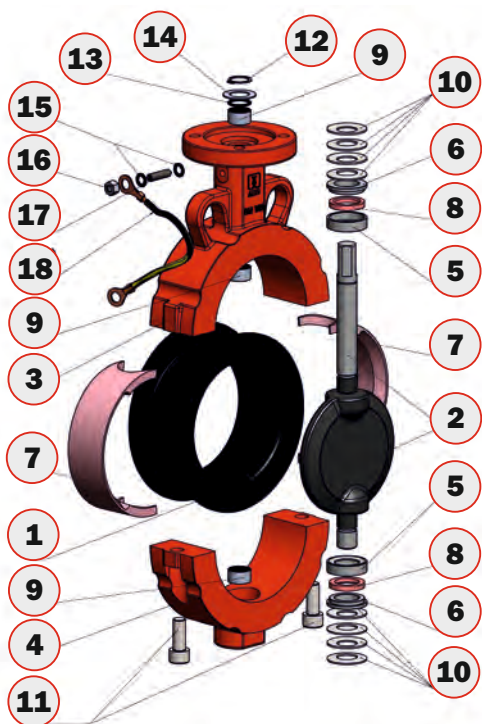
## Type designation

- 5 8 8 B** ■ **Body design**  
B - WAFER body with through holes  
T - LUG body with threaded holes
- **Seat material**  
8 - Conductive PTFE
- **Disc material**  
8 - Duplex stainless steel 1.4469 conductive PTFE coated  
7 - Duplex stainless steel 1.4469 with polished edges
- **Series designation**  
Series 500



## Material performance

- 1 - Seat**  
Conductive PTFE
- 2 - Disc & Shaft & Pivot**  
Stainless steel 1.4469 + conductive PTFE coating / Stainless steel 1.4469 with polished edges
- 3/4 - Body (top and bottom part)**  
Ductile iron 0.7043 (GGG40.3)
- 5 - Ring seat**  
Stainless steel 1.4021
- 6 - Pressure washer**  
Stainless steel 1.4021
- 7 - Spring element**  
Silicone rubber
- 8 - Ring**  
Silicone rubber
- 9 - Sliding bush**  
Steel + CuSn10 + PTFE
- 10 - Disc spring**  
Stainless steel 1.4310
- 11 - Bolt**  
Stainless steel A4
- 12 - Retaining ring**  
Stainless steel A2
- 13 - O-Ring**  
Silicone rubber
- 14 - Washer**  
Stainless steel A2
- 15 - Fan washer**  
Steel - galvanized
- 16 - Nut**  
Stainless steel A4
- 17 - Screw for ATEX valves**  
Stainless steel 1.4021
- 18 - Wire clamp**  
Stainless steel A2 / Copper



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## ABO valve

**SERIES 500**  
**CHEMICAL LINE**  
**ATEX DESIGN**

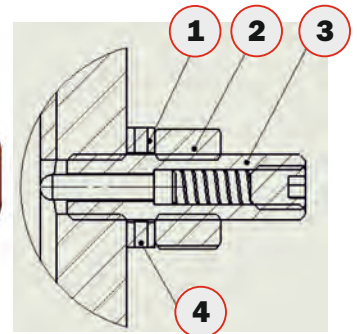
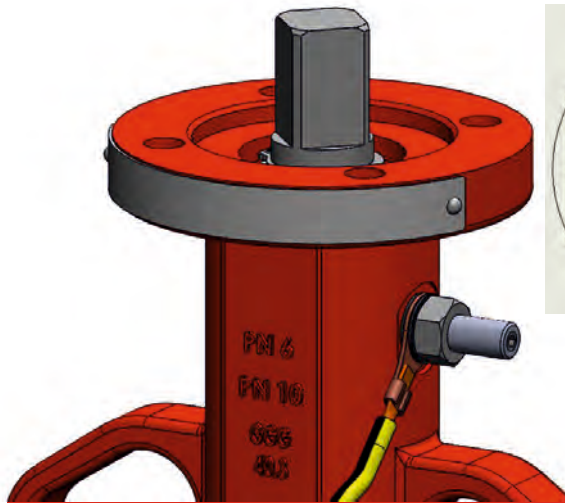
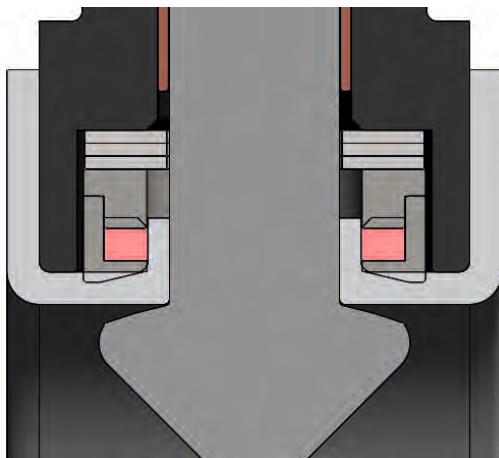


### Seat

- The seat is made of **conductive** Teflon (**PTFE**) and is pressed by a set of prestressed disc springs
- **Safety seals** on both shaft ends - ring made of silicone rubber which is pressed by set of springs

### ATEX desing

- **ATEX clamp** - (pos. No. 4) to which it is connected the lead wire is connected to the ATEX screw (No. 3) using hexagon nuts (No. 2) and two washers (No. 1)
- **The ATEX screw** is connected to the shut-off flap through the threaded hole into which it is screwed
- **The tip of the ATEX screw** is pressed in by means of a spring to the steel shaft and thanks to this spring the contact is constant and does not break



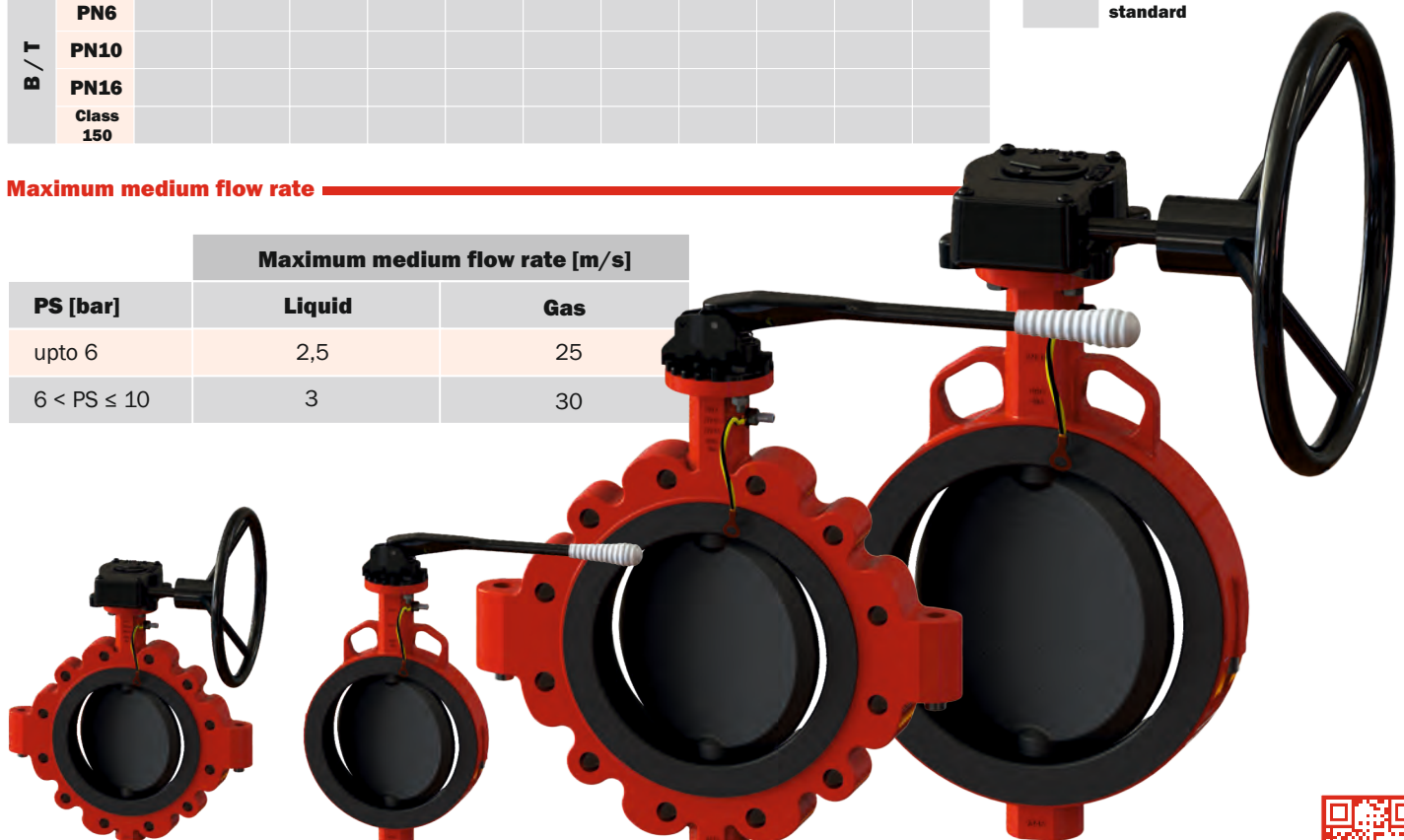
Installation between flanges DN50 to DN400

	DN	50	65	80	100	125	150	200	250	300	350	400
B / T	PN6											
	PN10											
	PN16											
	Class 150											

standard

### Maximum medium flow rate

PS [bar]	Maximum medium flow rate [m/s]	
	Liquid	Gas
upto 6	2,5	25
6 < PS ≤ 10	3	30



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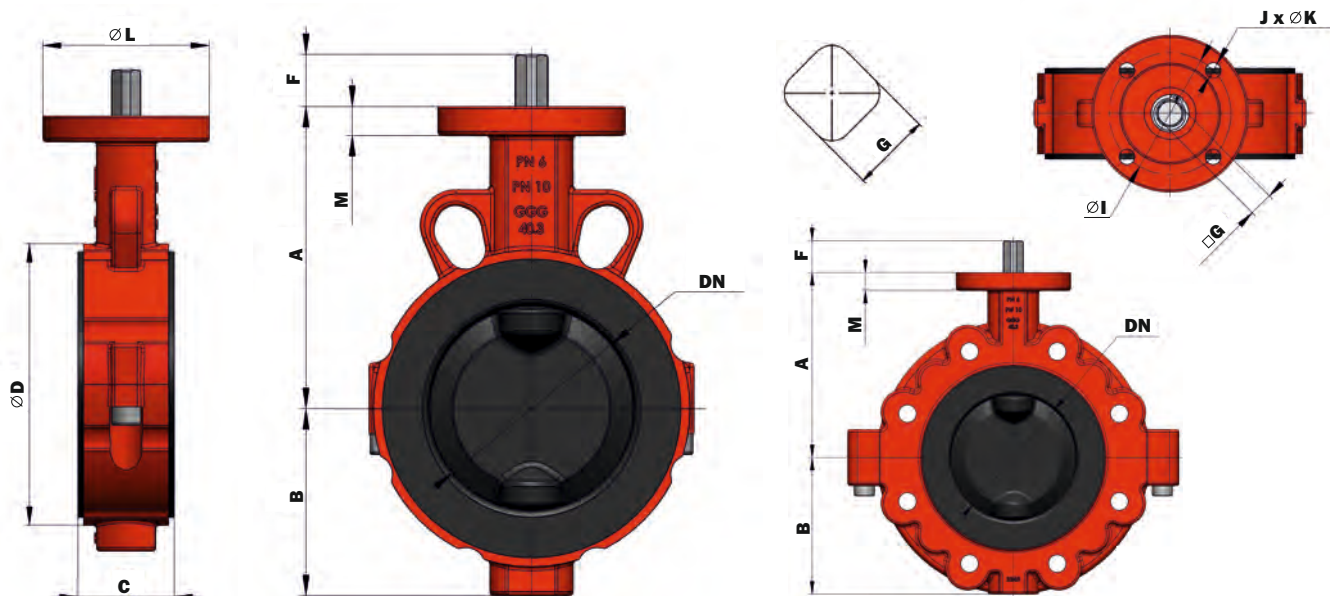
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 **ABO** valve

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**CHEMICAL LINE**  
**ATEX DESIGN**



Basic dimensions



WAFER (B)-DESIGN	DN	50	65	80	100	125	150	200	250	300	350	400
Valve dimension	A	120	128	135	145	164	176,5	234	274	299	331	361
	B	61	74	78	90	106	126	152	186	214	245	280
	C	43	46	46	52	56	56	60	70	76	78	102
	D	96	115	131	152	181	207	257	314	364	408	468
Endshaft dimensions	F	25	25	25	25	25	25	25	31	31	42	42
	G	11	11	14	14	14	14	17	22	22	27	27
Top flange dimensions	I	50	50	70	70	70	70	70	102	102	125	125
	J	4	4	4	4	4	4	4	4	4	4	4
	K	7	7	9	9	9	9	9	12	12	14	14
	L	70	70	90	90	90	90	90	125	125	155	155
	M	14	14	14	14	14	14	14	18	20	20	20
ISO Flange 5211		F05	F05	F07	F07	F07	F07	F07	F10	F10	F12	F12
Weight (kg)		2,3	3,0	3,5	5,0	6,5	7,8	13,2	23,6	30,9	40,1	59,7

Dimensions are mentioned in mm.

For basic parameters of „Design T”, please contact producer.

Maximum torque at Pmax = 10 bar

DN	50	65	80	100	125	150	200	250	300	350	400
Mk [N.m]	30	40	60	95	140	190	250	435	660	850	1050

Note: torques are given without a safety factor.  
The recommended safety factor for installing the actuator is 1.3.

