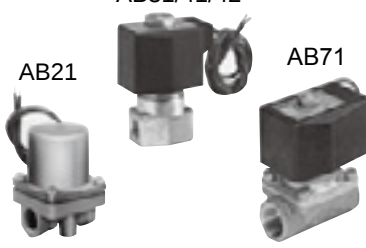
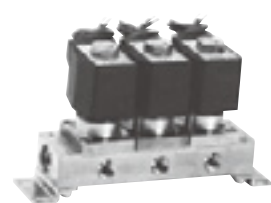
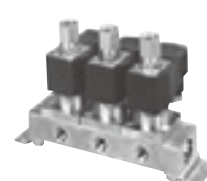


Series variation

Multi-fluid control direct acting 2, 3-port solenoid valve General purpose

* Refer to page 328 for dry air (-Z).

No. of ports	Model	Configuration	Actuation				
					Air	Low vacuum [1.33 x 10 ² Pa (abs)]	
2-port		AB21	Single unit	NC (open when energized)		●	
		AB31				●	●
		AB41				●	●
		AB42		NO (closed when energized)		●	●
		AB71		NC (open when energized)		●	
		GAB312	Manifold	NC (open when energized)	Common supply	●	●
		GAB352			Individual supply	●	●
		GAB412			Common supply	●	●
		GAB452			Individual supply	●	●
		GAB422		NO (closed when energized)	Common supply	●	●
3-port		AG31	Single unit	Universal		●	●
		AG41				●	●
		AG33		NC pressurization		●	●
		AG43				●	●
		AG34		NO pressurization		●	●
		AG44				●	●
	 	GAG31	Manifold	Universal	Common supply/individual exhaust	●	●
		GAG35			Common supply separate flow	●	●
		GAG41			Common supply/individual exhaust	●	●
		GAG45			Common supply separate flow	●	●
		GAG33		NC pressurization	Common supply/individual exhaust	●	●
		GAG43				●	●
		GAG34	Actuator	NO pressurization		●	●
		GAG44				●	●

Working fluid					Port size						Page
Water	Kerosene	Oil [50 mm ² /s or less]	Hot water	Steam	Rc1/8	Rc1/4	Rc3/8	Rc1/2	Rc3/4	Rc1	
●		●			●	●					150
●	●	●	●	●	● ^{*4}	● ^{*4}					154
●	●	●	●	●		● ^{*4}	● ^{*4}	● ^{*4}			154
●	●	●	●	●		● ^{*4}	● ^{*4}				154
●	●	● ^{*1}						●	●	●	168
●	●	●	●	●		● ^{*2}	● ^{*2}				172
●	●	●	●	●		● ^{*2}	● ^{*2}				172
●	●	●	●	●		● ^{*2}	● ^{*2}				172
●	●	●	●	●		● ^{*2}	● ^{*2}				172
●	●	●	●	●		● ^{*2}	● ^{*2}				182
●	●	●	●	●	● ^{*4}	● ^{*4}					190
●	●	●	●	●		● ^{*4}	● ^{*4}				190
●	●	●	●	●	● ^{*4}	● ^{*4}					208
●	●	●	●	●		● ^{*4}	● ^{*4}				208
●	●	●	●		● ^{*4}	● ^{*4}					226
●	●	●	●			● ^{*4}	● ^{*4}				226
●	●	●	●	●	● ^{*2} ● ^{*3}	● ^{*2} ● ^{*3}					198
●	●	●	●	●	● ^{*2} ● ^{*3}	● ^{*2} ● ^{*3}					198
●	●	●	●	●		● ^{*2} ● ^{*3}	● ^{*2} ● ^{*3}				198
●	●	●	●	●		● ^{*2} ● ^{*3}	● ^{*2} ● ^{*3}				198
●	●	●	●	●	● ^{*2} ● ^{*3}	● ^{*2} ● ^{*3}					216
●	●	●	●	●		● ^{*2} ● ^{*3}	● ^{*2} ● ^{*3}				216
●	●	●	●		● ^{*2} ● ^{*3}	● ^{*2} ● ^{*3}					234
●	●	●	●			● ^{*2} ● ^{*3}	● ^{*2} ● ^{*3}				234

Refer to page 148 for details on the coil system.

*1 : 20 mm²/s for AB71 Series.

*2 : Port A: Rc1/4, port C: Rc3/8

*3 : ● indicates NO port.

*4 : Refer to each How to order column for the thread.

EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/ AD
APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S ◇ B/ NAB
LAD/ NAD
Water- Rela
NPNAP/ NVP
SNP
CHB/G
MXB/G
Other valves
SWD/ MWD
DustColl
CVE/ CVSE
CCH/ CPE/D
LifeSci
Gas- Combus
Auto- Water
Outdoor
SpecFld
Custom
Ending

Coil selection guide

● Coil housing types and selection guide

Various types are available according to the application.
Refer to the structure and features to select the optimum model.

For direct acting 2, 3-port solenoid valve (AB/GAB/AG/GAG)

For direct acting 2, 3-port solenoid valve (AB/GAB/AG/GAG)				Appearance			
Coil system	Open frame	Thermal class B mold	● For DC and AC (50/60 Hz common) ● Degree of protection: IP61 or equivalent ● Cannot be used outdoors	Grommet lead wire	● Lead wire length 300 mm		Blank
		Thermal class B mold	● For DC and AC (50/60 Hz common) ● Degree of protection: IP61 or equivalent ● Cannot be used outdoors	DIN terminal box	● Easy wiring and maintenance ● Enhanced electrical safety (by grounding the ground terminal) ● Indicator lamp available (Optional - 100 VAC, 200 VAC and 24 VDC)		2E 2G 2H
		Thermal class B mold	● For DC and AC (50/60 Hz common) ● Degree of protection: IP65 or equivalent ● Cannot be used outdoors	Lead wire	● Lead wire length 300 mm ● Conduit (CTC19) for direct piping can be attached		6C
		Thermal class B mold	● For DC and AC (50/60 Hz common) ● Degree of protection: IP21 or equivalent ● Cannot be used outdoors	HP terminal box	● Easy wiring ● Indicator lamp available (Optional - 100 VAC, 200 VAC, 12 VDC, 24 VDC, 100 VDC)		3A
		Thermal class B mold	● For DC and AC (50/60 Hz common) ● Degree of protection: IP65 or equivalent ● Cannot be used outdoors	HP terminal box	● Easy wiring ● Indicator lamp available (Optional - 100 VAC, 200 VAC, 12 VDC, 24 VDC, 100 VDC)		2E 2G 2H
		Thermal class H taped	● AC dedicated (50/60 Hz common) ● High temperature fluids and high ambient temperatures usable ● Degree of protection: IP00 ● Cannot be used outdoors	Lead wire	● Lead wire length 300 mm ● Conduit (CTC19) for direct piping can be attached.		6E 6G 6H
		Thermal class B mold with diode	● Diode in the coil converts AC to DC. ● Perfect for places where whirring noise should be prevented. ● AC dedicated (50/60 Hz common) ● Degree of protection: IP65 or equivalent ● Cannot be used outdoors	HP terminal box	● Easy wiring ● Indicator lamp available (optional - 100 VAC, 200 VAC)		3A
		Thermal class B mold with diode	● Diode in the coil converts AC to DC. ● Perfect for places where whirring noise should be prevented. ● AC dedicated (50/60 Hz common) ● Degree of protection: IP21 or equivalent ● Cannot be used outdoors	Lead wire	● Lead wire length 300 mm ● Conduit (CTC19) for direct piping can be attached.		3M 3N
		Thermal class B mold with diode	● Diode in the coil converts AC to DC. ● Perfect for places where whirring noise should be prevented. ● AC dedicated (50/60 Hz common) ● Degree of protection: IP65 or equivalent ● Cannot be used outdoors	HP terminal box	● Easy wiring ● Indicator lamp available (Optional - 100/200 VAC)		3I 3J
		Thermal class B mold with diode	● Diode in the coil converts AC to DC. ● Perfect for places where whirring noise should be prevented. ● AC dedicated (50/60 Hz common) ● Degree of protection: IP65 or equivalent ● Cannot be used outdoors	HP terminal box	● Easy wiring ● Indicator lamp available (Optional - 100/200 VAC)		4A
		Conduit	● Use a conduit (CTC19 or G1/2) when using direct conduit wiring for the open frame lead wire.		4M 4N		
						5A	
						5M 5N	
						5I 5J	
						G H	

● Repair parts compatibility table by coil option

Coil option code	Supported voltage	Repair parts			
		Plunger assembly	Core assembly	Coil assembly	Actuator assembly *1
0 or blank	AC	○	○	○	-
6C *2, *3	DC	-	-	-	○
2E 2G 2H	AC	○	○	○	-
2E 2G 2H	DC	○	○	○	-
6E 6G 6H *2, *3	DC	-	-	-	○
3A	AC	○	○	○	-
	DC		○	○	-
3M 3N	AC	○	○	○	-
	DC		○	○	-
3I 3J	AC	○	○	○	-
	DC		○	○	-
4A	AC	○	○	○	-
4M 4N	AC	○	○	○	-
5A	AC	○	○	○	-
5M 5N	AC	○	○	○	-
5I 5J	AC	○	○	○	-

*1 : The actuator assembly includes the coil assembly, core assembly and plunger assembly.

*2 : As 6C, 6E, 6G and 6H are dedicated parts, they are provided as part of the actuator assembly.

*3 : AB41 only.

EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/ AD
APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S◇B/ NAB
LAD/ NAD
Water- Rela
NP/NAP/ NVP
SNP
CHB/G
MXB/G
Other valves
SWD/ MWD
DustColl
CVE/ CVSE
CCH/ CPE/D
LifeSci
Gas- Combus
Auto- Water
Outdoor
SpecFld
Custom
Ending