

Models: **VC**

**Category:** Non-Capacity Type Solenoid Pump  
**Application:** Oil Series  
**Classification:** Pressure (Piston) Type

**FEATURES:**

- These non-capacity solenoid pump models are linearly controlled by pulse with modulation (PWM) in variable pressure oil applications.
- Every pump models in this series can be adapted at the factory input use with one of four different input voltages. For the two AC input voltage options, usually the pump output pressure is generated when a half-wave AC voltage is applied. However, it is also possible to control these pumps by a phase control method. For the two DC input voltage options, multi-step pressure control as well as linear control is possible by using a pulse width modulation (PWM) circuit board.



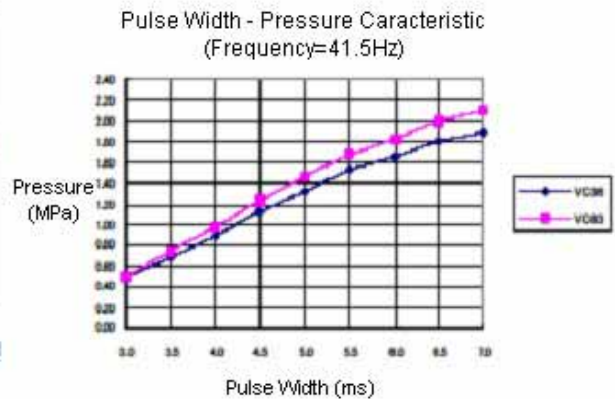
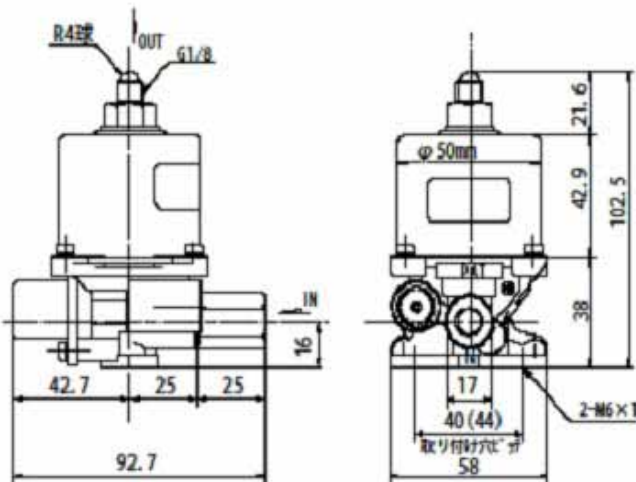
**PRIMARY APPLICATIONS:**

- Used as a precision (PWM controlled) "gun-type" burner in kerosene space heaters and light oil water boilers.
- Used as a pressure type actuator.

**SPECIFICATIONS:**

| MODELS                                 | VC36   | VC63                         |
|--|--|------------------------------|
| <b>SPECIFICATIONS</b>                  |  |                              |
| <b>Power Sources</b>                   | 120 / 230VAC (50 / 60Hz) [Half-Wave Rectifier or a Phase Control Drive Circuit Board or a Pulse Width Modulation Circuit Board is Required]<br>12 / 24VDC [Pulse Width Modulation Circuit Board is Required] |                              |
| <b>Power Consumption (Typical)</b>     | 19 VA  | 25 VA                        |
| <b>Maximum Free Flow Rate</b>          | < 1.8 L / h (< 0.48 gal / h)   | < 5.4 L / h (< 1.43 gal / h) |
| <b>Maximum Pressure (No Flow)*</b>     | 1.8MPa (256 psi)   | 2.1MPa (298 psi)             |
| <b>Pressure Regulation System</b>      | Without a mechanical pressure regulation system  |                              |
| <b>Corresponding Nozzle</b>            | 0.5 – 1.0 gal / h  | 0.75 – 1.5 gal / h           |
| <b>Suction Level</b>                   | < 1 M (< 3.3 ft)   |                              |
| <b>Internal Solenoid Cut-off Valve</b> | No   |                              |
| <b>Operating Temperature</b>           | -20 ~ 40 (-4o F ~ 104o F)  |                              |
| <b>Mounting Thread</b>                 | 2 – M6 x P1.0  |                              |
| <b>Piping Connection Sizes</b>         | <b>Intake:</b> R 1/8" <b>Discharge:</b> G 1/8" B (Half Spherical Surface of Radius 4m)   |                              |
| <b>Weight</b>                          | 0.72 Kg (1.58 lbs)   | 0.73 Kg (1.61 lbs)           |

\* Measurements of the maximum flow rate and the maximum pressure are dependent upon the type of nozzle used in conjunction with each pump. The values given above for the VC36 and VC63 pump models are derived from calculations using 0.4 gal / h and 0.85 gal / h nozzles, respectively.



**Nippon Control Kogyo Co., Ltd. Sales Dep.**

5-1-16 Chiyoda, Sakado, Saitama. 3500214 Japan

TEL: 81.49.283.7711 FAX: 81.49.283.7717 E-mail: inquiry@nipcon.co.jp URL: http://www.nipcon.co.jp