

WEY® Regulating Knife Gate Valve Type VNC-R 2.19.10



Valve features

Knife Gate Valve Type VNC
 Nominal diameter DN 50–400
 V-Notch 60°
 Positioner PMV D3 digital

Function

The valve modulates fluid flow according to the external control signal. Data is processed by the positioner as follows:

- The position transducer system senses the actual gate position
- The electronic microprocessor compares the actual position with the preset value
- The microprocessor control system rectifies the modulating difference

Positioner

The PMV D3 is a digital positioner with exceptional features and benefits. The computer-optimised pneumatic relay with piezo-electric valves offers great dynamic performance together with

very low steady state air consumption. All information is depicted on a graphic display. The positioner can be used with single or double acting actuators.



Technical specification

Positioner:

Input signal: 4–20 mA
 Apparent resistance: approx. 500 Ohm
 Air delivery: 400 nl/min
 Repeatability: < 0,5 %
 Dead band: 0–10 % adjustable
 User surface: 5 push bottoms
 Voltage drop: < 11 V
 Temperature: -30 to 85° C
 Air quality: ISO 8573, filtered 40 µ, dew point 10K below lowest design temperature, residual oil content 5mg/m³
 Authorisations: 93/68EEC, 89/336/EEC, 92/31/EEC

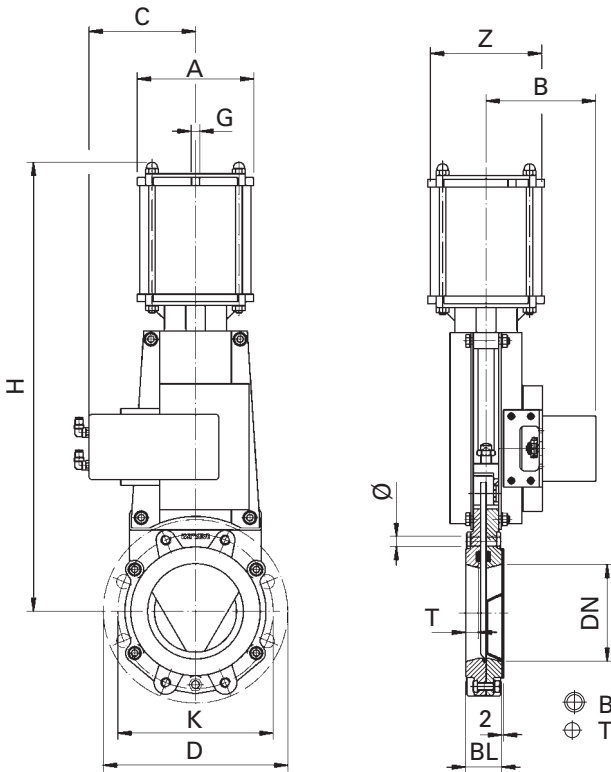
EMC: EN 50081-2, EN 50082-2
 Material: Die-cast aluminium powder epoxy coated, screws A2/A4
 Option: Explosion protection, profibus
 Supply voltage: 9–28 VDC (feedback 4–20 mA)
 Air supply: 6 bar
 Air consumption: < 0,3 nl/min
 Hysteresis: < 0,4 %
 LC-Display: Graphic, view area 15 x 41 mm
 Processor: 16 bit
 Enclosure: IP 66/NEMA 4 x

Valve:

Flange drilling: PN10/16 EN 1092 / ISO 7005
 Face-to-face: EN 558-1 / ISO 5752 part 20
 Differential pressure over the V-Notch is max. 2.5 bar

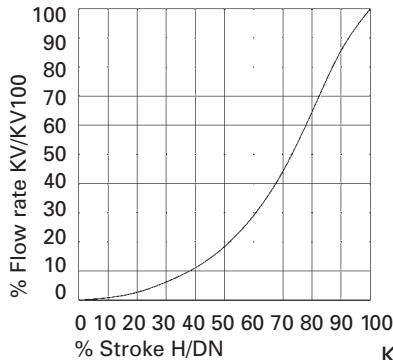
Nominal pressure PN: DN 50–200 10 bar
 DN 250–300 6 bar
 DN 350–400 4 bar

Operating pressure: with V-Notch max. 2.5 bar

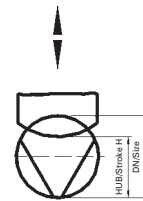


Flow characteristic

VN-60° V-Notch



DN	KV100-Value (m ³ /h)
50	61
65	111
80	159
100	307
125	528
150	800
200	1492
250	2500
300	3600
350	4900
400	5724



DN	D	K	BL	H	Z	A	B	C	G	Ø	T	Screws (Qty)	⊕	⊕	Weight (kg)
50	165	125	43	407	100	140	165	97	ISO 228-G1/4	M16	17	4	4	–	10
65	185	145	46	429	100	140	165	105	ISO 228-G1/4	M16	17	4	4	–	11
80	200	160	46	462	100	140	165	92	ISO 228-G1/4	M16	17	8	4	4	12
100	220	180	52	535	100	140	165	130	ISO 228-G1/4	M16	20	8	4	4	15
125	250	210	56	601	100	140	165	152	ISO 228-G1/4	M16	22	8	4	4	18
150	285	240	56	698	160	180	165	164	ISO 228-G1/4	M20	21	8	4	4	28
200	340	295	60	828	160	180	169	138	ISO 228-G1/4	M20	23	8	4	4	34
250	395	350	68	987	200	220	170	170	ISO 228-G1/4	M20	19	12	6	6	48
300	445	400	78	1114	200	220	187	192	ISO 228-G1/4	M20	23	12	6	6	80
350	505	460	78	1329	250	270	187	213	ISO 228-G1/2	M20	20	16	8	8	110
400	565	515	102	1461	250	270	187	237	ISO 228-G1/2	M24	28	16	6	10	136

All actuators are sized for the specified pressure range for unproblematic fluids.