

Specification

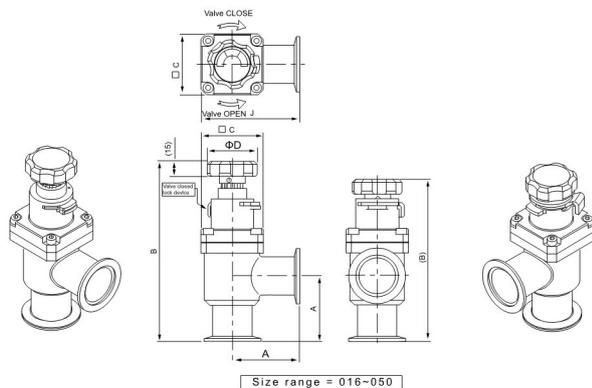
VLAL special			Vacuum Angle Valve / Manually Closed Lock type										
			Bellows STEM seal (A: SUS316L)										
Valve port	SIZE		16	25	40	50	63	80	100	160	200	250	320
Flange Standards	ISO-CF	CF	●	●	●	●	×	×	×	×	×	×	×
Valve Actuating type			Manual acting										
Feature			Closed Locking mechanism (Safety device) Ratchet lever release unlock										
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	-	-	-	-	-	-	-
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) Main parts: SUS304, AL-6061, FKM (Standard seal)										
Open stroke			14	14	18	25	-	-	-	-	-	-	-
Number of Handle rotation			7	7	9	12.5	-	-	-	-	-	-	-
Seal distance (A-Value)			40	50	65	70	-	-	-	-	-	-	-

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

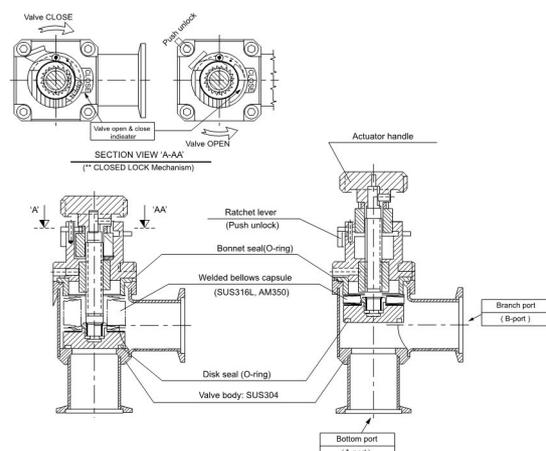
External dimension table

SIZE	16	25	40	50
A	40	50	65	70
B	143.5	151.5	179	206
(B)	129.5	137.5	161	181
C	48	48	60	69
D	Ø48	Ø48	Ø48	Ø48
H	Ø30	Ø40	Ø55	Ø75
J	64	74	95	104.5
K	-	-	-	-

Dimensional drawing



Internal detail



How to Order

Valve **V(A)B(C)** - ① ② - ③ - ④ - ⑤ ⑥ - (⑦) Model VLAP - □□□ □□-□□ - □ - □□

Series	① Body shape	VL(B)C	L	L-type(Angle valve) 304SS Body										
		VY(B)C	Y	Y-type(Inline valve) 304SS Body										
	② Stem Seal	V(A)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										
	③ Operation type	V(A)P	P	Double Acting (Pneumatic)										
		V(A)S	S	Single Acting (N.C.)										
		V(A)M	M	Manual operation										
		V(A)Q	Q	Double Acting, w/Heater (Pneumatic)										
		V(A)R	R	Single Acting, w/Heater (N.C.)										
		V(A)H	H	Double Acting, Heating model(Pneumatic)										
		V(A)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				
		Direction: W:left, E:right, S:up, B:down				Direction: W:left, E:right, S:up, B:down		Direction: W:left, E:right, S:up, B:down		Direction: W:left, E:right, S:up, B:down				
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 (Note 3)	⑦	(G) or (W)	G: Mounting Solenoid valve(Applicable Model) / W:Heater exclude (Not installed)											
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(A)S]	Solenoid Valve Spec.	RDV412-5DZ-01				RDS301-5DZ-01A				(Note 4)	Not Available			
Double acting [V(A)P]	Solenoid Valve Spec.	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