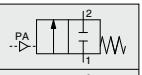
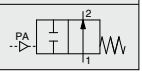
Direct Air Operated 2 Port Valve
VXA21/22 Series
For Air, Water, Oil

Single Unit

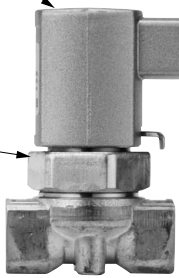
Valve

Normally closed (N.C.)	
Normally open (N.O.)	

Material

Body — Brass (C37), Stainless steel
Seal — NBR, FKM, EPDM

When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid.

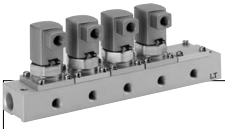


Pilot port (Free take off direction)

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

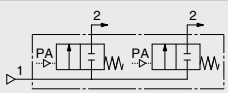
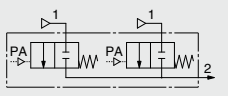
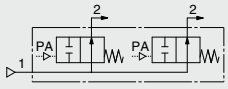
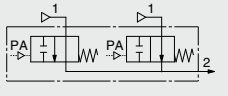
Model

Model	Port size Rc	Orifice dia. (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



Manifold

Valve

Normally closed (N.C.)	Common SUP type	
	Individual SUP type	
Normally open (N.O.)	Common SUP type	
	Individual SUP type	

Material

Base — AL
Body — Zn
Seal — NBR, FKM, EPDM

Manifold

Manifold system — B mount
Manifold station — 2 to 10 station

When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid.

Model

Manifold base	Individual port Rc	Common port Rc
VVXA211-station	1/8	3/8
VVXA212-station	1/4	
VVXA221-station	1/8	
VVXA222-station	1/4	

VXA21/22 Series
Common Specifications

Standard Specifications

Valve specifications	**Type**		Single Unit	Manifold
	Valve construction		Pilot operated poppet	
	Withstand pressure	**MPa**	1.5	
	Body material		Brass (C37), Stainless steel	Zn
	Seal material		NBR, FKM, EPDM	NBR, FKM, EPDM

Contents

Applicable Fluid Check List

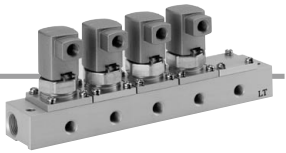
All Options (Single Unit)

Refer to page 410 for specifications and models.

VXA2□□ 0 2 □ – □□ – 1 – □

Option symbol

Fluid and application	Option symbol	Seal material	Body material	Holder material (drive part)
Air	**Nil**	NBR	Brass (C37)	PPS
	G		Stainless steel	
Medium vacuum (0.1 Pa·abs), Non-leak Note 1)	**V** Note 2)	FKM	Brass (C37)	
	M Note 2)		Stainless steel	
Water	**Nil**	NBR	Brass (C37)	
	G		Stainless steel	
Oil Note 3)	**A**	FKM	Brass (C37)	
	H		Stainless steel	
Other combination	**B**	EPDM	Brass (C37)	
	J		Stainless steel	



All Options (Manifold)

Refer to page 412 for specifications and models.

VXA2□□ 1 3 □ – 00 – 1

Option symbol

Fluid and application	Option symbol	Seal material	Body material	Base material	Holder material (drive part)
Air	**Nil**	NBR	Zn	Al	PPS
Medium vacuum, Non-leak Note 1)	**V** Note 2)	FKM	Al		
Oil Note 3)	**A**	FKM	Zn		
Other combination	**B**	EPDM			

Note 1) The leakage amount (10^{-6} Pa·m³/s) of "V" options are values when differential pressure is 0.1 MPa.
Note 2) Use grease for vacuums on sliding parts. Use silicon grease elsewhere.
Note 3) The dynamic viscosity of the fluid must not exceed 50 mm²/s or less.

∗ If using for other fluids, please consult with SMC.
∗ Oil-free specification: Oil-free specification cannot be manufactured since the sliding parts in contact with fluid have a seal construction.

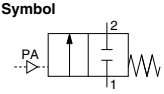
For Air /Single Unit

(Non-leak, Medium vacuum)

Model/Valve Specifications

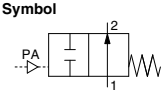
N.C.

Symbol



N.O.

Symbol



When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid.

Model/Valve

Port size	Orifice diameter (mmø)	Model	Max. operating pressure differential (MPa) Note 2)	Pilot pressure (MPa)	Flow rate characteristics Note 1) Air			Max. system pressure (MPa) Note 2)	Proof pressure (MPa)	Weight (g)
					C[dm³/(s·bar)]	b	Cv			
1/8 (6A)	3	**VXA212$^{0}_{2}$**	1.0	0.25 to 0.7	1.3	0.50	0.38	1.0	1.5	170
	4.5	**VXA213$^{0}_{2}$**	0.5		2.3	0.45	0.70			
1/4 (8A)	3	**VXA212$^{0}_{2}$**	1.0		1.3	0.50	0.38			
	4.5	**VXA213$^{0}_{2}$**	0.5		2.5	0.45	0.75			250
		VXA223$^{0}_{2}$	1.0							
	6	**VXA224$^{0}_{2}$**	0.6		3.3	0.50	1.1			
	8	**VXA225$^{0}_{2}$**	0.2		6.4	0.40	1.8	0.4		340
	10	**VXA226$^{0}_{2}$**	0.1		8.8	0.40	2.3			
3/8 (10A)	4.5	**VXA223$^{0}_{2}$**	1.0		2.5	0.45	0.75	1.0		250
	6	**VXA224$^{0}_{2}$**	0.6		3.3	0.50	1.1			
	8	**VXA225$^{0}_{2}$**	0.2		6.4	0.40	1.8	0.4		340
	10	**VXA226$^{0}_{2}$**	0.1		11.0	0.38	2.8			
1/2 (15A)	10	**VXA226$^{0}_{2}$**	0.1		11.0	0.38	2.8			420

Note 1) The flow rate characteristics of this product have variations.
When the highly precise flow control is required according to the system to be used, select an orifice diameter 1.3 times larger than that shown above and install a restrictor on the downstream side of the solenoid valve to make the adjustment.

Note 2) Refer to "Glossary of Terms" on page 309 for details on the max. operating pressure differential and the max. system pressure.

Fluid and Ambient Temperature

Fluid temperature (°C)		Ambient temperature (°C)
Valve option symbol		
Nil, Others	**V, M**	
–5 Note) to 60	–5 Note) to 40	–5 to 40

Note) Dew point temperature: –5°C or less

Valve Leakage Rate

Internal Leakage

Seal material	Leakage rate	
	Air	Non-leak, Note) Medium vacuum
NBR, EPDM, FKM	1 cm³/min or less	10^{-6} Pa·m³/sec or less

External Leakage

Seal material	Leakage rate	
	Air	Non-leak, Note) Medium vacuum
NBR, EPDM, FKM	1 cm³/min or less	10^{-6} Pa·m³/sec or less

Note) Value for option "V", "M" (Non-leak, Medium vacuum)

How to Order (Single Unit)

VXA [21] [2] [0] [ ] – [01] [ ] – 1 – [ ]

Model
Refer to the table (1) shown below for availability.

Orifice diameter
Refer to the table (1) shown below for availability.

Valve/Body configuration

0	N.C. / Single unit
2	N.O. / Single unit

Valve option
Refer to the table (2) shown below for availability.

Port size
Refer to the table (1) shown below for availability.

Thread type∗1

Nil	Rc
T	NPTF
F	G∗2
N	NPT

∗1 Including pilot port
∗2 For connection, prepare a fitting compliant with ISO 16030 and JIS B 8674.

Bracket

Nil	None
B	With bracket

∗ VX021N-12A and VX022N-12A are packed in the same container as the main body.
∗ Refer to the table (3) if a bracket is ordered separately.

VX2
VXK
VXD
VXZ
VXS
VXB
VXE
VXP
VXR
VXH
VXF
VX3
VXA

Table (1) Model/Orifice Diameter/Port Size

Solenoid valve (Port size)			Orifice symbol (Diameter)				
Model	**VXA21**	**VXA22**	**2** (3 mmø)	**3** (4.5 mmø)	**4** (6 mmø)	**5** (8 mmø)	**6** (10 mmø)
Port no. (Port size)	**01** (1/8)	–	●	●	–	–	–
	02 (1/4)	–	●	●	–	–	–
	–	**02** (1/4)	–	●	●	●	●
	–	**03** (3/8)	–	●	●	●	●
	–	**04** (1/2)	–	–	–	–	●

Table (2) Valve Option

Option symbol	Seal material	Body material	Holder material	Note
Nil	NBR	Brass (C37)	PPS	–
G		Stainless steel		
V Note)	FKM	Brass (C37)		Non-leak (10^{-6} Pam^3/sec), Medium vacuum (0.1 Pa.abs)
M Note)		Stainless steel		

Note) Use grease for vacuums on sliding parts. Use silicon grease elsewhere.

Table (3) Bracket Part No.

Model	Part no.
VXA21$^{20}_{32}$	VX021N-12A
VXA22$^{30}_{42}$	VX022N-12A
VXA22$^{50}_{62}$	VX023N-12A-L

Dimensions → page 422 (Single unit)

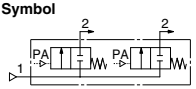
For Air /Manifold

(Non-leak, Medium vacuum)

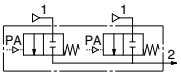
Model for Manifold/Valve Specifications

N.C.

Symbol



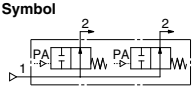
Common SUP type



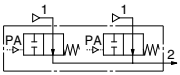
Individual SUP type

N.O.

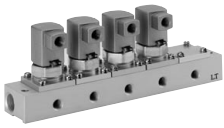
Symbol



Common SUP type



Individual SUP type



When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid.

Model for Manifold/Valve Specifications

Orifice diameter (mmø)	Model	Max. operating pressure differential (MPa) Note 2)	Pilot pressure (MPa)	Flow rate characteristics Note 1)			Max. system pressure (MPa) Note 2)	Proof pressure (MPa)	Weight (g)
				Air					
				C[dm³/(s·bar)]	b	Cv			
3	**VXA212$\frac{1}{3}$-00**	1.0	0.25 to 0.7	1.3	0.50	0.38	1.0	1.5	120
4.5	**VXA213$\frac{1}{3}$-00**	0.5		2.3	0.45	0.70			
	VXA223$\frac{1}{3}$-00	1.0							160
6	**VXA224$\frac{1}{3}$-00**	0.6		3.3	0.50	1.1			

Note 1) The flow rate characteristics of this product have variations.
When the highly precise flow control is required according to the system to be used, select an orifice diameter 1.3 times larger than that shown above and install a restrictor on the downstream side of the solenoid valve to make the adjustment.

Note 2) Refer to “Glossary of Terms” on page 309 for details on the max. operating pressure differential and the max. system pressure.

Fluid and Ambient Temperature

Fluid temperature (°C)		Ambient temperature (°C)
Solenoid valve option symbol		
Nil, A, B	**V**	
–5 Note) to 60	–5 Note) to 40	–5 to 40

Note) Dew point temperature: –5°C or less

Valve Leakage Rate

Internal Leakage

Seal material	Leakage rate	
	Air	Non-leak, Note) Medium vacuum
NBR, EPDM, FKM	1 cm³/min or less	10^{-6} Pa·m³/sec or less

External Leakage

Seal material	Leakage rate	
	Air	Non-leak, Note) Medium vacuum
NBR, EPDM, FKM	1 cm³/min or less	10^{-6} Pa·m³/sec or less

Note) Value for option “V” (Non-leak, Medium vacuum)

How to Order (Valve for Manifold)

VXA 21 2 1 ☐ – 00 – 1

Model
Refer to the table (1) shown below for availability.

Orifice diameter
Refer to the table (1) shown below for availability.

Valve/Body configuration

1	N.C. (For manifold)
3	N.O. (For manifold)

Valve option
Refer to the table (2) shown below for availability.

How to Order Manifold Bases

VVXA21 / VVXA22 1 ☐ – 07 – 1

Number of manifolds

02	2 stations
⋮	⋮
10	10 stations

Port size (Individual port)

1	Rc 1/8
2	Rc 1/4

∗ All IN ports are Rc 3/8.

Base

Nil	Common SUP type
V	Individual SUP type

Manifold base

Blanking plate part no.

For VXA21: VX011-001 ☐
For VXA22: VX011-006 ☐

Seal material

N	NBR
F	FKM
E	EPDM

Table (1) Model/Orifice Diameter

Solenoid valve	Orifice symbol (Diameter)		
	2 (3 mmø)	3 (4.5 mmø)	4 (6 mmø)
VXA21	●	●	–
VXA22	–	●	●

Table (2) Valve Option

Option symbol	Body material	Base material	Seal material	Holder material	Note
Nil	Zn	AL	NBR	PPS	–
A			FKM		
B			EPDM		
V Note)	Al		FKM		Non-leak (10^{-6} Pam^3/sec), Medium vacuum (0.1 Pa.abs)

Note) Use grease for vacuums on sliding parts. Use silicon grease elsewhere.

How to Order Manifold

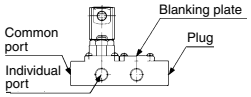
■ **Write both the base part number and the solenoid valve to be mounted or blanking plate part number.**

(Example) 7 stations of VXA21 common pressure, individual port Rc 1/8.

(Base) VVXA211-07-1 ..... 1 pc.
(Valve) ∗ VXA2121-00-1 ..... 6 pcs.
(Blanking plate) ∗ VX011-001N ..... 1 pc.

"∗" is the symbol for mounting. When shipping mounted on a base, add an "∗" in front of the valve and blanking plate model.

■ **Arrangement of solenoid valves**



The standard arrangement of manifolds should be placed on an individual port on this side, each solenoid valve from the left side and a blank plate in the right side. The right side of the common port provides plug.

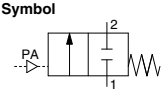
Dimensions → page 423 (Manifold)

For Water/Single Unit

Model/Valve Specifications

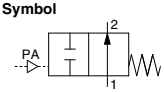
N.C.

Symbol



N.O.

Symbol



When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid.

Model/Valve Specifications

Port size	Orifice diameter (mmø)	Model	Pilot pressure (MPa)	Max. operating pressure differential (MPa) Note 2)	Flow rate characteristics Note 1) Water Kv	Flow rate characteristics Note 1) Water Cv converted	Max. system pressure (MPa) Note 2)	Proof pressure (MPa)	Weight (g)
1/8 (6A)	3	**VXA212$^{0}_{2}$**	0.25 to 0.7	1.0	0.28	0.33	1.0	1.5	170
	4.5	**VXA213$^{0}_{2}$**		0.5	0.54	0.61			
1/4 (8A)	3	**VXA212$^{0}_{2}$**		1.0	0.28	0.33			
	4.5	**VXA213$^{0}_{2}$**		0.5	0.54	0.61			
		VXA223$^{0}_{2}$		1.0					250
	6	**VXA224$^{0}_{2}$**		0.6	0.93	1.1			
	8	**VXA225$^{0}_{2}$**		0.2	1.46	1.7	0.4		340
	10	**VXA226$^{0}_{2}$**		0.1	1.64	1.9			
3/8 (10A)	4.5	**VXA223$^{0}_{2}$**		1.0	0.54	0.61	1.0		250
	6	**VXA224$^{0}_{2}$**		0.6	0.93	1.1			
	8	**VXA225$^{0}_{2}$**		0.2	1.46	1.7	0.4		340
	10	**VXA226$^{0}_{2}$**		0.1	2.07	2.4			
1/2 (15A)	10	**VXA226$^{0}_{2}$**		0.1	2.07	2.4			420

Note 1) The flow rate characteristics of this product have variations.
When the highly precise flow control is required according to the system to be used, select an orifice diameter 1.3 times larger than that shown above and install a restrictor on the downstream side of the solenoid valve to make the adjustment.

Note 2) Refer to "Glossary of Terms" on page 309 for details on the max. operating pressure differential and the max. system pressure.

Fluid and Ambient Temperature

Fluid temperature (°C)	Ambient temperature (°C)
Valve option symbol	
Nil, G, B, J	
1 to 40	–5 to 40

Note) With no freezing

Valve Leakage Rate

Internal Leakage

Seal material	Leakage rate (Water)
NBR, EPDM	0.1 cm^3/min or less

External Leakage

Seal material	Leakage rate (Water)
NBR, EPDM	0.1 cm^3/min or less

How to Order (Single Unit)

VXA 21 2 0 □ – 01 □ – 1 – □

Model
Refer to the table (1) shown below for availability.

Orifice diameter
Refer to the table (1) shown below for availability.

Valve/Body configuration

0	N.C. / Single unit
2	N.O. / Single unit

Valve option
Refer to the table (2) shown below for availability.

Port size
Refer to the table (1) shown below for availability.

Thread type∗1

Nil	Rc
T	NPTF
F	G∗2
N	NPT

∗1 Including pilot port
∗2 For connection, prepare a fitting compliant with ISO 16030 and JIS B 8674.

Bracket

Nil	None
B	With bracket

∗ VX021N-12A and VX022N-12A are packed in the same container as the main body.
∗ Refer to the table (3) if a bracket is ordered separately.

Table (1) Model/Orifice Diameter/Port Size

Valve (Port size)			Orifice symbol (Diameter)				
Model	**VX21**	**VX22**	**2** (3 mmø)	**3** (4.5 mmø)	**4** (6 mmø)	**5** (8 mmø)	**6** (10 mmø)
Port no. (Port size)	**01** (1/8)	—	●	●	—	—	—
	02 (1/4)	—	●	●	—	—	—
	—	**02** (1/4)	—	●	●	●	●
	—	**03** (3/8)	—	●	●	●	●
	—	**04** (1/2)	—	—	—	—	●

Table (2) Valve Option

Option symbol	Seal material	Body material	Holder material	Note
Nil	NBR	Brass (C37)	PPS	—
G		Stainless steel		
B	EPDM	Brass (C37)		
J		Stainless steel		

Table (3) Bracket Part No.

Model	Part no.
VX21 $^{20}_{32}$	VX021N-12A
VX22 $^{30}_{42}$	VX022N-12A
VX22 $^{50}_{62}$	VX023N-12A-L

Dimensions → page 422 (Single unit)

For Oil/Single Unit

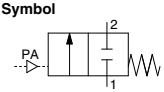
⚠ When the fluid is oil.

The dynamic viscosity of the fluid must not exceed 500 mm²/s.

Model/Valve Specifications

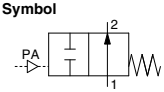
N.C.

Symbol



N.O.

Symbol



When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid.

Model/Valve Specifications

Port size	Orifice diameter (mmø)	Model	Max. operating pressure differential (MPa) Note 2)	Pilot pressure (MPa)	Flow rate characteristics Note 1) Oil		Max. system pressure (MPa) Note 2)	Proof pressure (MPa)	Weight (g)
					Av x 10^{-6} m²	Cv converted			
1/8 (6A)	3	**VXA212$^{0}_{2}$**	1.0	0.25 to 0.7	7.9	0.33	1.0	1.5	170
	4.5	**VXA213$^{0}_{2}$**	0.5		15	0.61			
1/4 (8A)	3	**VXA212$^{0}_{2}$**	1.0		7.9	0.33			
	4.5	**VXA213$^{0}_{2}$**	0.5		15	0.61			250
		VXA223$^{0}_{2}$	1.0						
	6	**VXA224$^{0}_{2}$**	0.6		26	1.1			
	8	**VXA225$^{0}_{2}$**	0.2		41	1.7	0.4		340
	10	**VXA226$^{0}_{2}$**	0.1		46	1.9			
3/8 (10A)	4.5	**VXA223$^{0}_{2}$**	1.0		15	0.61	1.0		250
	6	**VXA224$^{0}_{2}$**	0.6		26	1.1			
	8	**VXA225$^{0}_{2}$**	0.2		41	1.7	0.4		340
	10	**VXA226$^{0}_{2}$**	0.1		58	2.4			
1/2 (15A)	10	**VXA226$^{0}_{2}$**	0.1		58	2.4			420

Note 1) The flow rate characteristics of this product have variations.
When the highly precise flow control is required according to the system to be used, select an orifice diameter 1.3 times larger than that shown above and install a restrictor on the downstream side of the solenoid valve to make the adjustment.

Note 2) Refer to "Glossary of Terms" on page 309 for details on the max. operating pressure differential and the max. system pressure.

Fluid and Ambient Temperature

Fluid temperature (°C)	Ambient temperature (°C)
Valve option symbol	
A, H	
–5 Note) to 40	–5 to 40

Note) Dynamic viscosity: 500 mm²/s or less

Valve Leakage Rate

Internal Leakage

Seal material	Leakage rate (Oil)
FKM	0.1 cm³/min or less

External Leakage

Seal material	Leakage rate (Oil)
FKM	0.1 cm³/min or less

How to Order (Single Unit)

VXA 21 2 0 A – 01 □ – 1 – □

Model
Refer to the table (1) shown below for availability.

Orifice diameter
Refer to the table (1) shown below for availability.

Valve/Body configuration

0	N.C. / Single unit
2	N.O. / Single unit

Valve option
Refer to the table (2) shown below for availability.

Port size
Refer to the table (1) shown below for availability.

Thread type[*1]

Nil	Rc
T	NPTF
F	G[*2]
N	NPT

*1 Including pilot port
*2 For connection, prepare a fitting compliant with ISO 16030 and JIS B 8674.

Bracket

Nil	None
B	With bracket

* VX021N-12A and VX022N-12A are packed in the same container as the main body.
* Refer to the table (3) if a bracket is ordered separately.

Table (1) Model/Orifice Diameter/Port Size

Solenoid valve (Port size)			Orifice symbol (Diameter)				
Model	**VX21**	**VX22**	**2** (3 mmø)	**3** (4.5 mmø)	**4** (6 mmø)	**5** (8 mmø)	**6** (10 mmø)
Port no. (Port size)	**01** (1/8)	—	●	●	—	—	—
	02 (1/4)	—	●	●	—	—	—
	—	**02** (1/4)	—	●	●	●	●
	—	**03** (3/8)	—	●	●	●	●
	—	**04** (1/2)	—	—	—	—	●

Table (2) Valve Option

Option symbol	Seal material	Body material	Holder material
A	FKM	Brass (C37)	PPS
H		Stainless steel	

Table (3) Bracket Part No.

Model	Part no.
VX21$^{20}_{32}$	VX021N-12A
VX22$^{30}_{42}$	VX022N-12A
VX22$^{30}_{62}$	VX023N-12A-L

Dimensions → page 422 (Single unit)

For Oil/Manifold

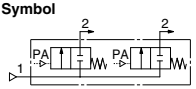
⚠ When the fluid is oil.

The dynamic viscosity of the fluid must not exceed 500 mm²/s.

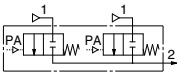
Valve for Manifold/Valve Specifications

N.C.

Symbol



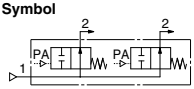
Common SUP type



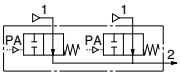
Individual SUP type

N.O.

Symbol



Common SUP type



Individual SUP type

When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid.

Valve for Manifold/Valve Specifications

Orifice diameter (mmø)	Model	Max. operating pressure differential (MPa) Note 2)	Pilot pressure (MPa)	Flow rate characteristics Note 1)		Max. system pressure (MPa) Note 2)	Proof pressure (MPa)	Weight (g) Note)
				Air				
				Av x 10^{-6} m^2	Cv converted			
3	**VXA212$\frac{1}{3}$-00**	1.0	0.25 to 0.7	7.9	0.33	1.0	1.5	120
4.5	**VXA213$\frac{1}{3}$-00**	0.5		15	0.61			
	VXA223$\frac{1}{3}$-00	1.0						160
6	**VXA224$\frac{1}{3}$-00**	0.6		26	1.1			

Note 1) The flow rate characteristics of this product have variations.
When the highly precise flow control is required according to the system to be used, select an orifice diameter 1.3 times larger than that shown above and install a restrictor on the downstream side of the solenoid valve to make the adjustment.

Note 2) Refer to "Glossary of Terms" on page 309 for details on the max. operating pressure differential and the max. system pressure.

Fluid and Ambient Temperature

Fluid temperature (°C)	Ambient temperature (°C)
Valve option symbol	
A	
–5 Note) to 40	–5 to 40

Note) Dynamic viscosity: 500 mm²/s or less

Valve Leakage Rate

Internal Leakage

Seal material	Leakage rate
FKM	0.1 cm³/min or less

External Leakage

Seal material	Leakage rate
FKM	0.1 cm³/min or less

How to Order (Valve for Manifold)

VXA 21 2 1 A – 00 – 1

- **Model** — Refer to the table (1) shown below for availability.
- **Orifice diameter** — Refer to the table (1) shown below for availability.
- **Valve/Body configuration**

1	N.C. (For manifold)
3	N.O. (For manifold)

- **Valve option** — Refer to the table (2) shown below for availability.

How to Order Manifold Bases

VVXA21 / VVXA22 1 ☐ – 07 – 1

- **Number of manifolds**

02	2 stations
⋮	⋮
10	10 stations

- **Port size (Individual port)**

1	Rc 1/8
2	Rc 1/4

∗ All IN ports are Rc 3/8.

- **Base**

Nil	Common SUP type
V	Individual SUP type

- **Manifold base**

- **Blanking plate part no.**

For VXA21: VX011-001 F
For VXA22: VX011-006 F

- **Seal material**

F	FKM

Table (1) Model/Orifice Diameter

Solenoid valve	Orifice symbol (Diameter)		
	2 (3 mmø)	3 (4.5 mmø)	4 (6 mmø)
VXA21	●	●	–
VXA22	–	●	●

Table (2) Valve Option

Option symbol	Body, Base material	Seal material	Holder material	Note
A	Aluminum	FKM	PPS	–

How to Order Manifold

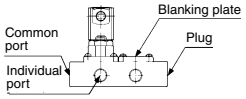
■ **Write both the base part number and the solenoid valve to be mounted or blanking plate part number.**

(Example) 7 stations of VXA21 common pressure, individual port Rc 1/8.

(Base) VVXA211-07-1 ..... 1 pc.
(Valve) ∗ VXA2121-00-1 ..... 6 pcs.
(Blanking plate) ∗ VX011-001F ..... 1 pc.

"∗" is the symbol for mounting. When shipping mounted on a base, add an "∗" in front of the valve and blanking plate model.

■ **Arrangement of solenoid valves**

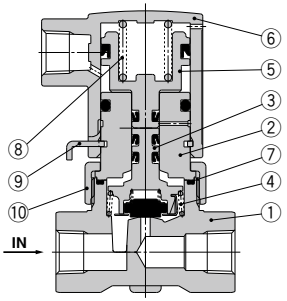


The standard arrangement of manifolds should be placed on an individual port on this side, each solenoid valve from the left side and a blank plate in the right side. The right side of the common port provides plug.

Dimensions → page 423 (Manifold)

Construction: Single Unit

Normally closed (N.C.)
Body material: Brass (C37), Stainless steel

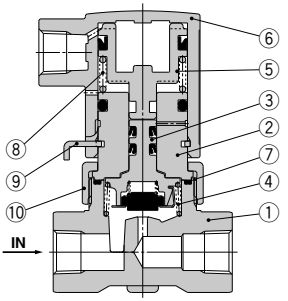


Component Parts

No.	Description	Material	
		Body material Brass (C37) specification	Body material stainless steel specification
1	**Body**	Brass (C37)	Stainless steel
2	**Adapter**	C36	Stainless steel
3	**Holder assembly**	(NBR, FKM, EPDM), Stainless steel, PPS	
4	**Return spring**	Stainless steel	
5	**Piston assembly**	(NBR), Polyacetal	
6	**Pilot cover**	ADC12	
7	**O-ring**	(NBR, FKM, EPDM)	
8	**Piston spring**	Stainless steel	
9	**Retainer**	Stainless steel	
10	**Nut**	Brass (C37)	Brass (C37), Ni plated

The materials in parentheses are the seal materials.

Normally open (N.O.)
Body material: Brass (C37), Stainless steel



Component Parts

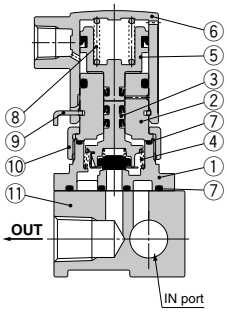
No.	Description	Material	
		Body material Brass (C37) specification	Body material stainless steel specification
1	**Body**	Brass (C37)	Stainless steel
2	**Adapter**	C36	Stainless steel
3	**Holder assembly**	(NBR, FKM, EPDM), Stainless steel, PPS	
4	**Return spring**	Stainless steel	
5	**Piston assembly**	(NBR), Polyacetal	
6	**Pilot cover**	ADC12	
7	**O-ring**	(NBR, FKM, EPDM)	
8	**Piston spring**	Stainless steel	
9	**Retainer**	Stainless steel	
10	**Nut**	Brass (C37)	Brass (C37), Ni plated

The materials in parentheses are the seal materials.

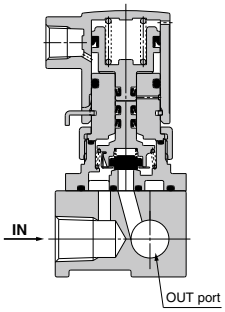
Construction: Manifold

Normally closed (N.C.)
Body material: Zn
Base material: AL

Common SUP type



Individual SUP type



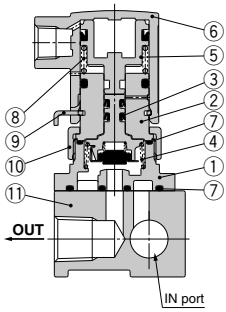
Component Parts

No.	Description	Material
1	**Body**	Zn (AL)
2	**Adapter**	C36
3	**Holder assembly**	(NBR, FKM, EPDM), Stainless steel, PPS
4	**Return spring**	Stainless steel
5	**Piston assembly**	NBR, Polyacetal
6	**Pilot cover**	ADC12
7	**O-ring**	(NBR, FKM, EPDM)
8	**Piston spring**	Stainless steel
9	**Retainer**	Stainless steel
10	**Nut**	Brass (C37)
11	**Base**	Aluminum

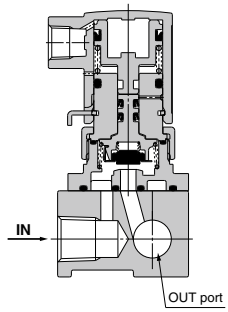
The materials in parentheses are the seal materials.

Normally open (N.O.)
Body material: Zn
Base material: AL

Common SUP type



Individual SUP type



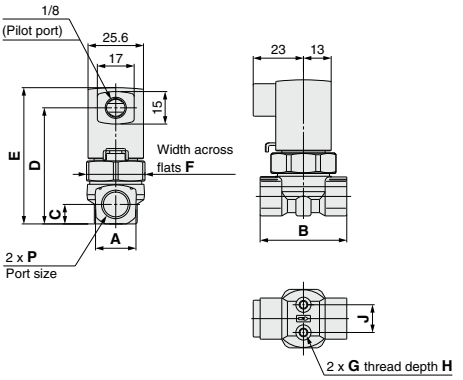
Component Parts

No.	Description	Material
1	**Body**	Zn (AL)
2	**Adapter**	C36
3	**Holder assembly**	(NBR, FKM, EPDM), Stainless steel, PPS
4	**Return spring**	Stainless steel
5	**Piston assembly**	NBR, Polyacetal
6	**Pilot cover**	ADC12
7	**O-ring**	(NBR, FKM, EPDM)
8	**Piston spring**	Stainless steel
9	**Retainer**	Stainless steel
10	**Nut**	Brass (C37)
11	**Base**	Aluminum

The materials in parentheses are the seal materials.

Dimensions: Single Unit/Body Material: Brass (C37), Stainless Steel

Normally closed (N.C.): VXA21□0/VXA22□0
Normally open (N.O.): VXA21□2/VXA22□2

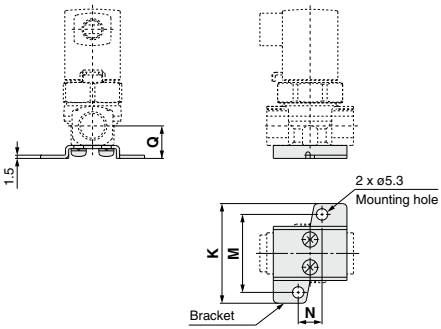


(mm)

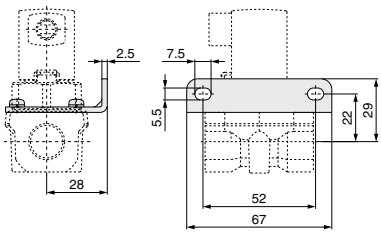
Model		Orifice diameter	Port size P	A	B	C	D	E	F	G	H	J
N.C.	N.O.											
VXA21□0	**VXA21□2**	ø3, ø4.5	1/8, 1/4	19	40	9	54	63	27	M4	6	12.8
VXA22(3,4)0	**VXA22(3,4)2**	ø4.5, ø6	1/4, 3/8	22	45	10.5	60	69	32	M5	8	19
VXA22(5,6)0	**VXA22(5,6)2**	ø8, ø10	1/4, 3/8, 1/2	29	50	14	66	76	32	M5	8	23

Specifications with bracket

Orifice ø3, ø4.5, ø6



Orifice ø8, ø10



(mm)

Model		Orifice diameter	Port size P	Bracket mounting			
N.C.	N.O.			K	M	N	Q
VXA21□0	**VXA21□2**	ø3, ø4.5	1/8, 1/4	46	36	11	15
VXA22(3,4)0	**VXA22(3,4)2**	ø4.5, ø6	1/4, 3/8	56	46	13	17.5