

Specification

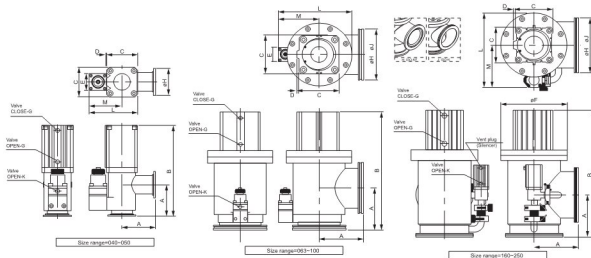
VL(^A / _B)D series			Vacuum Angle Valve / Double Acting / w/Soft-Roughing valve										
			Bellows STEM seal (A: SUS316L / B: AM350)										
Valve port		SIZE	16	25	40	50	63	80	100	160	200	250	320
Flange Standards	ISO-KF	CF	×	×	●	●	●	●	●	●	×	×	×
	ISO-K		×	×	×	×	●	●	●	●	●	●	×
Valve Actuating type			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)			-	-	42	95	150	250	520	1,430	3,180	5,150	-
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)										
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(at 0.5MPa)	cc(mL) ^(Note 2)		-	-	45	100	185	210	400	940	1,490	2,700	-
Open stroke			-	-	18	25	30	35	40	60	95	110	-
Seal distance (A-Value)			-	-	65	70	88	90	108	138	178	208	-
Soft Roughing Valve Specification(N.C.)			-	-	BPSV	BPSV	BPSV	BPSV	BPSV	NW16	NW25	NW40	
Operating pressure MPa (G)			0.4~0.7										
Operation Port Port Size			-	-	PT 1/8" (Rc1/8")					PT 1/8" (Rc1/8")			

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

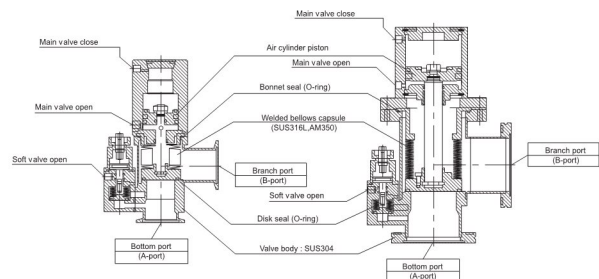
External dimension table

SIZE	16	25	40	50	63	80	100	160	200	250
A	-	-	65	70	88	90	108	138	178	208
B	-	-	184	205	244	257.5	302.5	415	520.5	611
C	-	-	60	69	77	77	98	117	117	142
D	-	-	2	2	5	5	5	6.5	6.5	11
E	-	-	35	35	35	35	35	-	-	-
F	-	-	-	-	Ø119	Ø119	Ø159	Ø208	Ø258	Ø318
G	-	-	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 3/8"	PT 3/8"	PT 3/8"
H	-	-	Ø55	Ø75	Ø95	Ø114	Ø134	Ø190	-	-
J	-	-	-	-	Ø95	Ø110	Ø130	Ø180	Ø240	Ø290
K	-	-	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"
L	-	-	94	102.5	134.5	140.5	179	244	308	390
M	-	-	64	68	75	81	99.5	140	180	230

Dimensional drawing



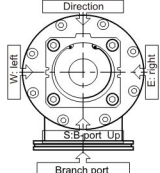
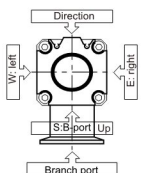
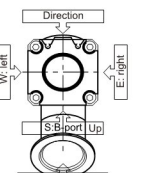
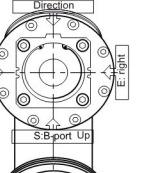
Internal detail



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	VAⒶC	A	316L Bellows STEM Seal																			
		VABⒶC	B	AM350 Bellows STEM Seal																			
		VASⒶC	S	O-Ring STEM Seal																			
	C Operation type	VABⒶP	P	Double Acting (Pneumatic)																			
		VABⒶS	S	Single Acting (N.C.)																			
		VABⒶM	M	Manual operation																			
		VABⒶQ	Q	Double Acting, w/Heater (Pneumatic)																			
		VABⒶR	R	Single Acting, w/Heater (N.C.)																			
		VABⒶH	H	Double Acting, Heating model(Pneumatic)																			
		VABⒶ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.)																			
	D Valve Seal	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®	Chemraz®	Kalrez®	Kalrez®	ULTIC ARMOR®									
								SS592	SS630	SSE38	4079	9100	UA4640										
			Im case of FFKM (FS), please specify a separate material.																				
CDA port position (Note 2)	④ (Note 2)	□ Branch port Lower part	None		E				S				W										
			Rear		Right				Left				Same Direction										
																							
Sensor	⑤	□	0		1				2														
			None		1 EA				2 EA														
Solenoid or Heater Mounting	⑥	□	C		N				P				H										
			W8H(TPC)		W9HN(TPC)				W9HP(TPC)				D-*****(SMC)										
Valve	⑦ (Note 3)	(G) or (W)	G: Mounting Solenoid valve(Applicable Model) / W:Heater exclude (Not installed)																				
			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	[VⒶⒶS]	Solenoid Valve Spec.	RDV412-5DZ-01					RDS301-5DZ-01A			(Note 4)	Not Available											
Double acting	[VⒶⒶ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