

Wey Regulating Knife Gate Valve VNC-R

2.19.10

Valve features

Wey Knife Gate Valve VNC
Nominal diameter DN 50–400
V-Notch 60°
Intelligent digital positioner SRD991

Function

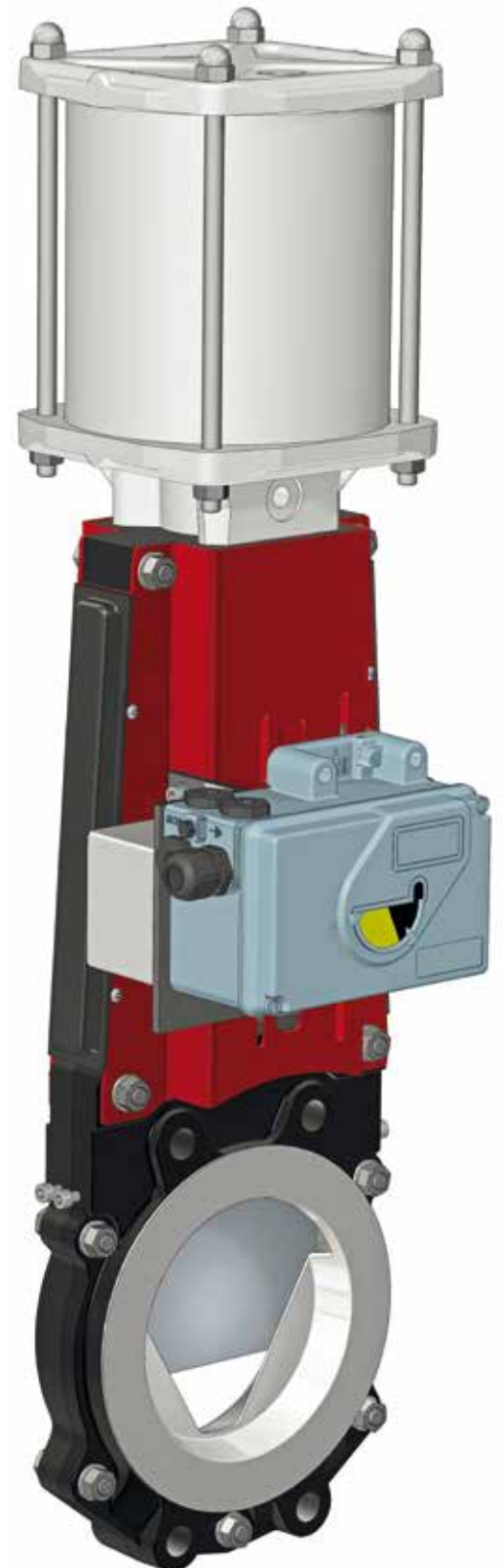
The valve modulates fluid flow according to the external control signal. Data is processed by the positioner as follows:

- 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 SRD991

The SRD991 is an intelligent digital positioner featuring a powerful pneumatic output. Its double-acting pneumatic amplifier is actuated by an I/P motor (nozzle-flapper principle of operation), allowing the SRD991 to deliver high air output at minimum air consumption

Microprocessor and I/P motor are fed by the electrical two-wire input signal supplying set point to the positioner.



Technical specification

Positioner SRD991

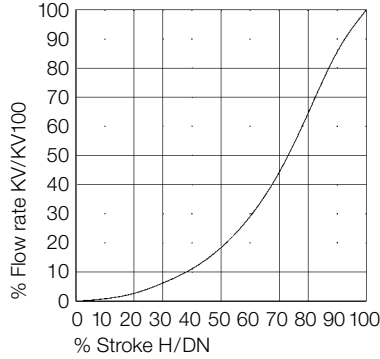
SRD991	Autostart with self-calibration Self diagnostic Easy operation via 3 buttons Status & diagnostic feedback Setting of characteristic line Stroke limiter and sealead close-function
Without communication	Setpoint 4-20 mA Load 300 Ohms
With communication HART	Setpoint 4-20 mA Load 420 Ohms
	PROFIBUS PA & FOUNDATION Fieldbus H1 based on IEC 1158-2 acc. to the FISCO-model
Display	multilingual full text graphic LCD: % valve position, diagnostics and other messages in plaintext (German, English and 1 additional language available)
Air Supply	max. 7 bar
Supply Air	acc. ISO 8573-1, solid particle size and density Class 2, pressure dew point 10 K under ambient temperature
Protection Class	IP 66, NEMA 4X
El. Classification	Classification ATEX: intrinsic safety II G EEx ia IIC T4/T6 Classification FM/CSA: intrinsic safety class I, Div. 1, Groups A, B, C, D
El. Connection	M20 x 1.5
Pn. Connection	G $\frac{1}{4}$
Ambient Temp.	-40 to +80 °C (-40 to +176 °F)
Options	Inductive limit switches (2- or 3-wire) Mechanical limit switches Position transmitter (4 to 20 mA) Binary inputs or binary outputs External potentiometer Manometer

Valve

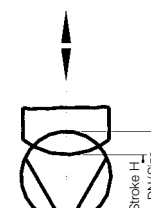
Flange drilling	PN 10/16 EN 1092 / ISO 7005
Face-to-face	EN 558 / ISO 5752 part 20
Differential pressure	over the V-Notch is max. 2.5 bar
Nominal pressure	DN 50-200 10 bar
PN	DN 250-300 6 bar
	DN 350-400 4 bar

Flow characteristic

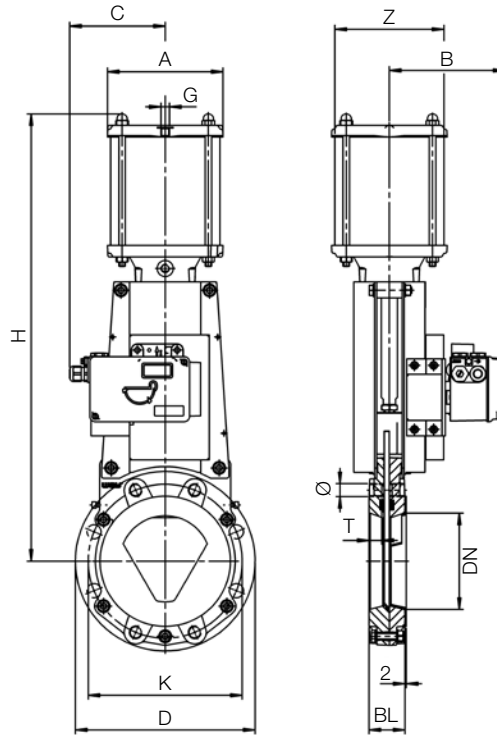
VN-60° V-Notch



KV100-Value (m³/h)



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



⊕ Blind tapped holes
⊕ Thru flange bolts

DN	D	K	BL	H	Z	A	B	C	G	∅	T	Qty Screws	⊕	⊕	Weight kg
50	165	125	43	407	100	140	176	108	ISO 228-G $\frac{1}{4}$	M16	17	4	4	-	10
65	185	145	46	429	100	140	176	116	ISO 228-G $\frac{1}{4}$	M16	17	8	4	-	11
80	200	160	46	462	100	140	176	139	ISO 228-G $\frac{1}{4}$	M16	17	8	4	4	12
100	220	180	52	535	100	140	176	142	ISO 228-G $\frac{1}{4}$	M16	20	8	4	4	15
125	250	210	56	601	100	140	176	163	ISO 228-G $\frac{1}{4}$	M16	22	8	4	4	18
150	285	240	56	698	160	180	180	140	ISO 228-G $\frac{1}{4}$	M20	21	8	4	4	28
200	340	295	60	828	160	180	180	149	ISO 228-G $\frac{1}{4}$	M20	23	8	4	4	34
250	395	350	68	987	200	220	181	181	ISO 228-G $\frac{1}{4}$	M20	19	12	6	6	48
300	445	400	78	1114	200	220	198	203	ISO 228-G $\frac{1}{4}$	M20	23	12	6	6	80
350	505	460	78	1329	250	270	196	224	ISO 228-G $\frac{1}{2}$	M20	20	16	8	8	110
400	565	515	102	1461	250	270	196	250	ISO 228-G $\frac{1}{2}$	M24	28	16	6	10	136

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