

Data sheet

Butterfly valve with electrical actuator VFY-WA

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
- Manual operation

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

Main Data:

- 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 (PA disc)
 - 10 ... 130 °C (SS disc)
- 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:  

Ordering

Type VFY-WA 230 V

Picture	DN	k_{vs} (m³/h)	PN	T _{max} (°C)	Opening time (s)	Disc	Code No.	
	25	40	10	130	12	Stainless Steel	082G7350	
	32/40	62	16				12	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			30			082G7410
	250	3948			60			082G7412
	300	5635			38			082G7413
	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			30		082G7372	
	250	3948			60		082G7379	
	300	5635			38		082G7380	
	350	8520			38		082G7375	

Ordering (continuous)

Type VFY-WA 24 V

type VFY-WA							
Picture	DN	k_{VS} (m³/h)	PN	T _{max} (°C)	Opening time (s)	Disc	Code No.
	25	40	10	130	12	Stainless Steel	082G7361
	32/40	62	16			082G7362	
	50	79	16	120	7	Polyamid Coating	082G7363
	65	174					082G7364
	80	275					082G7365
	100	496					082G7366
	125	883					082G7367
	150	1212					082G7368
	200	2500					082G7373
	250	3948					082G7374

Spare parts

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 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
250			065B7593
300			065B7594
350			065B7591

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
VS150	200	150	30	45		082G7398
VS300	250	300	60	45		082G7387
VT600	300-350	600	38	250		082G7396
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
VS150	200	150	30	45		082G7399
VS300	250	300	60	45		082G7394

Note:

Contact Danfoss sales organization regarding information about replacement actuators for VFY butterfly valves purchased before 01/2015.

Technical data

Actuator

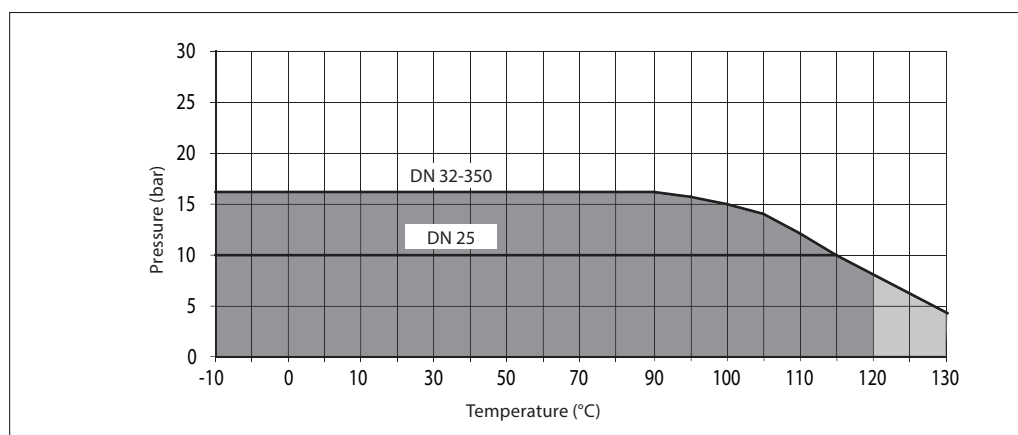
Power supply	DN 25-250	V	100-240 AC; 100-350 DC 15-30 AC; 12-48 DC
Power supply	DN 300-350		230 AC
Frequency (AC)		Hz	50/60
Control Input	DN 25-250		on/off
	DN 300-350		3-point
Torque		Nm	20-600
Ambient temperature		°C	-10 ... 55
Duty Rating IEC34			S4 (50 %)
Grade of enclosure	DN 25-150		IP66
	DN 200-350		IP68 (1m, 72h)
 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	PA disc	°C	−10 ... 120 (see PT diagram)
	SS disc		−10 ... 130 (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

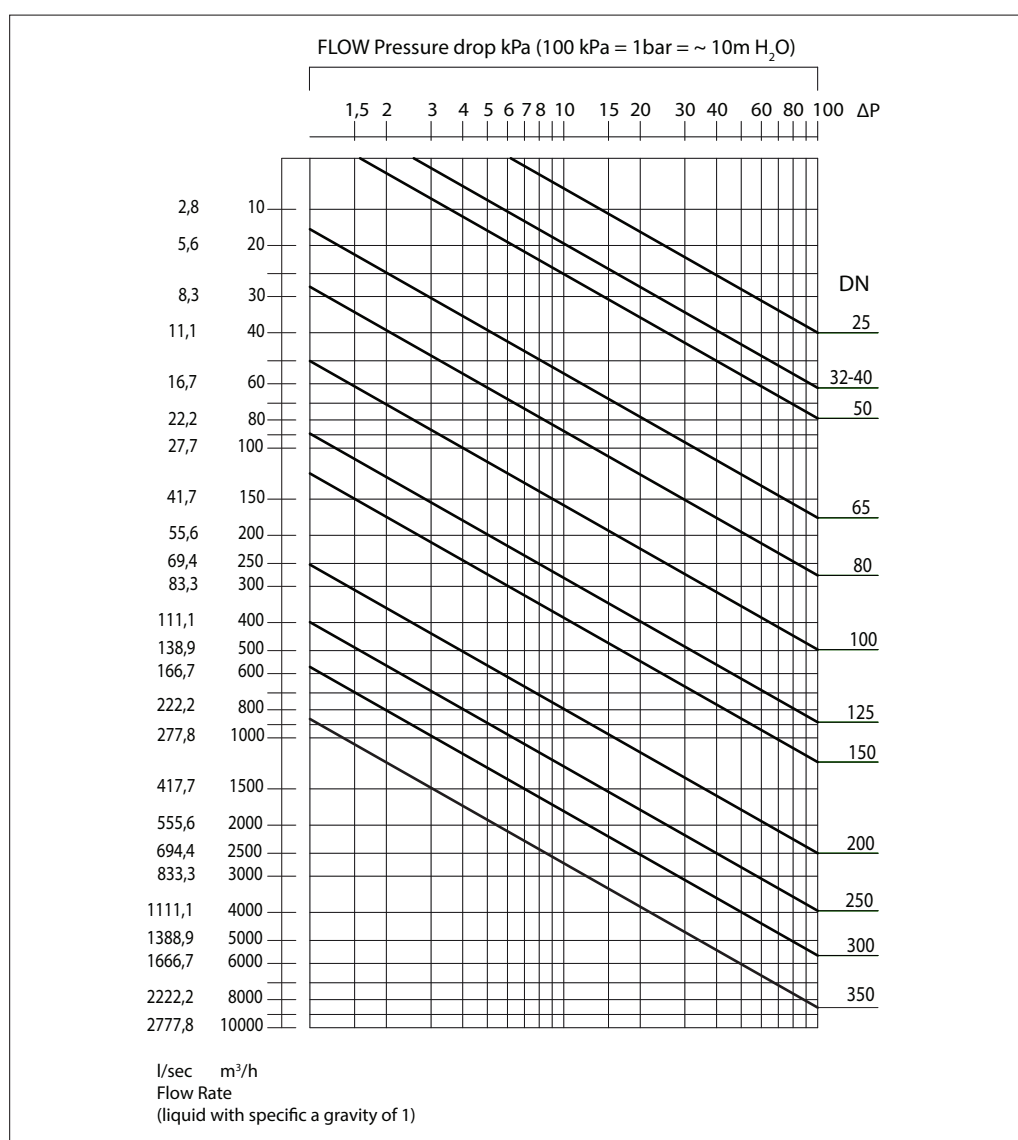
¹⁾ No visible defectable leakage during the testing procedure

P-T diagram

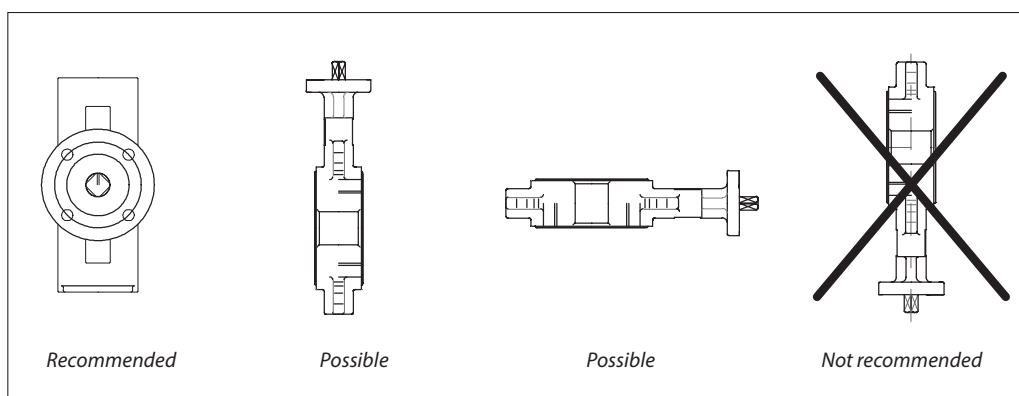


Headloss diagram

For water at 20°C

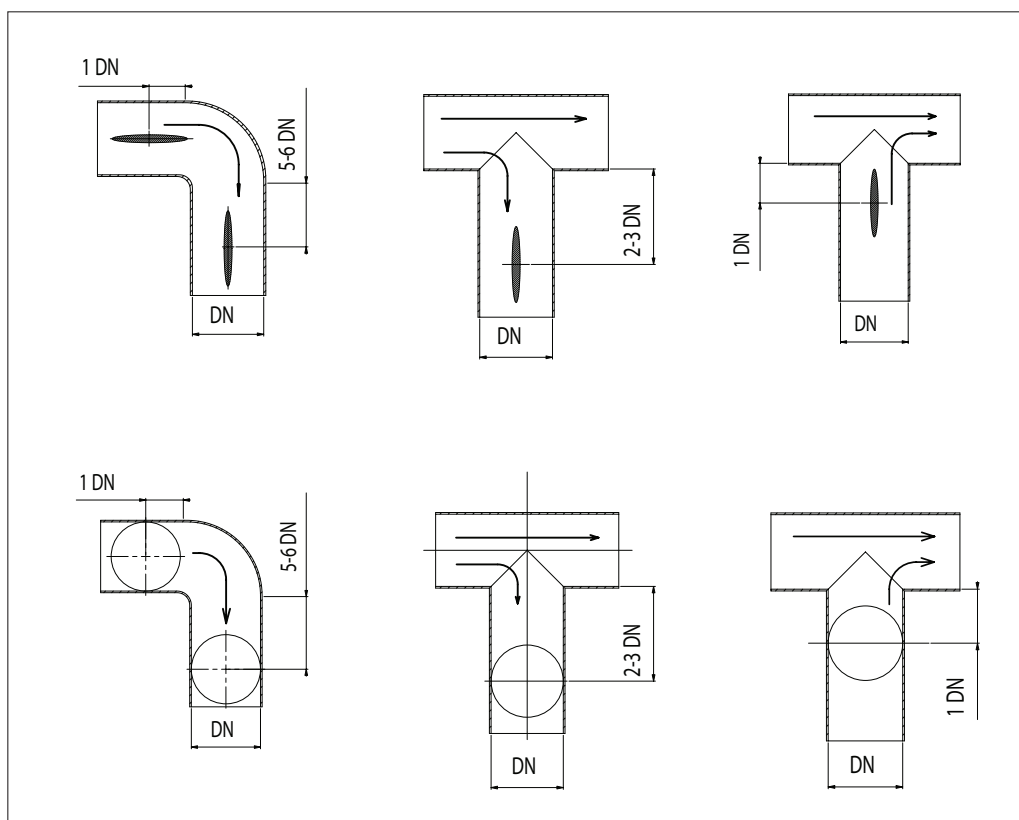


Installation positions

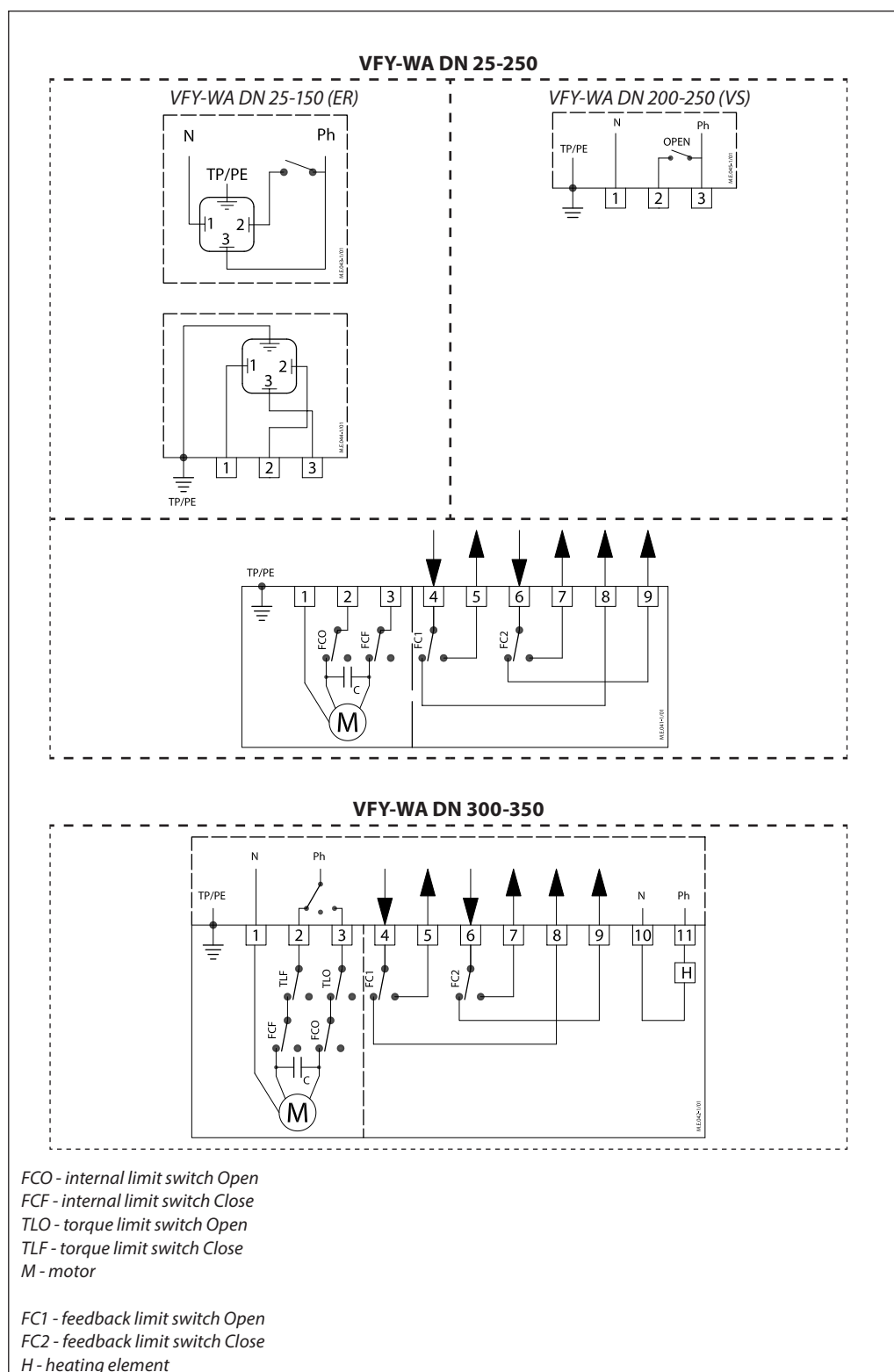


Installation conditions

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.

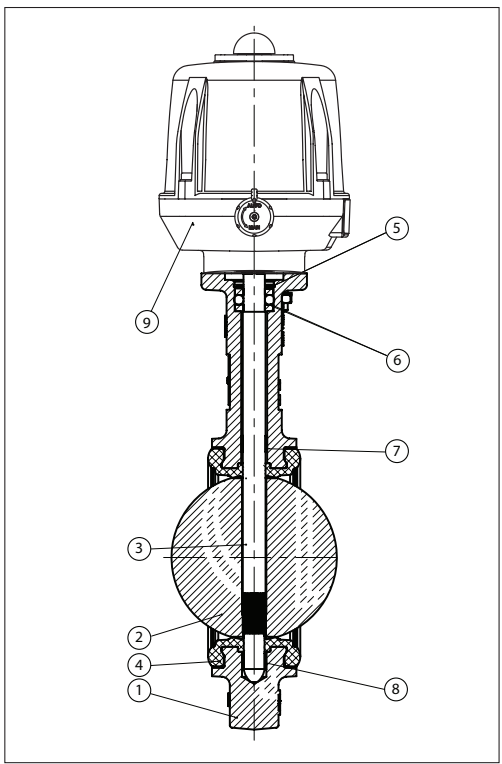


Wiring

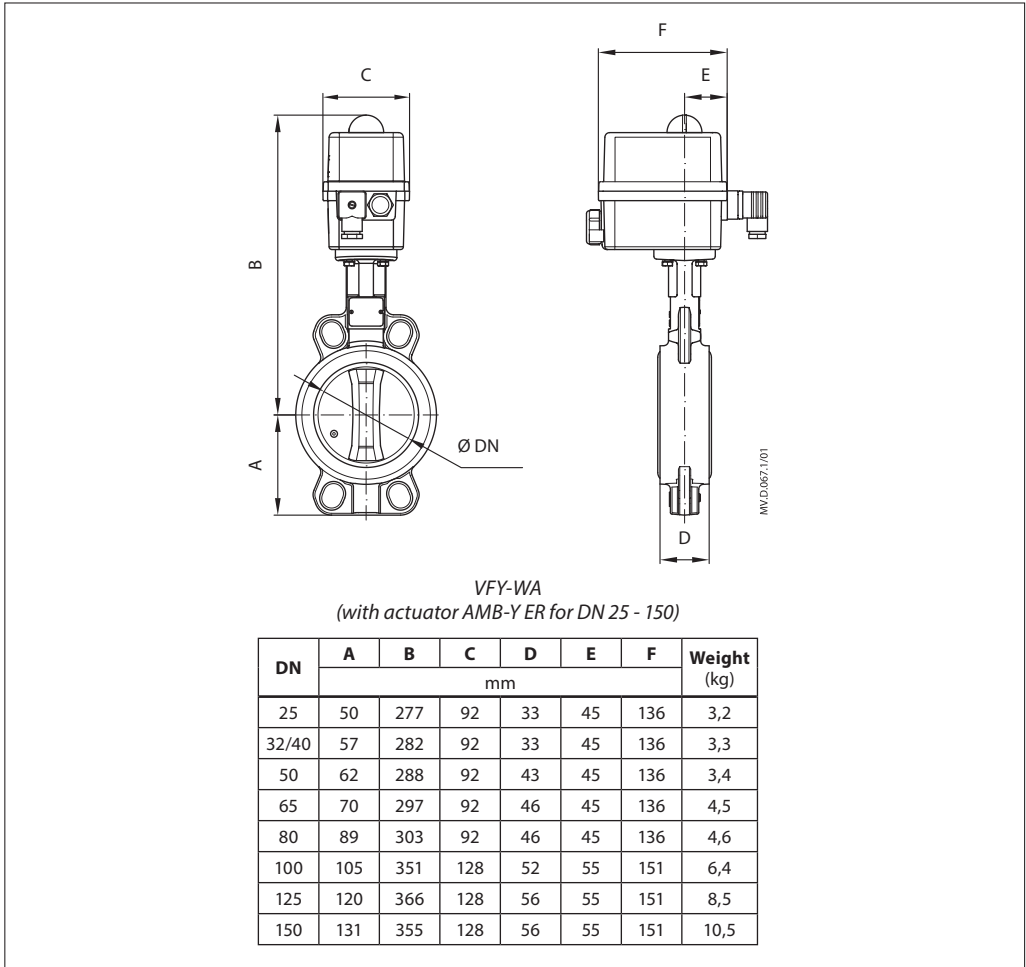


Design

- 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)

