

Series Variations/Selection Procedure

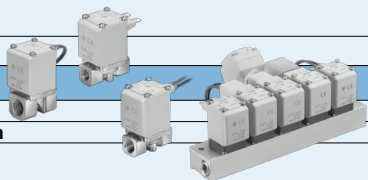
Direct Operated 2 Port Solenoid Valve

Series **VX21/22/23**

N.C., N.O./Single Unit, Manifold

For Air, Medium vacuum, Water, Oil, Steam

P.27



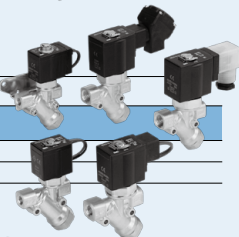
Direct Operated 2 Port Solenoid Valve with Built-in Y-strainer

Series **VXK21/22/23**

N.C., N.O./Single Unit

For Air, Water, Oil, Steam

P.73



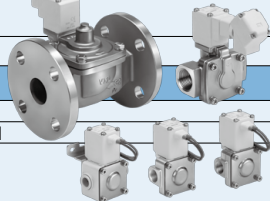
Pilot Operated 2 Port Solenoid Valve

Series **VXD**

N.C., N.O./Single Unit

For Air, Water, Heated water, Oil, High temperature oil

P.101



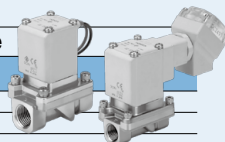
Zero Differential Pressure Type Pilot Operated 2 Port Solenoid Valve

Series **VXZ**

N.C., N.O./Single Unit

For Air, Water, Heated water, Oil, High temperature oil

P.154

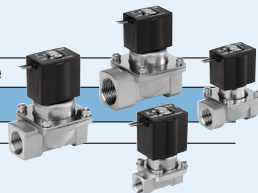


Zero Differential Pressure Type Pilot Operated 2 Port Solenoid Valve

Series **VXS22/23**

For Steam

P.172



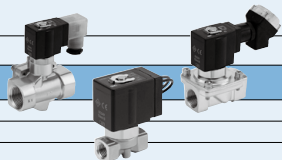
Energy Saving Type 2 Port Solenoid Valve

Series **VXE**

N.C.

For Air, Water, Oil

P.190

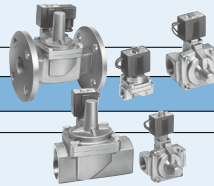


Pilot Operated 2 Port Solenoid Valve

Series VXP21/22/23

For Air, Gas, Steam, Water, Oil

P.243



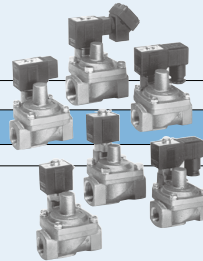
Selection Procedure for 2/3 Port Valves for Fluid Control

Water Hammer Relief/Pilot Operated 2 Port Solenoid Valve

Series VXR21/22/23

For Water and Oil

P.255



1. Selection of the series

Select series by referring to the number of ports, valve type (N.C., N.O., C.O.), port size and applied fluid.

2. Check by the applicable fluids check list

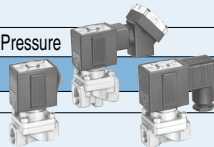
Use the tables for each series to check the compatibility of the applicable fluid with the solenoid valve.

Diaphragm Type Pilot Operated 2 Port Solenoid Valve for High Pressure

Series VXH

Max. operating pressure: 2.0 MPa

P.265



3. Confirmation of the working pressure differential

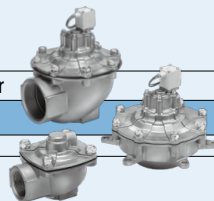
There are two types of pressure differentials. The high pressure differential is the highest pressure difference allowable between the inlet side and the outlet side in an open and closed state. The minimum pressure differential is the lowest pressure required to hold the main valve fully open. Refer to the following pages for each series as the pressure differential varies with the orifice size, power supply, pressure and fluid.

2 Port Solenoid Valve/Air Operated Valve for Dust Collector

Series VXF2/VXFA2

For Dust collector

P.267



4. Reference to the flow characteristic table

To obtain the flow rate of fluid, refer to the flow characteristic table.

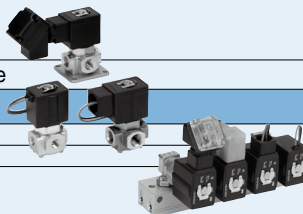
Direct Operated 3 Port Solenoid Valve

Series VX31/32/33

N.C., N.O., COM./Single Unit, Manifold

For Air, Water, Oil, Steam

P.306



5. Choice of the power supply voltage and electrical entry

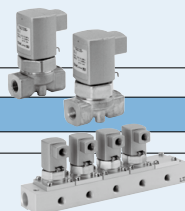
Select the AC/DC power source and choose the electrical entry.

Direct Air Operated 2 Port Valve

Series VXA21/22

For Air, Water, Oil

P.335



Solenoid Valves/Air Operated Valves List

Solenoid Valves List

Number of ports		2 port										
Action	Direct operated		Direct operated		Pilot operated, Diaphragm type	Zero pressure differential operation, Pilot operated, Diaphragm type	Zero pressure differential operation, Pilot operated, Diaphragm type	Direct operated <Energy saving type>				
	VX21/22/23		VXK21/22/23		VXD	VXZ	VXS22/23	VXE21/22/23				
Series	VX21/22/23		VXK21/22/23		VXD	VXZ	VXS22/23	VXE21/22/23				
Body type	Single unit		Single unit		Single unit	Single unit	Single unit	Single unit	Manifold			
Valve type	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.			
Applicable fluids	Air	●	●	●	●	●	—	—	●	●		
	Medium vacuum, non-leak, oil-free	●	●	●	—	—	—	—	●	●		
	Water	●	●	●	●	●	—	—	●	●		
	Heated water	●	●	●	●	●	—	—	—	—		
	Oil	●	●	●	●	●	—	—	●	●		
	Steam	●	●	●	—	—	●	—	—	—		
Port size	One-touch fittings	ø6	●	—	—	—	—	—	—	—		
		ø8	●	—	—	—	—	—	—	—		
		ø10	●	—	—	●	—	—	—	—		
		ø12	●	—	—	●	—	—	—	—		
		ø3/8	—	—	—	●	—	—	—	—		
	Rc	1/8 (6A)	●	●	●	—	—	—	—	●	●	
		1/4 (8A)	●	●	●	●	●	●	●	●	●	
		3/8 (10A)	●	●	●	●	●	●	●	●	●	
		1/2 (15A)	●	—	—	●	●	●	●	●	—	
		3/4 (20A)	—	—	—	●	●	●	—	—	—	
		1 (25A)	—	—	—	●	●	●	—	—	—	
		1 1/4 (32A)	—	—	—	●	—	—	—	—	—	
		Flange, Rc	1 1/2 (40A)	—	—	—	●	—	—	—	—	—
			2 (50A)	—	—	—	●	—	—	—	—	—
			2 1/2 (65A)	—	—	—	—	—	—	—	—	—
			3 (80A)	—	—	—	—	—	—	—	—	—
3 1/2 (90A)	—		—	—	—	—	—	—	—	—		
4 (100A)	—	—	—	—	—	—	—	—	—			
Page	P.30		P.75		P.103	P.152	P.174	P.193	P.193			

Air Operated Valves List

Number of ports		2 port			
Action	Direct operated				
	VXA21/22		VXFA2		
Series	VXA21/22		VXFA2		
Body type	Single unit	Manifold	Single unit		
Valve type	N.C.	N.O.	N.C.	N.O.	
Applicable fluids	Air	●	●	—	—
	Medium vacuum, non-leak, oil-free	●	—	—	—
	Water	●	—	—	—
	Heated water	●	—	—	—
	Oil	●	—	—	—
	Steam	●	—	—	—
Port size Rc	1/8 (6A)	—	—	3/4 (20A) to 4 (100A)	—
	1/4 (8A)	—	—	—	—
	3/8 (10A)	—	—	—	—
	1/2 (15A)	—	—	—	—
	Page	P.335		P.272	

