



For double cutoff compliant with low pressure (5 kPa) to intermediate pressure (45 kPa) specifications.

Equivalent to "DIN3394" groups A and B

Gas cutoff valve (quick open) VNA Series

● City gas/natural gas/LPG

● Port size: Rp1/2, Rp3/4, Rp1, Rp1 1/4, Rp1 1/2, Rp2, Rp2 1/2



- EXA
- FWD
- HNB/G
- USB/G
- FAB/G
- FGB/G
- FVB
- FWB/G
- FHB
- FLB
- AB
- AG
- AP/AD
- APK/ADK
- DryAir
- EX-XPLNprf
- XPLNprf
- HVB/HVL
- SAB/NAB
- LAD/NAD
- Water-Rela
- NP/NAP/NVP
- SNP
- CHB/G
- MXB/G
- Other valves
- SWD/MWD
- DustColl
- CVE/CVSE
- CCH/CPE/D
- LifeSci
- Gas-Combus
- Auto-Water
- SpecFld
- Custom
- Ending

Features

- Japan Gas Appliances Inspection Association (JIA) certified product (relevant model No.: VNA-32-AC100V, AC200V, VNA-40-AC100V, AC200V, VNA-50-AC100V, AC200V. * Option products, other bore sizes are not compliant.)
- 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.
- Dust-proof and drip-proof

Main applications

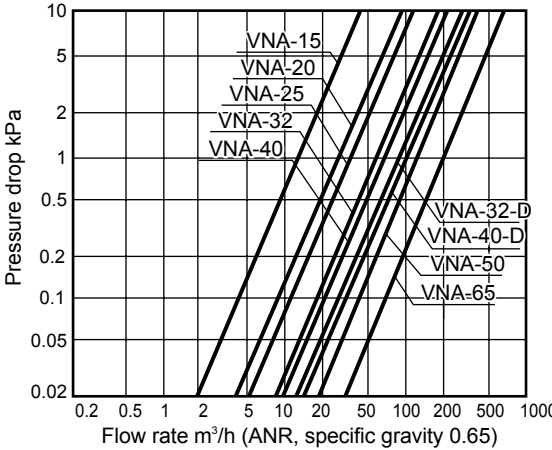
- Gas boilers
- Industrial furnaces
- Gas absorption water coolers/heaters
- Drying furnaces
- Others

Specifications

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar

Descriptions	VNA-15	VNA-20	VNA-25	VNA-32	VNA-40	VNA-50	VNA-65	VNA-32-D	VNA-40-D	
Working fluid	City gas/natural gas/LPG									
Working pressure kPa	0 to 45	0 (≈0 psi, 0 bar) to 30 (≈4.3 psi, 0.3 bar)				0 (≈0 psi) to 20 (≈2.9 psi)		0 (≈0 psi) to 5 (≈0.7 psi)		
Flow rate <small>Specific gravity of natural gas 0.65 ΔP = 0.25 kPa</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 (-4°F) to +60 (140°F) (no freezing)									
Opening time s	0.5 or less									
Closing time s	1.0 or less									
Frequency Cycle/min.	30 or less									
Flow rate adjustment %	20 to 100							-		
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	1.7	2.5	2.4	4.0	3.9	8.3	14.6	3.7	3.7	
Proof pressure MPa	0.1 (≈15 psi, 1 bar)									

Flow characteristics



Reference: conversion coefficient

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

Gas type	Natural gas (13A)	City gas (6B.6C)	Propane	Butane	Butane-air (6A)
Specific gravity (air = 1)	0.65	0.54	1.6	2.0	1.25
Coefficient	1.0	1.09	0.63	0.57	0.72

How to order

VNA - 40 - D PY - AC100V

Model No.

A Port size

B Capacity

C Other options

D Voltage

Model No.

Code		Content	VNA-15	VNA-20	VNA-25	VNA-32	VNA-40	VNA-50	VNA-65
A Port size									
15		Rp1/2	●						
20		Rp3/4		●					
25		Rp1			●				
32		Rp1 ¹ / ₄				●			
40		Rp1 ¹ / ₂					●		
50		Rp2						●	
65		Rp2 ¹ / ₂							●
B Capacity									
Blank		Standard	●	●	●	●	●	●	●
D		Large flow rate specifications				●	●		
C Other options									
Blank	Std.	None	●	●	●	●	●	●	●
E	Option	With operation confirming μ switch	●	●	●	●	●	●	●
H		0.1 MPa specifications	●	●	●	●	●		
L		With power indicator lamp	●	●	●	●	●	●	●
P		With pressure detection port	●	●	●	●	●	●	●
V		Vacuum specifications	●	●	●				
Y		With flow rate adjustment				●	●		
ZZ		Outdoor	●	●	●	●	●	●	●
D Voltage									
AC100V	Std.	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 : Models with flow rate adjustment (Item C Y) can be mounted on large flow rate specification (Item B D) only.

*3 : For large flow rate specifications (Item B D), 0.1 MPa specifications (Item C H) are not available.

*4 : If several options of Item C are necessary, contact CKD.

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

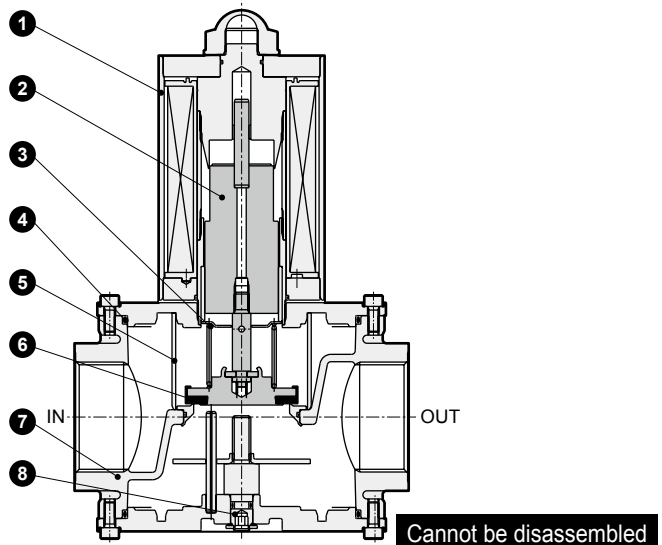
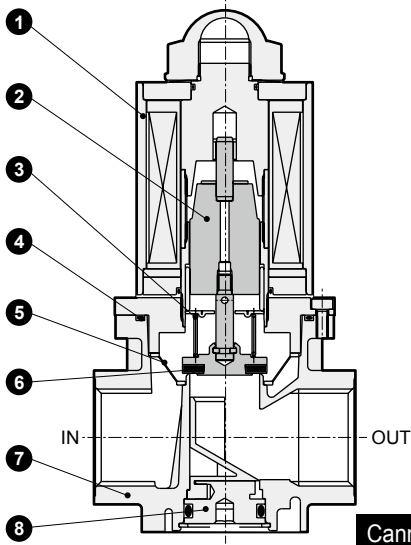
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DryAir
EX-
XPLNprf
XPLNprf
HVB/
HVL
S Δ B/
NAB
LAD/
NAD
Water-
Rela
NP/NAP/
NVP
SNP
CHB/G
MXB/G
Other
valves
SWD/
MWD
DustColl
CVE/
CVSE
CCH /
CPE/D
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Internal structure and parts list

● VNA-15 to 40

● VNA-50 to 65



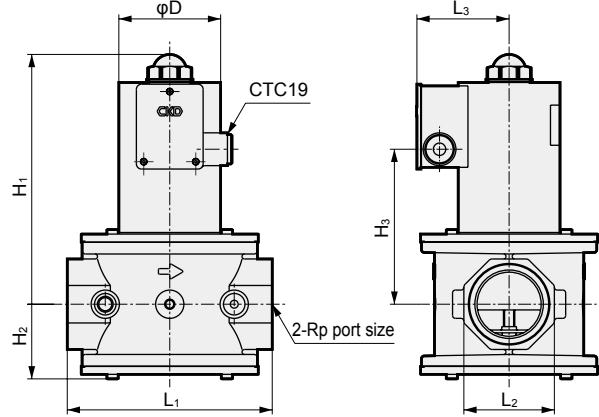
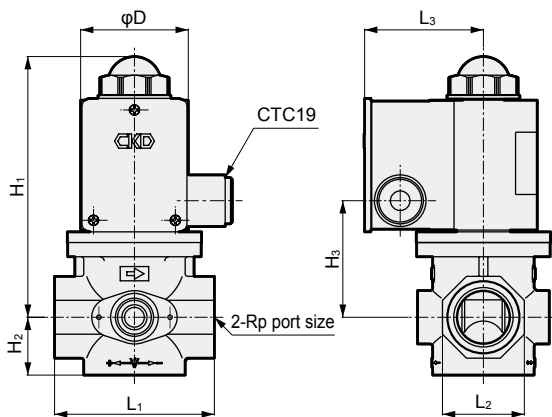
No.	Part name	Material	No.	Part name	Material
1	Bonnet	Steel	5	Strainer	Resin (15 to 50)/stainless steel wire (65)
2	Plunger	Stainless steel	6	Valve disc	Nitrile rubber
3	Spring	Stainless steel wire	7	Body	Aluminum
4	O-ring	Nitrile rubber	8	Flow rate adjustment screw	Aluminum (15 to 40)/steel (50 to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

Dimensions



● VNA-15 to 40

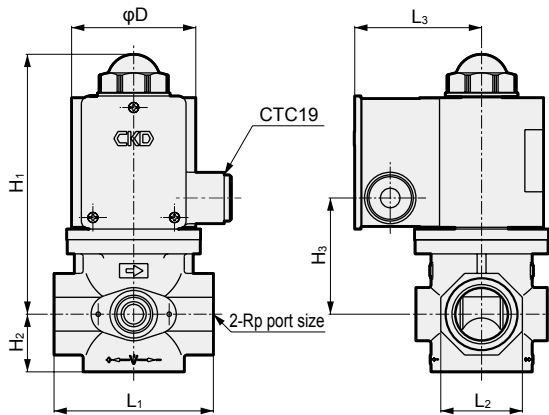
● VNA-50 to 65



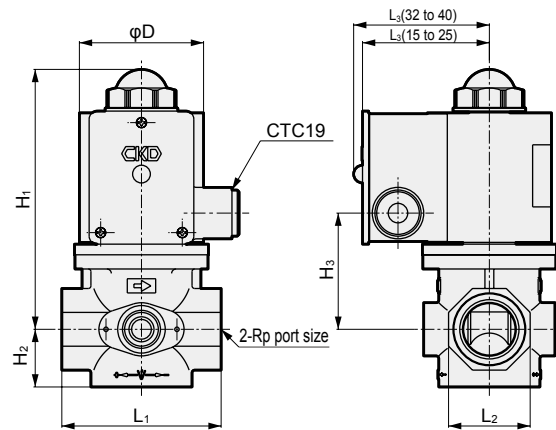
Code	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	φD
Model No.								
VNA-15	1/2	132.5	24.5	51	69	32	63	50
VNA-20	3/4	147	33	65.5	89	46	68	60.5
VNA-25	1	147	33	65.5	89	46	68	60.5
VNA-32	1 1/4	166	39.5	84.5	128	65	73	70
VNA-40	1 1/2	166	39.5	84.5	128	65	73	70
VNA-50	2	221	66.5	137	180	80	83	90
VNA-65	2 1/2	232	77.5	148	218	95	101	127
VNA-32-D	1 1/4	174.5	35	93	128	70	73	70
VNA-40-D	1 1/2	174.5	35	93	128	70	73	70

Optional dimensions

- Vacuum specifications: 1.33×10^{-5} to 101 kPa (reverse vacuum is not possible)
VNA-15/20/25-V



- 0.1 MPa specifications
VNA-15 to 40-H

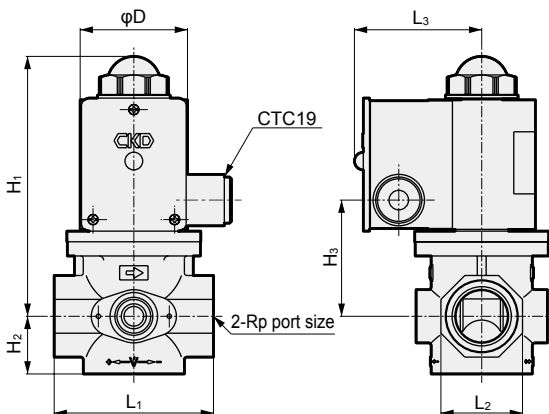


Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	φD
VNA-15-V	1/2	136.5	24.5	55	69	32	68	60.5
VNA-20-V	3/4	147	33	65.5	89	46	73	70
VNA-25-V	1	147	33	65.5	89	46	73	70

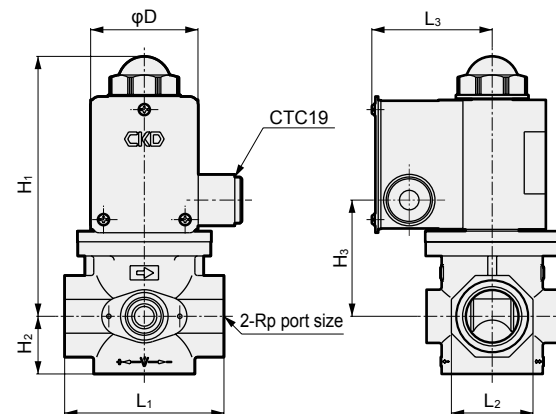
*For port sizes 32 and 40, power indicator lamp is provided as standard.

Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	φD
VNA-15-H	1/2	136.5	24.5	55	69	32	68	60.5
VNA-20-H	3/4	147	33	65.5	89	46	73	70
VNA-25-H	1	147	33	65.5	89	46	73	70
VNA-32-H	1 1/4	193	39.5	111.5	128	65	88	90
VNA-40-H	1 1/2	193	39.5	111.5	128	65	88	90

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



- Outdoor
VNA-15 to 65-ZZ



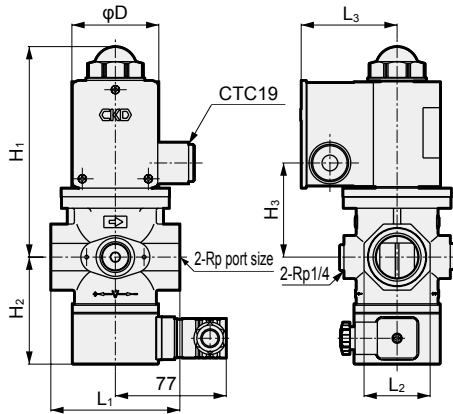
Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	φD
VNA-15-L	1/2	132.5	24.5	51	69	32	68	50
VNA-20-L	3/4	147	33	65.5	89	46	73	60.5
VNA-25-L	1	147	33	65.5	89	46	73	60.5
VNA-32-L	1 1/4	166	39.5	84.5	128	65	78	70
VNA-40-L	1 1/2	166	39.5	84.5	128	65	78	70
VNA-50-L	2	221	66.5	137	180	80	88	90
VNA-65-L	2 1/2	232	77.5	148	218	95	106	127

Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	φD
VNA-15-ZZ	1/2	132.5	24.5	51	69	32	63	50
VNA-20-ZZ	3/4	147	33	65.5	89	46	68	60.5
VNA-25-ZZ	1	147	33	65.5	89	46	68	60.5
VNA-32-ZZ	1 1/4	166	39.5	84.5	128	65	73	70
VNA-40-ZZ	1 1/2	166	39.5	84.5	128	65	73	70
VNA-50-ZZ	2	221	66.5	137	180	80	83	90
VNA-65-ZZ	2 1/2	232	77.5	148	218	95	101	127

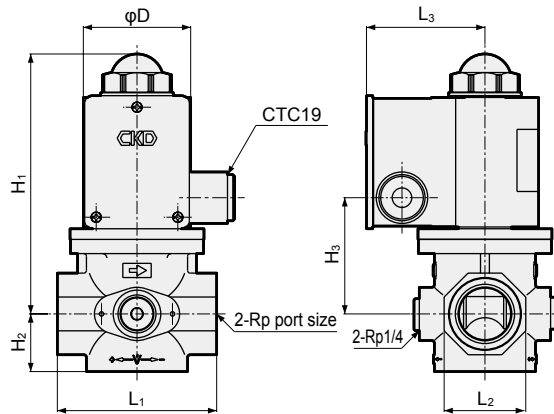
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Optional dimensions

● With operation confirmation micro switch
VNA-15 to 65-E



● With pressure detection port
VNA-15 to 65-P

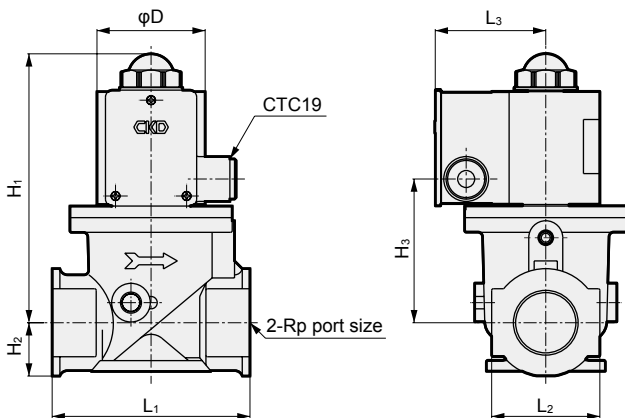


* Pressure detection port is provided as standard. Flow rate adjustment is not available.

Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	φD
VNA-15-E	1/2	132.5	69.5	51	69	32	63	50
VNA-20-E	3/4	147	75	65.5	89	46	68	60.5
VNA-25-E	1	147	75	65.5	89	46	68	60.5
VNA-32-E	1 1/4	166	81.5	84.5	128	65	73	70
VNA-40-E	1 1/2	166	81.5	84.5	128	65	73	70
VNA-50-E	2	221	104.5	137	180	80	83	90
VNA-65-E	2 1/2	232	115.5	148	218	95	101	127

Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	φD
VNA-15-P	1/2	132.5	24.5	51	69	32	63	50
VNA-20-P	3/4	147	33	65.5	89	46	68	60.5
VNA-25-P	1	147	33	65.5	89	46	68	60.5
VNA-32-P	1 1/4	166	39.5	84.5	128	65	73	70
VNA-40-P	1 1/2	166	39.5	84.5	128	65	73	70
VNA-50-P	2	221	66.5	137	180	80	83	90
VNA-65-P	2 1/2	232	77.5	148	218	95	101	127

● Large flow rate specifications
VNA-32/40-D



* Flow rate adjustment is not available.

Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	φD
VNA-32-D	1 1/4	174.5	35	93	128	70	73	70
VNA-40-D	1 1/2	174.5	35	93	128	70	73	70