

Specification

VL(^A / _B)P-G series			Vacuum Angle Valve / Double Acting											
			Bellows STEM seal (A: SUS316L / B: AM350)											
Valve port		SIZE	16	25	40	50	63	80	100	160	200	250	320	
Flange Standards	ISO-KF	KF	●	●	●	●	●	●	●	●	×	×	×	
	ISO-K	KQ	×	×	×	×	●	●	●	●	●	●	●	
	ISO-F	KC	×	×	×	×	●	●	●	●	●	●	●	
Valve Actuating type			Double acting cylinder											
Fluid			Vacuum in an inert gas system											
Operating temperature °C			≤120											
Operating pressure Pa (Abs)			1×10 ⁻⁶ ~ to atmospheric pressure											
Conductance L / s ^(Note 1)			7	14	42	95	150	250	520	1,430	3,180	5,150	6,480	
Leakage Pa·m³/s	Inside	Standard material (FKM) 1.0×10 ⁻¹⁰ at room temperature (excluding gas permeation)												
	Outside	Standard material (FKM) 1.0×10 ⁻¹¹ at room temperature (excluding gas permeation)												
Main material			Body: SUS304, Bellows: (SUS316L / AM350) Main parts: SUS304, AL-6061, FKM (Standard seal)											
Operating pressure MPa [G]			0.4~0.7											
Operation Port Port Size			PT 1/8" (Rc1/8")							PT 3/8" (Rc3/8")				
Compressed air consumption (@0.5MPa)	cc (mL) ^(Note 2)		22.5	22.5	45	100	185	210	400	940	1,490	2,700	6,000	
Open stroke			14	14	18	25	30	35	40	60	95	110	150	
Seal distance [A-Value]			40	50	65	70	88	90	108	138	178	208	250	
w/Solenoid Valve Spec.	SIZE		016	025	040	050	063	080	100	160	200	250	320	
Single acting		[VA@S]	RDV412-5DZ-01				RDS301-5DZ-01A			[Note 3]	Not Available			
Double acting		[VA@P]	DS2120-5HZ-01							RDS5120-5DZ-03				

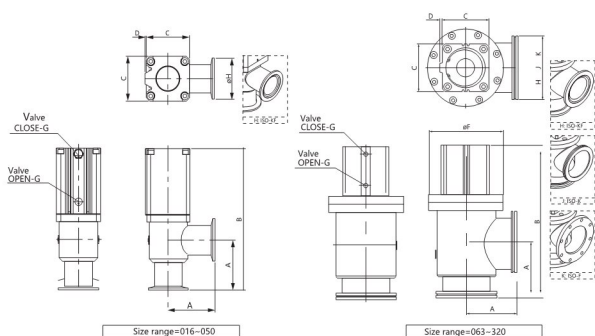
(Note 1) Conductance is represented by "molecular flow" of elbow of the same dimension. (Note 2) One stroke condition. (Open & Close)

(Note 3) Solenoid valve specification: RDS301-5DZ-02A

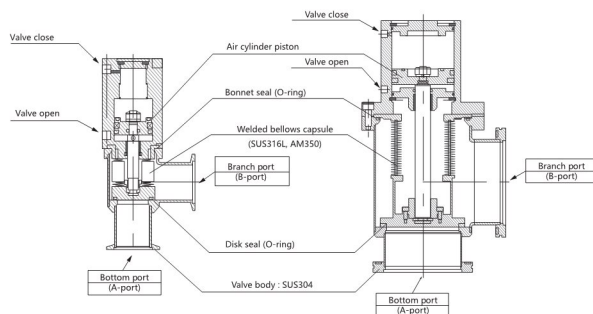
External dimension table

SIZE	16	25	40	50	63	80	100	160	200	250	320
A	40	50	65	70	88	90	108	138	178	208	250
B	138.5	146.5	184	205	244	257.5	302.5	415	520.5	611	737
C	48	48	60	69	77	77	98	117	117	142	178
D	3	3	2	2	5	5	5	6.5	6.5	11	10
F	-	-	-	-	Ø119	Ø119	Ø159	Ø208	Ø258	Ø318	Ø410
G	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 3/8"	PT 3/8"	PT 3/8"	PT 3/8"
H	Ø30	Ø40	Ø55	Ø75	Ø95	Ø114	Ø134	Ø190	-	-	-
J	-	-	-	-	Ø95	Ø110	Ø130	Ø180	Ø240	Ø290	Ø370
K	-	-	-	-	Ø130	Ø145	Ø165	Ø225	Ø285	Ø335	Ø425

Dimensional drawing



Internal detail



How to Order

Valve **VA@C** - ① ② - ③ - ④ - ⑤ ⑥ - (⑦)

Model VLAP - □□□ □□-□□ - □ - □□

Series	A Body shape	VLⓅC	L	L-type(Angle valve) 304SS Body											
		VYⓅC	Y	Y-type(Inline valve) 304SS Body											
	B Stem Seal	VⓂAⓅC	A	316L Bellows STEM Seal											
		VⓂAⓅBⓈC	B	AM350 Bellows STEM Seal											
		VⓂAⓅSⓈC	S	O-Ring STEM Seal											
	C Operation type	VⓂAⓅBⓈP	P	Double Acting (Pneumatic)											
		VⓂAⓅBⓈS	S	Single Acting (N.C.)											
		VⓂAⓅBⓈM	M	Manual operation											
		VⓂAⓅBⓈQ	Q	Double Acting, w/Heater (Pneumatic)											
		VⓂAⓅBⓈR	R	Single Acting, w/Heater (N.C.)											
		VⓂAⓅBⓈH	H	Double Acting, Heating model(Pneumatic)											
		VⓂAⓅBⓈK	K	Double Acting, Heating model, w/Heater(Pneumatic)											
		VLⓅD	D	Double Acting, w/Soft start bypass valve(Pneumatic)											
		VLⓅT	T	Single Acting, w/Soft start bypass valve(N.C.)											
		VLⓅX	X	Single Acting, w/Soft start integrated valve(N.C.)											
		VLⓅW	W	Bonnet gasket seal type, Double Acting (Pneumatic)											
		VLⓅY	Y	Bonnet gasket seal type, Single Acting (N.C.)											
		VLⓅZ	Z	Bonnet gasket seal type, Manual operation											
Port flange	Valve size	①	□□□	016	025	040	050	063	080	100	160	200	250	320	
	Flange Spec.	②	□□ Specific	KF		KQ		KC		CF		JF			
Seal material (Disc, Bonnet, Stem)	③ (Note 1)	□□	N1		ED	S1	FS	R1	R2	R3	P1	P2	U1		
			FKM	NBR	EPDM	VMQ	FFKM	Chemraz®	Chemraz®	Chemraz®	Kalrez®	Kalrez®	ULTIC ARMOR®		
			SS592		SS630		SSE38		4079		9100		UA4640		
			Im case of FFKM (FS), please specify a separate material.												
CDA port position	④ (Note 2)	□ Branch port Lower part	None		E		S		W						
			Rear		Right		Left		Same Direction						
Sensor	⑤	□	0		1		2								
	⑥	□	None		1 EA		2 EA								
Solenoid or Heater Mounting	⑦	(G) or (W)	C		N		P		H						
			W8H(TPC)		W9HN(TPC)		W9HP(TPC)		D-*****(SMC)						
Valve	(Note 3)		VLAP- / VLBP- / VLAS- / VLBS- / VLAD- / VLBD- / VLAT- / VLSP- / VLSS- / VLBT- / VYAP- / VYAS- / VYBP- / VYBS- / VYSP- / VYSS-												

Modified special		()	※Please consult our technical department.									
w/Solenoid Valve Spec.	size range	016	025	040	050	063	080	100	160	200	250	320
Single acting	[VA@S]	Solenoid Valve Spec.	RDV412-5DZ-01				RDS301-5DZ-01A			(Note 4)	Not Available	
Double acting	[VA@P]		DS2120-5HZ-01							RDS5120-5DZ-03		
Solenoid valve maker: TPC / Electric power: DC24V												
w/Heater Spec.	size range	016	025	040	050	063	080	100	160	200	250	320
Type: Silicon Rubber Heater		25W	25W	30W	45W	70W	90W	150W	Not Available			
Temperature Max.: Amb.~150℃ / TC.sensor control: K-Type / Electric power: AC220V												

(Note 1) For standard products, use sealing material of vacuum secretion as a FKM (flammable O-ring).

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(Note 2) Applies only to the double and single operating valves (except VABM-series)

(Note 3) Specifications that are partially changed in standards or standards other than standard products can be specially designed to meet the customer's needs, so please consult with them.

(Note 4) Solenoid valve specification: RDS301-5DZ-02A