

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					082G7402				
	100	496					082G7403				
	125	883					082G7404				
	150	1212					082G7405				
	200	2500					082G7406				
	250	3948					082G7407				
	300	5635					082G7408				
	350	8520					082G7409				
	50	79					16	120	12	Polyamid Coating	082G7352
	65	174									082G7353
	80	275		082G7354							
	100	496	082G7355								
	125	883	082G7356								
	150	1212	082G7357								
	200	2500	082G7358								
	250	3948	082G7359								
	300	5635	082G7360								
	350	8520	082G7375								

Ordering (continuous)

Type VFY-WA 24 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	082G7361
	32/40	62	16				082G7362
	50	79	16			Polyamid Coating	082G7363
	65	174					082G7364
	80	275					082G7365
	100	496					082G7366
	125	883					082G7367
	150	1212					082G7368
	200	2500					082G7369
	250	3948					082G7370
				7			
				12			
				12			
				12			
				60			
				60			

Spare parts

Replacement butterfly valve
VFY-WB (wafer 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	Polyamid coated
350	065B7554		
50	16	065B7382	
65		065B7383	
80		065B7384	
100		065B7385	
125		065B7386	
150		065B7387	
200		065B7388	
250		065B7389	
300		065B7390	
350		065B7391	

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	Polyamid coated
350	065B7576		
50	16	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

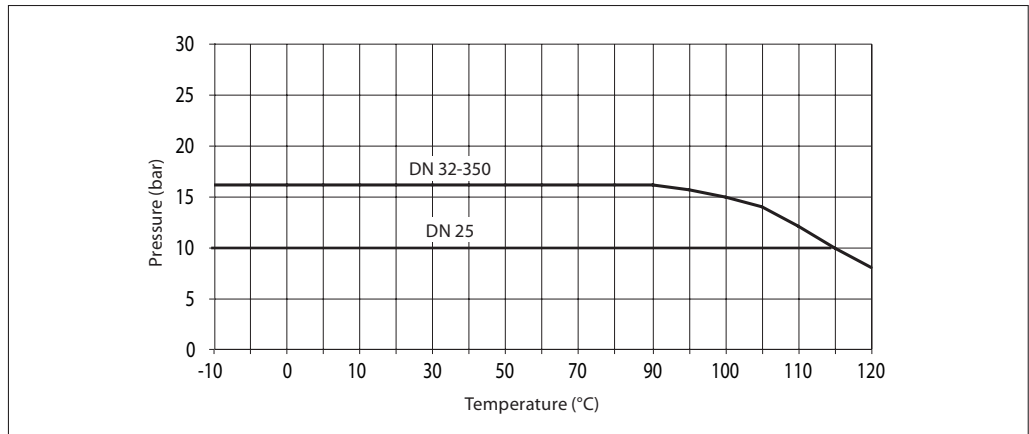
Power supply	DN 25-250	V	100-240 AC; 100-350 DC 15-30 AC; 12-40 DC
Power supply	DN 300-350		230 AC
Frequency		Hz	50/60
Control Input	DN 25-250		on/off
	DN 300-350		3-point
Torque		Nm	20-600
Ambient temperature		°C	-10 ... 55
Duty Rating IEC34			S4 (50 %)
Grade of enclosure	DN 25-150		IP66
	DN 200-350		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

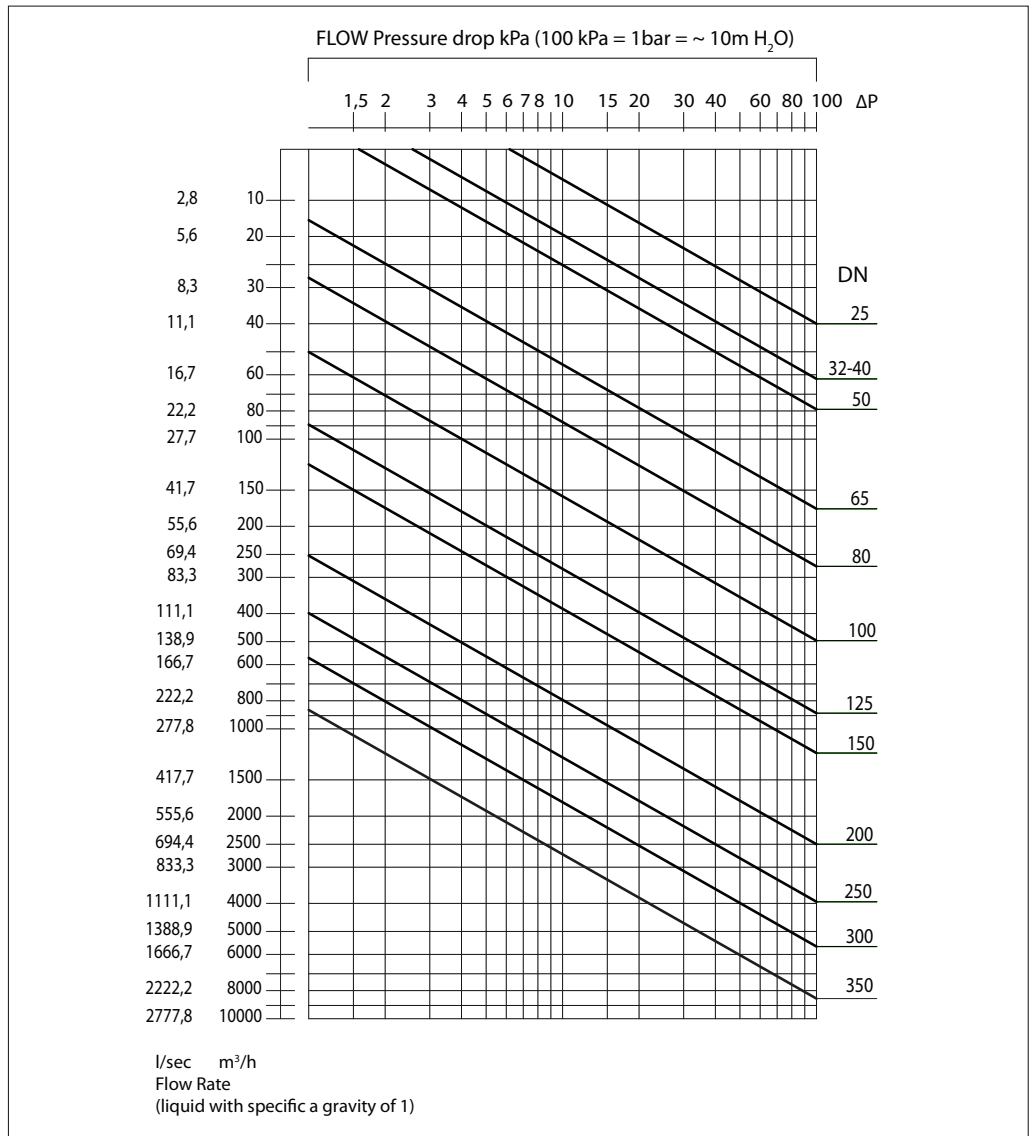
Nominal diameter	DN	25-350
k_{vs} value	m ³ /h	40-8520
Rotation angle		90°
Leakage rate		Acc. to PED 97/23/CE, EN 12266-1, Rate A ¹⁾
Nominal pressure	PN	16 (10)
Medium		Circulation water, drinking water, chilled glycolic water up to 50%
Medium temperature	°C	-10 ... 120 (see PT diagram)
Connection		Centering 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

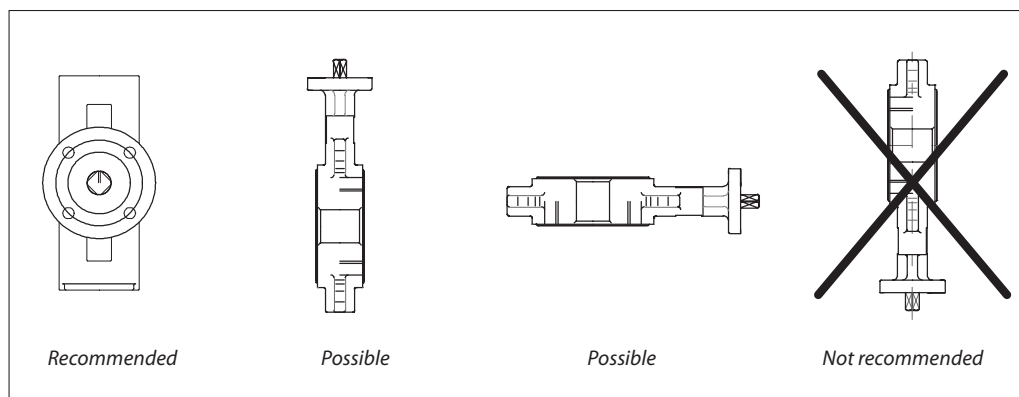
P-T diagram



Headloss diagram
For water at 20°C

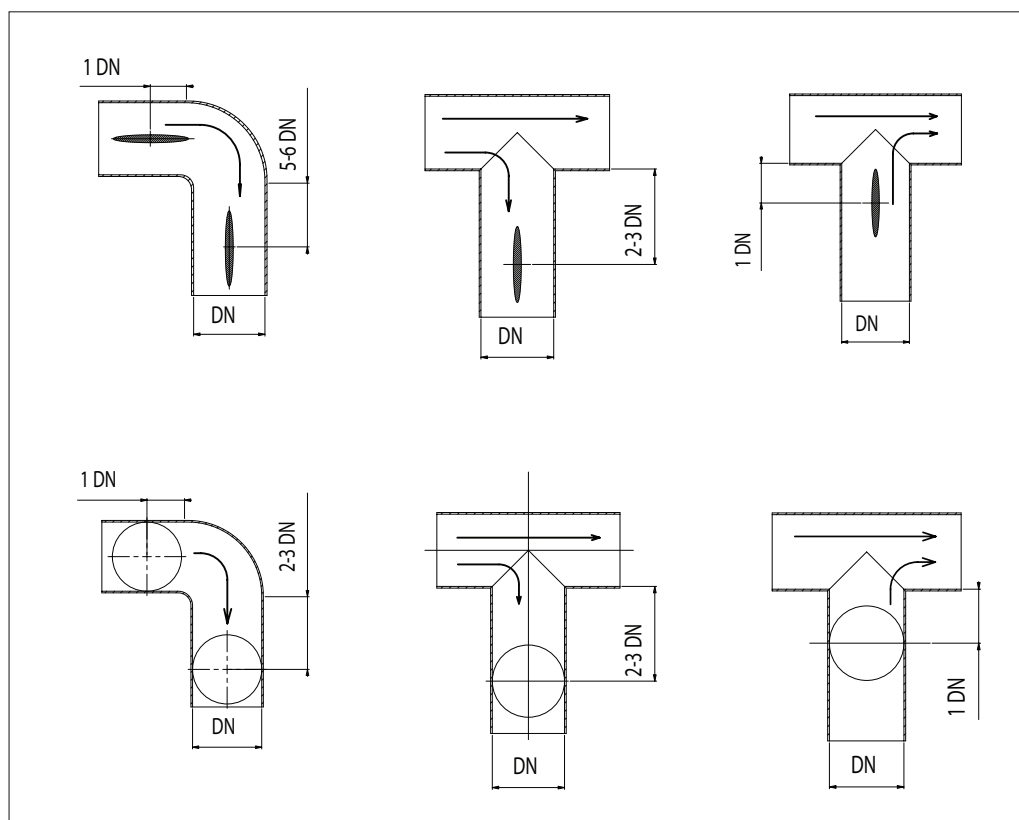


Installation positions

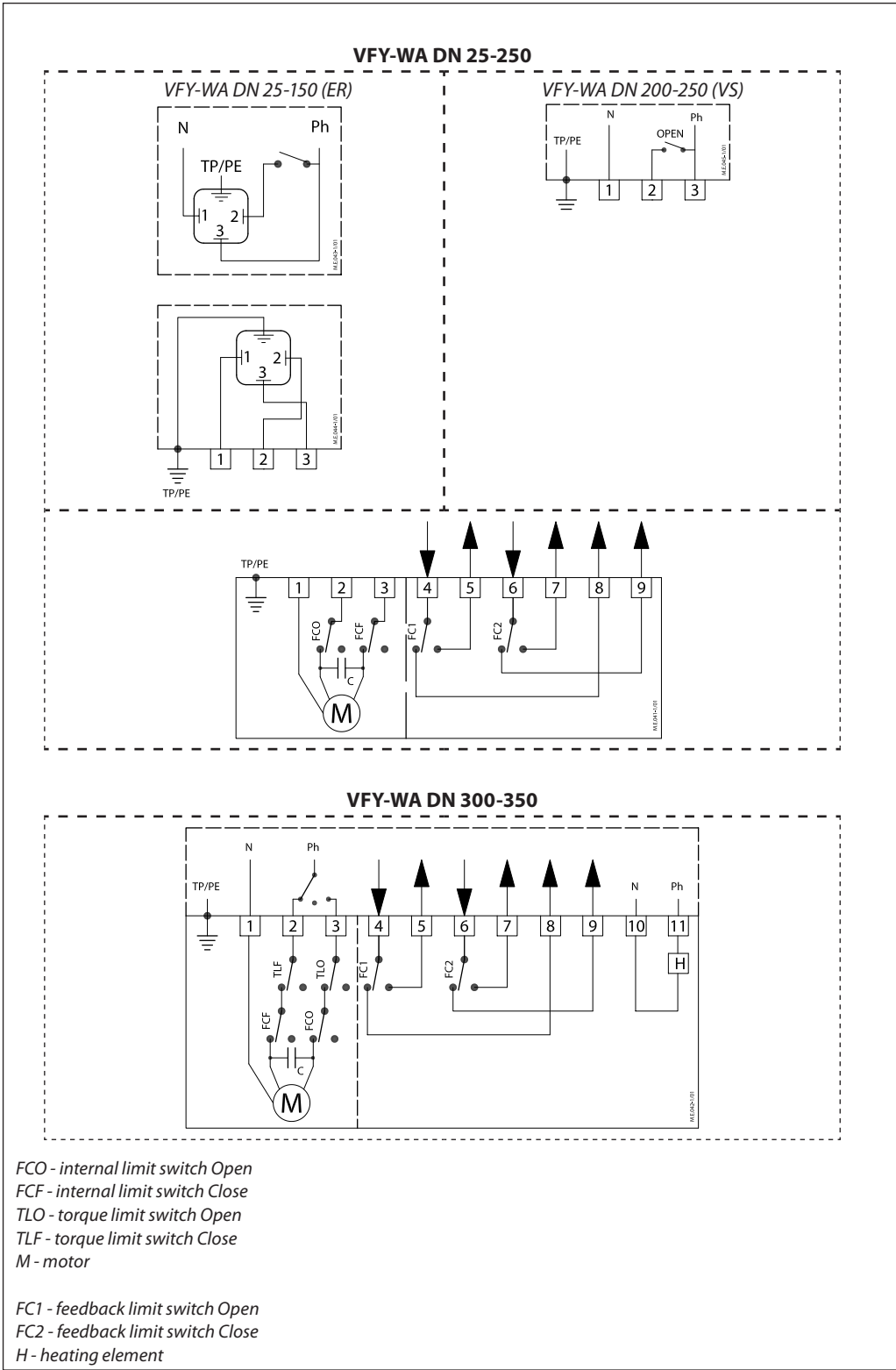


Installation conditions

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.

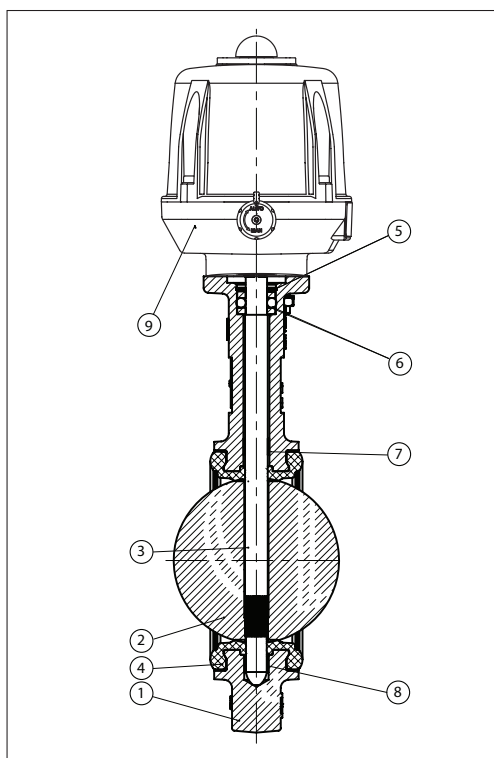


Wiring

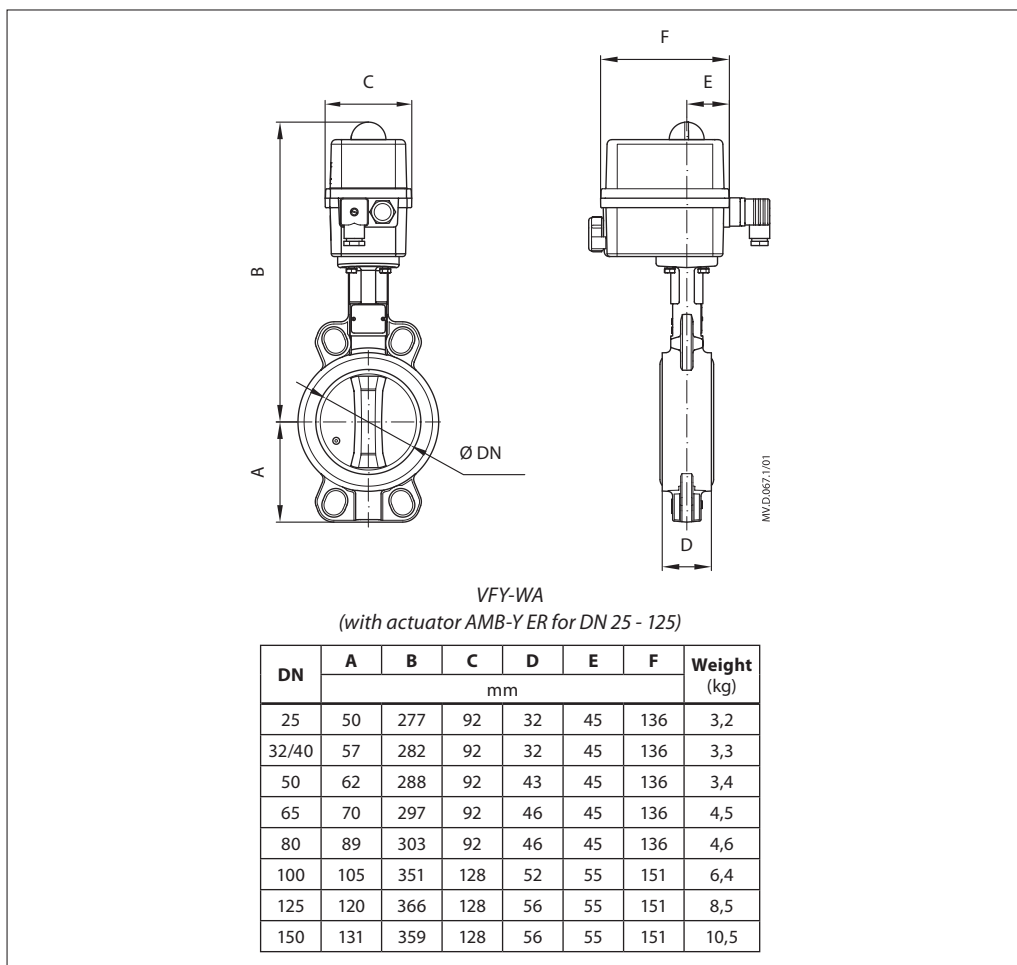


Design

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



Dimensions



Dimensions (continuous)

