



For double cutoff compliant with low pressure (5 kPa) to intermediate pressure (25 kPa) specifications.

Gas cutoff valve (slow open) **VLA Series**

- NC (when energized Open) type
- City gas/LPG
- Port size: Rp1/2, Rp3/4, Rp1, Rp1 1/4, Rp1 1/2, Rp2, Rp2 1/2



Features

- For a wide range of gas pressures ranging from low pressure to intermediate pressure.
- Flow rate adjustment (calorie change) is easy, adjustable even after installation.
- Equipped with a robust dedicated terminal box with JIS standard conduit thread, making electrical wiring easy too.
- The DC driven actuator with rectifier has eliminated noise and coil burnout for safety.

Applications

- Gas boilers
- Industrial furnaces
- Gas absorption water coolers/heaters
- Drying furnaces
- Hydrogen-related devices (only hydrogen gas option is used as the working fluid)
- Other

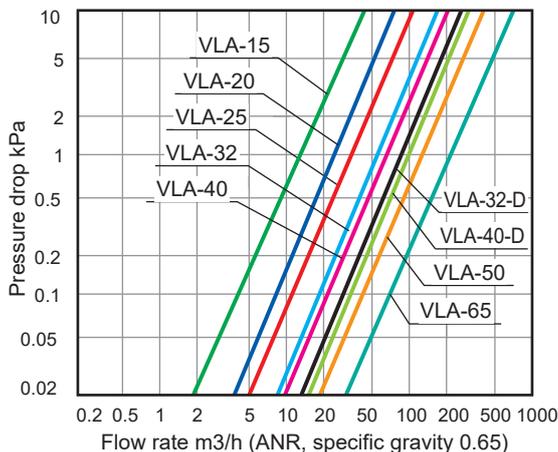
Specifications

Item	VLA-15	VLA-20	VLA-25	VLA-32	VLA-40	VLA-50	VLA-65	VLA-32-D	VLA-40-D
Working fluid	City gas/LPG (hydrogen gas *1)								
Working pressure kPa	0 to 25		0 to 20					0 to 5	
Flow rate <small>Specific gravity of city gas 0.65</small> m ³ /h (ANR)	6.9	14.8	18.7	30.3	34.5	70.0	112.6	45.0	49.0
Cv	4.6	9.9	12.5	20.4	23.2	47.1	75.8	30.3	33.0
Rated voltage V	100 AC ^{+10%} / _{-15%} 200 AC ^{+10%} / _{-15%}								
Frequency Hz	Common to 50 and 60								
Power consumption (apparent power) VA	31		50		73	74	50		
Ambient temperature °C	-20 to +60 (no freezing) *2								
Opening time s	Approx. 10								
Closing time s	1.0 or less								
Frequency cycles/min	1 or less								
Flow rate adjustment %	20 to 100							-	
Start gas adjustment %	0 to 70								
Re-energizing intermission time s	5.0 or more								
Mounting orientation	Vertical direction with the coil on top or horizontal direction with the coil horizontal								
Connection	Screw-in (Rp)								
Port size	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	1 1/4	1 1/2
Weight kg	1.9	2.7	2.6	4.2	4.1	8.9	15.2	4.0	4.0
Proof pressure MPa	0.1								
Degree of protection	IPX4								

* 1: Only the option for hydrogen gas as the working fluid can be used.

* 2: When micro switch for operation confirmation is selected, -15 to +60 (no freezing)

Flow characteristics

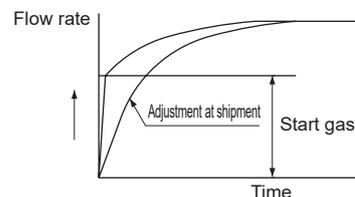


Reference: Conversion coefficient

Converted flow rate = (flow rate in table) x (coefficient)

Gas	City gas (13A)	Propane	Butane	Hydrogen gas *1
Specific gravity (air = 1)	0.65	1.6	2.0	0.07
Coefficient	1.0	0.63	0.57	3.04

Opening operation characteristics



How to order

VLA - 40 - D P H2 - AC100V

Model No.

1 Port size

2 Capacity

*2

3 Other options

*3

*4

*5

*6

4 Hydrogen compatible option

5 Voltage

*7

Model No.							
VLA-15	VLA-20	VLA-25	VLA-32	VLA-40	VLA-50	VLA-65	

Code	Description	VLA-15	VLA-20	VLA-25	VLA-32	VLA-40	VLA-50	VLA-65
1 Port size								
15	Rp1/2	●						
20	Rp3/4		●					
25	Rp1			●				
32	Rp1 ¹ / ₄				●			
40	Rp1 ¹ / ₂					●		
50	Rp2						●	
65	Rp2 ¹ / ₂							●
2 Capacity								
Blank	Standard	●	●	●	●	●	●	●
D	Large flow rate specifications				●	●		
3 Other options								
Blank	Standard	None						
E	Option	With operation confirmation micro switch						
L		With power indicator lamp						
P		With pressure detection port						
ZZ		Outdoor type						
4 Hydrogen compatible option								
Blank	Standard							
H2	Working fluid: Hydrogen gas							
5 Voltage								
AC100V	Standard	100 VAC 50/60 Hz						
AC200V		200 VAC 50/60 Hz						
AC110V	Option	110 VAC 50/60 Hz						
AC220V		220 VAC 50/60 Hz						
DC24V		24 VDC						
DC100V		100 VDC						

* 1: The combinations indicated with ● above are available.

* 2: For large flow rate specifications (2 Capacity "D"), flow rate adjustment is not available.

* 3: For models with operation confirmation micro switch (3 Other option "E"), a pressure detection port is provided as standard. Flow rate adjustment is not available. Combination with the outdoor specification (3 Other option "ZZ") is not available.

* 4: Combination with power indicator lamp (3 Other option "L") is not available for outdoor specification (3 Other option "ZZ").

* 5: Combinations of the outdoor specification (3 Other option "ZZ") with micro switch for operation check (3 Other option "E") and with power indicator lamp (3 Other option "L") are not available.

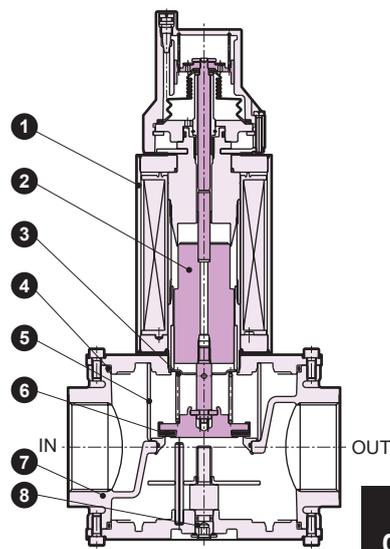
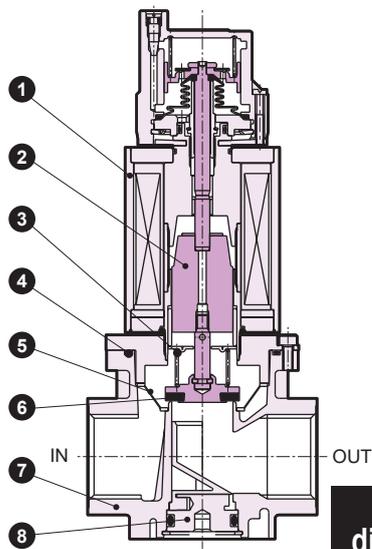
* 6: 3 For combinations of other optional specifications other than above, contact CKD.

* 7: For voltages other than above, contact CKD.

Internal structure/material

● VLA-15 to 40

● VLA-50 to 65

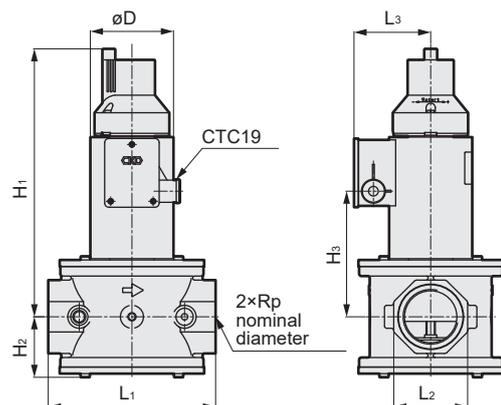
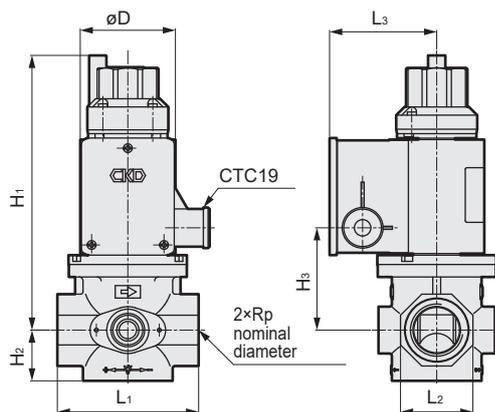


Part No.	Part name	Material	Part No.	Part name	Material
1	Bonnet	Steel	5	Strainer	Resin (15 to 50)/stainless steel wire (65)
2	Plunger	Stainless steel	6	Valve disc	Nitrile rubber
3	Spring	Stainless steel wire	7	Body	Aluminum
4	O-ring	Nitrile rubber	8	Flow rate adjusting screw	Aluminum (15 to 40)/steel (50 to 65)

Dimensions

● VLA-15 to 40

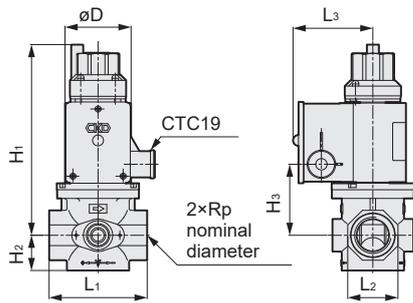
● VLA-50 to 65



Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
VLA-15	1/2	161.5	24.5	51	69	32	63	50
VLA-20	3/4	176	33	65.5	89	46	68	60.5
VLA-25	1	176	33	65.5	89	46	68	60.5
VLA-32	1 1/4	195	39.5	84.5	128	65	73	70
VLA-40	1 1/2	195	39.5	84.5	128	65	73	70
VLA-50	2	292.5	66.5	137	180	80	83	90
VLA-65	2 1/2	303.5	77.5	148	218	95	101	127
VLA-32-D	1 1/4	203.5	35	93	128	70	73	70
VLA-40-D	1 1/2	203.5	35	93	128	70	73	70

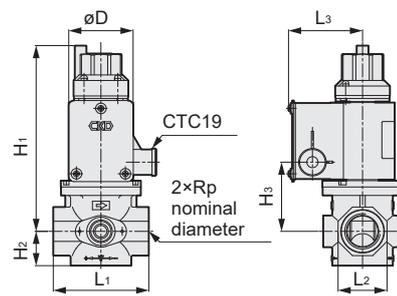
Optional dimensions

- With power indicator lamp
VLA-15 to 65-L



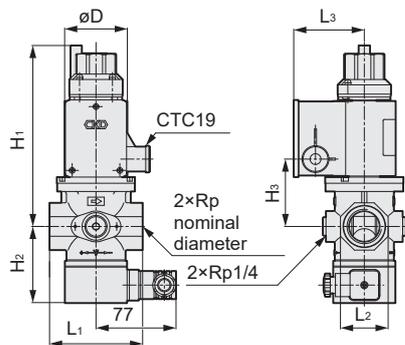
Code Model No.	Connection Bore size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
VLA-15-L	1/2	161.5	24.5	51	69	32	68	50
VLA-20-L	3/4	176	33	65.5	89	46	73	60.5
VLA-25-L	1	176	33	65.5	89	46	73	60.5
VLA-32-L	1 1/4	195	39.5	84.5	128	65	78	70
VLA-40-L	1 1/2	195	39.5	84.5	128	65	78	70
VLA-50-L	2	292.5	66.5	137	180	80	88	90
VLA-65-L	2 1/2	303.5	77.5	148	218	95	106	127

- Outdoor type
VLA-15 to 65-ZZ



Code Model No.	Connection Bore size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
VLA-15-ZZ	1/2	161.5	24.5	51	69	32	63	50
VLA-20-ZZ	3/4	176	33	65.5	89	46	68	60.5
VLA-25-ZZ	1	176	33	65.5	89	46	68	60.5
VLA-32-ZZ	1 1/4	195	39.5	84.5	128	65	73	70
VLA-40-ZZ	1 1/2	195	39.5	84.5	128	65	73	70
VLA-50-ZZ	2	292.5	66.5	137	180	80	83	90
VLA-65-ZZ	2 1/2	303.5	77.5	148	218	95	101	127

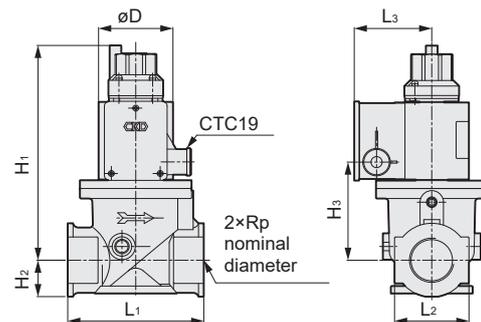
- With operation confirmation micro switch
VLA-15 to 65-E



* Pressure detection port is provided as standard. Flow rate adjustment is not available.

Code Model No.	Connection Bore size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
VLA-15-E	1/2	161.5	69.5	51	69	32	63	50
VLA-20-E	3/4	176	75	65.5	89	46	68	60.5
VLA-25-E	1	176	75	65.5	89	46	68	60.5
VLA-32-E	1 1/4	195	81.5	84.5	128	65	73	70
VLA-40-E	1 1/2	195	81.5	84.5	128	65	73	70
VLA-50-E	2	292.5	104.5	137	180	80	83	90
VLA-65-E	2 1/2	303.5	115.5	148	218	95	101	127

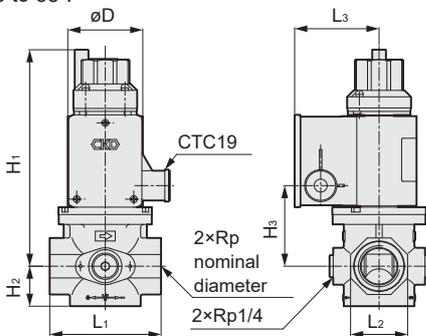
- Large flow rate specifications
VLA-32/40-D



* Flow rate adjustment is not available.

Code Model No.	Connection Bore size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
VLA-32-D	1 1/4	203.5	35	93	128	70	73	70
VLA-40-D	1 1/2	203.5	35	93	128	70	73	70

- With pressure detection port
VLA-15 to 65-P



* The pressure detection port is connected to the IN side.

Code Model No.	Connection Bore size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
VLA-15-P	1/2	161.5	24.5	51	69	32	63	50
VLA-20-P	3/4	176	33	65.5	89	46	68	60.5
VLA-25-P	1	176	33	65.5	89	46	68	60.5
VLA-32-P	1 1/4	195	39.5	84.5	128	65	73	70
VLA-40-P	1 1/2	195	39.5	84.5	128	65	73	70
VLA-50-P	2	292.5	66.5	137	180	80	83	90
VLA-65-P	2 1/2	303.5	77.5	148	218	95	101	127