

## Data sheet

# Butterfly valves with gear box VFY-WG, VFY-LG

### 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
- Position indicator

### Main Data:

- DN 50-350
- $k_{vs}$  79-8520 m<sup>3</sup>/h
- PN 16
- EPDM Liner
- Stainless steel or Polyamid coated disc
- Medium:
  - Circulation water, drinking water or chilled glycolic water up to 50 %
- Medium Temperature:
  - 10 ... 120 °C (PA disc)
  - 10 ... 130 °C (SS disc)
- Wafer or Lug connection
- Approvals:

### Ordering

#### Wafer type VFY-WG

Picture	DN	$k_{vs}$ (m <sup>3</sup> /h)	PN	T <sub>max</sub> (°C)	Disc	Code No.
	50	79	16	130	Stainless Steel	065B7440
	65	174				065B7441
	80	275				065B7442
	100	496				065B7443
	125	883				065B7444
	150	1212				065B7445
	200	2500				065B7446
	250	3948				065B7447
	300	5635				065B7448
	350	8520	065B7449			
	50	79	16	120	Polyamid Coating	065B7430
	65	174				065B7431
	80	275				065B7432
	100	496				065B7433
	125	883				065B7434
	150	1212				065B7361
	200	2500				065B7362
	250	3948				065B7363
300	5635	065B7364				
350	8520	065B7435				

Ordering

Lug type **VFY-LG**

Picture	DN	$k_{vs}$ (m <sup>3</sup> /h)	PN	T <sub>max</sub> (°C)	Disc	Code No.
	50	79	16	-10 ... 130	Stainless Steel	065B7460
	65	174				065B7461
	80	275				065B7462
	100	496				065B7463
	125	883				065B7464
	150	1212				065B7465
	200	2500				065B7466
	250	3948				065B7467
	300	5635				065B7468
	350	8520				065B7469
	50	79	16	120	Polyamid Coating	065B7451
	65	174				065B7452
	80	275				065B7453
	100	496				065B7454
	125	883				065B7455
	150	1212				065B7376
	200	2500				065B7377
	250	3948				065B7378
	300	5635				065B7379
	350	8520				065B7456

Spare parts

Replacement Disc **VFY-Disc**

DN	PN	Disc	Code No.
50	16	Stainless steel	065B7567
65			065B7568
80			065B7569
100			065B7570
125			065B7571
150			065B7572
200			065B7573
250			065B7574
300			065B7575
350			065B7576
50	16	Polyamid coated	065B7555
65			065B7556
80			065B7557
100			065B7558
125			065B7559
150			065B7560
200			065B7561
250			065B7562
300			065B7563
350			065B7564

Replacement Liner **VFY-W Liner**

DN	PN	Liner	Code No.
50	16	EPDM	065B7582
65			065B7583
80			065B7584
100			065B7585
125			065B7586
150			065B7587
200			065B7588
250			065B7589
300			065B7590
350			065B7591

Replacement gearbox **VFY-Gearbox**

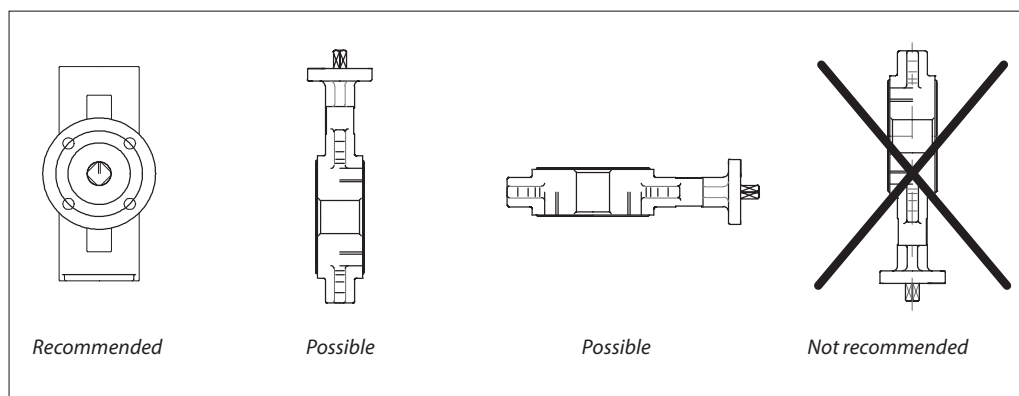
for DN	Code No.
50/65/80/100	065B7595
125/150	065B7596
200	065B7597
250	065B7598
300	065B7599
350	065B7600

Technical data

Type		VFY-WG	VFY-LG
Nominal diameter	DN	50-350	
k <sub>vs</sub> value	m <sup>3</sup> /h	79-8520	
Rotation angle		90 °	
Leakage rate		Acc. to PED 97/23/CE, EN 12266-1, Rate A <sup>1)</sup>	
Nominal pressure	PN	16	
Medium		Circulation water, Glycolic water up to 50 % or drinking water	
Medium temperature	PA disc	-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 deadline
<b>Material</b>			
Body		Cast iron EN GJL 250 (DIN GG25) DN 50-300 Ductile iron (DIN GGG40) DN 350	Cast iron EN GJL 250 (DIN GG25) DN 50-150 Ductile iron (DIN GGG40) DN 200-350
Disc		Ductile iron EN GJS 400-15 (DIN GGG 40) with Polyamid 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	
Gear box		Aluminium	

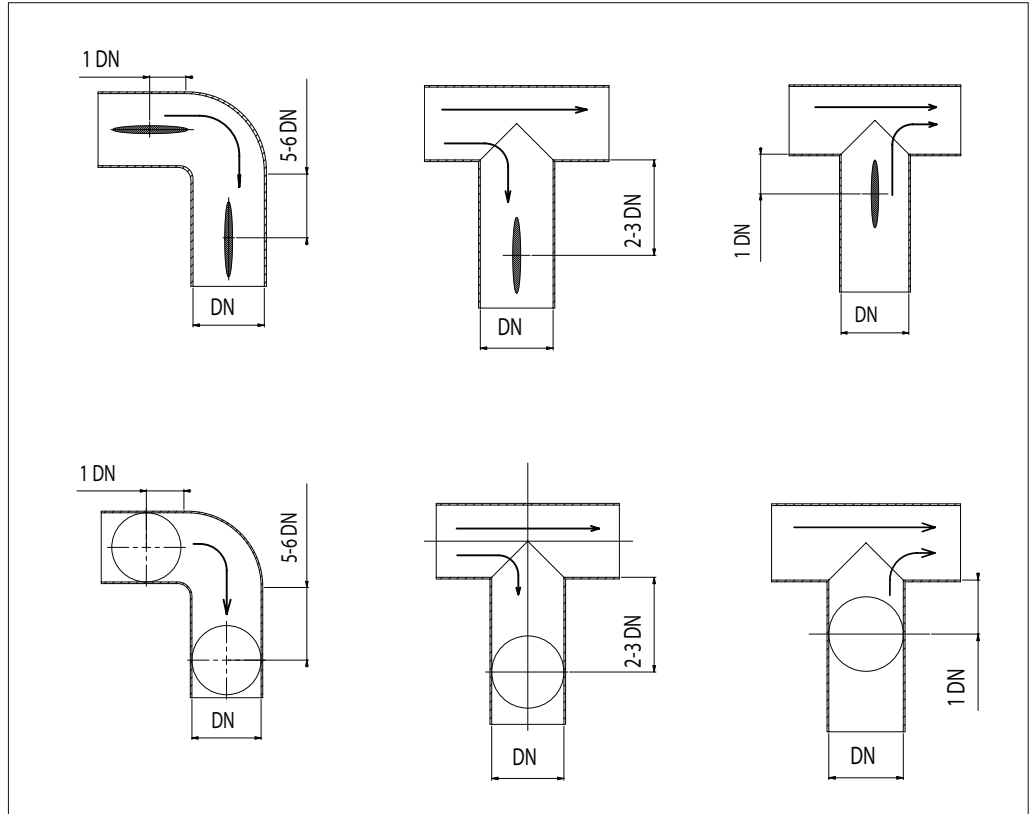
<sup>1)</sup> No visible defectable leakage during the testing procedure

Installation positions

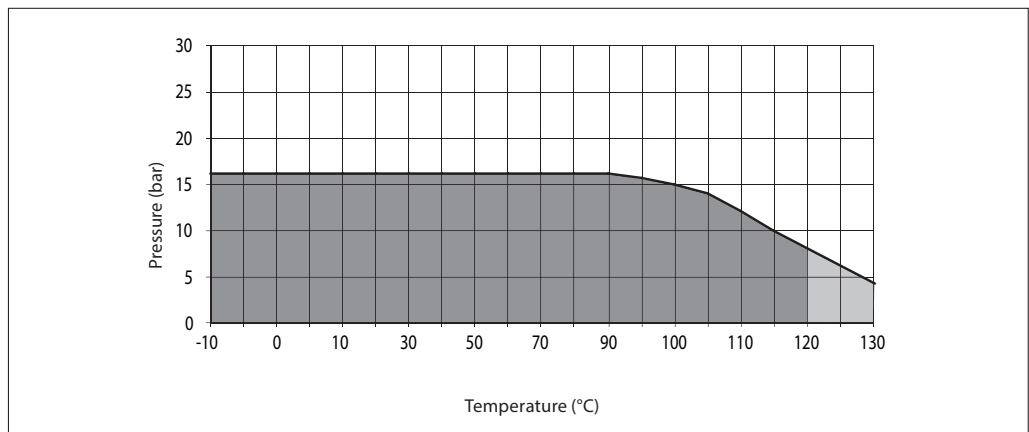


Installation conditions

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.

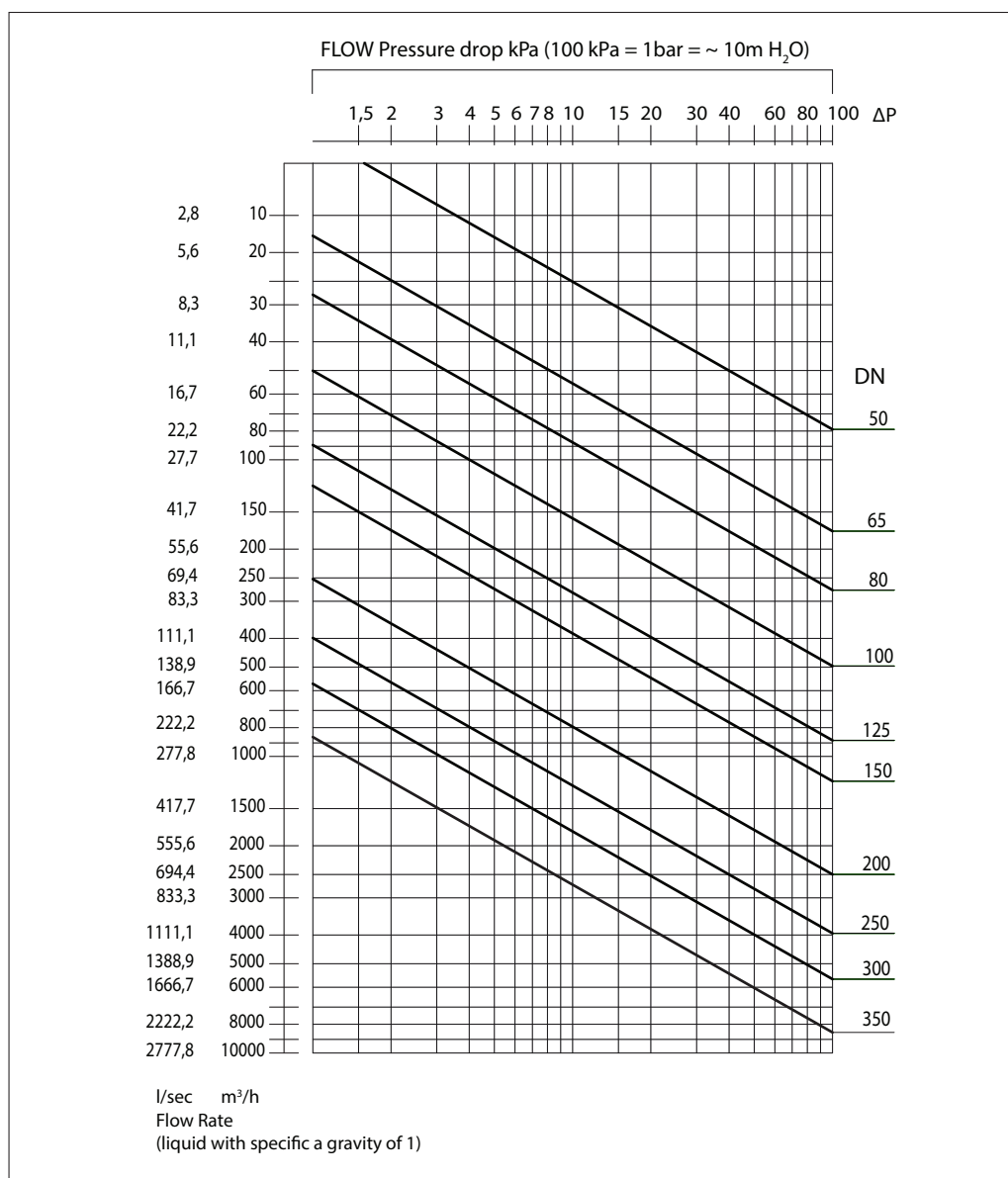


P-T diagram



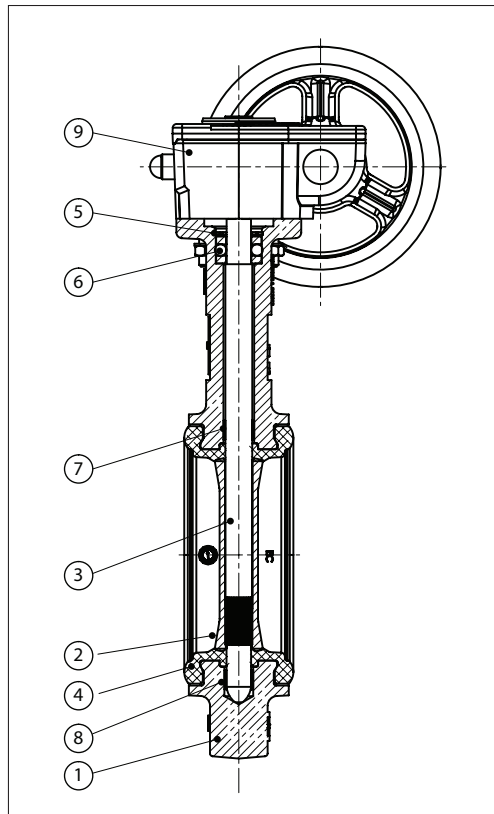
**Headloss diagram**

For water at 20 °C

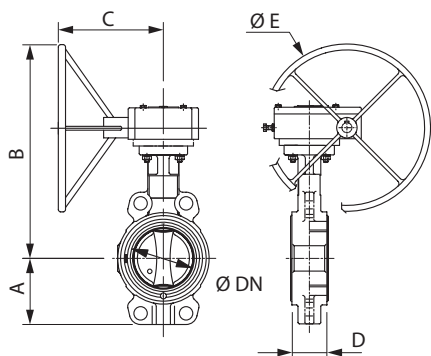


Design

- 1. Body
- 2. Disc
- 3. Shaft
- 4. Liner
- 5. Circlip
- 6. O-ring
- 7. Upper guide bush
- 8. Lower guide bush
- 9. Gear box

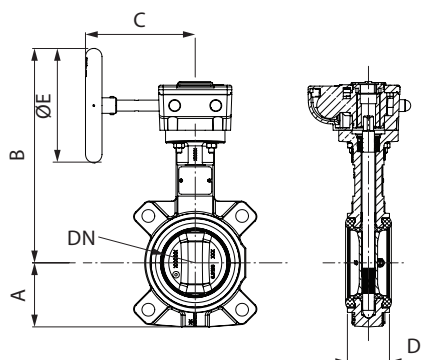


Dimensions



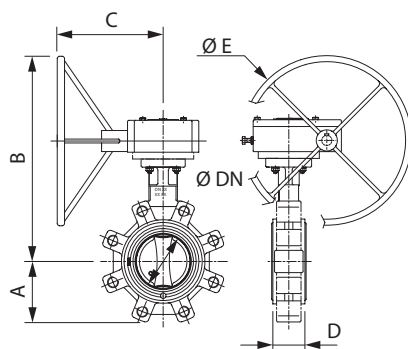
Waffer type **VFY-WG**

DN	A	B	C	D	ØE	Weight
	mm					(kg)
50	62	225,5	120	43	125	3,6
65	70	234,5	120	46	125	4
80	89	240,5	120	46	125	4,3
100	106	264,5	120	52	125	6,3
125	120	279,5	120	56	125	7,4
150	131	292,5	120	56	125	8,5
200	164	315	120	60	125	12,1
250	200	399	197	68	200	22,9
300	235	459	239	78	250	34,3
350	270	468	239	78	250	41,4



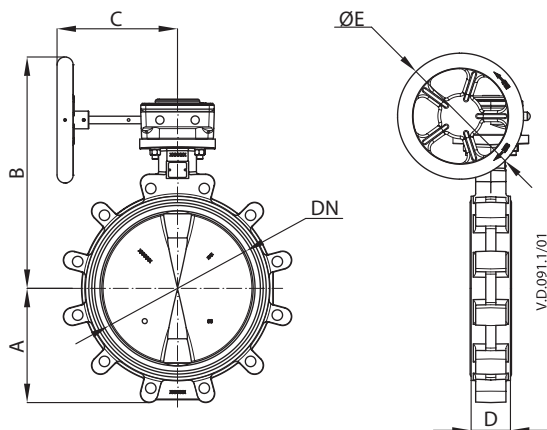
Lug type **VFY-LG**

DN	A	B	C	D	ØE	Weight
	mm					(kg)
50	62	225,5	120	43	125	4
65	70	234,5	120	46	125	4,5



Lug type **VFY-LG**

DN	A	B	C	D	ØE	Weight
	mm					(kg)
80	89	240,5	120	46	125	5,4
100	103	264,5	120	52	125	7,9
125	119	279,5	120	56	125	9,9
150	133	292,5	120	56	125	11,9



Lug type **VFY-LG**

DN	A	B	C	D	ØE	Weight
	mm					(kg)
200	168	373,5	197	60	200	22,9
250	198	399	197	68	200	29,6
300	227	459	239	78	250	41,3
350	248	468	239	78	250	49,7

