

Direct Operated 2 Port Solenoid Valve

VX21/22/23 Series



Air



Medium vacuum



Water



Oil



Steam

* Can be used with heated water.



Note) For details, refer to the UL-compliance table on page 52 and onwards.



VX2

VXK

VXD

VXZ

VXS

VXB

VXE

VXP

VXR

VXH

VXF

VX3

VXA

Large flow rate

Flow rate

20% More flow*

(Size 1)

* Comparison with SMC current model

Compact

Height

10% Smaller*

(Size 1)

Lightweight

Weight

30% Lighter*

(Size 1, Aluminum body)

Body material

Air
Aluminum, Resin
Water/Oil/
Medium vacuum/Steam
C37 (Brass),
Stainless steel

With One-touch fittings
(Resin body)



Bracket
Standard
equipment



Enclosure

IP65*

* Electrical entry
Flat terminal type
terminal is IP40.

Power consumption

4.5 W (Size 1)
7 W (Size 2)
10.5 W (Size 3)
(DC/N.C. valve)

Manifold

Material • Body/PPS
• Base/Aluminum
• Seal/NBR, FKM

Solenoid coil type

- Insulation type Class B/H
- Fluid temperature Class B/Max. 60°C Class H/Max. 183°C

Valve type

N.C. N.O.

Direct Operated 2 Port Solenoid Valve



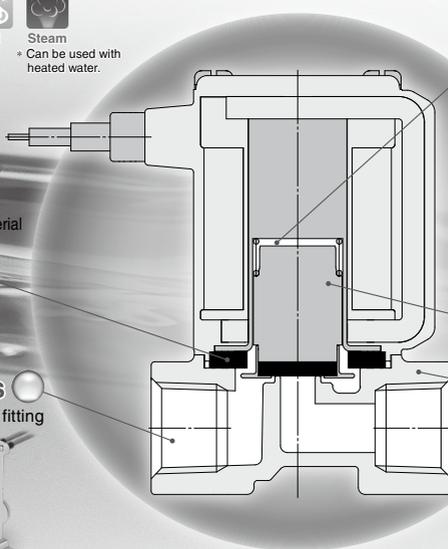
Air Medium vacuum Water Oil Steam
 * Can be used with heated water.

Enclosure
IP65

Flame resistance
UL94V-0 conformed
Flame resistant mold coil material

Low-noise construction
Metal noise reduced by the rubber bumper

Piping variations
Thread piping, One-touch fitting



Clearance

By providing a bumper and clearance, we reduced the collision sound of the core when ON (when the valve is open). Because of the clearance, when using highly viscous fluids such as oil, the armature does not get stuck and the responsiveness when OFF (when the valve is closed) is improved.

Power consumption

* DC/Class B, N.C. valve

4.5 W (Size 1)

7 W (Size 2)

10.5 W (Size 3)

Improved armature durability

Body material

Air Aluminum, Resin

Water/Oil/Medium vacuum/Steam C37 (Brass), Stainless steel

Full-wave rectifier type (AC specification: Insulation type Class B/H)

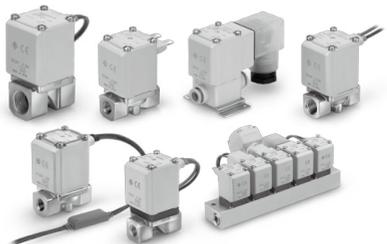
- Improved durability**
 Service life is extended by the special construction. (compared with current shading coil)
- Reduced buzz noise**
 Rectified to DC by the full-wave rectifier, resulting in a buzz noise reduction.
- Reduced apparent power** * Class B, N.C. valve
 10 VA → **7 VA** (Size 1) 20 VA → **9.5 VA** (Size 2)
 32 VA → **12 VA** (Size 3)
- Improved OFF response**
 Specially constructed to improve the OFF response when operated with a higher viscosity fluid such as oil.
- Low-noise construction**
 Specially constructed to reduce the metal noise during operation.

Variations

<Fluid>

Model	Applicable fluid *1					* Can be used with heated water.
	Air	Medium vacuum	Water	Oil	Steam	
For Air VX2□0 Page 33	●	—	—	—	—	—
For Medium vacuum VX2□4 Page 38	●*2	●	—	—	—	—
For Water VX2□2 Page 42	●*2	—	●	—	—	—
For Oil VX2□3 Page 44	●*2	—	●*2	●	—	—
For Steam * Can be used with heated water. VX2□5 Page 46	●*2	—	●*2	●*2	●	●

*1 For details, refer to pages 73 and 74. *2 Refer to the individual specifications for each fluid.



<Body Size>

Model	Body size	Orifice diameter						Port size
		2 mmφ	3 mmφ	4 mmφ	5 mmφ	7 mmφ	8 mmφ	
VX2₁	Size 1	●	●	—	●	—	—	1/8, 1/4 One-touch fitting: ø6, ø8
VX2₅	Size 2	—	—	●	—	●	—	1/4, 3/8 One-touch fitting: ø8, ø10
VX2₆	Size 3	—	—	—	●	—	●	1/4, 3/8, 1/2 One-touch fitting: ø10, ø12

Note) N.C. only