

Solenoid Vacuum Valves 500 Series

3-port, External Pilot Type



Specifications

Item	Basic model	VA500AE1	VV500AE1	VA500AE2
Media			Vacuum, air	
Operation type			Indirect acting	
Number of ports			3 ports	
Valve function		Single solenoid Normally closed (NC, standard), Normally open (NO, optional)		Double solenoid Normally closed (NC), Normally open (NO)
Effective area (Cv) mm ²			55 [2.7]	
Port size Rc			1/2	
Lubrication			Not required	
Operating pressure range kPa(mmHg) [in.Hg]		0~100 {0~-750} [0~-29.53]	-51~-100 {-380~-750} [-14.96~-29.53]	0~100 {0~-750} [0~-29.53]
External pilot pressure		Recommended pilot air pressure 0.2~0.3MPa [29~44psi] MAX.0.5MPa [73psi]	Pilot vacuum -51~-100kPa [-14.96~-29.53in.Hg]	Recommended pilot air pressure 0.2~0.3MPa [29~44psi] MAX.0.7MPa [102psi]
External pilot port size		φ 6 [0.236in.] flareless fitting (For nylon tube)		
Operating temperature range °C [°F]		5~60 [41~140]		
Voltage type V		Standard AC100 (50/60Hz), AC200 (50/60Hz), For other voltages, see p.960.		
Voltage fluctuations %		±10		
Current ^{note} A	AC100V	50Hz → 0.14, 60Hz → 0.13		
	AC200V	50Hz → 0.070, 60Hz → 0.065		
Energizing type		Continuous energizing		
Insulation type		B type		
Wiring connection type		Conduit		
Lead wire length mm [in.]		Approximately 300 [11.8]		
Mounting direction		Any		
Mass kg [lb.]		0.85 [1.87]		0.95 [2.09]

Note: The starting current and energizing current values are virtually identical, and fall within these values.

Solenoid Vacuum Valve Order Codes

	Basic model	Option	Voltage
Single solenoid	Air pilot VA500AE1	Valve function Normally open (NO) -11 With barbed fitting for pilot -62	24 VDC AC100V AC200V
Single solenoid	Vacuum pilot VV500AE1		
Double solenoid	Air pilot VA500AE2		

Handling Instructions and Precautions

- When using in dusty atmospheres, install a filter between the vacuum pad and the solenoid valve, and at the R port.
- For the wiring instructions of VA500AE2, see p.960.
- Maintain pilot vacuum at -51kPa [-380mmHg] [-14.96in.Hg] or more for the VV500AE1.

- For inner diameter φ 6 [0.236in.] rubber tube
- Single solenoid only
- Blank: Normally closed (NC)
- E2: Both normally closed (NC) and normally open (NO)