

BUTTERFLY VALVE WITH HANDLE

TECHNICAL PASSPORT

BUTTERFLY VALVE - DUCTILE IRON BODY WITH HANDLE - LUGGED

VPG4648-02

APPLICATION

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

Area of use

Area of use: water supply, water treatment, pumping, irrigation, industry, HVAC.



Fluids

Cold water, hot water, wastewater, liquid discharges, etc.

Contraindications

Use on steam is strongly discouraged.



GENERAL CHARACTERISTICS

Range: from DN40 to DN300.

- Design according to standard NF EN 593.
- Removable type with threaded 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

Design	Manufacture according to the requirements of the European directive 2014/68/UE «Equipment under pressure»: modulate H.
Face to face	Face to face according to standards NF EN 558-1 serie 20, ISO 5752 serie 20, DIN 3202.
Connection	Mounting with flanges : ISO PN10/16 from DN40 to DN150 and PN16 from DN200 to DN300 in accordance with the standards EN1092-2, BS450,AISI B16.1-5.
Tests	Pressure test according to standards EN12266-1, DIN 3230 and ISO 5208: -Body: 24 bar -Seat: 17.6 bar

PRODUCT APPROVALS



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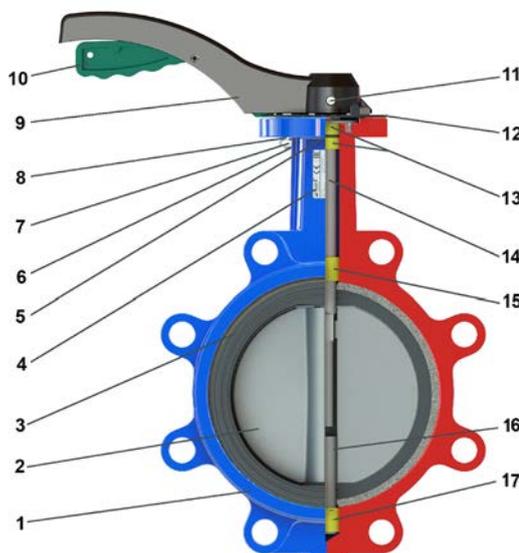


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CONSTRUCTION



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	Ductile iron EN-GJS-400-15 + Nickel	GGG40	A536 65-45-12	EN-JS1030	
3	1	Sleeve	Heat 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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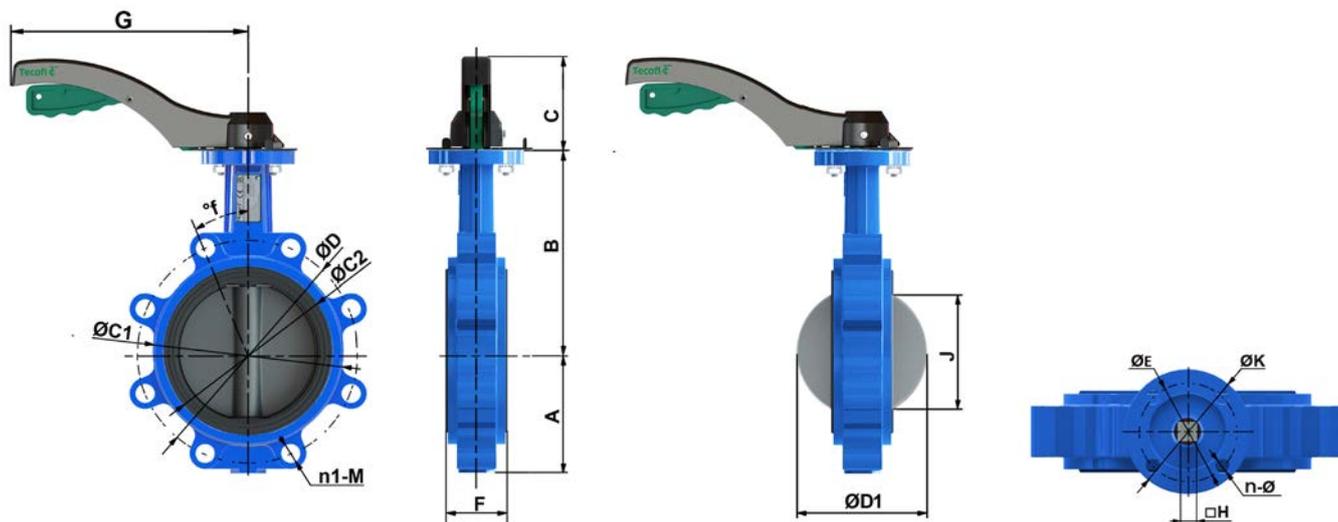


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DIMENSIONS



DN		A	B	C	ØC1	ØC2	ØD	ØD1	n1-M	f°	F	J	G	ØE	ØK	n-Ø	ØH	Torque * (Nm)	Weight (kg)
mm	inch																		
40	1 1/2"	60	102	75	88	71	110	43	4-M16	45°	33	29	170	50	65	4-Ø7	9	12	1,93
50	2"	60	128	78	93	75	125	53	4-M16	45°	43	31	170	50	65	4-Ø7	9	16	2,47
65	2 1/2"	72	140	78	110	92	145	65	4-M16	45°	45	46	170	50	65	4-Ø7	9	18	2,97
80	3"	89	146	78	123	105	160	79	8-M16	45°	45	64	170	50	65	4-Ø7	9	25	4,13
100	4"	100	165	78	156	134	180	105	8-M16	22.5°	52	91	170	50	65	4-Ø7	11	42	5,2
125	5"	116	175	98	183	158	210	124	8-M16	22.5°	56	111	215	70	90	4-Ø10	14	65	7,55
150	6"	131	199	98	211	187	240	155	8-M20	22.5°	56	144	215	70	90	4-Ø10	14	110	9,48
200	8"	162	220	93	264	236	295	203	12-M20	15°	60	194	350	102	125	4-Ø12	17	200	17,6
250	10"	195	251	93	329	291	355	251	12-M24	15°	68	242	350	102	125	4-Ø12	22	330	25,46
300	12"	228	288		385	342	410	302	12-M24	15°	78	292	500	102	125	4-Ø12	22	500	38

* Torque value 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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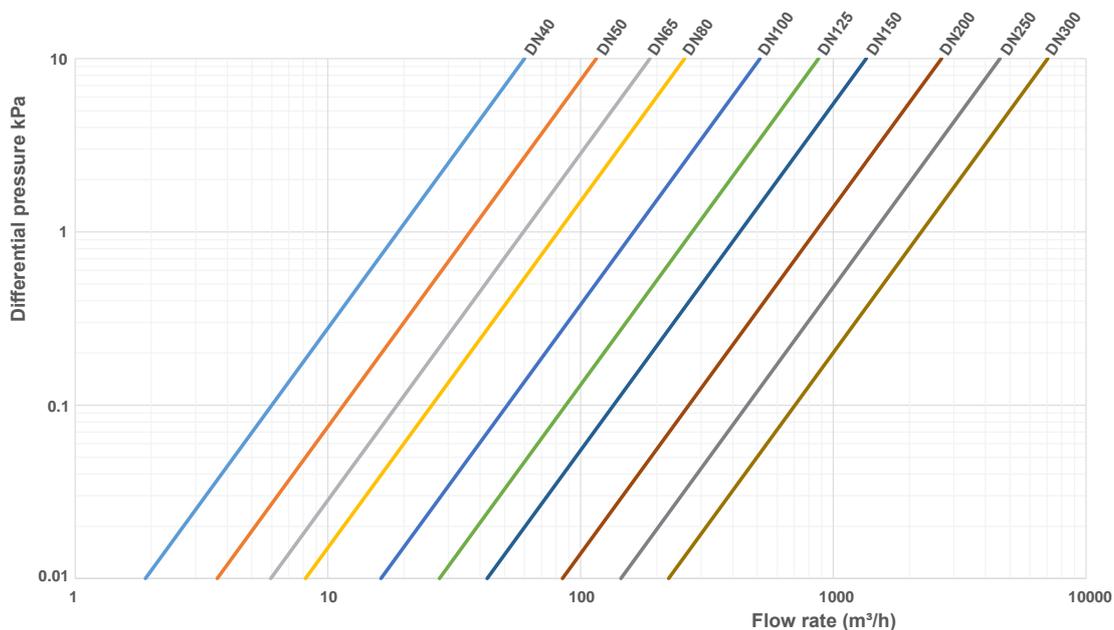


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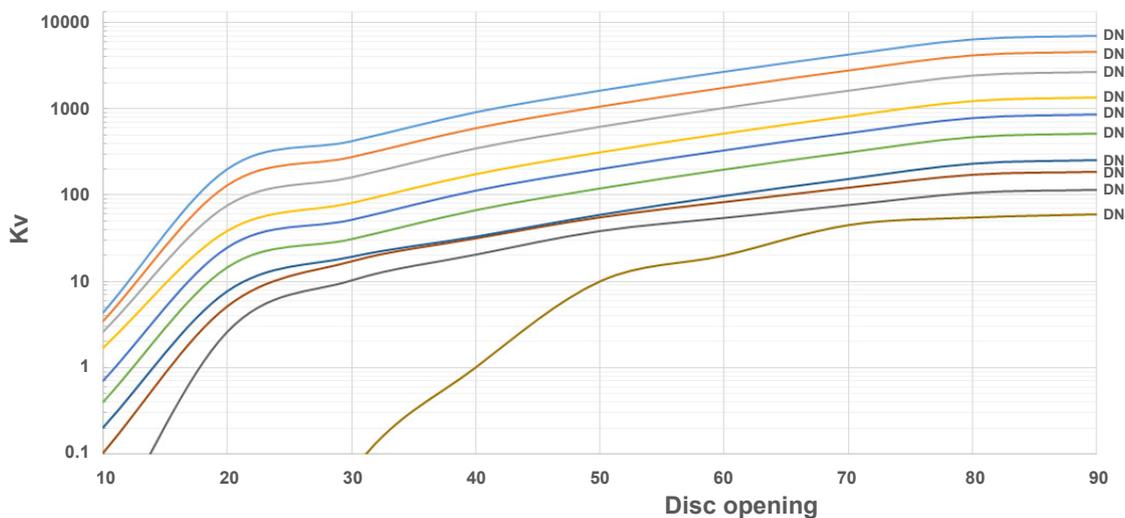
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HEAD LOSSES DIAGRAMM



FLOW FACTOR

DN		Kv								
mm	inch	10°	20°	30°	40°	50°	60°	70°	80°	90°
40	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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