

Specification

VL ^A / _B Y series			Vacuum Angle Valve / Single Acting(N.C.) / Bonnet metal seal type										
			Bellows STEM seal (A: SUS316L / B: AM350)										
Valve port		SIZE	16	25	40	50	63	80	100	160	200	250	320
Flange Standards	ISO-CF	CF	●	●	●	●	●	×	×	×	×	×	×
			1.33CF	2.12CF	2.75CF	3.38CF	4.5CF	×	×	×	×	×	×
Valve Actuating type			Single 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)			5	13	42	75	145	-	-	-	-	-	-
Leakage Pa·m ³ /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), OFHC Bonnet 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)		12	12	23	49	94	-	-	-	-	-	-
Open stroke			14	14	18	25	30	-	-	-	-	-	-
Seal distance (A-Value)			54.6	54.6	65	86.4	90.5	-	-	-	-	-	-

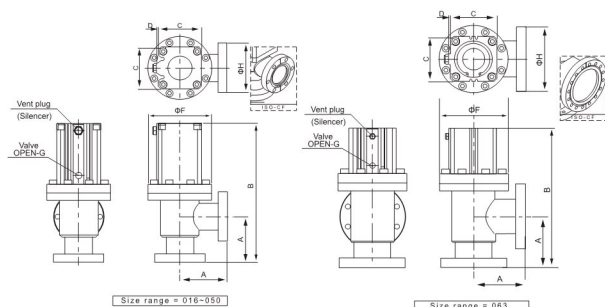
(Note 1) Conductance is represented by "molecular flow" of elbow of the same dimension.

(Note 2) One stroke condition. (Open & Close), The close side port has a silencer installed

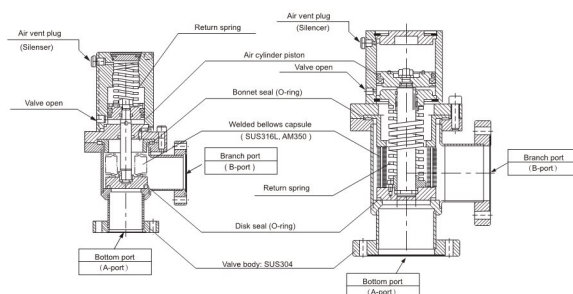
External dimension table

SIZE	16	25	40	50	63
A	54.6	54.6	65	86.4	90.5
B	164	162	197	233	247
C	48	48	60	69	77
D	3	3	2	2	5
F	Ø72	Ø72	Ø88	Ø99	Ø119
G	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"
H	Ø33.8	Ø54	Ø69.9	Ø85.7	Ø114.3

Dimensional drawing



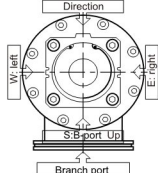
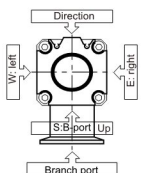
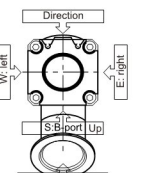
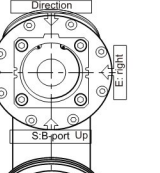
Internal detail



How to Order

Valve **V(A)B(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ⒶAC	A	316L Bellows STEM Seal											
		VⒶBC	B	AM350 Bellows STEM Seal											
		VⒶSC	S	O-Ring STEM Seal											
	C Operation type	VⒶBP	P	Double Acting (Pneumatic)											
		VⒶBS	S	Single Acting (N.C.)											
		VⒶBM	M	Manual operation											
		VⒶBQ	Q	Double Acting, w/Heater (Pneumatic)											
		VⒶBR	R	Single Acting, w/Heater (N.C.)											
		VⒶBH	H	Double Acting, Heating model(Pneumatic)											
		VⒶBK	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).

Chemraz® is a registered trademark of Greene, Tweed & Co. Kalrez® is a registered trademark of E.I. du Pont de Nemours and Company.

ULTIC ARMOR® is a registered trademark of NIPPON VALQUA INDUSTRIES, LTD.

(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