

Valve features

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

Function

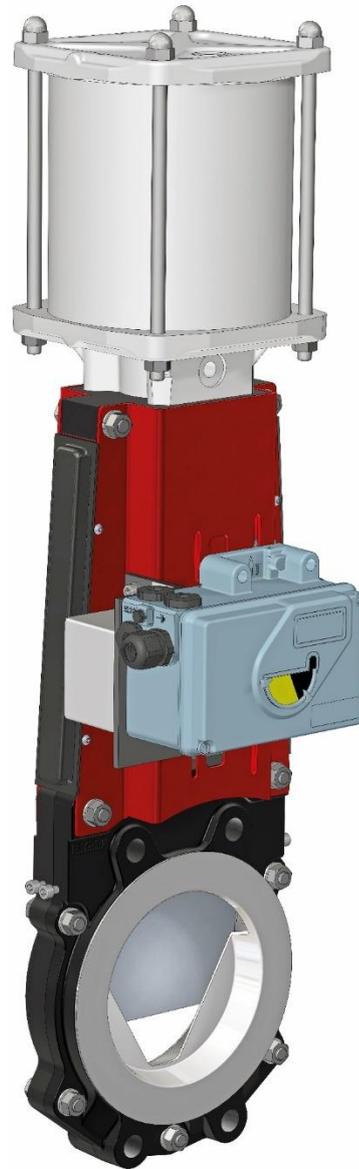
The valve modulates fluid flow according to the external control signal. Data is processed by the positioner as follows:

- 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

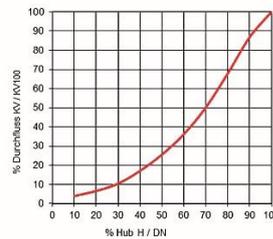
- SRD991: Autostart with self-calibration
- Self diagnostic
- Easy operation via 3 buttons
- Status & diagnostic feedback
- Setting of characteristic line
- Stroke limiter and sealad close-function
- Without communication Setpoint 4-20 mA Load 300 Ohms
- With communication HART Setpoint 4-20 mA Load 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 $\frac{3}{4}$
- 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

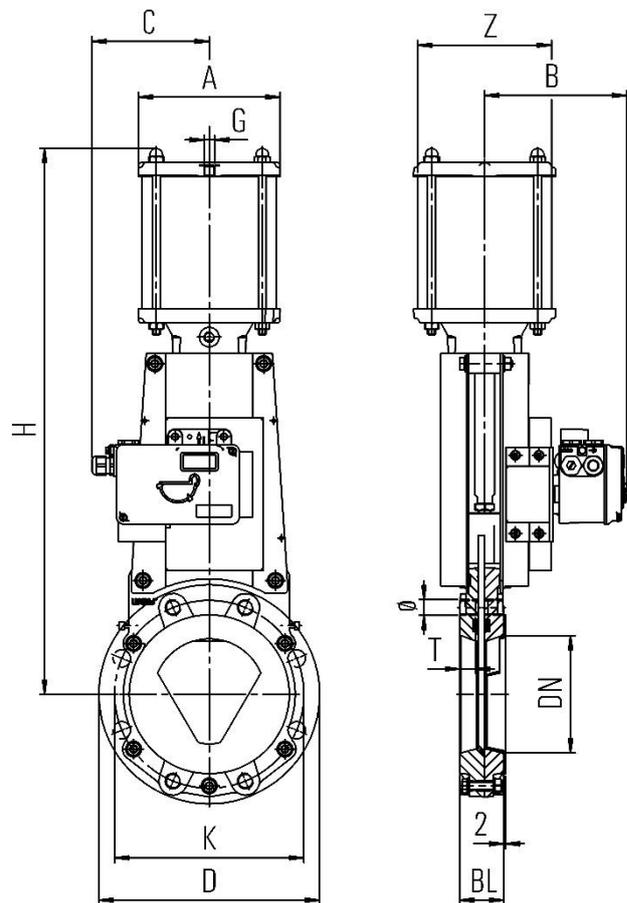
- Flange drilling PN 10/16 EN 1092 / ISO 7005
- Face-to-face EN 558 / ISO 5752 part 20
- Differential pressure over the V-Notch is max. 2.5 bar
- Nominal pressure PN DN 50–200 10 bar
- DN 250–300 6 bar
- DN 350–400 4 bar

Flow characteristic

VN-60° V-Notch



DN	KV100-Value (m ³ /h)
50	55
65	103
80	153
100	264
125	444
150	668
200	1213
250	1747
300	2714
350	3588
400	4516



- ⊕ Blind tapped holes
- ⊕ Thru flange bolts

DN	D	K	BL	H	Z	A	B	C	G	Ø	T	Screws	⊕	⊕	Weight
50	165	125	43	407	100	140	176	108	ISO 228-G¼	M16	17	4 pcs.	4	-	10 kg
65	185	145	46	429	100	140	176	116	ISO 228-G¼	M16	17	8 pcs.	4	-	11 kg
80	200	160	46	462	100	140	176	139	ISO 228-G¼	M16	17	8 pcs.	4	4	12 kg
100	220	180	52	535	100	140	176	142	ISO 228-G¼	M16	20	8 pcs.	4	4	15 kg
125	250	210	56	601	100	140	176	163	ISO 228-G¼	M16	22	8 pcs.	4	4	18 kg
150	285	140	56	698	160	180	180	140	ISO 228-G¼	M20	21	8 pcs.	4	4	28 kg
200	340	195	60	828	160	180	180	149	ISO 228-G¼	M20	23	8 pcs.	4	4	34 kg
250	395	350	68	987	200	220	181	181	ISO 228-G¼	M20	19	12 pcs.	6	6	48 kg
300	445	400	78	1114	200	220	198	203	ISO 228-G¼	M20	23	12 pcs.	6	6	80 kg
350	505	460	78	1329	250	270	196	224	ISO 228-G½	M20	20	16 pcs.	8	8	110 kg
400	565	515	102	1461	250	270	196	250	ISO 228-G½	M24	28	16 pcs.	6	10	136 kg

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