



For double shut-off compliant with low pressure (5 kPa) to intermediate pressure (45 kPa) specifications. Equivalent to "DIN3394" groups A and B

Gas shut-off valve (quick open) VNA Series

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



Features

- Japan Gas Component Inspection Association (JIA) type certified product (Applicable models: VNA-32-AC100V, 200 VAC, 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.

Applications

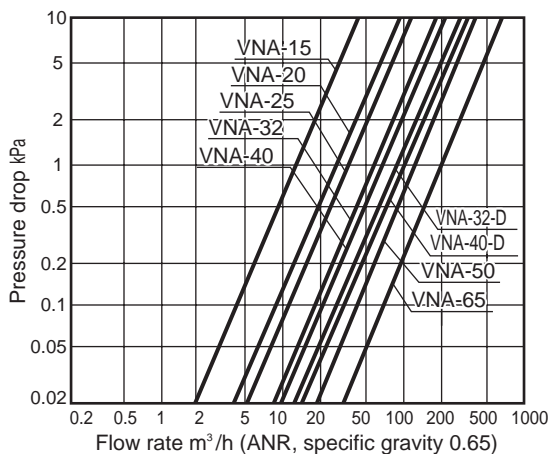
- Gas boilers
- Industrial furnaces
- Gas absorption water coolers/heaters
- Drying furnaces
- Hydrogen-related devices (only working fluid is hydrogen gas option)
- Other

Specifications

Item	VNA-15	VNA-20	VNA-25	VNA-32	VNA-40	VNA-50	VNA-65	VNA-32-D	VNA-40-D
Working fluid	City gas/LPG (hydrogen *)								
Working pressure kPa	0 to 45	0 to 30			0 to 20		0 to 5		
Flow rate <small>Specific gravity of city gas 0.65, ΔP=0.25kPa</small> m ³ /h (ANR)	6.9	14.8	18.7	3 0.3	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)								
Opening time s	0.5 or less								
Closing time s	1.0 or less								
Frequency cycles/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								
Degree of protection	IPX4								

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

Flow Rate Characteristics



Reference: conversion factor

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

How to order



Model No.

A Port size

B Capacity
*2

C Other options

- *3
- *4
- *5
- *6
- *7
- *8
- *10

D Voltage
*9

		Model No.						
		VNA-15	VNA-20	VNA-25	VNA-32	VNA-40	VNA-50	VNA-65
Code	Description							
A Port size								
15	Rp1/2	●						
20	Rp3/4		●					
25	Rp1			●				
32	Rp1¼				●			
40	Rp1½					●		
50	Rp2						●	
65	Rp2½							●
B Capacity								
Blank	Standard	●	●	●	●	●	●	●
D	Large flow rate specifications				●	●		
C Other options								
Blank	Std.	No	●	●	●	●	●	●
E	Option	Operation confirmation micro switch with	●	●	●	●	●	●
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 type	●	●	●	●	●	●
H2		Working fluid: Hydrogen gas	●	●	●	●	●	●
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 : For large flow rate specifications (B Item D), flow rate adjustment is not available. Combinations with flow rate adjustment (C Item Y) are available.
- *3 : For models with micro switch for operation confirmation (C Item E), a pressure detection port is provided as standard. Flow rate adjustment is not available. Combinations with the 0.1 MPa specification (C Item H), vacuum specification (C Item V), or outdoor specification (C Item ZZ) are not available.
- *4 : For port sizes 32 and 40 with 0.1 MPa specification (C Item H), a power indicator lamp is provided as standard.
- *5 : For models with power indicator lamp (C Item L), combination with the outdoor specification (C Item ZZ) is not available.
- *6 : Models with flow rate adjustment (C Item Y) are dedicated large flow rate specification options (B Item D). Standard products all have flow rate adjustment equipped as standard.
- *7 : Combinations of the outdoor specification (C Item ZZ) with models with micro switch for operation confirmation (C Item E) or with power indicator lamp (C Item L) are not available.
- *8 : For combinations of the Item C option specifications other than listed above, contact CKD.
- *9 : For voltages other than above, contact CKD.
- *10: Gas used: Combinations of 0.1MPa specifications (C Item H) and vacuum specifications (C Item V) are not available for hydrogen gas option.

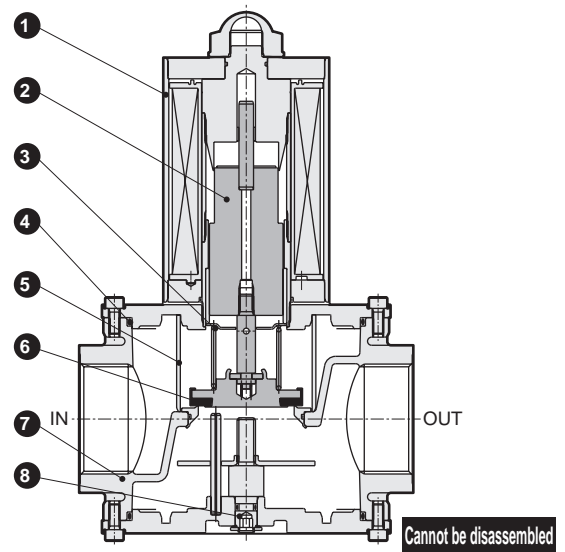
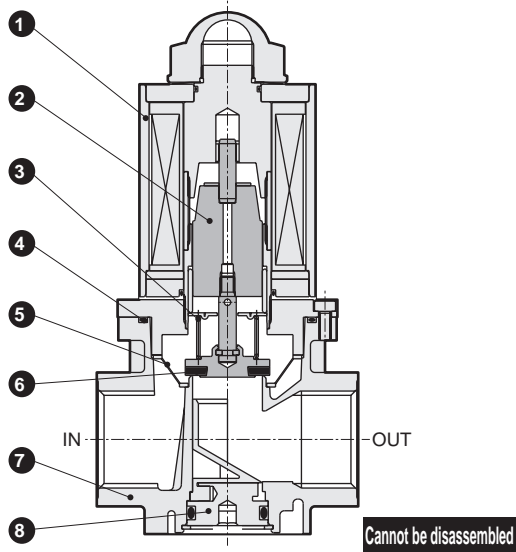
EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/AD
APK/ADK
DryAir
EX-XPLNprf
XPLNprf
HVB/HVL
S&B/NAB
LAD/NAD
Water-Rela
NP/NAP/NVP
SNP
CHB/G
MXB/G
Other valves
SWD/MWD
DustColl
CVE/CVSE
CCH/CPE/D
LifeSci
Gas-Combus
Auto-Water
Outdoor
SpecFld
Custom
Ending

EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/
AD
APK/
ADK

Internal structure and parts list

● VNA-15 to 40

● VNA-50 to 65



Part No.	Part name	Material	Part No.	Part name	Material
1	Bonnet	Steel	5	Strainer	Resin (15- 50)/Stainless steel wire
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)

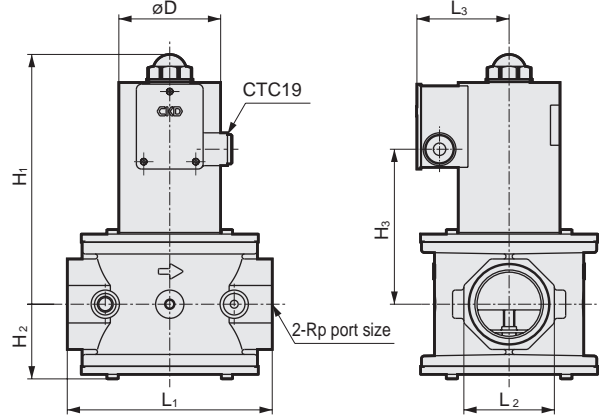
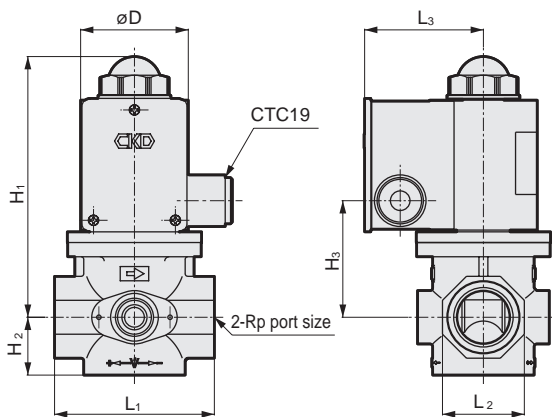
DryAir
EX-
XPLNprf
XPLNprf
HVB/
HVL
S ◇ B/
NAB
LAD/
NAD
Water-
Rela
NP/NAP/
NVP
SNP
CHB/G
MXB/G
Other
valves
SWD/
MWD
DustColl
CVE/
CVSE
CCH/
CPE/D
LifeSci
Gas-
Combus
Auto-
Water
Outdoor
SpecFld
Custom
Ending

Dimensions



● VNA-15 to 40

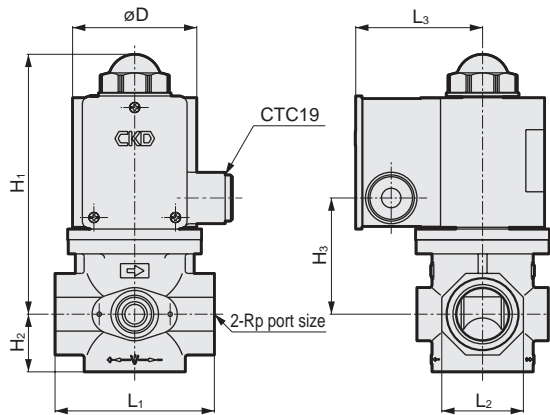
● VNA-50 to 65



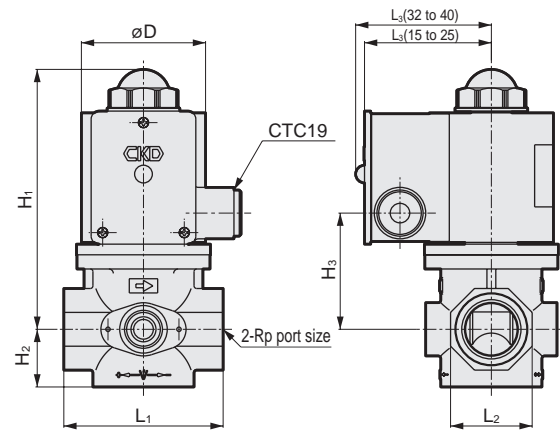
Code	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
Model No.								
VNA-15	1/2	132.5	24.5	51	69	32	63	50
VNA-20	3/4	147	33	65.5	89	46	68	60.5
VNA-25	1	147	33	65.5	89	46	68	60.5
VNA-32	1 1/4	166	39.5	84.5	128	65	73	70
VNA-40	1 1/2	166	39.5	84.5	128	65	73	70
VNA-50	2	221	66.5	137	180	80	83	90
VNA-65	2 1/2	232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

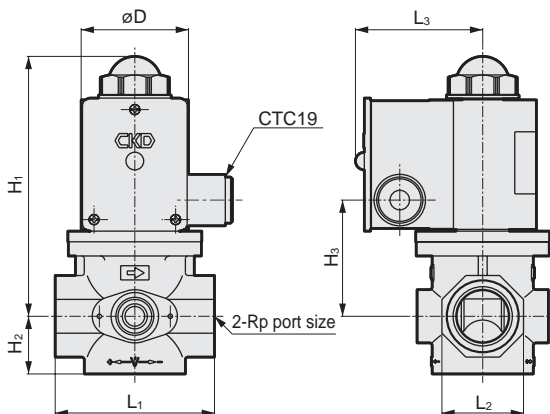


Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
VNA-15-V	1/2	136.5	24.5	55	69	32	68	60.5
VNA-20-V	3/4	147	33	65.5	89	46	73	70
VNA-25-V	1	147	33	65.5	89	46	73	70

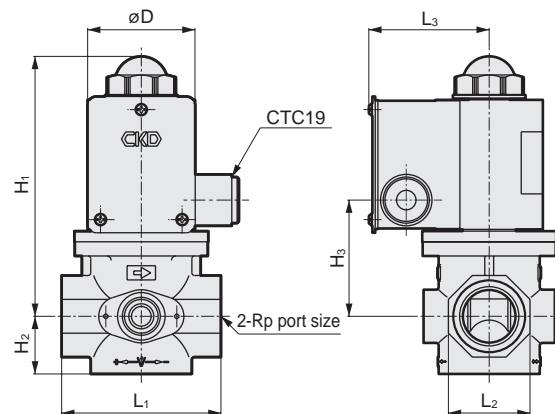
*For port sizes 32 and 40, power indicator lamp is provided as standard.

Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
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



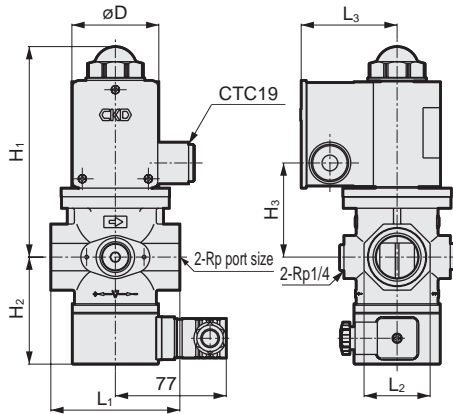
Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
VNA-15-L	1/2	132.5	24.5	51	69	32	68	50
VNA-20-L	3/4	147	33	65.5	89	46	73	60.5
VNA-25-L	1	147	33	65.5	89	46	73	60.5
VNA-32-L	1 1/4	166	39.5	84.5	128	65	78	70
VNA-40-L	1 1/2	166	39.5	84.5	128	65	78	70
VNA-50-L	2	221	66.5	137	180	80	88	90
VNA-65-L	2 1/2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

- 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
- S ⌀ B/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-Combust
- Auto-Water
- Outdoor
- SpecFld
- Custom
- Ending

Optional dimensions

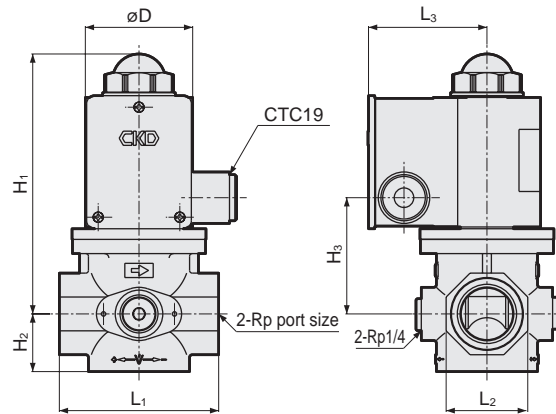
● With operation confirmation micro switch
VNA-15 to 65-E



* 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	øD
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

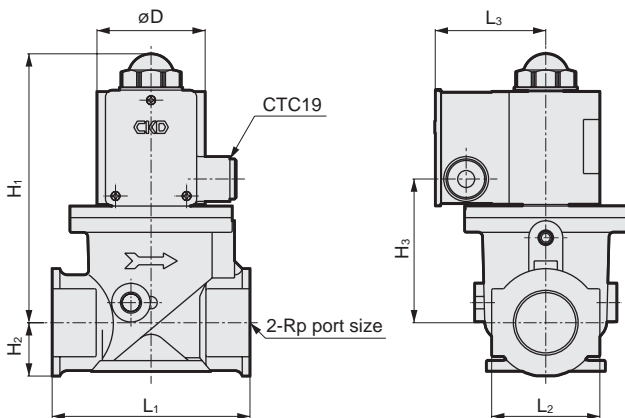
● With pressure detection port
VNA-15 to 65-P



* Pressure detection port connects on the IN side.

Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	øD
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	øD
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