



AVP21-8T



AVP**2-*K

Specifications

Descriptions		AVP21-8T	AVP5 ^{1/3} *2	AVP6 ^{1/3} *2	AVP7 ^{1/3} *2	AVP8 ^{1/3} *2 (Custom order)
Working fluid		Vacuum and inert gas				
Working pressure range Note 1 Pa(abs)	NC	1.3×10 ⁻⁶ to 2.5×10 ⁻⁵	1.3×10 ⁻⁶ to 1.5×10 ⁻⁵	1.3×10 ⁻⁶ to 1.0×10 ⁻⁵	1.3×10 ⁻⁶ to 1.0×10 ⁻⁵	1.3×10 ⁻⁶ to 1.0×10 ⁻⁵
	NO	—	—	—	—	Barotropic: 1.3×10 ⁻⁶ to 1.0×10 ⁻⁵ Back pressure: 1.3×10 ⁻⁶ to 1.0×10 ⁻⁵
	Double acting	—	1.3×10 ⁻⁶ to 2.0×10 ⁻⁵			
Maximum working differential pressure Note 2 MPa		0.25	NC: 0.15 NO: 0.15 Double acting: 0.2	NC: 0.1 NO: 0.1 Double acting: 0.2	NC: 0.1 (Back pressure not available) NO: 0.1 Double acting: 0.2	NC: 0.1 (Back pressure not available) NO: 0.15 Double acting: 0.2
Valve seat leakage Pa·m ³ /s(He)		1.3×10 ⁻⁹ or less				
External leakage Pa·m ³ /s(He)		1.3×10 ⁻⁹ or less				
Withstanding pressure MPa		0.3				
Fluid temperature °C		5 to 60				
Ambient temperature °C		0 to 60				
Orifice	mm	5	24	40	50	80
Stroke	mm	3	15	20	22	32
Conductance Note 3	ℓ/s	—	13	52	80	242
Connection		1/4" tube	NW25	NW40	NW50	NW80
Control pressure MPa		0.3 to 0.5				
Weight kg		0.25	1.6	2.6	3.8	10.4
JIS symbol		<p>● NC (Excluding AVP712, AVP812)</p> <p>(AVP712, AVP812)</p>				

Note 1: For AVP822: 1.3×10⁻⁶ Pa to 1.5×10⁻⁵ Pa

For AVP832: 1.3×10⁻⁶ Pa to 2×10⁻⁵ Pa.

Note that when using the AVP822 with a barotropic setting, the range is 1.3×10⁻⁶ Pa to 1.0×10⁻⁵ Pa.

Note 2: The back pressure type is not used for AVP712 and AVP812.

Note 3: The conductance is the theoretical calculation value at the molecular flow range, and is not the actual measurement value.

Electrical specifications		
Rated voltage		100V AC(50/60Hz), 110V AC(60Hz), 200V AC(50/60Hz), 220V AC(60Hz), 24V DC
Apparent power	When holding	3.9VA(50Hz), 3.1VA(60Hz)
	When starting	9.2VA(50Hz), 7.9VA(60Hz)
Power consumption	AC	2.0W (50Hz), 1.7W (60Hz)
	DC	4.0W
Heat resistance class		B

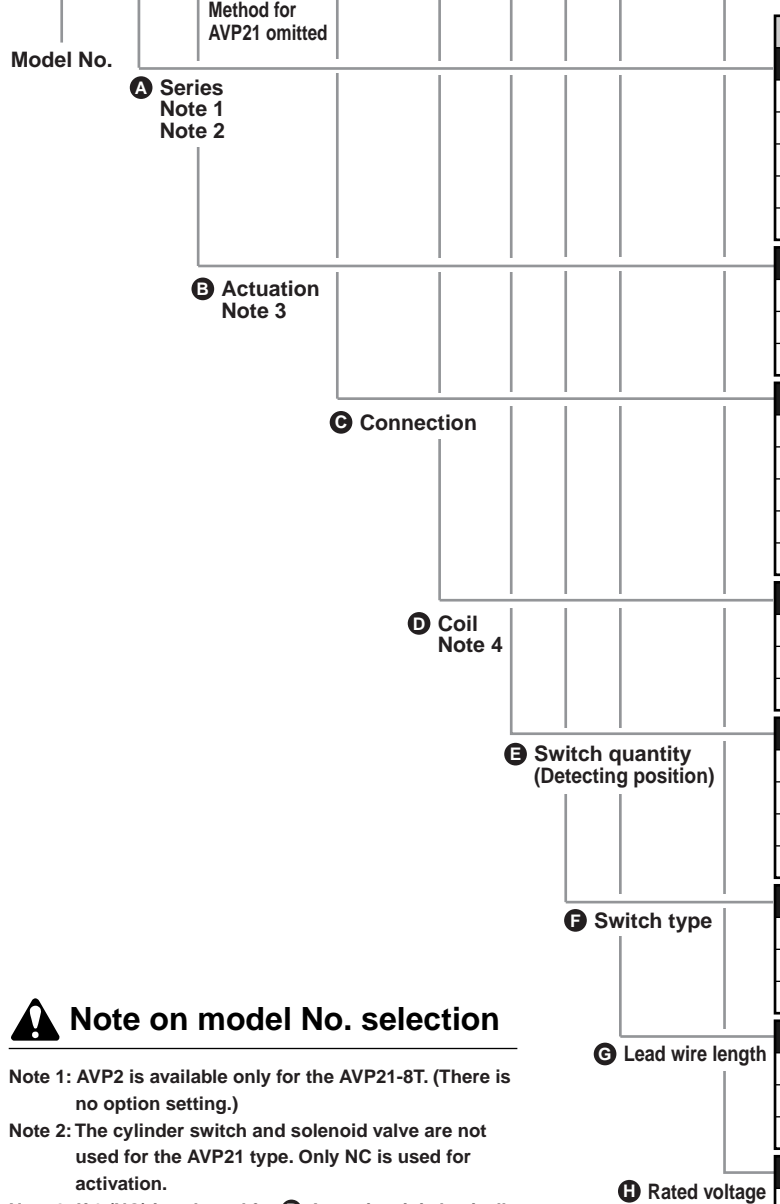
Switch specifications

Descriptions	Proximity switch	
	NAB-C2	NAB-C3
Applications	Programmable controller	Programmable controller, relay, IC circuit, small solenoid valve
Power voltage	—	10 to 28V DC
Load voltage/current	10 to 30V DC, 5 to 30mA	30V DC, 150mA or less
Power consumption	—	15mA or less at 24V DC (when ON)
Internal voltage drop	4V or less	0.5V or less
Light	Illuminating diode (lights when ON)	
Leakage current	1mA or less	10μA or less
Lead wire length Note 4	1m (oil resistant vinyl round code 2-conductor 0.2mm ²)	1m (oil resistant vinyl round code 3-conductor 0.15mm ²)
Maximum impact	294m/s ²	
Insulation resistance	100MΩ and over when measured with 500VDC megger	
Withstand voltage	No failure when 1000VAC is applied for 1 minute	
Ambient temperature range	-10 to +60°C	
Protective structure	IEC Standard IP67, JIS CO920 (water-tight type), oil-resistant	

Note 4: 3 m and 5 m leads are available as options.

How to order

AVP 6 1 2 - 40K - 2C - H C2 3 - DC24V



Symbol	Descriptions	
A Series		
2	1/4"	
5	25A	
6	40A	
7	50A	
8	80A (custom order)	
B Actuation		
1	NC (normally closed)	
2	NO (normally open)	
3	Double acting	
C Connection		
8T	1/4" tube	Only AVP21 is available
25K	NW25	Only AVP5*2 is available
40K	NW40	Only AVP6*2 is available
50K	NW50	Only AVP7*2 is available
80K	NW80	Only AVP8*2 is available
D Coil		
Blank	Without solenoid valve	
2C	Grommet coil	
2G	DIN terminal box	
E Switch quantity (detecting position)		
Blank	Without switch	
H	Detect when valve is open	
R	Detect when valve is closed	
D	Detect when valve is open/closed	
F Switch type		
Blank	Without switch	
C2	Proximity 2 wire	
C3	Proximity 3 wire	
G Switch lead wire length		
Blank	1m (standard)	
3	3m	
5	5m	
H Rated voltage		
Blank	Without solenoid valve	
AC100V	AC100V(50/60Hz), AC110V(60Hz)	
AC200V	AC200V(50/60Hz), AC220V(60Hz)	
DC24V	DC24V	

Note on model No. selection

- Note 1: AVP2 is available only for the AVP21-8T. (There is no option setting.)
- Note 2: The cylinder switch and solenoid valve are not used for the AVP21 type. Only NC is used for activation.
- Note 3: If 2 (NO) is selected for **B** Actuation, it is basically not possible to retrofit the solenoid valve. Designate the solenoid valve at purchase.
- Note 4: The **D** Coil setting is used only when 1 (NC) or 2 (NO) is selected for **B** Actuation. (The solenoid valve option is not used for the double-acting valve.)

<Example of model number >

AVP612-40K-2C-HC23-DC24V

Model: AVP612 high vacuum air operated valve

- A** Series : 40A
- B** Actuation : NC (normally closed)
- C** Connection : NW40
- D** Coil : Grommet coil
- E** Switch quantity : Detect when valve is open
- F** Switch type : Proximity 2 wire
- G** Lead wire length : 3m
- H** Rated voltage : 24V DC