

3 Port/Air Operated Valve Body Ported/Single Unit Series VPA300/500/700



Series VPA300



Series VPA500



Series VPA700

How to Order

VPA 3 4 2 - 1 - 01 A - -

Series

3	VPA300
5	VPA500
7	VPA700

Valve option

Nil	Standard
V	For vacuum

Port size

Symbol	Port size	VPA300	VPA500	VPA700
01	1/8	○	—	—
02	1/4	○	○	—
03	3/8	—	○	○
04	1/2	—	—	○

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

Made to Order

Nil	—
X505	Interchangeable specification with the previous valve mounting hole pitch type (Refer to page 40).

Bracket

Nil	Without bracket
F	With bracket

Type of actuation

A	N.C. (Normally closed)
B	N.O. (Normally open)

Specifications

Fluid	Air	
Type of actuation	N.C. or N.O. (Convertible)	
Operating pressure range (MPa)	Standard	0.2 to 1.0
	For vacuum	–100 kPa to 0.2
Pilot pressure (MPa)	0.2 to 1.0 (Equivalent to the operating pressure or more)	
Ambient and fluid temperature (°C)	–10 to 50 (No freezing)	
Lubrication	Not required	
Mounting orientation	Unrestricted	
Impact/Vibration resistance (m/s ²) (Note)	300/50	

Note) Impact resistance: No malfunction to axis and right angle directions of main valve, each one time when pilot signal ON and OFF. (Values at the initial period)

Vibration resistance: No malfunction from test with 45 to 2000 Hz one sweep, to axis and right angle direction of main valve, each one time when pilot signal ON and OFF. (Values at the initial period)

Flow Characteristics/Weight

Model	Port size	1 ↔ 2 (P ↔ A)			2 ↔ 3 (A ↔ R)			Weight (g) (Note)
		C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv	
VPA342	1/8	3.5	0.26	0.8	3.6	0.26	0.9	118
	1/4	4.2	0.22	1.0	4.2	0.23	1.0	114
VPA542	1/4	7.9	0.21	1.8	7.2	0.27	1.8	237
	3/8	8.9	0.16	2.2	8.9	0.20	2.1	229
VPA742	3/8	11.9	0.21	2.7	11.8	0.20	2.7	501
	1/2	15.1	0.21	3.6	15.3	0.22	3.7	484

Note) Values without brackets

Caution

Refer to back cover for Safety Instructions, “Handling Precautions for SMC Products” (M-E03-3) for Common Precautions.



Refer to back page 6 for changing the type of actuation.