

# BUTTERFLY VALVE WITH HANDLE

## TECHNICAL PASSPORT

**BUTTERFLY VALVE - DUCTILE IRON BODY  
WITH HANDLE - BETWEEN FLANGES PN10/16 - ASA 150**

**VPG4449-02**

### APPLICATION

VPG butterfly valves are intended for ON/OFF or control use in fluid transfer circuits.

#### Area of use

water supply, water treatment, pumping, irrigation, industry.



#### Fluids

cold water, hot water, drinking water, air, compatible fluids.

#### Contraindications

Use on steam is strongly discouraged.



### GENERAL CHARACTERISTICS

**Range:** from DN32/40 to DN300.

- Design according to standard NF EN 593.
- Removable wafer type with smooth centering lugs
- Sealing in both directions of piping circulation.
- One-piece, padlockable handle: notched sector ensuring 10 handle adjustment positions
- Body coated with epoxy paint protection against corrosion
- Raised neck compatible with pipe insulation
- Soft sleeve insures a perfect seal.
- Disc profiled and reduced in thickness
- Low operating torque.
- Stem in two parts couples to the disc using a square.
- Reduced head losses.
- Standardized ISO 5211 upper flange for easy assembly of actuators.

### STANDARDS

<b>Design</b>	Manufacture according to the requirements of the European directive 2014/68/UE «Equipment under pressure»: modulate H.
<b>Face to face</b>	Face to face according to standards NF EN 558-1 serie 20, ISO 5752 serie 20, DIN 3202.
<b>Connection*</b>	Mounting between flanges ISO PN10/16 according to EN1092-1 and GOST PN10/16. Adjustable between flanges ASME B16.5 Class 150 (ISO PN20) / EN 1092-2
<b>Tests</b>	Pressure test according to standards EN12266-1, DIN 3230 and ISO 5208: -Body: 24 bar -Seat: 17.6 bar

\* Possible assembly with stamped flanges and stainless steel collars

### PRODUCT APPROVALS



on request



certificate of health conformity  
n° 22 ACC LY 475



n° 2309075

ISO 9001  
ISO 14001  
BUREAU VERITAS  
Certification



### Tecofi France

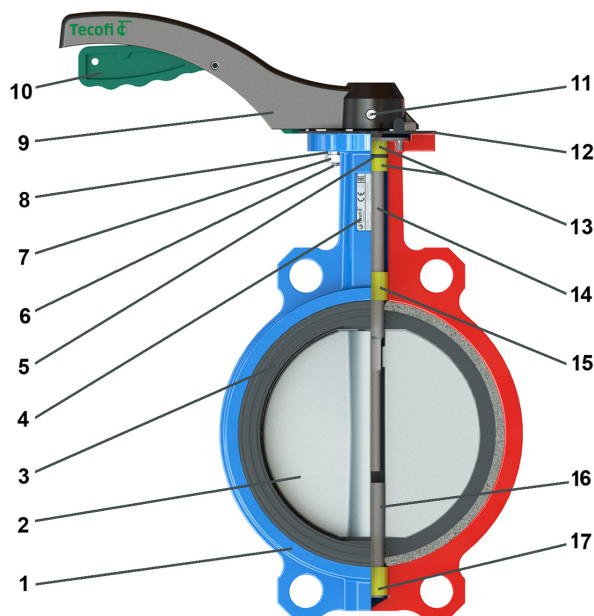
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#### CONSTRUCTION



Pos.	Q-ty	Description	Material	Equivalences			Epoxy coating
				DIN	ASTM	BS	
1	1	Body	Ductile iron EN-GJS-400-15	GGG40	A536 65-45-12	EN-JS1030	RAL 5015, 250 µm
2	1	Disc	Stainless steel 316	G-X6CrNiMo18 10	A351 Gr. CF8M	1504 316 C16	
3	1	Sleeve	ACS EPDM				
4	1	Nameplate	Stainless steel 304	X5CrNi 18 10	A 182 AISI 304	1449-2 304 S15	
5	1	O ring	EPDM				
6	2	Screw	Stainless steel 316/A4	X5CrNiMo 18 10	A 182 AISI 316	1449-2 316 S16	
7	2	Nut	Stainless steel 316/A4	X5CrNiMo 18 10	A 182 AISI 316	1449-2 316 S16	
8	2	Washer	Stainless steel 316/A4	X5CrNiMo 18 10	A 182 AISI 316	1449-2 316 S16	
9	1	Handle	Aluminium				Dark black RAL 9005
10	1	Trigger	Aluminium				Green RAL 6024
11	1	Set screw	Stainless steel 316/A4	X5CrNiMo 18 10	A 182 AISI 316	1449-2 316 S16	
12	1	Notched sector	Steel				Dark black RAL 9005 Kanigen coating
13	2	Upper bushing	PTFE				
14	1	Upper stem	Stainless steel 420	X20Cr13	A276 AISI 420	970-1 420S37	
15	1	Bushing	PTFE				
16	1	Lower stem	Stainless steel 420	X20Cr13	A276 AISI 420	970-1 420S37	
17	1	Lower bushing	PTFE				

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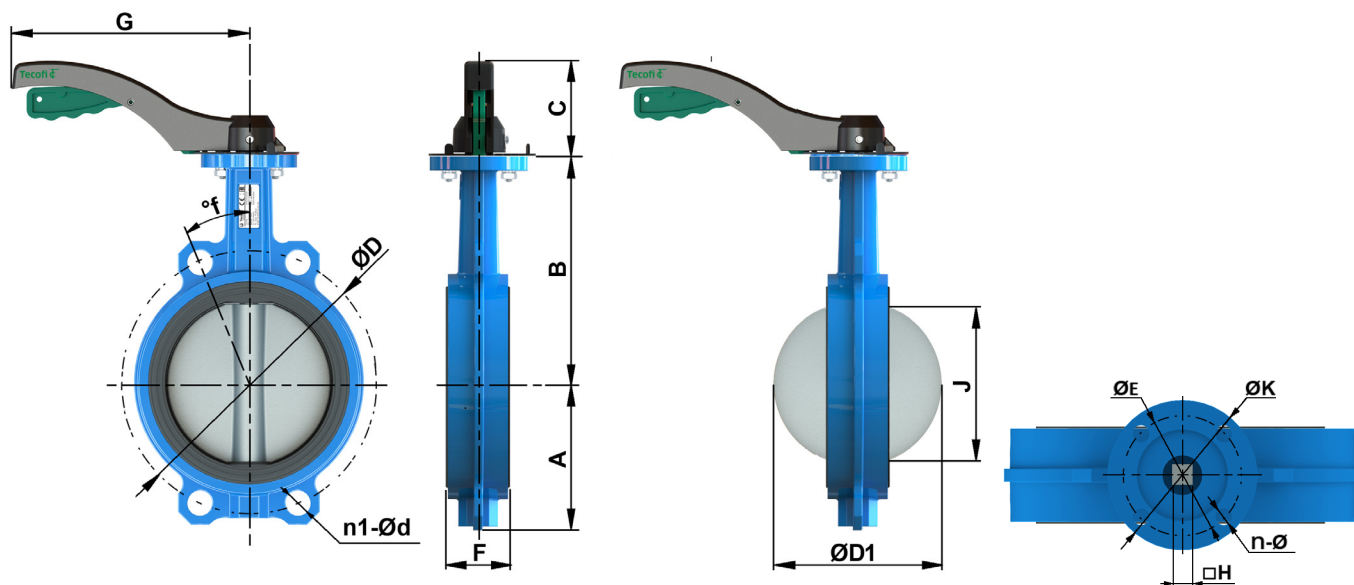


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#### DIMENSIONS



DN		A	B	C	ØD	ØD1	n1-Ød	f°	ØE	F	ØK	J	n-Ø	G	□H	Torque * (Nm)	Weight (kg)
mm	inch																
32/40	1"1/4 1"1/2	60	120	75	110	43	4-Ø19	45°	50	33	65	29	4-Ø7	170	9	12	1,56
50	2"	60	128	78	125	53	4-Ø19	45°	50	43	65	31	4-Ø7	170	9	16	2,11
65	2"1/2	72.5	140	78	145	65	4-Ø19	45°	50	45	65	46	4-Ø7	170	9	18	2,32
80	3"	91	148	78	160	79	4-Ø19	45°	50	45	65	64	4-Ø7	170	9	25	2,92
100	4"	108	165	78	180	105	4-Ø19	22.5°	50	52	65	91	4-Ø7	170	11	42	3,98
125	5"	121	175	98	210	124	4-Ø20	22.5°	70	56	90	111	4-Ø10	215	14	65	5,95
150	6"	131	199	98	240	155	4-Ø23	22.5°	70	56	90	144	4-Ø10	215	14	110	7,06
200	8"	163	220	93	295	203	4-Ø23	15°/22.5°	102	60	125	194	4-Ø12	350	17	200	13,78
250	10"	198	251	93	350/355	251	4-Ø28	15°	102	68	125	242	4-Ø12	350	22	330	20,97
300	12"	231	288	109	400/410	302	4-Ø28	15°	102	78	125	292	4-Ø12	500	22	500	30,5

The smooth holes are oblong on the DN32/40, DN200 et DN300

\* Torque values without safety factor

#### WORKING CONDITIONS

Maximum working pressure: 16 bar  
(6 bar for compressed air)

Maximum vacuum pressure: -0.8 bar for 10 minutes

(vacuum tests performed in laboratory, valve tested open at -0.8 bar for 10 minutes)

Maximum working temperature: -20°C / +130°C

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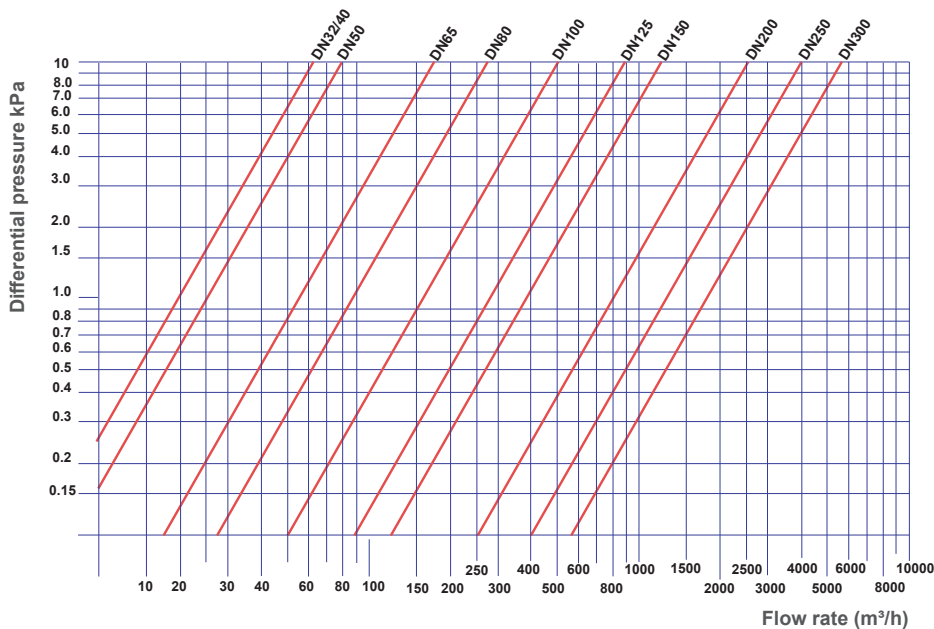


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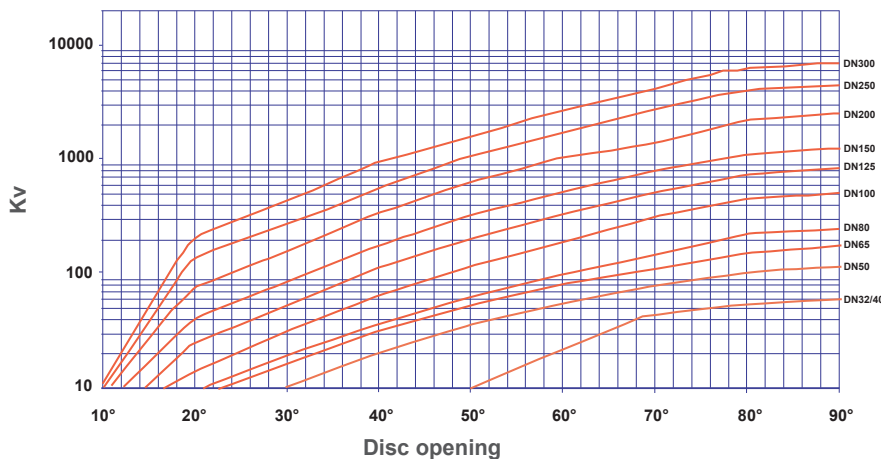
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#### HEAD LOSSES DIAGRAMM



#### FLOW FACTOR

DN		Kv								
mm	inch	10°	20°	30°	40°	50°	60°	70°	80°	90°
32/40	1"1/4 - 1"1/2	0.0	0.0	0.1	1.0	10.0	20.0	45.0	55.0	60.0
50	2"	0.0	2.6	10.3	20.5	38.5	54.7	77.0	106.9	115.4
65	1"1/2	0.1	5.1	17.1	31.6	55.6	83.8	123	174	188
80	3"	0.2	7.7	19.4	33.3	59.9	99.2	156	235	258
100	4"	0.4	14.5	30.8	66.7	119	197	311	467	513
125	5"	0.7	24.8	52.2	114	203	335	530	795	874
150	6"	1.7	38.5	81.2	175	313	517	819	1229	1350
200	8"	2.6	76.1	161	349	622	1028	1627	2440	2681
250	10"	3.4	129	274	593	1058	1750	2770	4154	4566
300	12"	4.3	200	423	917	1634	2704	4279	6418	7054



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