

Maxifluss Rotary Plug Valve VETEC - Type 62.7

Double eccentric control valve for process engineering and industrial applications

Valve size	DN 25 to 200	NPS 1 to 8
Nominal Pressure	PN 10 to 40	ANSI Class 150 and 300
Temperature	-60 °C to 220°C	-76 °F to 428 °F

Valve body made of

- Cast/carbon steel
- Stainless cast/carbon steel
- Low temperature cast/carbon steel

Seat version

- Metal sealing
- Soft sealing

Flanged version

- DN 25 to DN 200 PN10/16/25/40, face to face dimensions acc. to EN 558-1 table 16, series 36
- NPS 1 to 8, Class 150/300, face to face dimensions acc. to EN 558-2 table 16, series 36

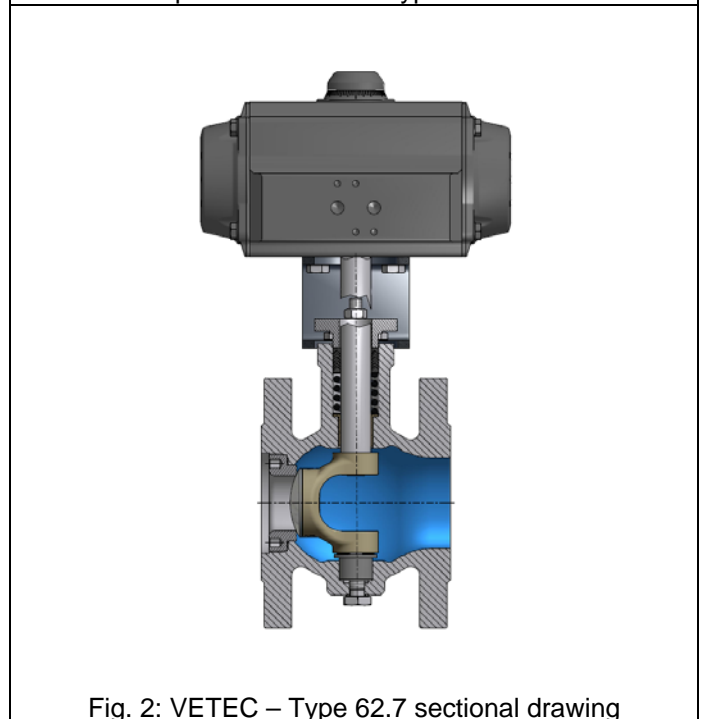
Standard version

For ambient air temperatures from -29°C to + 80 °C
(-20°F to 176°F)

Version for cryogenic temperature

For ambient air temperatures from -55°C to + 80 °C
(-67°F to 176°F)

The valves can be equipped with different accessories, such as positioners, solenoid valves and other accessories according to VDI/VDE 3845.



Principle of operation

The shaft/plug arrangement is eccentric (Figs. 3 and 4). The double-eccentric design of the Maxifluss rotary plug valve is achieved in combination with the offset of the plug's pivot. The double-eccentric design allows the plug to lift off the seat immediately.

Direction of flow = medium close = FTC

The flow coefficient depends on the opening angle of the valve.

Using positioners or cam disks, the natural characteristic of the Maxifluss rotary plug valve can be modified to achieve a linear or equal-percentage characteristic (Figs. 6 and 7).

Fail-safe action

In combination with the Type AT Actuators, the control valve has two fail-safe actions, which become effective when the piston is relieved of pressure or when the supply air fails.

Control Valve CLOSED without supply air: Maxifluss rotary plug valve closes when the supply air fails.

Control Valve OPEN without supply air: Maxifluss rotary plug valve opens if the supply air fails.

Installation

Observe the direction of flow indicated by the arrow on the valve body.

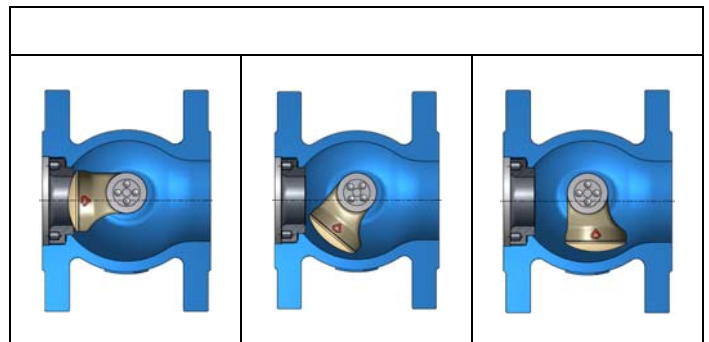


Fig. 3: Double-eccentric principle

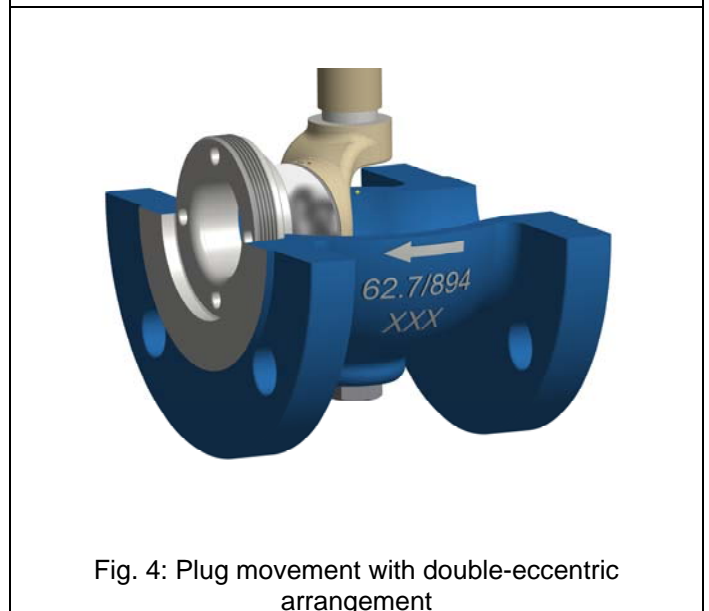


Fig. 4: Plug movement with double-eccentric arrangement



Fig. 5: Direction of flow

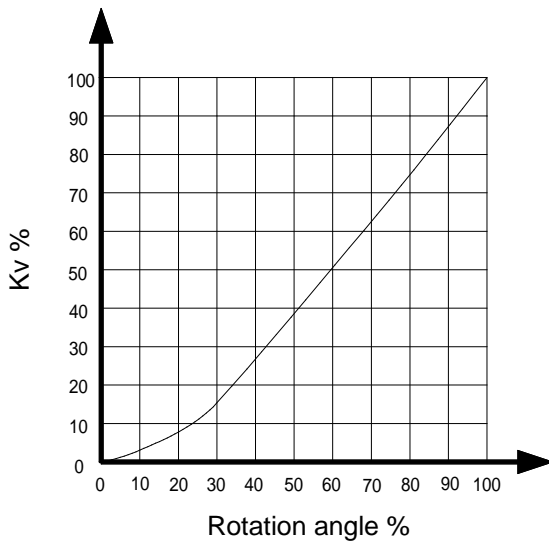


Fig. 6: Natural characteristic

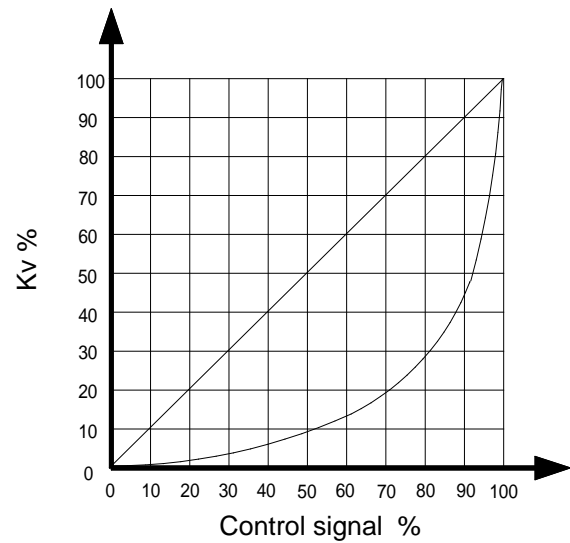
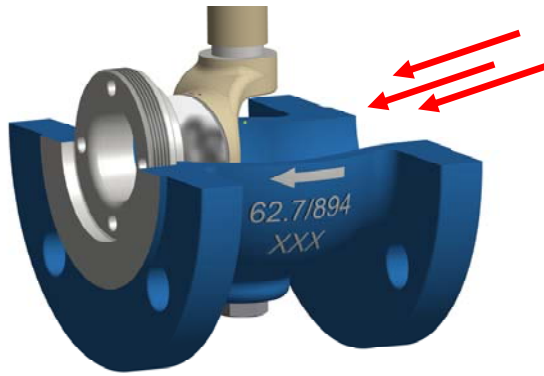


Fig. 7: Equal-percentage and linear characteristic

Technical data

Maxifluss-Type	62.7	
Valve size	25 to 200	NPS 1 to 8
Style	Flange	Flange
Flange pressure rating	PN 10 / 16 / 25 / 40	PN 150lbs / 300lbs
Overall length	EN 558-1 series 36	EN 558-2 series 36
Flange bore/form	DIN EN 1092 B1	ASME B16.5
Seat ring	 <p>Direction of flow - FTC</p>	
Characteristic	Equal percentage or linear positioner characteristic on/off valve	
Rangeability	up to 200 : 1	
Temperature range	Media: -60°C to +220°C	
Opening angle	90°	

Materials

Body	1.0619 / A216WCC	1.4408 / A351CF8M	1.5638 / A352LC3
Shaft	1.4404		
Plug	1.4404		
Disc back bar	1.4404 pn.		
Seat ring	1.4404 / soft seat		
Bushing	Polymer / Iglidur „X“		
Bonnet	1.4404		
Spring- loaded	PTFE TA-Luft		

Kvs and Cv coefficients

Seat with metal sealing - FTC leakage according DIN EN 60534-4, KI IV G1

DN / mm	25	40	50	80	100	150	200
DN / NPS	1	1,5	2	3	4	6	8

Flow rate

100%	Kvs	14	33	58	194	276	474	721
	Cvs	16	38	67	224	319	548	834
	Seat Ø [mm]	18	26	36	60	76	105	135
40%	Kvs	8	12	21	65	92	165	227
	Cvs	9,2	14	24	75	106	191	262
	Seat Ø [mm]	14	18,5	25,5	44	53	73	88

Soft seat – FTC leakage according DIN EN 60534-4, KI VI G1

DN / mm	25	40	50	80	100	150	200
DN / NPS	1	1,5	2	3	4	6	8

Flow rate

100%	Kvs			68				678
	Cvs			79				784
	Seat Ø [mm]	14	23	35	55	70	95	125
40%	Kvs							
	Cvs							
	Seat Ø [mm]	14	18,5	25,5	44	53	73	88

Face-to-face dimensions

DIN face-to-face-dimensions

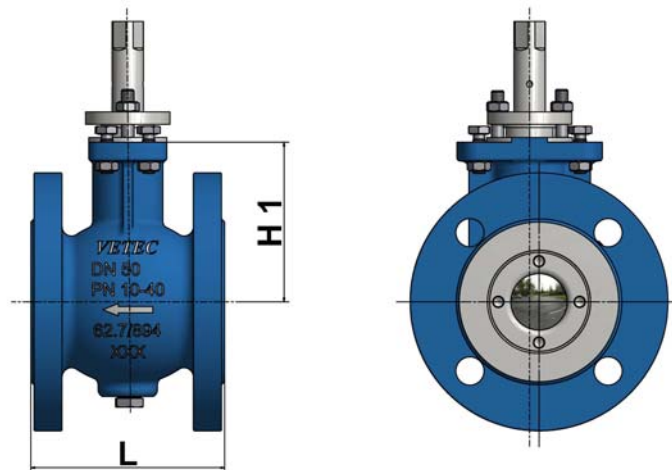
	DN	25	40	50	80	100	150	200
PN 10	Length [mm]	102	114	124	165	194	229	243
PN 16								
PN 25								
PN 40								

ANSI face-to-face-dimensions

	NPS	1	1,5	2	3	4	6	8
Class 150 Class 300	Length [mm]	102	114	124	165	194	229	243

Hight H1

	NPS	25/1	40/1,5	50/2	80/3	100/4	150/6	200/8
Height H1	[mm]	72	96	102	141	149	205	220
	[in]	2,83	3,78	4,02	5,55	5,87	8,07	8,66



Weight

Weight without actuator

DN/ mm	25	40	50	80	100	150	200
DN/ NPS	1	1,5	2	3	4	6	8
Weight							
[kg]	5	7	9	17,5	23,5	43	62
[lb]	11,04	15,45	19,87	38,63	51,88	94,92	136,87

Allowed differential pressure [bar]

DN / AT	60-4	100-4	150-4	220-4	300-4	450-4	600-4	900-4	1200-4	2000-4	3000-4
25	16										
40		16									
50			16								
80				11,5	16						
100					8	14	16				
150						5	7	10	16		
200							3,5	5	8	14	16

Allowed differential pressure [psi]

NPS / AT	60-4	100-4	150-4	220-4	300-4	450-4	600-4	900-4	1200-4	2000-4	3000-4
1	232										
1,5		232									
2			232								
3				167	232						
4					116	203	232				
6						72	101	145	232		
8							51	72	116	203	232

Order specifications:

Type	According to table 1
Valve size	DN ...
Nominal pressure	PN ...
Body material	According to table
Seat version	Metal or soft sealing
Characteristic	Equal percentage or linear
Kvs/Cv	According to table
Direction of flow	FTC (medium close)
Actuator	Type
Type of mounting	Mounting location of actuator
Fail-safe action	when supply air fails Fail-close= FC Fail-open= FO
Max. differential pressure for actuator	According to table
Supply air	4. bar
Bench range	... bar or mA
Accessories	e.g. positioners, limit switches, solenoid valve etc.
Others	e.g. special version, certificates, approvals etc.