

Data sheet

Butterfly valve with electrical actuator VFY-WA

Description



- Position indicator
- Torque limiter
- Complete installation from factory - ready for installation

Main Data:

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
- Manual operation

- DN 25-350
- k_{vs} 40-8520 m³/h
- PN 16 (10)
- 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
- Nominal voltage:
 - 24 V; 50 Hz/60 Hz
 - 230 V; 50 Hz/60 Hz
- Control input signal: On/Off or 3-point
- Torque: 20-600 Nm
- Grade of enclosure: IP66/68
- Ambient temperature: -10 ... 55 °C
- Duty rating IEC34: cycle S4 (50 %)
- Approvals: **CE EAC**

Ordering

Type VFY-WA 230 V

Picture	DN	k_{vs} (m ³ /h)	PN	T _{max} (°C)	Opening time (s)	Disc	Code No.
	25	40	10	120	12	Stainless Steel	082G7350
	32/40	62	16				082G7351
	50	79					082G7400
	65	174					082G7401
	80	275			7		082G7402
	100	496			12		082G7403
	125	883			12		082G7404
	150	1212			12		082G7405
	200	2500			60		082G7406
	250	3948			60		082G7407
	300	5635			38		082G7408
	350	8520			38		082G7409
	50	79	16	120	12	Polyamid Coating	082G7352
	65	174			12		082G7353
	80	275			7		082G7354
	100	496			12		082G7355
	125	883			12		082G7356
	150	1212			12		082G7357
	200	2500			60		082G7358
	250	3948			60		082G7359
	300	5635			38		082G7360
	350	8520			38		082G7375

Ordering (continuous)

Type VFY-WA 24 V

Type VFY-WA 24 V							
Picture	DN	k _{vs} (m³/h)	PN	T _{max} (°C)	Opening time (s)	Disc	Code No.
	25	40	10	120	12	Stainless Steel	082G7361
	32/40	62	16			082G7362	
	50	79	16			082G7363	
	65	174				082G7364	
	80	275			082G7365		
	100	496			082G7366		
	125	883			082G7367		
	150	1212			082G7368		
	200	2500	082G7369				
	250	3948	082G7370				

Spare parts

Replacement butterfly valve
VFY-WB (wafer type with bare shaft)

Type A (water type with bare shaft)			
DN	PN	Disc	Code No.
25	10	Stainless steel	065B7380
32/40	16		065B7381
50			065B7545
65			065B7546
80			065B7547
100			065B7548
125			065B7549
150			065B7550
200			065B7551
250			065B7552
300		065B7553	
350		065B7554	
50	16	Polyamid coated	065B7382
65			065B7383
80			065B7384
100			065B7385
125			065B7386
150			065B7387
200			065B7388
250			065B7389
300			065B7390
350			

Replacement Disc
VFY-Disc

DN	PN	Disc	Code No.
25	10	Stainless steel	065B7565
32/40	16		065B7566
50			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 actuator AMB-Y

Actuator type	for DN	Torque	Opening time (s)	Power consumption (W)	Supply voltage (V)	Code No.
ER20	25/32/40/50/65	20	12	15	230 V	082G7381
ER35	80	35	7	45		082G7382
ER60	100-150	60	12	45		082G7383
VS300	200	300	60	45		082G7386
VS300	250	300	60	45		082G7387
VT600	300	600	38	25		082G7396
VT600	350	600	38	25		082G7397
ER20	25/32/40/50/65	20	12	15	24 V	082G7388
ER35	80	35	7	45		082G7389
ER60	100-150	60	12	45		082G7390
VS300	200	300	60	45		082G7393
VS300	250	300	60	45		082G7394

Note:

Contact Danfoss sales organization regarding information about replacement actuators for VFY butterfly valves purchased before 10/2013.

Ordering (continuous)

Replacement Liner VFY-Liner

DN	PN	Liner	Code No.
25	10	EPDM	065B7565
32/40	16		065B7566
50			065B7567
65			065B7568
80			065B7569
100			065B7570
125			065B7571
150			065B7572
200			065B7573
250			065B7574
300			065B7575
350			065B7576

Note:

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

Technical data

Actuator

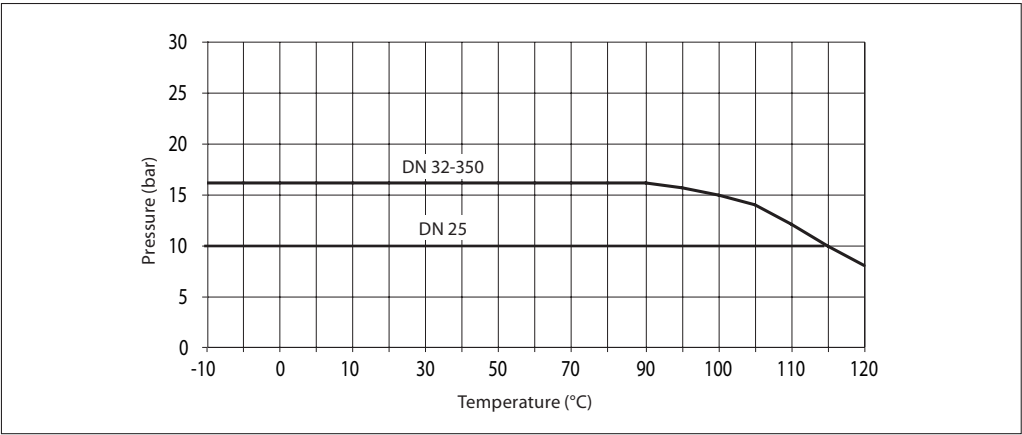
Power supply	DN 25-250	V	100-240 AC; 100-350 DC 15-30 AC; 12-40 DC
Power supply	DN 300-350		230 AC
Frequency		Hz	50/60
Control Input	DN 25-250		on/off
	DN 300-350		3-point
Torque		Nm	20-600
Ambient temperature		°C	-10 ... 55
Duty Rating IEC34			S4 (50 %)
Grade of enclosure	DN 25-150		IP66
	DN 200-350		IP68
marking in accordance with standards			Low voltage directive (LVD) 2006/95/EC: EN61000-3-2, EN61000-3-3, EN61000-6-4, EN61000-6-2
			EMC Directive 2004/108/EC: EN61010-1

Valve

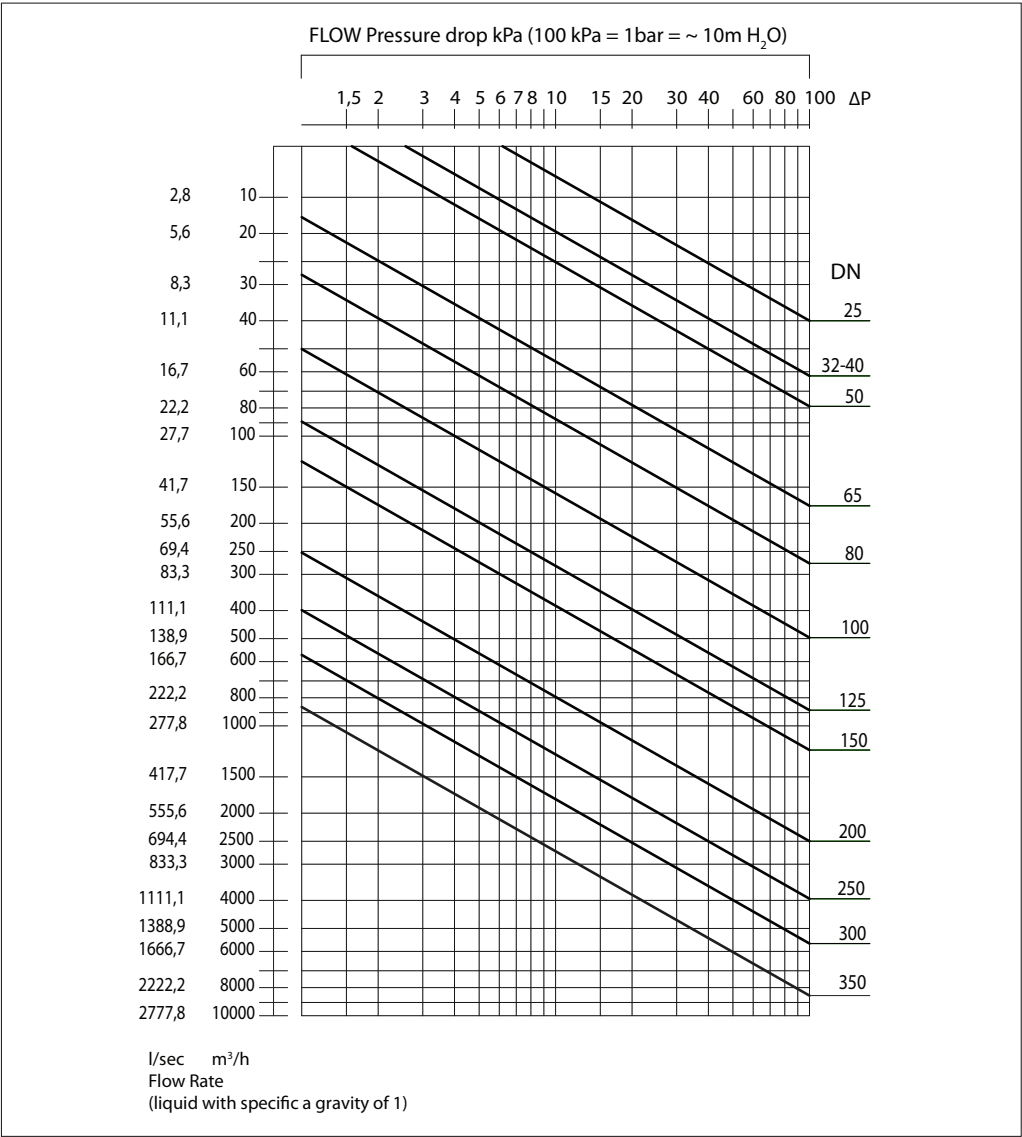
Nominal diameter	DN	25-350
k _{vs} value	m³/h	40-8520
Rotation angle		90°
Leakage rate		Acc. to PED 97/23/CE, EN 12266-1, Rate A ¹⁾
Nominal pressure	PN	16 (10)
Medium		Circulation water, drinking water, chilled glycolic water up to 50%
Medium temperature	°C	-10 ... 120 (see PT diagram)
Connection		Centering lugs (Wafer type)
Mounting		Mounting between flanges
Material		
Body	DN 25-300	Cast iron EN GJL 250 (DIN GG25)
	DN 350	Ductile iron (DIN GGG40)
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

¹⁾ No visible defectable leakage during the testing procedure

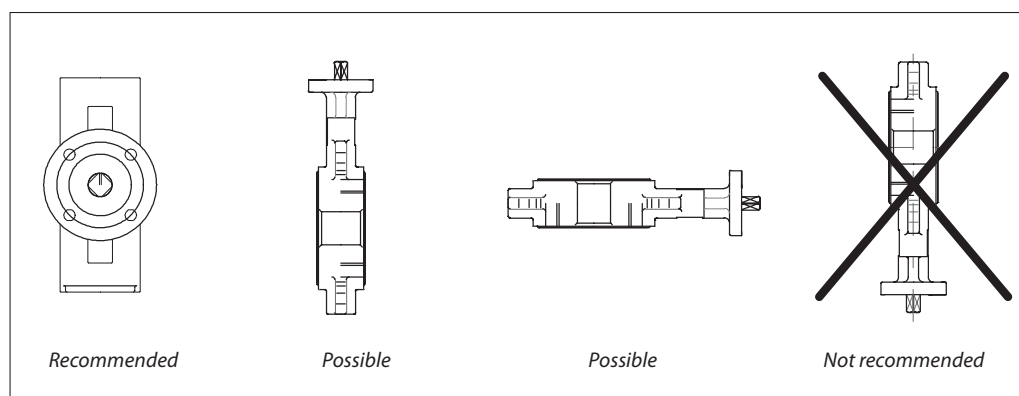
P-T diagram



Headloss diagram
For water at 20°C

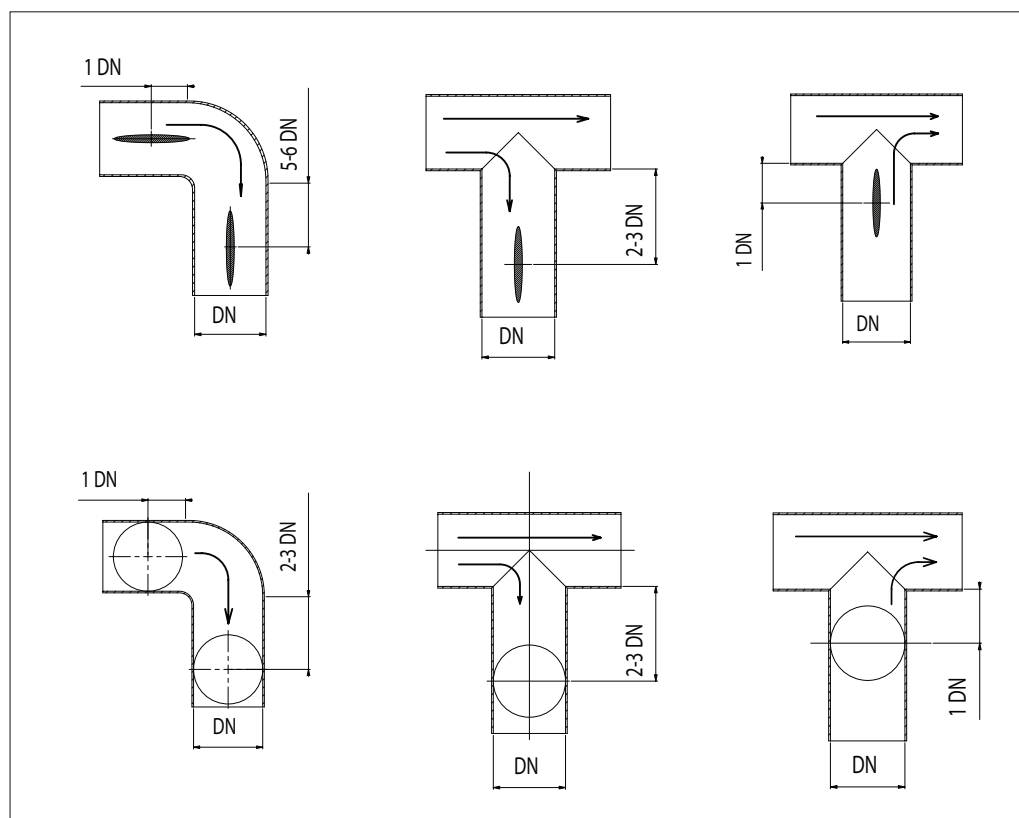


Installation positions

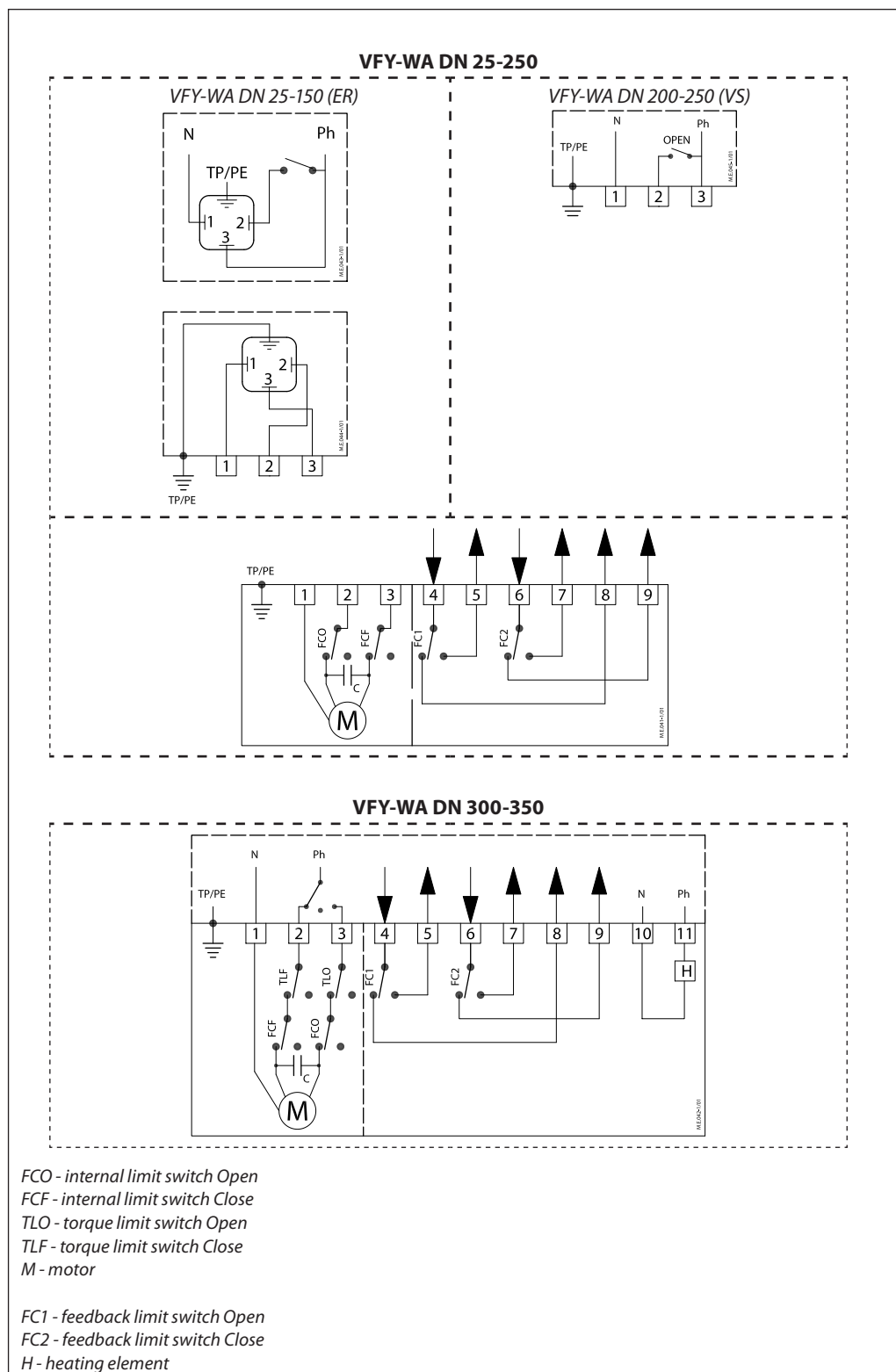


Installation conditions

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.

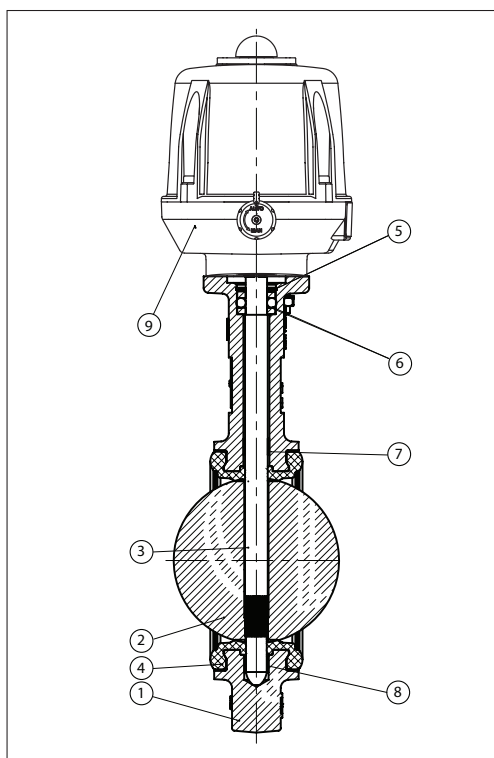


Wiring

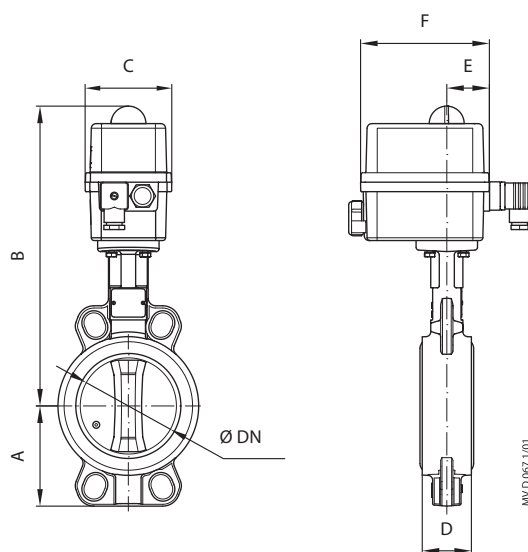


Design

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



Dimensions



VFY-WA
(with actuator AMB-Y ER for DN 25 - 125)

DN	A	B	C	D	E	F	Weight (kg)
	mm						
25	50	277	92	32	45	136	3,2
32/40	57	282	92	32	45	136	3,3
50	62	288	92	43	45	136	3,4
65	70	297	92	46	45	136	4,5
80	89	303	92	46	45	136	4,6
100	105	351	128	52	55	151	6,4
125	120	366	128	56	55	151	8,5
150	131	359	128	56	55	151	10,5

Dimensions *(continuous)*

