

BUTTERFLY VALVE WITH GEAR BOX

TECHNICAL PASSPORT

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

VPG4448-08

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 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.
- 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 series 20, ISO 5272 series 20, DIN 3202.
Connection*	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
Tests	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



Tecofi France

83 rue Marcel Mérieux - 69960 Corbas
Tél. +33 (0)4 72 79 05 79 - Fax. +33 (0)4 78 90 19 19
E-mail : sales@tecofi.fr - www.tecofi.fr

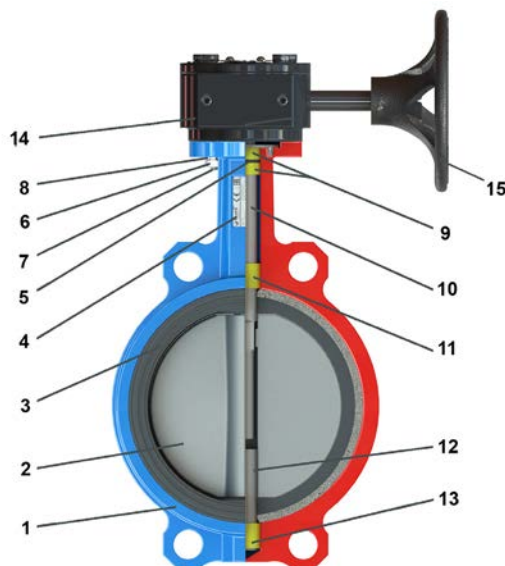


BUTTERFLY VALVE WITH GEAR BOX

TECHNICAL PASSPORT

VPG4448-08

CONSTRUCTION



Anticorrosion protection system:

The valve body is coated with a paint system corresponding to a C5 - Medium durability (C5M) classification, in accordance with the principles of NF EN ISO 12944.

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	2	Upper bushing	PTFE				
10	1	Upper stem	Stainless steel 420	X20Cr13	A276 AISI 420	970-1 420S37	
11	1	Bushing	PTFE				
12	1	Lower stem	Stainless steel 420	X20Cr13	A276 AISI 420	970-1 420S37	
13	1	Lower bushing	PTFE				
14	1	Gear box					Dark black RAL 9005
15	1	Handwheel	Cast iron				Dark black RAL 9005

Tecofi France

83 rue Marcel Mérieux - 69960 Corbas
Tél. +33 (0)4 72 79 05 79 - Fax. +33 (0)4 78 90 19 19
E-mail : sales@tecofi.fr - www.tecofi.fr

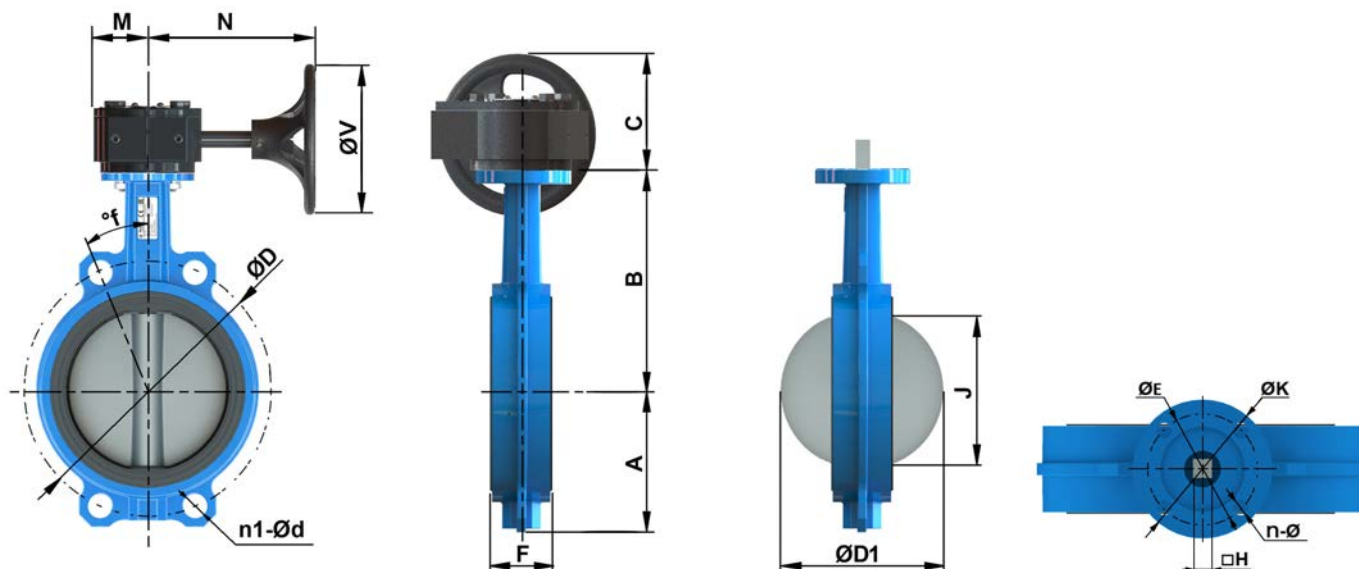


BUTTERFLY VALVE WITH GEAR BOX

TECHNICAL PASSPORT

VPG4448-08

DIMENSIONS



DN		A	B	C	ØD	ØD1	n1-Ød	f°	ØE	F	ØK	J	n-Ø	M	N	ØV	ØH	Torque* Nm	Weight (kg)
mm	inch																		
32/40	1"1/4 1"1/2	60	120	112	110	43	4-Ø19	45°	50	33	65	29	4-Ø7	50	160	150	9	12	5,57
50	2"	60	128	116	125	53	4-Ø19	45°	50	43	65	31	4-Ø7	50	160	150	9	16	6,12
65	2"1/2	72.5	140	115	145	65	4-Ø19	45°	50	45	65	46	4-Ø7	50	160	150	9	18	6,29
80	3"	91	148	116	160	79	4-Ø19	45°	50	45	65	64	4-Ø7	50	160	150	9	25	6,97
100	4"	108	165	115	180	105	4-Ø19	22.5°	50	52	65	91	4-Ø7	50	160	150	11	42	8,16
125	5"	121	175	116	210	124	4-Ø20	22.5°	70	56	90	111	4-Ø10	50	160	150	14	65	9,93
150	6"	131	199	116	240	155	4-Ø23	22.5°	70	56	90	144	4-Ø10	50	160	150	14	110	10,99
200	8"	163	220	208	295	203	4-Ø23	15°/22.5°	102	60	125	194	4-Ø12	75	232	305	17	200	22,28
250	10"	198	251	209	350/355	251	4-Ø28	15°	102	68	125	242	4-Ø12	75	232	305	22	330	28,68
300	12"	231	288	210	400/410	302	4-Ø28	15°	102	78	125	292	4-Ø12	75	232	305	22	500	38,78

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

* 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

Tecofi France

83 rue Marcel Mérieux - 69960 Corbas

Tél. +33 (0)4 72 79 05 79 - Fax. +33 (0)4 78 90 19 19

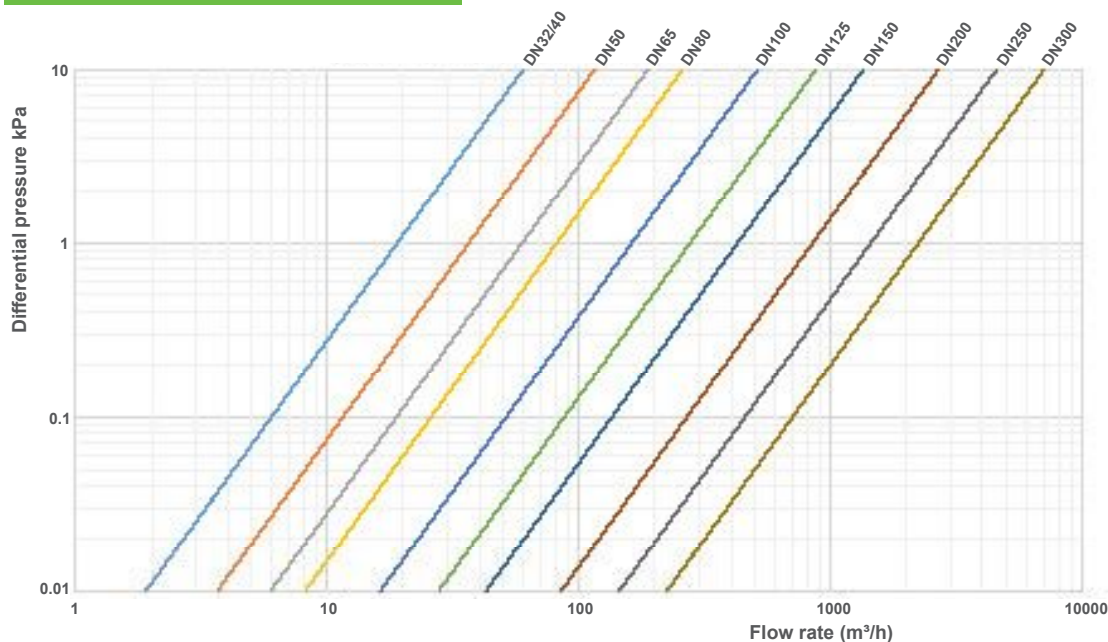
E-mail : sales@tecofi.fr - www.tecofi.fr

BUTTERFLY VALVE WITH GEAR BOX

TECHNICAL PASSPORT

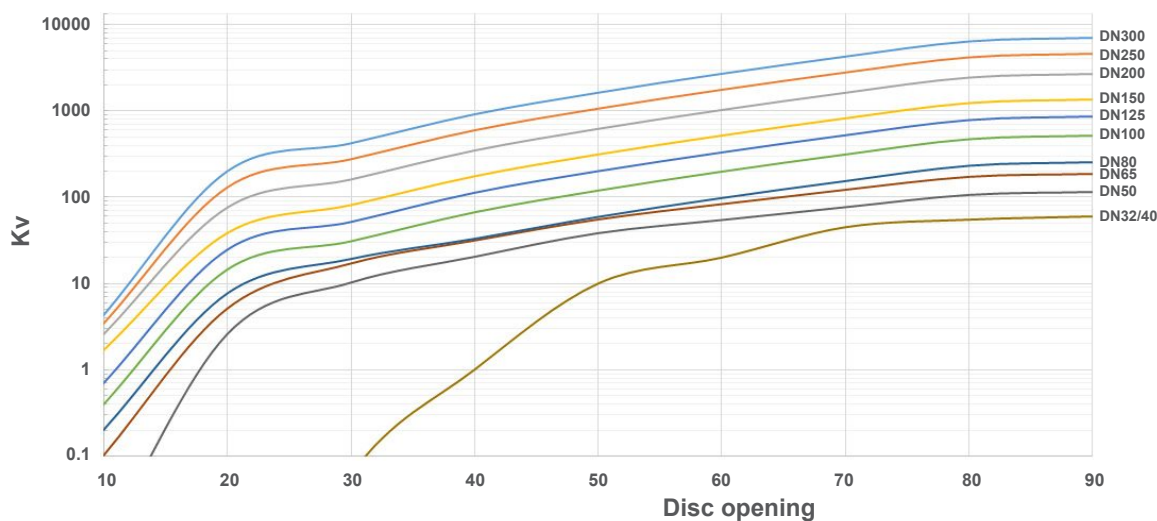
VPG4448-08

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



Tecofi France

83 rue Marcel Mérieux - 69960 Corbas
Tél. +33 (0)4 72 79 05 79 - Fax. +33 (0)4 78 90 19 19
E-mail : sales@tecofi.fr - www.tecofi.fr

