Series Variations/Selection Procedure

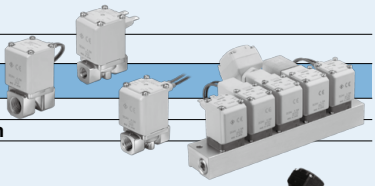
Direct Operated 2 Port Solenoid Valve

VX21/22/23 Series

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

For Air, Medium Vacuum, Water, Oil, Steam

P.27



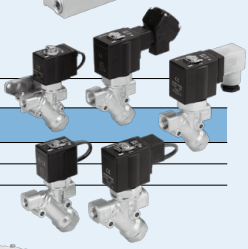
Direct Operated 2 Port Solenoid Valve with Built-in Y-strainer

VXK21/22/23 Series

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

For Air, Water, Oil, Steam

P.81



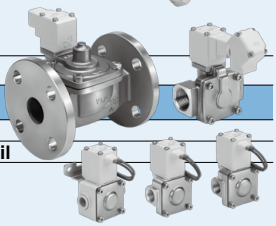
Pilot Operated 2 Port Solenoid Valve

VXD Series

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

For Air, Water, Heated Water, Oil, High Temperature Oil

P.113



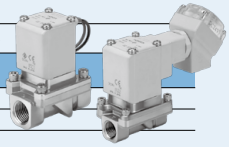
Zero Differential Pressure Type Pilot Operated 2 Port Solenoid Valve

VXZ Series

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

For Air, Water, Heated Water, Oil, High Temperature Oil

P.171

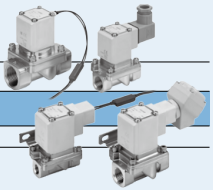


Zero Differential Pressure Type Pilot Operated 2 Port Solenoid Valve

VXS Series

For Steam

P.215

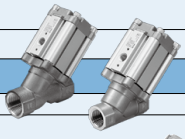


Angle Seat Valve/Air Operated Type

VXB Series

For Steam, Air

P.239



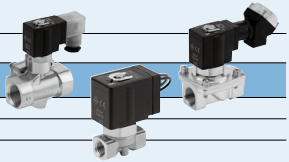
Energy Saving Type 2 Port Solenoid Valve

VXE Series

N.C.

For Air, Water, Oil

P.257

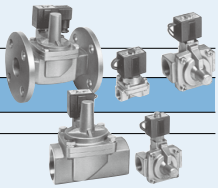


Pilot Operated 2 Port Solenoid Valve

VXP21/22/23 Series

For Air, Gas, Steam, Water, Oil

P.311

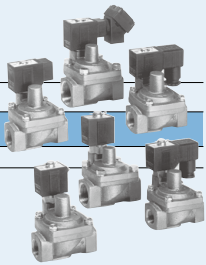


Water Hammer Relief/Pilot Operated 2 Port Solenoid Valve

VXR21/22/23 Series

For Water and Oil

P.323

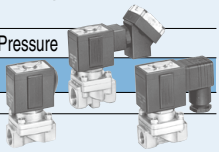


Diaphragm Type Pilot Operated 2 Port Solenoid Valve for High Pressure

VXH Series

Max. Operating Pressure: 2.0 MPa

P.333

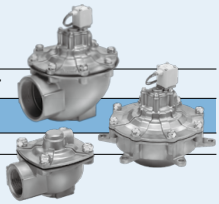


2 Port Solenoid Valve/Air Operated Valve for Dust Collector

VXF2/VXFA2 Series

For Dust Collector

P.335



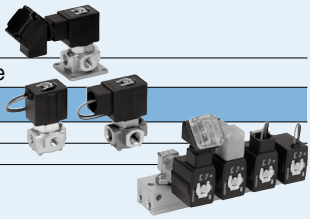
Direct Operated 3 Port Solenoid Valve

VX31/32/33 Series

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

For Air, Water, Oil, Steam

P.377

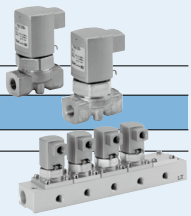


Direct Air Operated 2 Port Valve

VXA21/22 Series

For Air, Water, Oil

P.407



Selection Procedure for 2/3 Port Valves for Fluid Control

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.

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.

4. Reference to the flow characteristic table

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

5. Choice of the power supply voltage and electrical entry

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

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>						
Series		VX21/22/23				VXK21/22/23		VXD		VXZ		VXS22/23	VXE21/22/23						
Body type		Single unit		Manifold		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.	N.O.	N.C.	N.C.		N.C.				
Applicable fluids	Air	●		●		●		●		●		—	●		●				
	Medium vacuum, non-leak, oil-free	●		●		●		—		—		—	●		●				
	Water	●		●		●		●		●		—	●		●				
	Heated water	●		●		●		●		●		—	—		—				
	Oil	●		●		●		●		●		—	●		●				
	Steam	●		●		●		—		—		●	—		—				
Port size	One-touch fittings ø6	●		—		—		—		—		—	—		—				
	One-touch fittings ø8	●		—		—		—		—		—	—		—				
	One-touch fittings ø10	●		—		—		●		—		—	—		—				
	One-touch fittings ø12	●		—		—		●		—		—	—		—				
	One-touch fittings ø3/8	—		—		—		●		—		—	—		—				
	Rc 1/8 (6A)	●		●		●		—		—		—	●		●				
	Rc 1/4 (8A)	●		●		●		●		●		●	●		●				
	Rc 3/8 (10A)	●		●		●		●		●		●	●		●				
	Rc 1/2 (15A)	●		—		—		●		●		●	●		—				
	Rc 3/4 (20A)	—		—		—		●		●		●	—		—				
	Rc 1 (25A)	—		—		—		●		●		●	—		—				
	Flange, Rc 1 1/4 (32A)	—		—		—		● Flange		—		—	—		—				
	Flange, Rc 1 1/2 (40A)	—		—		—		● Flange		—		—	—		—				
	Flange, Rc 2 (50A)	—		—		—		● Flange		—		—	—		—				
	Flange, Rc 2 1/2 (65A)	—		—		—		—		—		—	—		—				
	Flange, Rc 3 (80A)	—		—		—		—		—		—	—		—				
	Flange, Rc 3 1/2 (90A)	—		—		—		—		—		—	—		—				
	Flange, Rc 4 (100A)	—		—		—		—		—		—	—		—				
Page		P.30				P.83		P.115		P.173		P.217	P.261		P.261				

Air Operated Valves List

Number of ports		2 port					
Action		Direct operated		Air operated Diaphragm valve		Air operated Piston type	
Series		VXA21/22		VXFA2		VXB	
Body type		Single unit	Manifold	Single unit		Single unit	
Valve type		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 Rc		1/8 (6A)		3/4 (20A) to 4 (100A)		3/8 (10A)	
		1/4 (8A)					
		3/8 (10A)				1/2 (15A)	
		1/2 (15A)					
		3/4 (20A)				3/4 (20A)	
Page		P.407		P.340		P.241	

										3 port		
	Pilot operated, Diaphragm type <Energy saving type>	Zero pressure differential operation, Pilot operated, Diaphragm type <Energy saving type>	Pilot operated, Disk type		Pilot operated, <Water hammer relief type>		Pilot operated, Diaphragm type	Pilot operated Diaphragm type	Direct operated			
	VXED21/22/23	**VXEZ22/23**	**VXP21/22/23**		**VXR21/22/23**		**VXH22**	**VXF2**	**VX31/32/33**			
	Single unit	Single unit	Single unit		Single unit		Single unit	Single unit	Single unit		Manifold	
	N.C.	N.C.	N.C.	N.O.	N.C.	N.O.	N.C.	N.C.	N.C.	N.O.	N.C.	N.O.
	●	●	—		—		—	●	●		●	
	—	—	—		—		—	—	●		●	
	●	●	—		—		—	—	●		—	
	—	—	—		—		—	—	●		—	
	●	●	—		—		—	—	●		●	
	—	—	—		—		—	—	● (Max. 183°C)		—	
	—	—	—	—	—	—	—	—	—		—	
	—	—	—	—	—	—	—	—	—		—	
	—	—	—	—	—	—	—	—	—		—	
	—	—	—	—	—	—	—	—	—		—	
	—	—	—	—	—	—	—	—	—		—	
	—	—	—	—	—	—	—	—	●		●	
	●	●	●	—	—	—	●	—	●		●	
	●	●	●	—	—	—	●	—	●		—	
	●	●	●	●	●	●	●	—	—		—	
	●	●	●	●	●	●	—	●	—		—	
	●	●	●	●	●	●	—	●	—		—	
	● Flange	—	● Flange, Rc	● Flange, Rc	● Rc	● Rc	—		—		—	
	● Flange	—	● Flange, Rc	● Flange, Rc	● Rc	● Rc	—	●	—		—	
	● Flange	—	● Flange, Rc	● Flange, Rc	● Rc	● Rc	—	●	—		—	
	—	—	—	—	—	—	—	●	—		—	
	—	—	—	—	—	—	—	●	—		—	
	—	—	—	—	—	—	—	●	—		—	
	—	—	—	—	—	—	—	●	—		—	
	P.283	P.297	P.311		P.323		P.333	P.338	P.379		P.379	

⚠Caution

Be sure to read this before handling the products. Refer to back page 50 for Safety Instructions and pages 17 to 19 for 2 Port Solenoid Valve for Fluid Control Precautions.