

# Diaphragm Cylinder Valve

## VNE Series



### Standard Specifications

Item	15A-VNE-3BG
Action Type	NC (Normally Closed)
Fluid	Air, Water
Fluid Viscosity mm <sup>2</sup> /s	≤500
Operating Pressure (Water Pressure) Mpa	-0.1~0.5Mpa (A), -0.1~0.4Mpa (B)
Pressure Resistance Mpa	1.0
Fluid Temperature °C	-10~50 (Must not freeze)
Ambient Temperature °C	10~50
Seat Leakage	120pa (T80)
Pipe Connection Size	Rc3/8
Weight kg	0.32
Mounting Method	M5 ↓ 8
Pilot Fluid	Air
Pilot Pressure Mpa	0.4~0.5
Pilot Pipe Size	6mm
Vacuum Flow Rate L/min	120(-100KPa)

### JIS Symbol

NC (Normally Closed) Type	
---------------------------	--

### Product Features

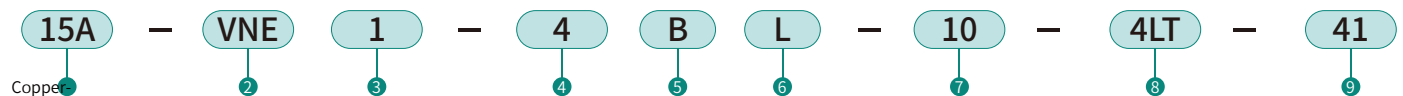
Normally Closed Type
Pipe Connection Size: Rc3/8
Fluid: Air, Inert Gas, Water, Non-corrosive Fluids

### Model Designation Method - Series I



1 Copper-Free	2 Model	3 Port Size	4 Effective Diameter	5 Body Material	6 Other Options				
Copper-Free Series	VNE	3	Rc3/8"	B	8	G	Stainless Steel	No Symbol B	No Option Mounting Plate

### Model Designation Method - Series II



1 Free	2 Model	3 Action Type	4 Port Interface	5 Effective Diameter	6 Manifold Material	7 Supply/Exhaust Port Position	8 Number of Units Combined	9 Number of Inlets/Outlets	
15A	VNE	1 Normally Closed	3 RC3/8	B	8	S Stainless Steel	Air Supply Direction	0	1 Inlet 1 Outlet
							Bottom Air Supply Port	1	2 Inlet 2 Outlet
			Right-side Air Supply Port	2	3 Inlet 3 Outlet				
		3 Double Acting	4 RC1/2	C	12	L Aluminum Alloy	Left-side Air Supply Port	0	4 Inlet 4 Outlet
							Right-side Air Supply Port	1	5 Inlet 5 Outlet
			Upper-side Air Supply Port	2	6 Inlet 6 Outlet				
	6 RC3/4	D	16			Lower-side Air Supply Port	3	7 Inlet 7 Outlet	
						Left-side Air Supply Port	4	8 Inlet 8 Outlet	
						Upper-side Air Supply Port	5	9 Inlet 9 Outlet	

[Note]: The maximum number of combined units is 6. Please contact our company for special requirements!

[Note 1]: For 8mm diameter single valves, stainless steel manifold plate material is optional.

[Note 2]: For multi-unit bodies (e.g., 6, 5, 4, 3, 2 combined), the air supply can only select the bottom/1/3 direction. Single-unit bodies can select direction 0 to 3. For multi-unit bodies with 1 inlet, the air supply can select direction 0/2.

[Note 3]: For inlet/outlet configurations (e.g., 4 inlets, 1 outlet), the air supply inlet direction is the selected bottom/1/3 direction. For 1 outlet, the direction defaults to 0. For 2 outlets, directions can be 0/2 (must be specified).

(For 4 inlets, 4 outlets) The outlet air supply direction corresponds to the load direction 1/3.

(For 1 inlet, 4 outlets) The outlet air supply direction corresponds to the selected load direction 1/3.

(For 2 inlets, 4 outlets) The air supply inlet direction is the selected bottom/1/3 direction. For multi-unit bodies, the inlet and outlet air directions cannot be the same.

\*If there are other special requirements for inlet/outlet air supply directions, please contact our company.

[Note 4]: Refer to the right diagram "Air Supply Direction" for outlet direction.

# Diaphragm Cylinder Valve

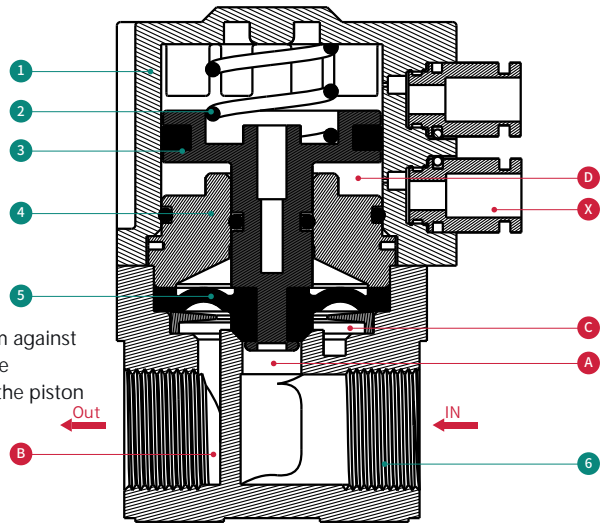
# VNE Series

## VNE Diaphragm Valve Working Principle and Structure

► 此型号是常闭型隔膜阀，在X接口没有正压气源接入时，活塞在压缩弹簧的作用下，膜片紧贴阀体阀口，从而阻断A腔与BC腔相连通。在有正压气源接入时，D腔压力大于外界大气，气压推动活塞向上运动膜片被拉起，从而使A腔与BC腔相通。

1	Cylinder Body	2	Compression Spring	3	Piston
4	Adapter	5	Diaphragm	6	Valve Body

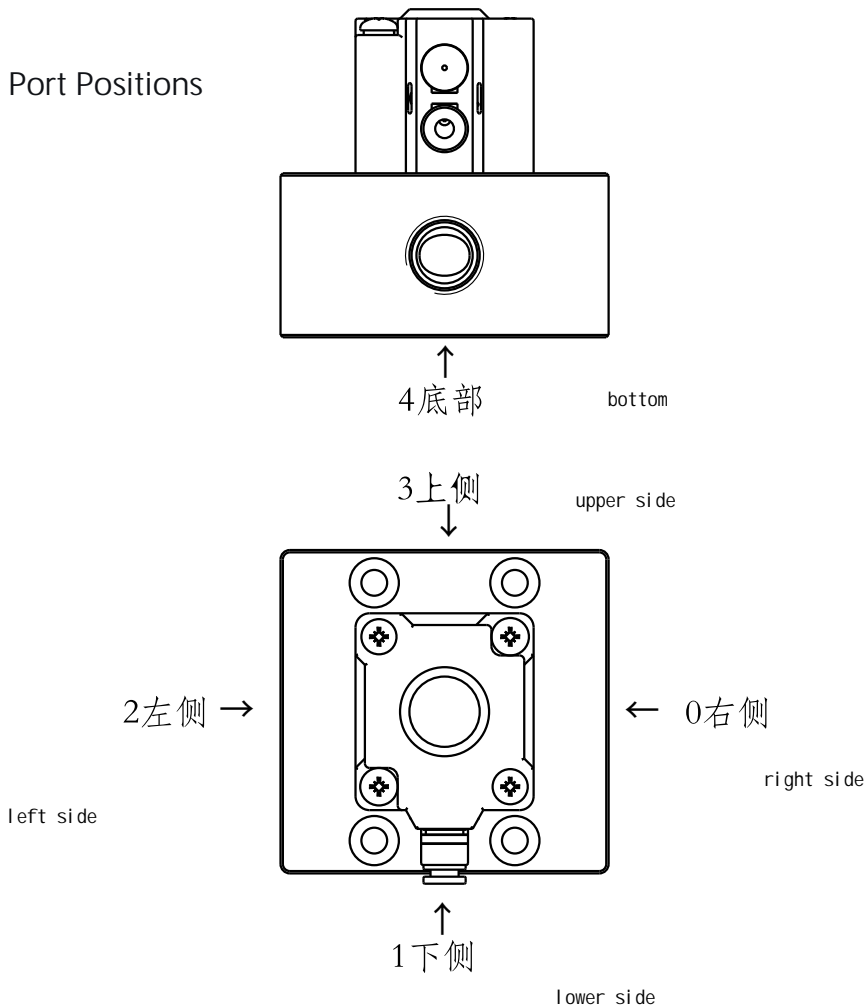
This model is a normally closed diaphragm valve. When no positive pressure air supply is connected to port X, the piston, under the force of the compression spring, presses the diaphragm against the valve seat, thereby blocking the connection between cavity A and cavities B/C. When a positive pressure air supply is connected, the pressure in cavity D exceeds atmospheric pressure, pushing the piston upward and lifting the diaphragm, thus connecting cavity A with cavities B/C.



## 气源方向 Air Supply Direction

► 供排气位置

Supply/Exhaust Port Positions

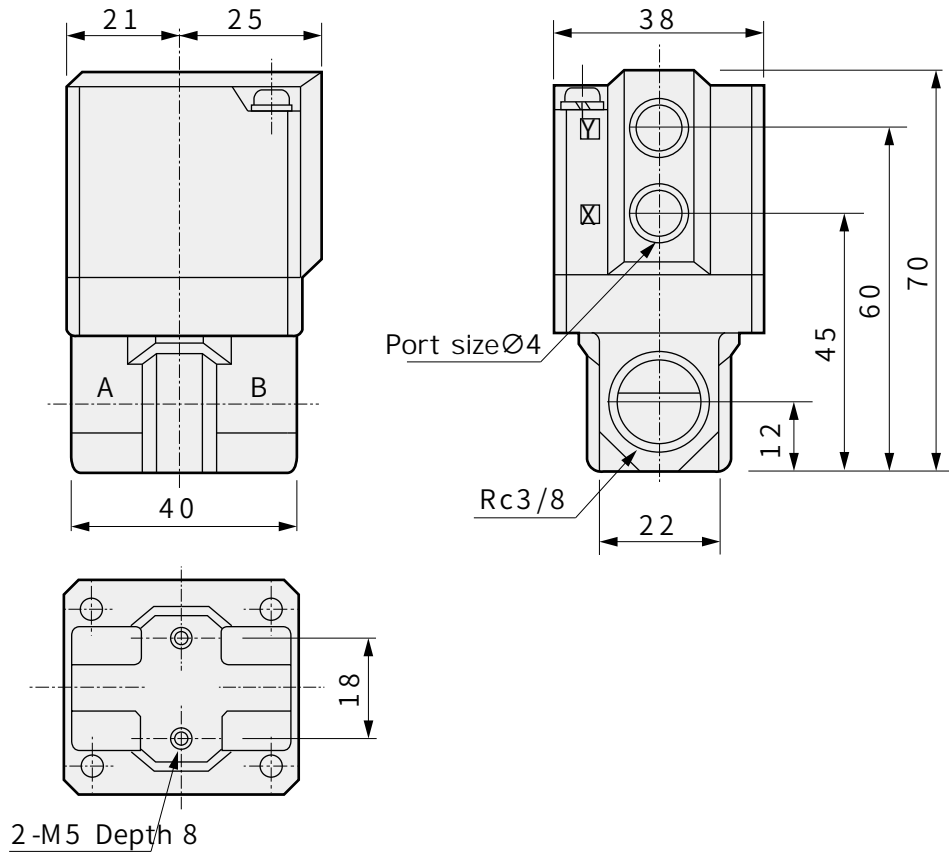


隔膜式气缸阀

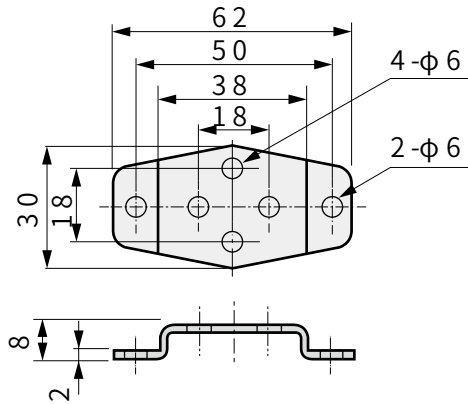
VNE系列

Outline Dimensions (mm)

► 15A-VNE-3BG



► Mounting Plate (Material: Stainless Steel)



# 隔膜式气缸阀

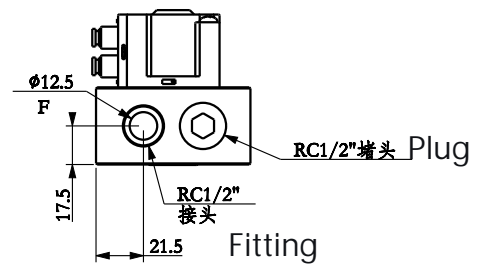
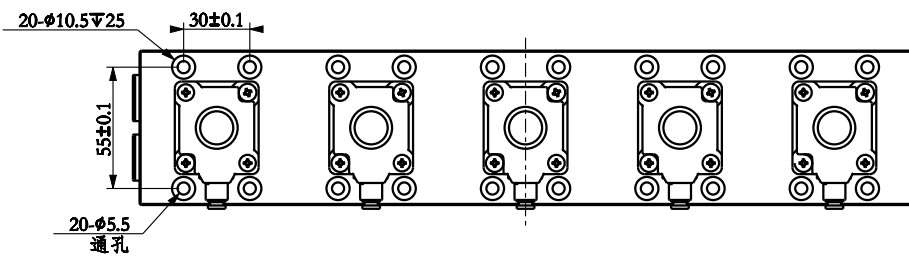
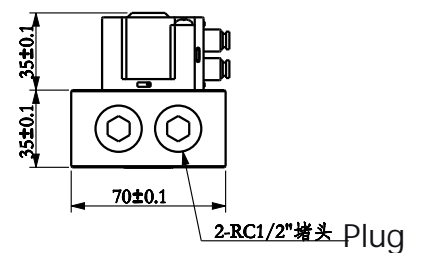
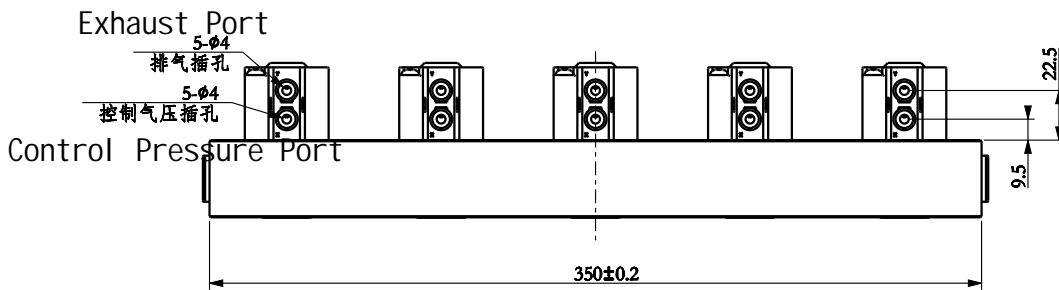
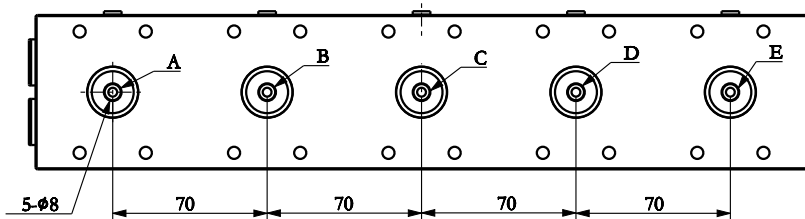
# VNE系列

## VNE Extended Series

### ► 15A-VNE1-4BL-0-5LT-51

#### Technical Specifications

1. This pneumatic control valve operates at an air pressure of 0.4-0.5 MPa. The medium flowing through the valve body is gas.
2. This valve body is of the normally closed type. The medium flows from A or B or C or D or E to F.
3. The working pressure for ports A, B, C, D, E is -0.1~0.5 MPa. The working pressure for port F is -0.1~0.4 MPa.
4. The vacuum flow rate for ports A, B, C, D, E is 150 L/min (-100 kPa).



Through Hole

## 隔膜式气缸阀

## VNE系列

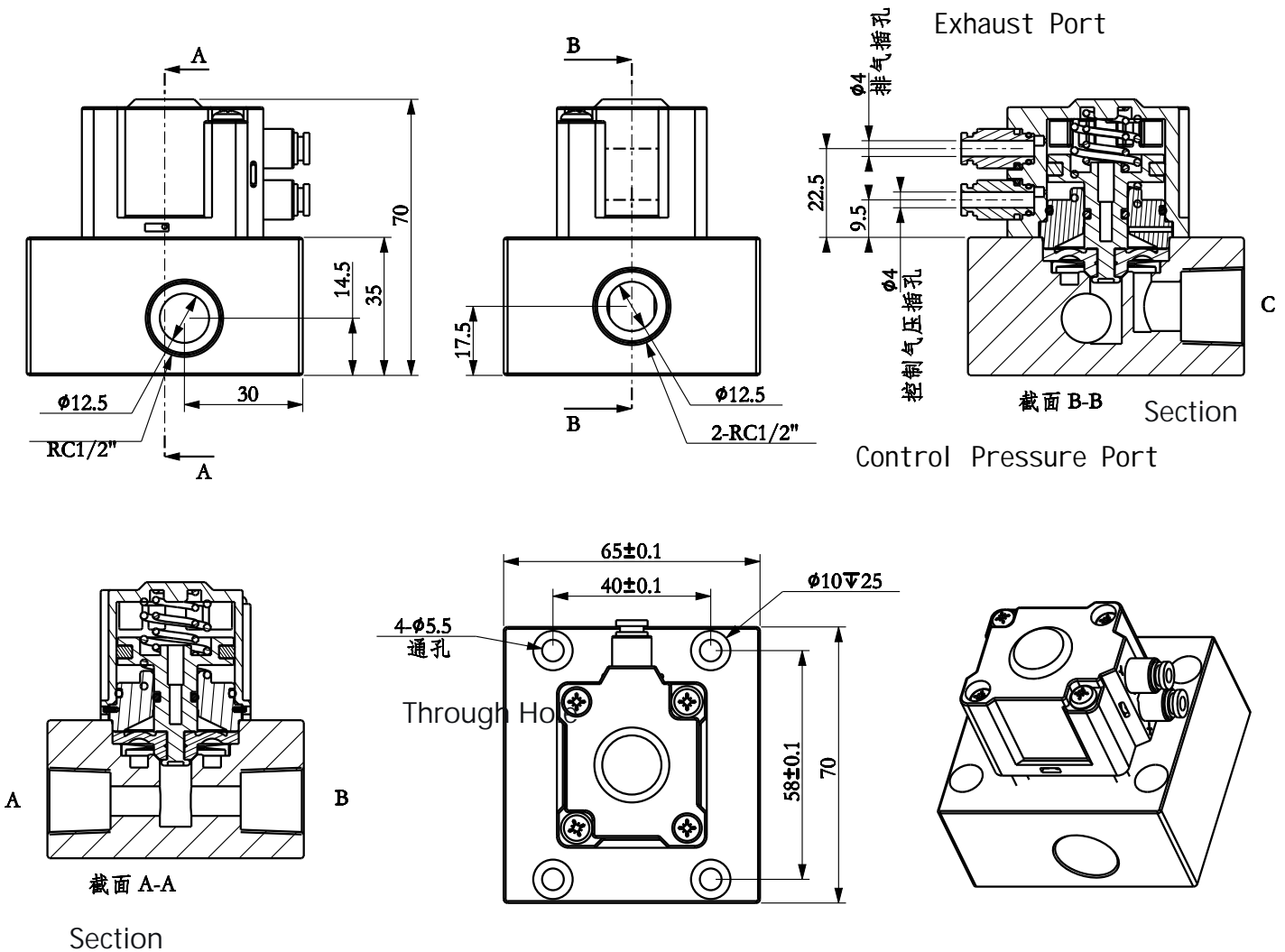
## VNE Extended Series

## ► 15A-VNE1-4BL-21

## Technical Specifications

- 1、本气控阀工作气压0.4-0.5Mpa, 阀体流通介质为气体。
- 2、本阀体为常闭型, 介质由A或B通向C。
- 3、AB阀口工作压力为-0.1~0.5Mpa, C阀口工作压力为-0.1~0.4Mpa。
- 4、阀口真空流量150L/min (-100kpa)。

1. This pneumatic control valve operates at an air pressure of 0.4-0.5 MPa, the medium flowing through the valve body is gas.
2. This valve body is of the normally closed type, the medium flows from A or B to C.
3. The working pressure for ports A, B is -0.1-0.5 MPa, the working pressure for port C is -0.1-0.4 MPa.
4. The port vacuum flow rate is 150 L/min (-100 kPa).



# 隔膜式气缸阀

# VNE系列

## VNE Extended Series

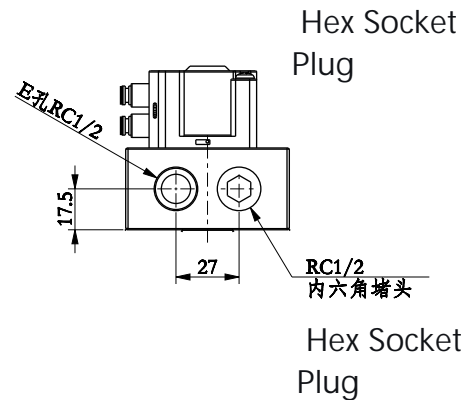
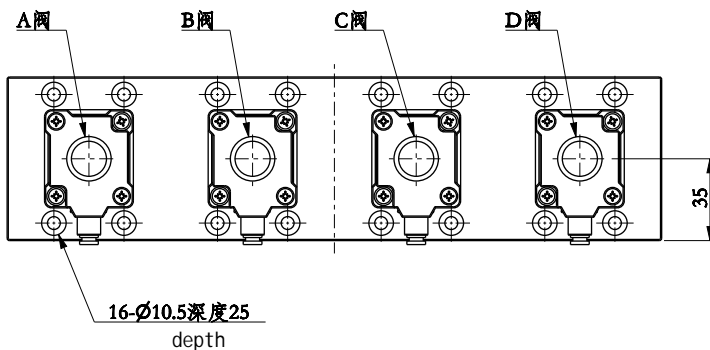
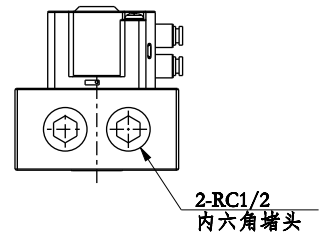
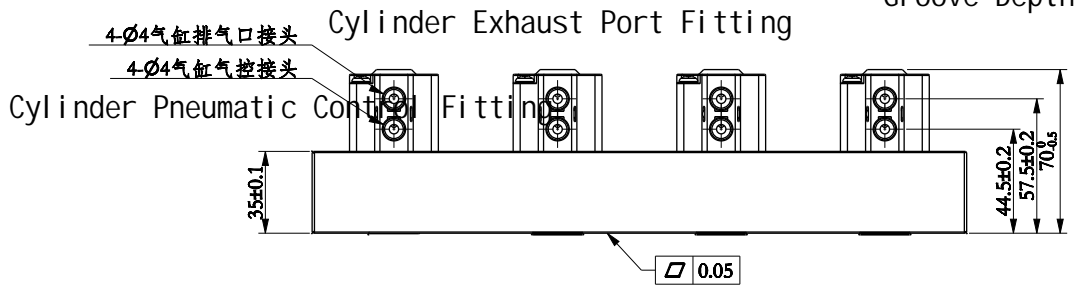
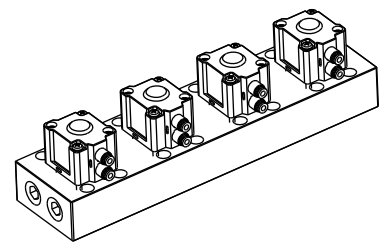
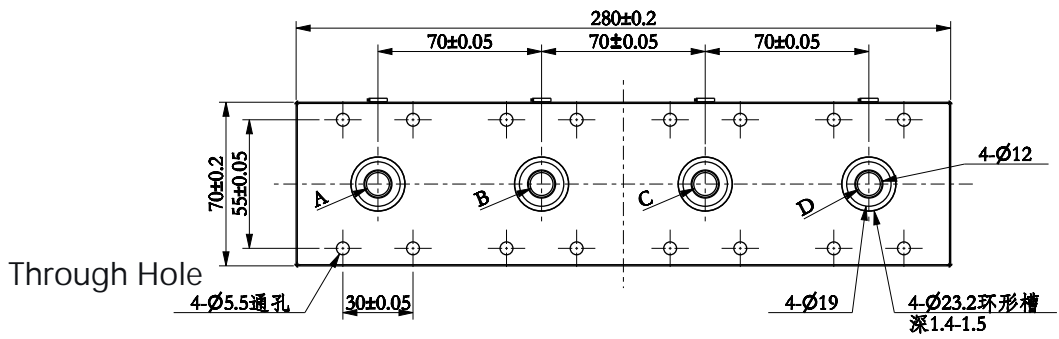
### ► 15A-VNE1-4CL-0-4LT-41

**技术要求:**

- 1.使用气压0.4-0.5Mpa。
- 2.阀口为常闭型。
- 3.ABCD阀口使用工作压力-0.1~0.5Mpa。
- 4.E阀口使用工作压力-0.1~0.4Mpa。
- 5.ABCD阀口均可通过气控阀开闭通入E口。
- 6.ABCD阀口真空流量250L/min (-100kpa)。

**Technical Requirements**

- 1.Operating air pressure: 0.4-0.5 MPa.
- 2.Valve ports are normally closed type.
- 3.Working pressure for ports A, B, C, D: -0.1~0.5 MPa.
- 4.Working pressure for port E: -0.1~0.4 MPa.
- 5.All ports A, B, C, D can be opened/closed by the pneumatic control valve to allow flow into port E.
- 6.Vacuum flow rate for ports A, B, C, D: 250 L/min (-100 kPa).



## 隔膜式气缸阀

## VNE系列

## VNE Extended Series

## ► 15A-VNE3-4DL-0-5LT-51

## 技术要求:

1. 气控使用气压0.5Mpa。
2. 阀口为气控双作用型。
3. ABCDE阀口使用工作压力-0.1~0.5Mpa。
4. ABCDE阀口均可通过气控阀开闭通入F口。

## Technical Requirements:

1. Pneumatic control air pressure: 0.5 MPa.
2. Valve ports are pneumatically controlled double-acting type.
3. Working pressure for ports A, B, C, D, E: -0.1-0.5 MPa.
4. All ports A, B, C, D, E can be opened/closed by the pneumatic control valve to allow flow into port F.

