

Data sheet

Butterfly valves VFY VFY-WG, VFY-LG, VFY-WA

Description



Features:

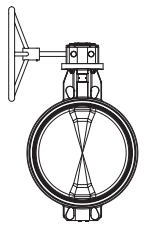
- Long term reliability due to upper and lower anti-friction bearings
- Safe maintenance: shaft blow out protection with circlip
- Position indicator

Main Data:

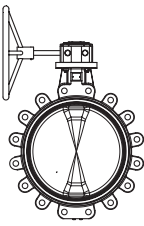
- DN 400-600
- k_{vs} 14695-25000 m³/h
- EPDM Liner
- Stainless steel or Ductile iron Epoxy Coated disc
- Medium: Circulation water, drinking water or chilled glycolic water up to 50 %
- Medium Temperature:
 - -15 ... 120 °C (EP disc)
 - -15 ... 130 °C (SS disc)

Ordering

Wafer type with worm gear **VFY-WG**

Picture	DN	k_{vs} (m ³ /h)	PN	T _{max} (°C)	Disc	Code No.
	400	14695	16	130	Stainless Steel	082X3050
	450	17000				082X3051
	500	20080				082X3052
	600	25000				082X3053
	400	14695		120	Ductile iron Epoxy Coated	082X3060
	450	17000				082X3061
	500	20080				082X3062
	600	25000				082X3063

Lug type with worm gear **VFY-LG**

Picture	DN	k_{vs} (m ³ /h)	PN	T _{max} (°C)	Disc	Code No.
	400	14695	16	130	Stainless Steel	082X3070
	450	17000				082X3071
	500	20080				082X3072
	600	25000				082X3073
	400	14695		120	Ductile iron Epoxy Coated	082X3080
	450	17000				082X3081
	500	20080				082X3082
	600	25000				082X3083

Ordering (continuous)

Wafer type with 230V Electric actuator **VFY-WA**

Picture	DN	k _{vs} (m ³ /h)	PN	T _{max} (°C)	Disc	Code No.
	400	14695	16	130	Stainless Steel	082X3090
	450	17000				082X3091
	500	20080				082X3092
	600	25000				082X3093
	400	14695		120	Ductile iron Epoxy Coated	082X3100
	450	17000				082X3101
	500	20080				082X3102
	600	25000				082X3103

Technical data

Actuator

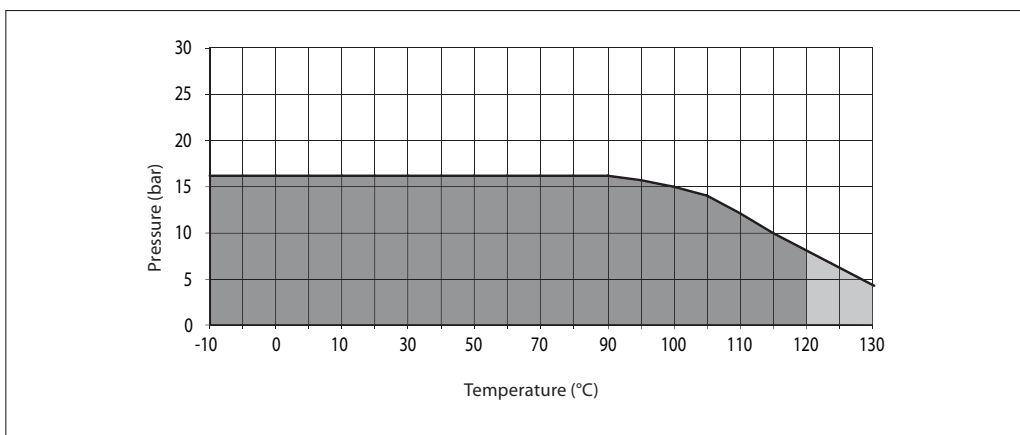
Power supply	Vac	230
Frequency	Hz	50/60
Control input		3-point
Torque	Nm	600-2400
Ambient temperature	°C	20...70
Duty Rating IEC 34		S4 (50%)
Grade of enclosure		IP68 (1m, 72h)
CE - marking in accordance with standards		Low voltage directive (LVD) 2006/95/EC: EN61000-3-2, EN61000-3-3, EN61000-6-4, EN61000-6-2

Valve

Nominal diameter	DN	400-600
k _{vs} value	m ³ /h	14695-25000
Rotation angle		90 °
Leakage rate		Acc. to PED 2014/68/EU, EN 12266-1, Rate A ¹⁾
Nominal pressure	PN	16
Medium		Circulation water, drinking water, chilled glycolyc water up to 50 % or
Medium temperature	EP disc	°C
	SS disc	
		-15 ... 120 (see p-T diagram)
		-15 ... 130 (see p-T diagram)
Mounting		Centering lugs (Wafer type)
Mounting		Mounting between flanges
Material		
Body		Ductile iron (DIN GGG40)
Disc		Ductile iron EN GJS 400-15 (DIN GGG 40) with Epoxy coating or Stainless Steel AISI 316
Shaft		Stainless steel AISI 420
Liner		EPDM
Circlip		Steel XC 75 / Stainless steel
O-ring		Nitrile/Viton
Upper guide bush		Zinc coated S. + PTFE
Lower guide bush		Zinc coated S. + PTFE

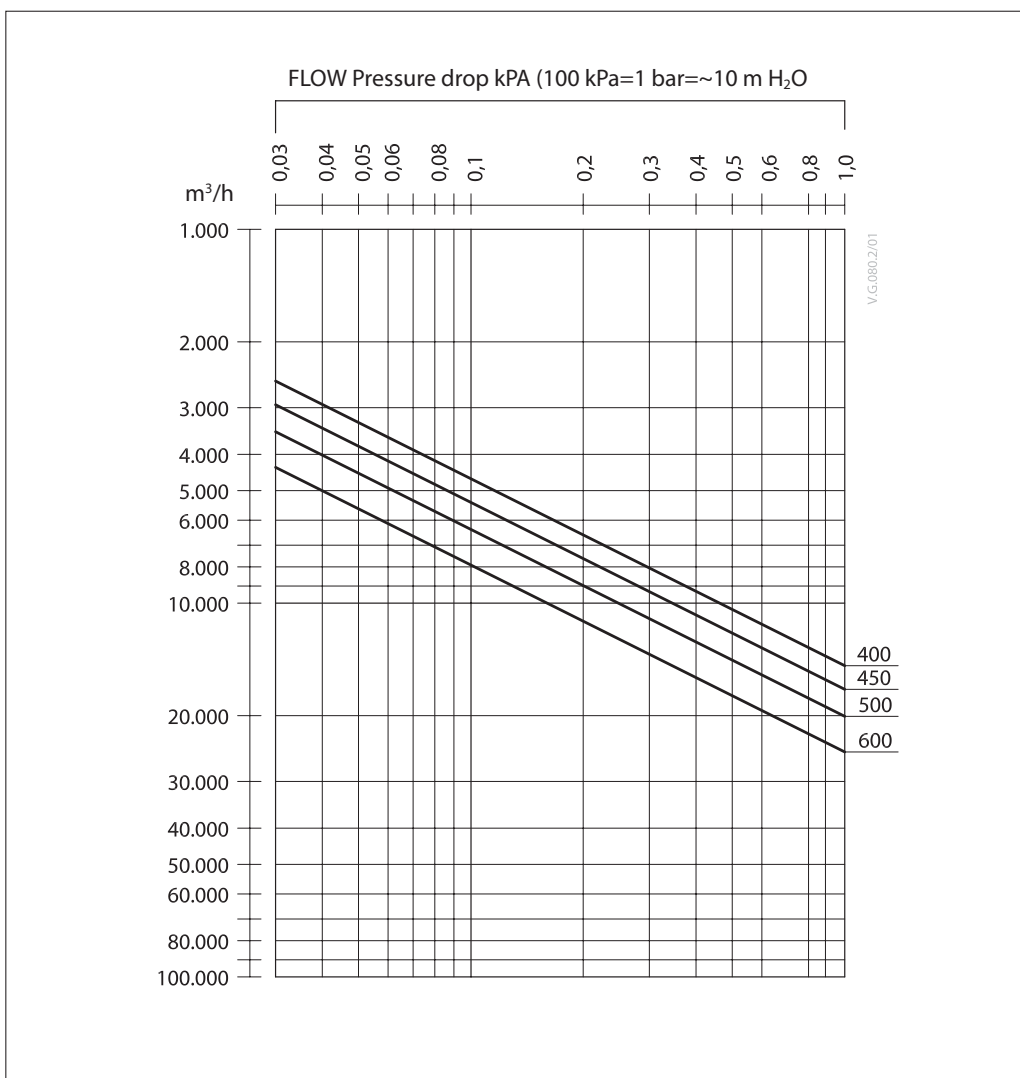
¹⁾ No visible defectable leakage during the testing procedure

P-T diagram



Headloss diagram

For water at 20 °C



Design

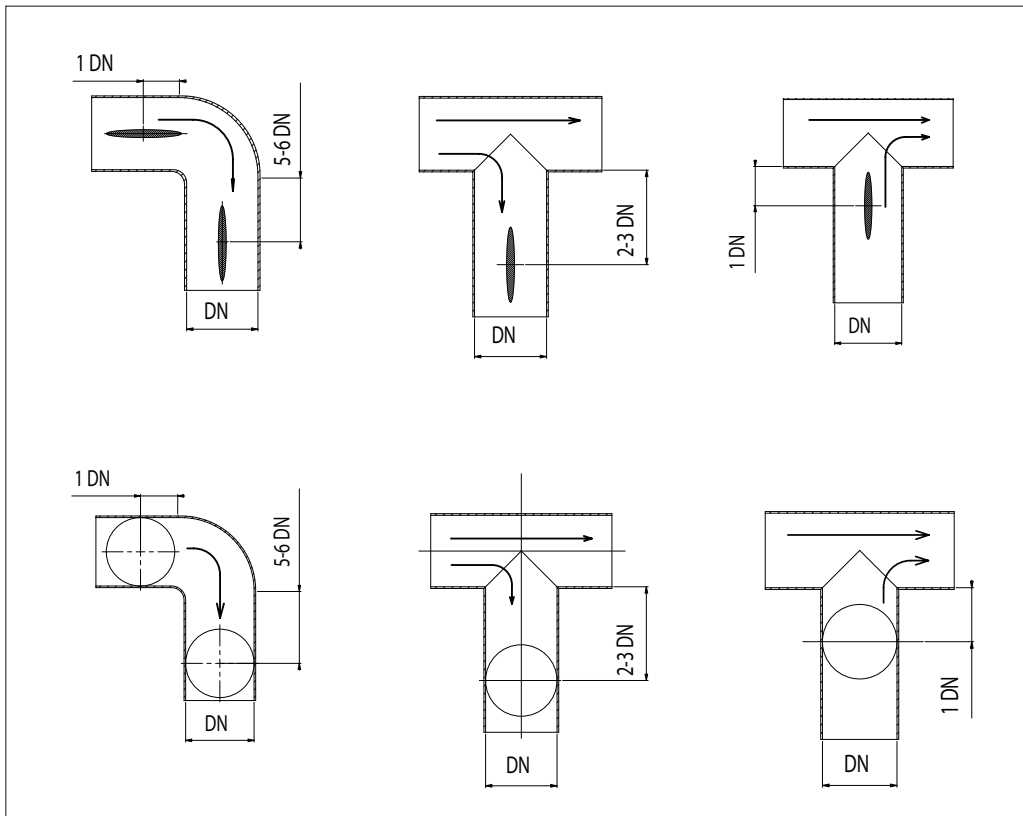
IND	DESIGNATION	MATERIAL
1	Body	EN-GJS-400-15 (GGG40)
2	Liner	EPDM
3	Bush	Acier Zingue
4	Shaft	X5CrNiCuNb16-4 (630)
5	Disc	EN-GJS-400-15 (GGG40)
6	Shaft	X5CrNiCuNb16-4 (630)
7	Ball	Stainless steel
8	Bottom	C235JR (E24-2)
9	Spacer	X5CrNiCuNb16-4 (630)
10	O'Ring	NBR 70 ShA
11	Circlip	Acier Zingue
12	O'Ring	NBR 70 ShA
13	Spacer	X5CrNi18-10 (304)
14	Screw	Acier Inox classe A2
15	Plate	X5CrNi18-10 (304)
16	O'Ring	FKM

Installation positions

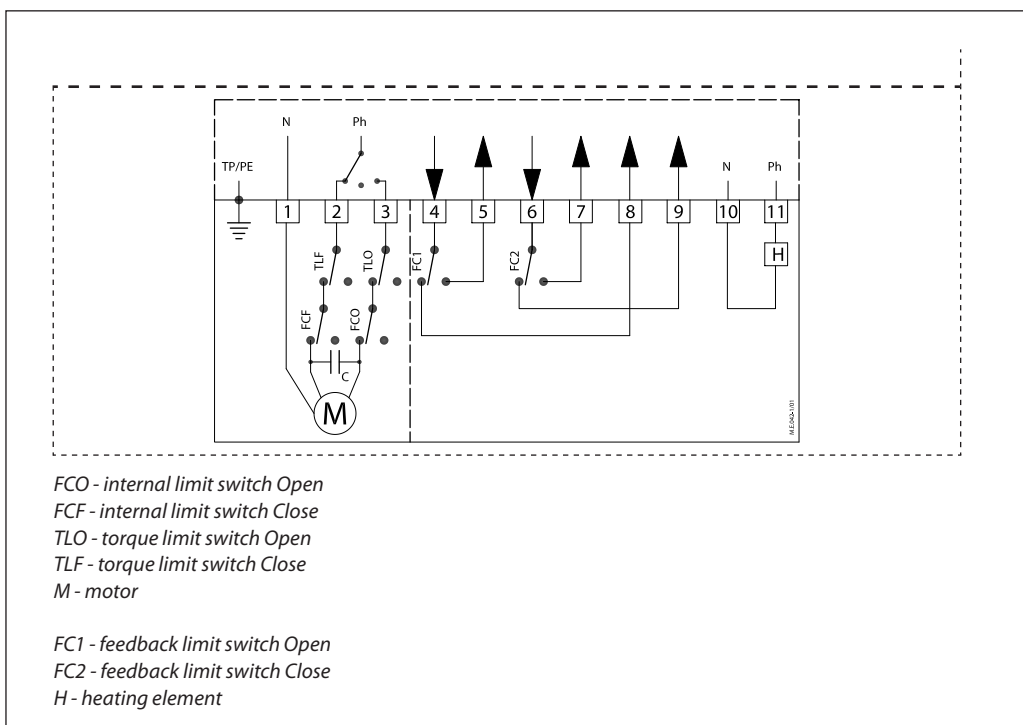
Recommended Possible Possible Not recommended

Installation conditions

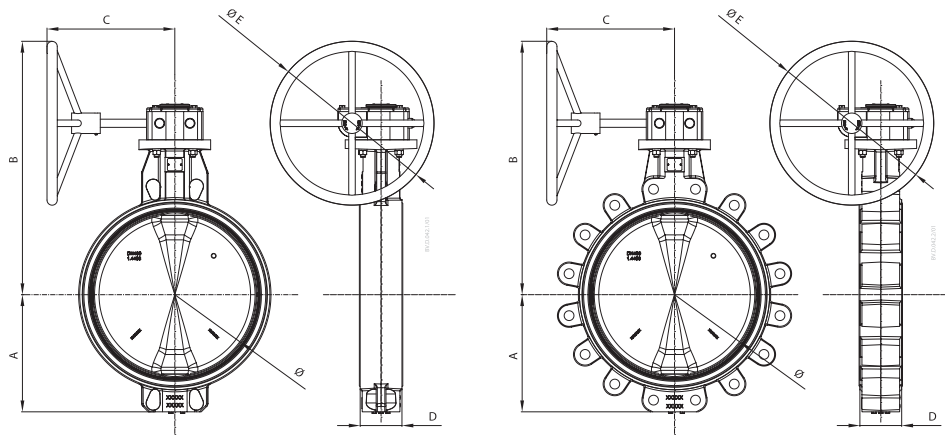
It is recommended that distances indicated below are respected in order to prolong lifetime of the valve. Mounting the valve close to pipework junctions (turbulent zones) increases wear.



Wiring



Dimensions

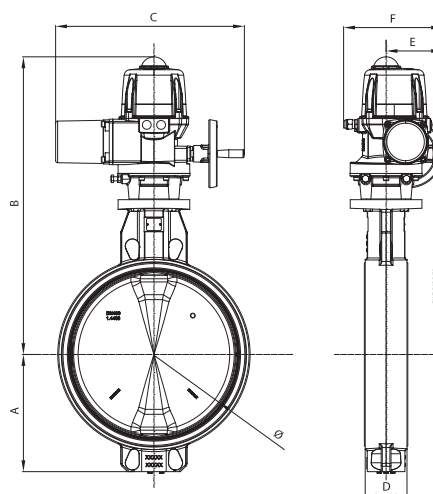


Wafer type with worm gear **VFY-WG**

DN	Ø	A	B	C	D	ØE	Weight (kg)
	mm						
400	392	286	619	312	102	400	67.5
450	442	315	652	312	114	400	91.5
500	492	355	682	350	127	400	115.5
600	592	415	843	411	154	500	170

Lug type with worm gear **VFY-LG**

DN	Ø	A	B	C	D	ØE	Weight (kg)
	mm						
400	392	286	619	312	102	400	90
450	442	315	652	312	114	400	122
500	492	355	682	350	127	400	163
600	592	415	843	411	154	500	245



Wafer type with 230V Electric actuator **VFY-WA**

DN	Ø	A	B	C	D	E	F	Weight (kg)
	mm							
400	392	286	684	482	102	211	300	79
450	442	315	723	482	114	211	300	108.5
500	492	355	907	389	127	260	572	152.5
600	592	415	962	389	154	260	572	200



Danfoss A/S

Heating Segment • danfoss.com • +45 7488 2222 • E-Mail: heating@danfoss.com

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and all Danfoss logotypes are trademarks of Danfoss A/S. All rights reserved.
