

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 Epoxy 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

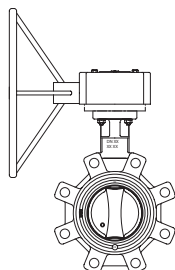
Wafer type VFY-WG

|     | DN   | $k_{vs}$<br>(m <sup>3</sup> /h) | PN  | T <sub>max</sub><br>(°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 | 065B7457                        |     |                          |                 |          |
| 300 | 5635 | 065B7458                        |     |                          |                 |          |
| 350 | 8520 | 065B7449                        |     |                          |                 |          |
| 50  | 79   | 16                              | 120 | Epoxy Coating            | 065B8420        |          |
| 65  | 174  |                                 |     |                          | 065B8421        |          |
| 80  | 275  |                                 |     |                          | 065B8422        |          |
| 100 | 496  |                                 |     |                          | 065B8423        |          |
| 125 | 883  |                                 |     |                          | 065B8424        |          |
| 150 | 1212 |                                 |     |                          | 065B8425        |          |
| 200 | 2500 |                                 |     |                          | 065B8426        |          |
| 250 | 3948 |                                 |     |                          | 065B8427        |          |
| 300 | 5635 |                                 |     |                          | 065B8428        |          |
| 350 | 8520 |                                 |     |                          | 065B8429        |          |

Ordering

Lug type **VFY-LG**

| DN  | k <sub>vs</sub><br>(m <sup>3</sup> /h) | PN | T <sub>max</sub><br>(°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                                   |    |                          |                 | 065B7406 |
| 250 | 3948                                   |    |                          |                 | 065B7407 |
| 300 | 5635                                   |    |                          |                 | 065B7408 |
| 350 | 8520                                   |    |                          |                 | 065B7469 |
| 50  | 79                                     | 16 | 120                      | Epoxy Coating   | 065B8430 |
| 65  | 174                                    |    |                          |                 | 065B8431 |
| 80  | 275                                    |    |                          |                 | 065B8432 |
| 100 | 496                                    |    |                          |                 | 065B8433 |
| 125 | 883                                    |    |                          |                 | 065B8434 |
| 150 | 1212                                   |    |                          |                 | 065B8435 |
| 200 | 2500                                   |    |                          |                 | 065B8436 |
| 250 | 3948                                   |    |                          |                 | 065B8437 |
| 300 | 5635                                   |    |                          |                 | 065B8438 |
| 350 | 8520                                   |    |                          |                 | 065B8439 |



Spare parts

Replacement Liner **VFY-W Liner**

| DN  | PN | Liner | Code No. |
|-----|----|-------|----------|
| 50  | 16 | EPDM  | 065B7582 |
| 65  |    |       | 065B7583 |
| 80  |    |       | 065B7584 |
| 100 |    |       | 065B7585 |
| 125 |    |       | 065B7578 |
| 150 |    |       | 065B7579 |
| 200 |    |       | 065B7592 |
| 250 |    |       | 065B7593 |
| 300 |    |       | 065B7594 |
| 350 |    |       | 065B7591 |

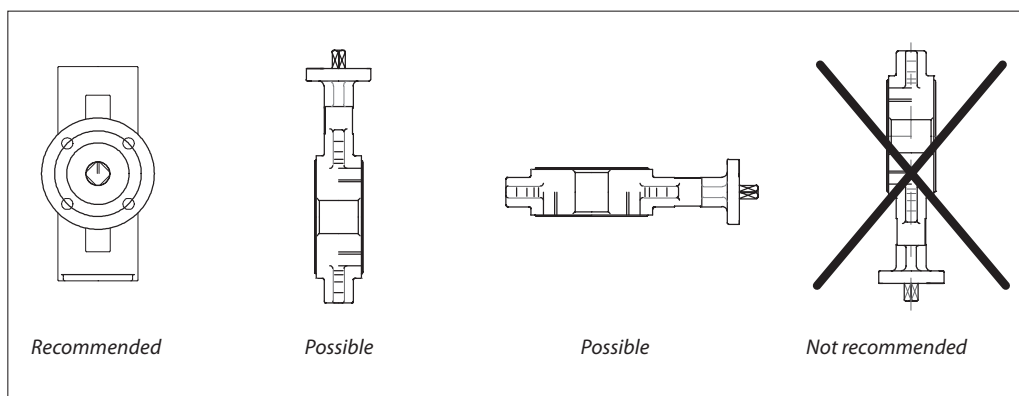
Replacement gearbox **VFY-Gearbox**

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

**Technical data**

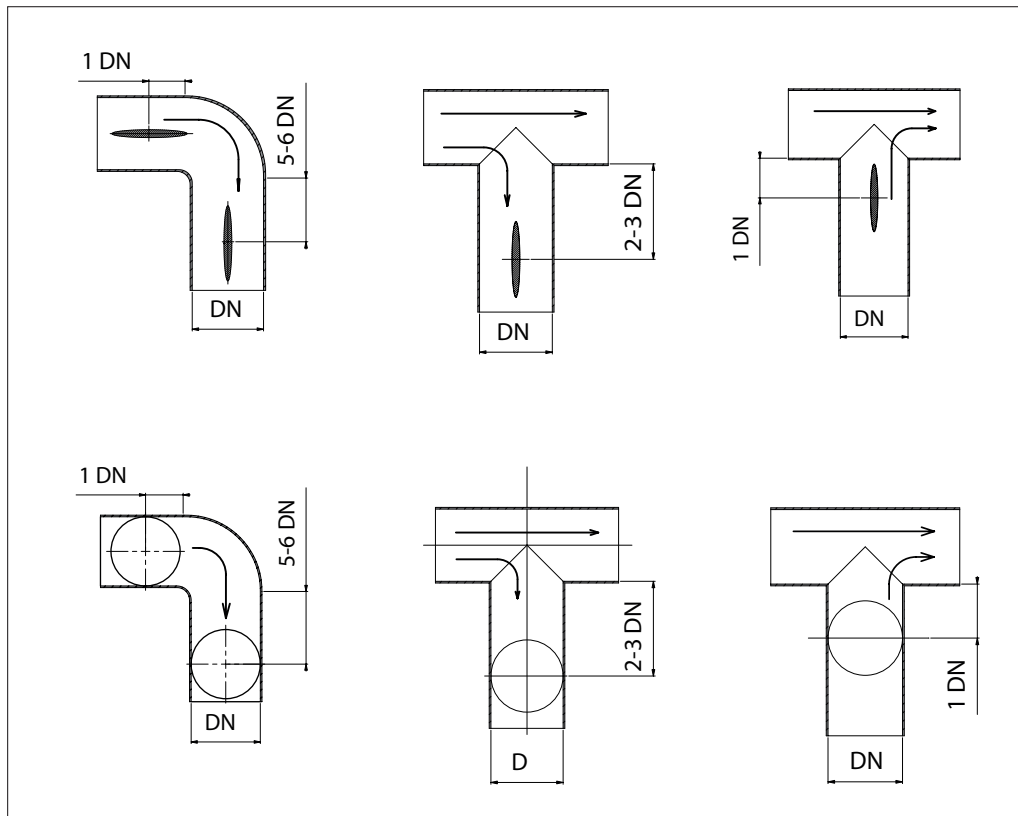
| Type               |                   | VFY-WG  | VFY-LG   |
|--------------------|-------------------|---|--|
| Nominal diameter   | DN                | 50-350  |  |
| $k_{vs}$ value     | m <sup>3</sup> /h | 79-8520   |  |
| Rotation angle     |                   | 90°   |  |
| Leakage rate       |                   | Acc. to PED 2014/68/EU, 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<br>Ductile iron (DIN GGG40) DN 350  | Cast iron EN GJL 250 (DIN GG25) DN 50-150<br>Ductile iron (DIN GGG40) DN 200-350 |
| 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   |  |
| Gear box           |                   | Aluminium   |  |

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

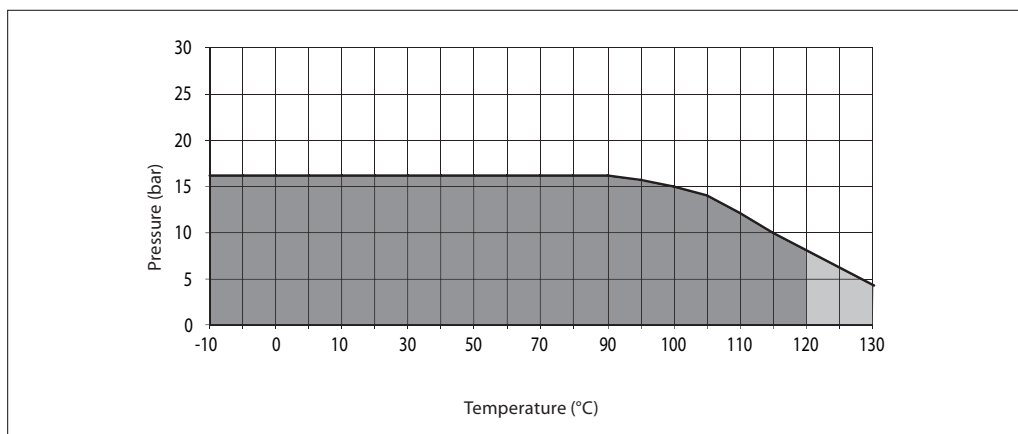
**Installation positions**


**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.

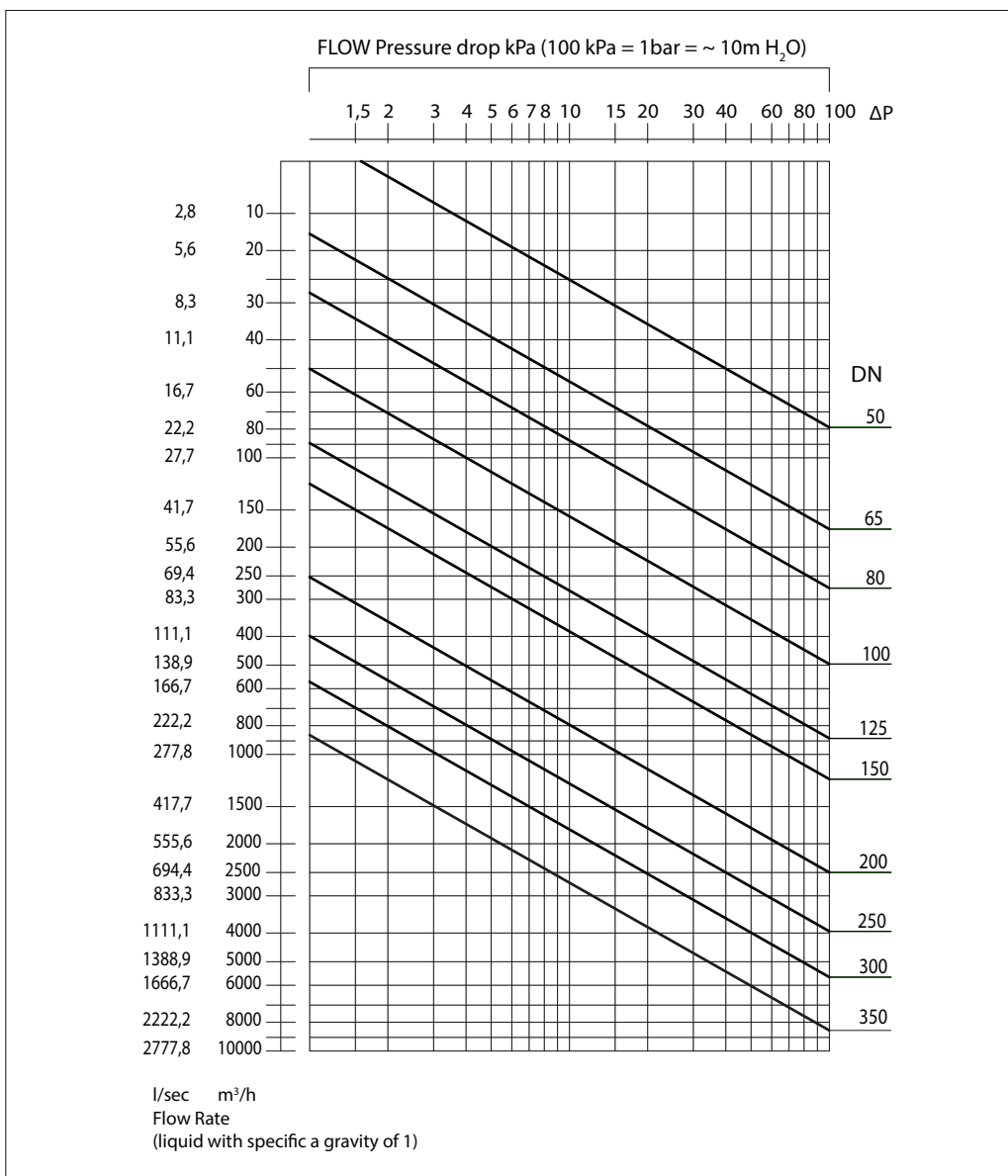


**P-T diagram**



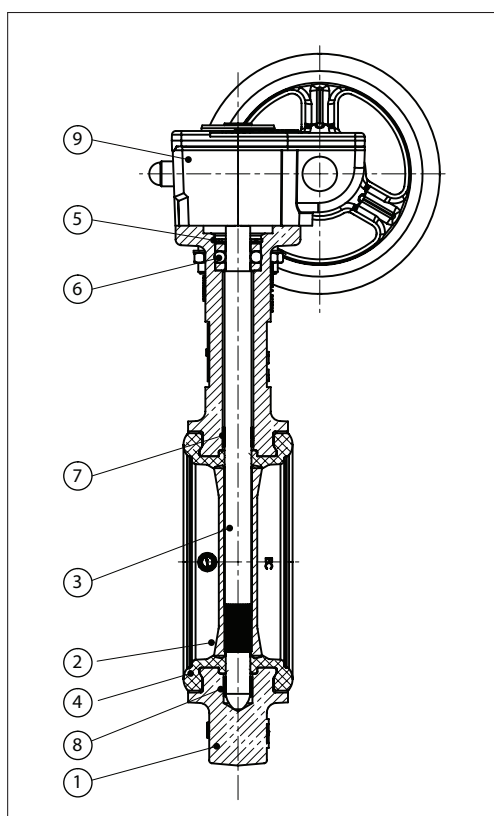
**Headloss diagram**

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 (kg) |
|-----|-----|-------|-----|----|-----|-------------|
|     | mm  |       |     |    |     |             |
| 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 | 166 | 315   | 120 | 60 | 125 | 12,3        |
| 250 | 196 | 429   | 239 | 70 | 250 | 25,2        |
| 300 | 238 | 453   | 239 | 77 | 250 | 28,9        |
| 350 | 270 | 468   | 239 | 78 | 250 | 41,4        |

Lug type **VFY-LG**

| DN | A  | B     | C   | D  | ØE  | Weight (kg) |
|----|----|-------|-----|----|-----|-------------|
|    | mm |       |     |    |     |             |
| 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 (kg) |
|-----|-----|-------|-----|----|-----|-------------|
|     | mm  |       |     |    |     |             |
| 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 (kg) |
|-----|-----|-----|-----|----|-----|-------------|
|     | mm  |     |     |    |     |             |
| 200 | 162 | 315 | 120 | 60 | 125 | 17          |
| 250 | 198 | 429 | 239 | 68 | 250 | 30,8        |
| 300 | 227 | 453 | 239 | 77 | 250 | 38,3        |
| 350 | 248 | 468 | 239 | 78 | 250 | 49,7        |



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