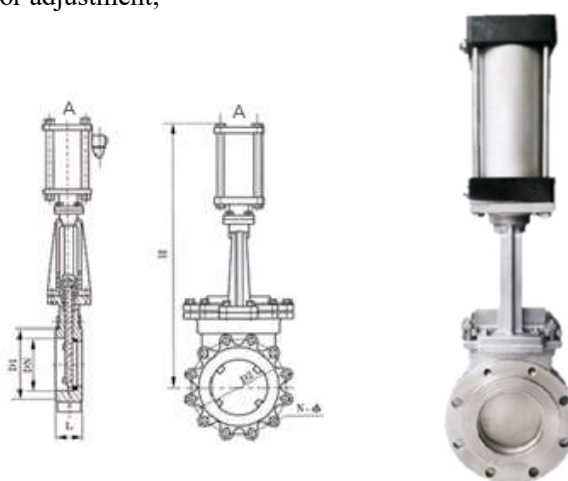


Product overview

The VGP pneumatic knife-type brake valve is constituted by left/right valve, U-shaped sealing ring, flashboard, steel nut, valve rod, holder and air cylinder, and the valve opening and closing are performed by cylinder action. The motion control and signal output in the open/close position can be realized by the accessories (such as solenoid valve and proximity switch), and the automatic control of continuous action can be completed, too. The user can make a choice as per the actual demand. The cast iron, cast steel and stainless steel are used for the main body, and the diameter changes from DN50 to DN1000.

Product features

- The double-clip type structure is used with small volume and light weight;
- The completely open channel can be used to prevent the medium from being deposited in the valve;
- The newly developed U-shaped sealing ring can ensure the valve is of good leakproofness;
- The external seal of the flashboard is realized by the flexible sealing strip embedded into the valve, and the bolt and pressing plate can be used for adjustment;
- Small flow resistance;
- Convenient installation and repair.



Product application

The pneumatic sluice valve product is widely used for the fields (such as chemical engineering, coal, sugaring, sewage and papermaking) and is an ideal seal valve. It's especially suitable for regulating and throttling on the pipeline in the industries, such as papermaking, electric power and lithium battery new energy.

Product size

MPa	DN	L	D	D1	D2	H	N-M	A
1.0	50	43	160	125	100	330	4-M16	180
	65	46	180	145	120	360	4-M16	180
	80	46	195	160	135	390	4-M16	220
	100	52	215	180	155	440	8-M16	220
	125	56	245	210	185	510	8-M16	230
	150	56	280	240	210	600	8-M20	280
	200	60	335	295	265	700	8-M20	360
	250	68	390	350	320	840	12-M20	360
	300	78	440	400	368	960	12-M20	400
	350	78	500	460	428	1110	16-M20	400
	400	102	565	515	482	1250	16-M22	400
	450	114	615	565	532	1380	20-M22	530
	500	127	670	620	585	1530	20-M22	530
	600	154	780	725	685	1800	20-M27	600
	700	165	895	840	800	2150	24-M27	600
	800	190	1010	950	898	2420	24-M30	680
	900	203	1110	1050	1005	2680	28-M30	680
	1000	216	1220	1160	1115	3100	28-M30	700

	1200	254	1450	1380	1325	3450	32-M36	800
1.6	50	43	160	125	99	330	4-M16	180
	65	46	185	145	120	360	4-M16	180
	80	46	200	160	135	390	8-M16	220
	100	52	220	180	155	440	8-M16	220
	125	56	250	210	185	510	8-M16	230
	150	56	285	240	210	600	8-M20	280
	200	60	340	295	265	700	12-M20	360
	250	68	405	355	310	840	12-M22	360
	300	78	460	410	375	960	12-M22	400
	350	78	520	470	435	1110	16-M22	400
	400	102	580	525	485	1250	16-M27	400
	450	114	640	585	545	1380	20-M27	530
	500	127	715	650	609	1530	20-M30	530
	600	154	840	770	720	1800	20-M36	600
	700	165	910	840	788	2150	24-M36	600
	800	190	1025	950	898	2420	24-M36	680
	900	203	1125	1050	998	2680	28-M36	680
	1000	216	1255	1170	1110	3100	28-M42	700
	1200	254	1485	1390	1325	3450		

Sluice valve material

Part name	Material name	Material grade
Round nut	High-quality carbon steel	25
Handwheel	Gray cast iron	HT200
Bearing gland	High-quality carbon steel	35
Valve rod nut	Aluminum bronze	ZCuA19Mn2 and ZCuA19Fe4Ni4Mn2
	Aluminium brass	ZCuZn25A16Fe3Mn3
Bearing	—	51110
Valve rod	Stainless steel	304, 316 and 2Cr13
Bracket	Carbon steel and stainless steel	WCB, CF8, etc.
Flashboard	Stainless steel	304, 316, 304L, 316L and 2Cr13
Bolt and nut	High-quality carbon steel	35
Packing gland	Carbon steel	WCB
Packing	Flexible graphite packing, asbestos packing and enhanced teflon fiber packing	—
Valve body	Carbon steel and stainless steel	WCB, CF8 (304), CF3 (304L), CF8M (316), CF3M (316L) and seal seat surfacing alloy or stainless steel

Actuator parameter

Inner diameter of cylinder (mm)		Φ40	Φ50	Φ63	Φ80	Φ100	Φ125	Φ160	Φ200	Φ250
Theoretical piston acting force (N) (subject to 0.4MPa operating pressure)	Thrusting force	490	760	1215	1960	3077	4800	7869	12308	19227
	Tension	410	680	1030	1770	2675	4400	7379	10035	18463
Working medium	Compressed air with oil mist after purification									
Working pressure (MPa)	0.15-1									
Ambient temperature (°C)	-10-+80									
Relative humidity	95									
Piston speed (mm/g)	50-500									
Durability (KM)	600									

Design standard

Design standard	JB/T8691-1998 MSS SP-81
Flange standard	GB/T9113. 1-2000
Structure length	GB/T1-5188. 2-94
Test and pressure	GB/T13927-2000

Performance specification

Nominal pressure PN(MPa)	Shell test (MPa)	Seal test (MPa)	Applicable medium
1.0	1.5	1.1	Smoke, ash, slag and water mixture and air mixture
1.6	2.4	1.8	