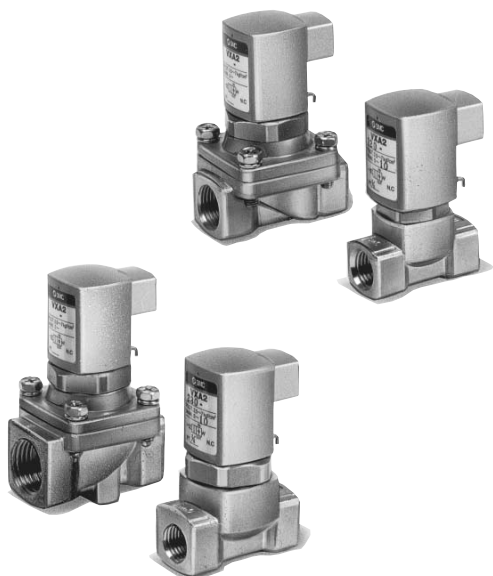


Direct Air Operated 2 Port Valve

For Air, Gas, Vacuum, Water and Oil

Series VXA21/22



- Wide variations of combination.
Able to control a wide variety of fluids.

Application can be matched by simply choosing body material (Brass or Stainless steel) and seal material (NBR, FKM, EPDM).

- Easy to disassemble and reassemble in a shorttime.
- High viscosity fluids (500 cSt).

VC□

VDW

VQ

VX2

VX□

VX3

VXA

VN□

LVC

LVA

LVH

LVD

LVQ

LQ

LVN

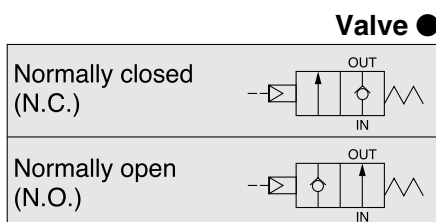
TI/
TIL

PA

PAX

PB

Variations

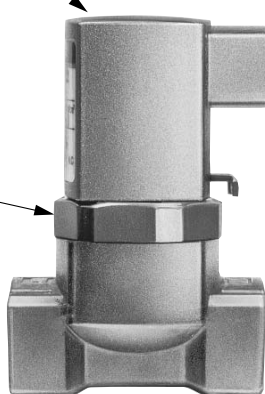


● **Pilot port** (Free take off direction)

Port size ——— Rc 1/8
Pilot pressure ——— 0.25 to 0.7 MPa

● **Material**

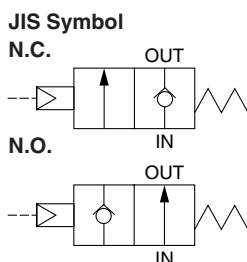
Body ——— Brass, Stainless steel
Seal ——— NBR, FKM, EPDM



Model

Model	Port size Rc	Orifice size (mmø)
VXA212 ² / ₀	1/8, 1/4	3
VXA213 ² / ₀	1/8, 1/4	4.5
VXA223 ² / ₀	1/4, 3/8	4.5
VXA224 ² / ₀	1/4, 3/8	6
VXA225 ² / ₀	1/4, 3/8	8
VXA226 ² / ₀	1/4, 3/8, 1/2	10

Normally Closed (N.C.), Normally Open (N.O.)



Fluid

Standard specification	Option ^{Note)}
Water (Standard, up to 40°C)	Vacuum (up to 1.3×10^{-1} Pa) (V, M)
Air (Standard, Dry)	Non-leak (10^{-6} Pa·m ³ /s or less) (V, M)
Turbine oil	
Vacuum (up to 1.3×10^2 Pa)	
Carbon dioxide (CO ₂), Nitrogen gas (N ₂)	



Note 1) Refer to page 17-3-13 "Applicable Fluids Check List" for details of special fluids outside of the standard options and specifications.

Model/Valve Specifications

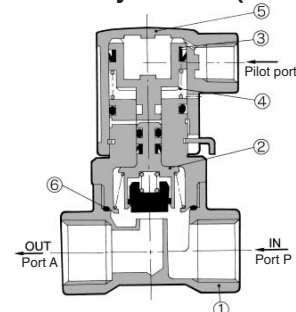
Port size	Orifice size (mmø)	Model	Max. operating pressure differential (MPa)	Flow characteristics					Max. system pressure (MPa)	Proof pressure (MPa)	Weight (g)	
				Water, Oil		Air						
				Av x 10 ⁻⁶ m²	Cv converted	C [dm³/ (s· bar)]	b	Cv				
1/8 (6A)	3	VXA212	1.0	7.9	0.33	1.3	0.50	0.38	1.0	1.5	170	
	4.5	VXA213	0.5	15	0.61	2.3	0.45	0.70				
1/4 (8A)	3	VXA212	1.0	7.9	0.33	1.3	0.50	0.38			0.4	250
	4.5	VXA213	0.5	15	0.61	2.5	10.45	0.75				
		VXA223	1.0									
	6	VXA224	0.6	26	1.1	3.3	0.50	1.1				
	8	VXA225	0.2	41	1.7	6.4	0.40	1.8				
3/8 (10A)	10	VXA226	0.1	46	1.9	8.8	0.40	2.3	1.0		250	
	4.5	VXA223	1.0	15	0.61	2.5	0.45	0.75				
	6	VXA224	0.6	26	1.1	3.3	0.50	1.1			0.4	340
	8	VXA225	0.2	41	1.7	6.4	0.40	1.8				
	10	VXA226	0.1	58	2.4	11	0.38	2.8				
1/2 (15A)	10	VXA226	0.1	58	2.4	11	0.38	2.8			420	



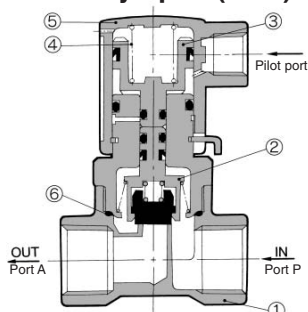
Note) Refer to "Glossary" on page 17-3-15 for details of max. operating pressure differential and max. system pressure.

Construction/ Principal Parts Material

Normally closed (N.C.)



Normally open (N.O.)



Operating Fluid and Ambient Temperature

Temperature conditions	Operating fluid temperature (°C)				Ambient temperature (°C)
	Water (Standard)	Air (Standard)	Oil (Standard)	Vacuum ⁽³⁾ (V, M)	
Maximum	40	60	40	40	40
Minimum	1	-5 ⁽¹⁾	-5 ⁽²⁾	-5	-5



Note 1) Dew point: -5°C or less Note 2) 500 cSt or less

Note 3) "V", "M" in parentheses are option symbols.

Tightness of Valve (Leak rate)

Fluid	Air	Liquid	Non-leak, Vacuum V, M ⁽²⁾
Seal material			
NBR, FKM, EPDM	1 cm ³ /min or less	0.1 cm ³ /min or less ⁽¹⁾	10 ⁻⁶ Pa·m ³ /s



Note 1) Differs depending on the operating conditions such as pressure, etc.

Note 2) Value on option "V", "M" (Non-leak, Vacuum).

Pilot Pressure

Model	Pressure (MPa)
VXA21□□	0.25 to 0.7
VXA22□□	

No.	Description	Material	
		Standard	Option
①	Body	Brass	Stainless steel
②	Valve assembly	Stainless steel, Brass NBR, Polyacetal	Stainless steel FKM/EPDM
③	Piston assembly	Polyacetal, NBR	—
④	Piston spring	Stainless steel	—
⑤	Pilot cover	Aluminum	—
⑥	O-ring	NBR	FKM/EPDM

Direct Air Operated 2 Port Valve For Air, Gas, Vacuum, Water and Oil **Series VXA21/22**

The VX* series will be revised shortly.

How to Order

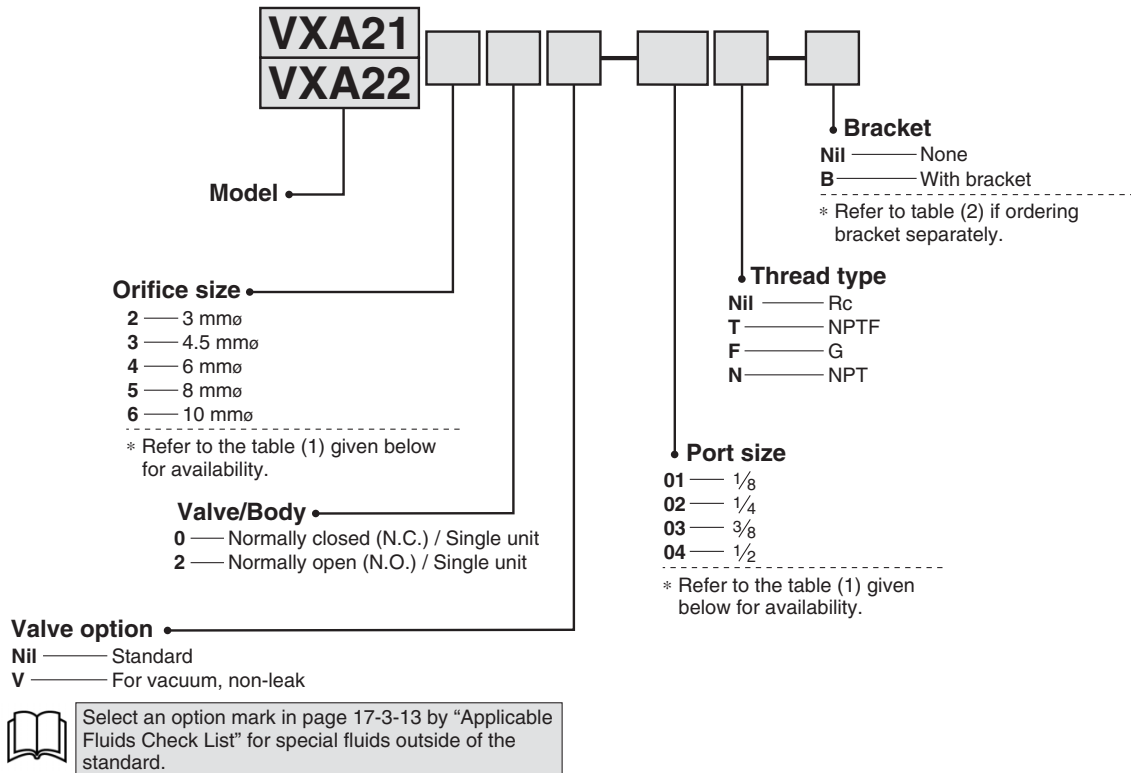


Table (1) Port/Orifice Size

Model		Orifice size (No.)				
VXA21	VXA22	2 (3 mmø)	3 (4.5 mmø)	4 (6 mmø)	5 (8 mmø)	6 (10 mmø)
01 (1/8)	—	●	●	—	—	—
02 (1/4)	—	●	●	—	—	—
—	02 (1/4)	—	●	●	●	●
—	03 (3/8)	—	●	●	●	●
—	04 (1/2)	—	—	—	—	●

Table (2) Bracket Part No.

Model	Part no.
VXA212□ VXA213□	VX070-020
VXA223□ VXA224□	VX070-022
VXA225□ VXA226□	VX070-029

Ordering example

(Example) Series VXA21, Orifice size 4.5 mmø, Normally closed, Rc 1/4
(Part no.) **VXA2130-02**

VC□

VDW

VQ

VX2

VX□

VX3

VXA

VN□

LVC

LVA

LVH

LVD

LVQ

LQ

LVN

TI/
TIL

PA

PAX

PB