

Data sheet

Butterfly valves with hand lever VFY-WH, VFY-LH

Description



Features:

- Spline driven one piece shaft connected to spherically machined disc allows high torque transmission i.e. quick response and minimum back-lash
- Long term reliability due to upper and lower anti-friction bearings
- Safe maintenance : shaft blow out protection with circlip
- Padlockable hand lever with 10 positions.

Main Data*:

- DN 25 (32)-200
- k_{vs} 40 (62)-2500 m³/h
- PN 16 (10)
- EPDM Liner
- Stainless steel or Ductile iron Epoxy Coated disc
- Medium:
 - Circulation water or chilled glycolic water up to 50 %
- Medium temperature:
 - 10 ... 120 °C (EP disc)
 - 10 ... 130 °C (SS disc)
- Wafer or Lug connection
- Approvals: **CE** **EAC**

* please check the Directive 2014/68/UE table at the end of the data sheet for appropriate product selection

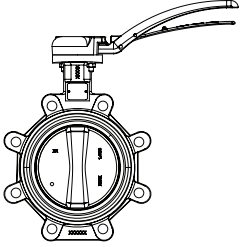
Ordering

Wafer type VFY-WH

DN	k _{vs} (m³/h)	PN	T _{max} (°C)	Disc	Code No.
25	40	10	130	Stainless Steel	065B7350
32/40	62	16			065B7351
50	79				065B7410
65	174				065B7411
80	275				065B7412
100	496				065B7413
125	883				065B7414
150	1212				065B7415
200	2500				065B7416
50	79	16	120	Ductile iron Epoxy Coated	065B8400
65	174				065B8401
80	275				065B8402
100	496				065B8403
125	883				065B8404
150	1212				065B8405
200	2500				065B8406

Ordering

Lug type VFY-LH

	DN	k _{vs} (m ³ /h)	PN	T _{max} (°C)	Disc	Code No.
	32	62	16	130	Stainless Steel	065B7365
	40	62				065B7366
	50	79				065B7420
	65	174				065B7421
	80	275				065B7422
	100	496				065B7423
	125	883				065B7424
	150	1212				065B7425
	200	2500				065B7436
	50	79	16	120	Ductile iron Epoxy Coated	065B8410
	65	174				065B8411
	80	275				065B8412
	100	496				065B8413
	125	883				065B8414
	150	1212				065B8415
	200	2500				065B8416

Spare parts

Note:
Please contact Danfoss sales to align on details before ordering spare parts.

Replacement Liner VFY-W Liner

DN	PN	Liner	Code No.
25	16	EPDM	065B7580
32/40			065B7581
50			065B7582
65			065B7583
80			065B7584
100			065B7585
125			065B7578
150			065B7579
200			065B7592

Replacement Hand lever VFY-Handle

for DN	Code No.
25/32/40/50/65/80/100	065B7605
125/150/200	065B7606

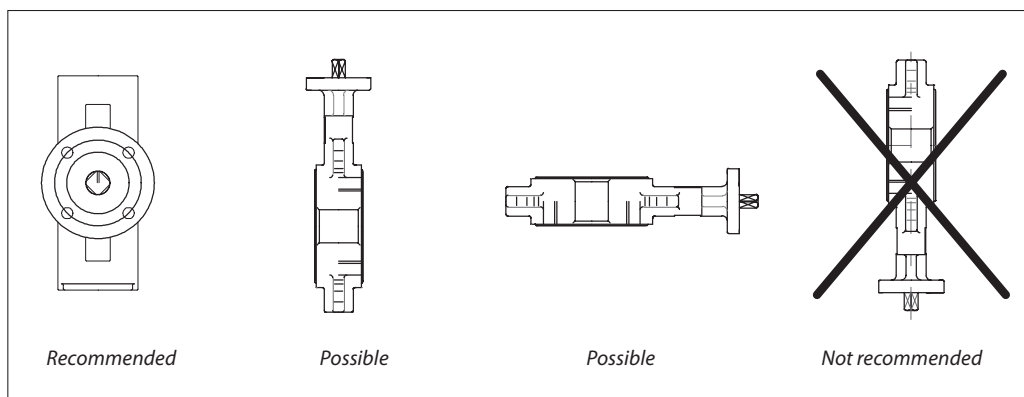
Technical data

Type			VFY-WH	VFY-LH
Nominal diameter	DN		25-200	32-200
k _{vs} value	m ³ /h		40-2500	62-2500
Rotation angle			90°	
Leakage rate			Acc. to PED 2014/68/EU, EN 12266-1, Rate A ¹⁾	
Nominal pressure	PN		16 (from DN 32-200) / 10 (for DN 25)	16
Medium			Circulation water, Glycolic water up to 50 %	
Medium temp.	EP disc	°C	-10 ... 120 (see p-T diagram)	
	SS disc		-10 ... 130 (see p-T diagram)	
Connection			Wafer (centering lugs)	Lug (tapped lugs)
Mounting			Mounting between flanges	Mounting between flanges or mounting deadline
Material				
Body			Ductile iron EN GJS 400-15 ²⁾	Ductile iron EN GJS 400-15 DN50-150 ²⁾ Ductile iron EN GJS 400-15 DN200
Disc			Ductile iron EN GJS 400-15 (DIN GGG 40) with Epoxy coating or Stainless Steel	
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	
Cap			EN GJS-400-15/EN GJL-250	
Hand lever			EN GJS-400-15	

¹⁾ No visible detectable leakage during the testing procedure

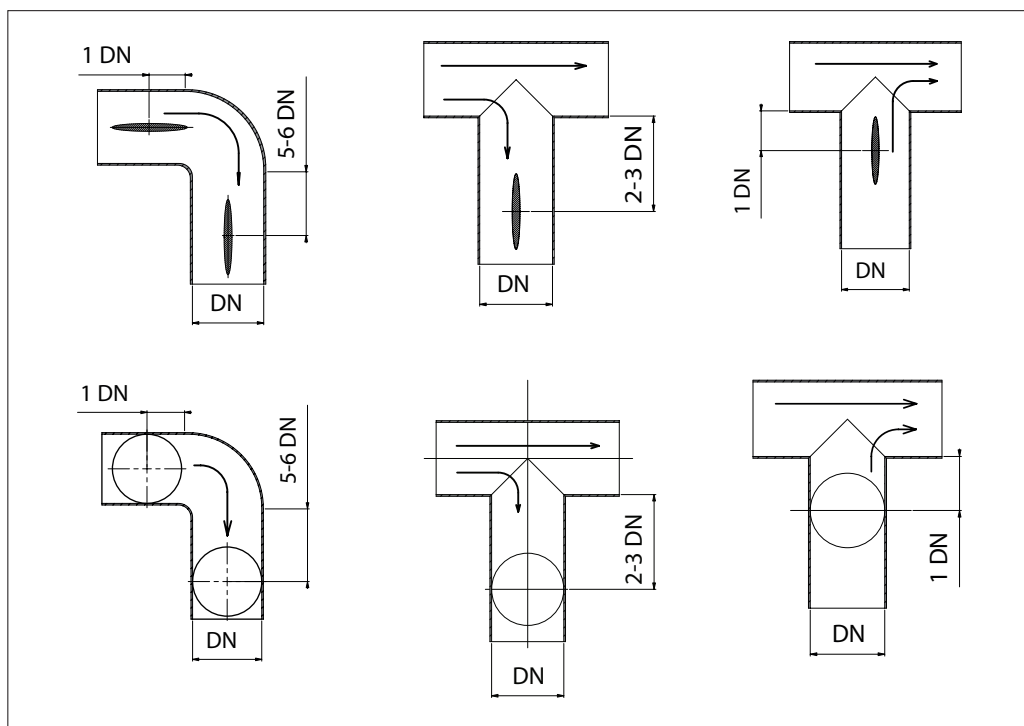
²⁾ Changed from Cast iron EN GJL 250 (DIN GG25) in Q4/2024

Installation positions

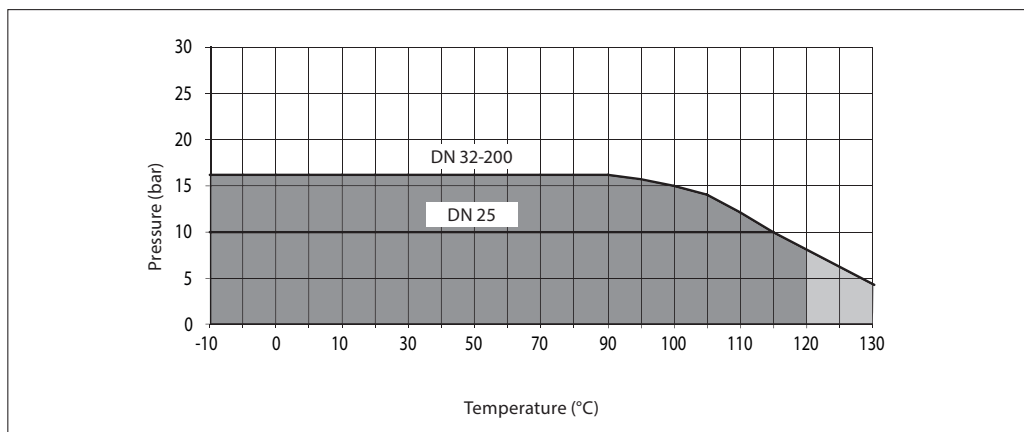


Installation conditions

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.

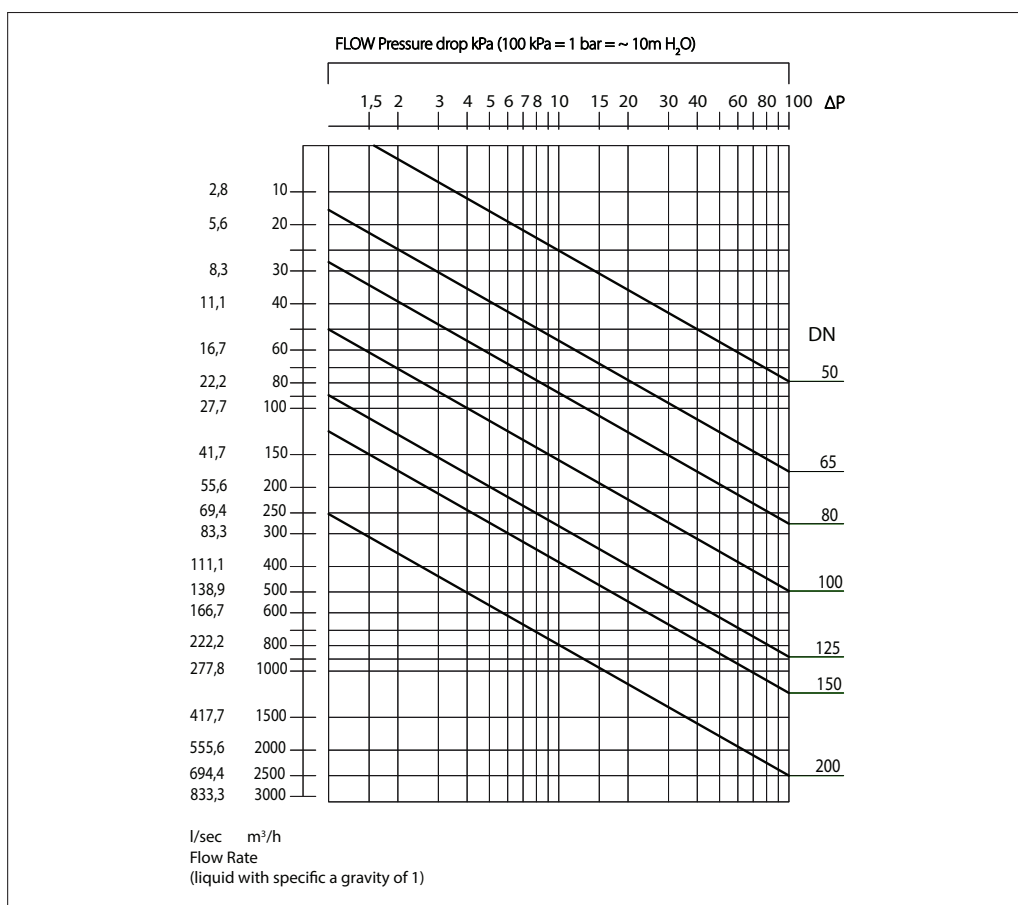


P-T diagram



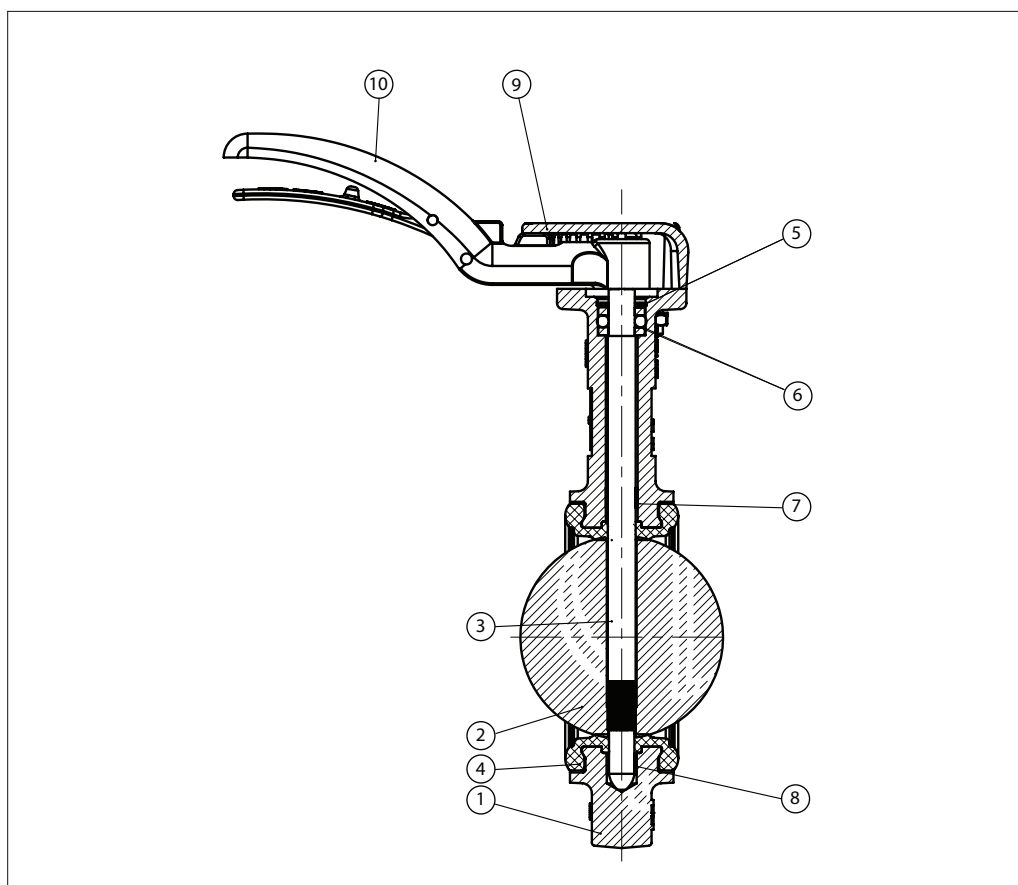
Headloss diagram

For water at 20°C



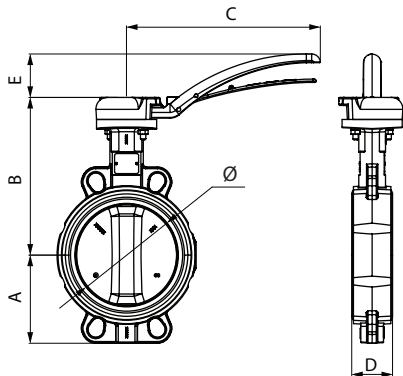
Design

1. Body
2. Disc
3. Shaft
4. Liner
5. Circlip
6. O-ring
7. Upper guide bush
8. Lower guide bush
9. Cap
10. Hand lever



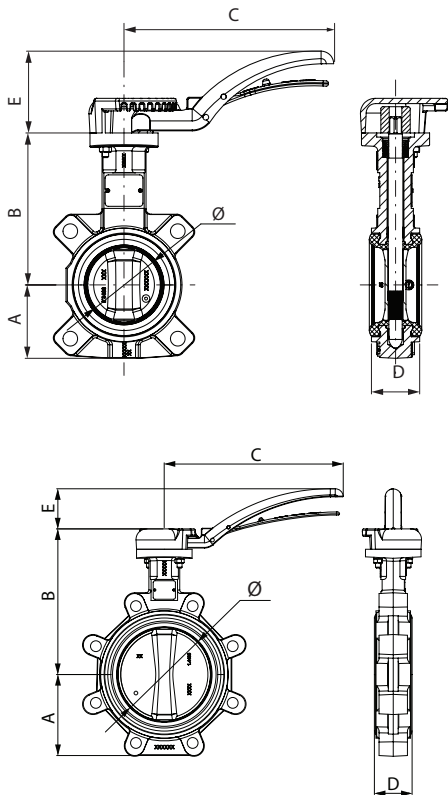
Dimensions

VFY-WH



DN	Ø	A	B	C	D	E	Weight (kg)
							VFY-WH
25	32	50	158	200	33	45	2.3
32/40	43	57	163	200	33	45	2.4
50	54	62	169	200	43	45	3.3
65	70	70	178	200	46	45	3.6
80	85	89	184	200	46	45	4.0
100	100	106	208	200	52	45	6.3
125	125	120	223	290	56	65	7.5
150	150	131	236	290	56	65	8.5
200	200	165	258	290	60	65	12.2

VFY-LH



DN	Ø	A	B	C	D	E	Weight (kg)
							VFY-LH
32/40	43	57	163	200	33	45	2.8
50	54	62	169	200	43	45	3.7
65	70	70	178	200	46	45	4.1

DN	Ø	A	B	C	D	E	Weight (kg)
							VFY-LH
80	85	89	184	200	46	45	5.1
100	100	106	208	290	52	65	7.6
125	125	120	223	290	56	65	10.0
150	150	131	236	290	56	65	11.0
200	200	162	290	290	60	98	17.2

Data sheet

VFY-WH, VFY-LH

Directive 2014/68/UE
Equipments under pressure

Products manufactured in conformity with the requirements of the directive, according to pressure, DN and fluid. Relevant for countries following this Directive (ie, PED)

Family		DN (mm)	Cat.	Mounting	PFA	PS			
					water	L1	L2	G1	G2
VFY DN25 to 350 mm with EPDM liner	10 bar	25 to 100	4\$3	Flanges	10	10	10	-	10
				End of line	6	6	6	-	6
	16 bar	125 to 350	I	Flanges	10	10	10	-	10
				End of line	6	6	6	-	6
		32 to 100	4\$3	Flanges	16	16	16	-	10
				End of line	12	12	12	-	10
		125	I	Flanges	16	16	16	-	10
				End of line	12	12	12	-	10
		150	I	Flanges	16	10	16	-	10
				End of line	12	6	12	-	10
		200 to 300	I	Flanges	16	10	16	-	10
				End of line	10	6	10	-	10
		350	I	Flanges	16	10	16	-	10
				End of line	8	6	8	-	8
	20 bar	32 to 250	4\$3	Flanges	20	-	20	-	-
				End of line	12	-	12	-	-
VFY DN400 to 1200 mm with EPDM liner	10 bar	400 to 1200	I	Flanges	10	10	10	-	-
				End of line	6	6	6	-	-
	16 bar	400 to 1200	I	Flanges	16	-	16	-	-
				End of line	8	-	8	-	-
	20 bar	400 to 600	I	Flanges	20	-	20	-	-
				End of line	10	-	10	-	-

PS: Maximum allowable pressure (bars) in accordance with directive 2014/68/EC
PFA: Allowable operating pressure (bars) for supply, distribution and disposal of water

L1: Group 1 liquid - Hazardous fluid category
L2: Group 2 liquid - Other fluids
G1: Group 1 gas - Hazardous gas category
G2: Group 2 gas - Other gasses

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