

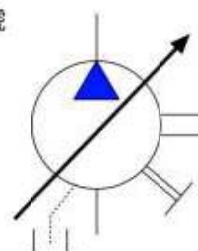


# Variable Displacement Vane Pump

## 變量葉片泵



油壓記號



SYMBOL

### 型式號碼/MODEL CODE

VCM - SM - 30 - B - 20

設計號碼

壓力範圍

A:35 kgf/cm<sup>2</sup>B:70 kgf/cm<sup>2</sup>

泵排量

30L,40L

系列號碼：

葉片泵系列

Design No.

Pressure ranges

C:105 kgf/cm<sup>2</sup>D:140 kgf/cm<sup>2</sup>

Displacement at 1800 rpm

30L, 40L

Series No.

Vane pump series

### 產品特性：

1. 高壓力、高效率、運轉平順。
2. 低噪音、低振動，符合低噪音工作環境要求。
3. 反應靈敏，動作精確度高。
4. 壓力補償型調整裝置，提供穩定的操作特性。
5. 結構簡單，容易維護及操作。

### Feature:

1. High efficiency, high-pressure, operation.
2. Extremely low vibration and noise level.
3. Instant and sharp cut-off characteristics.
4. Sturdy structure for high efficiency and long service life.
5. Easy adjustment in handling and maintenance.

### 技術資料/TECHNICAL DATA

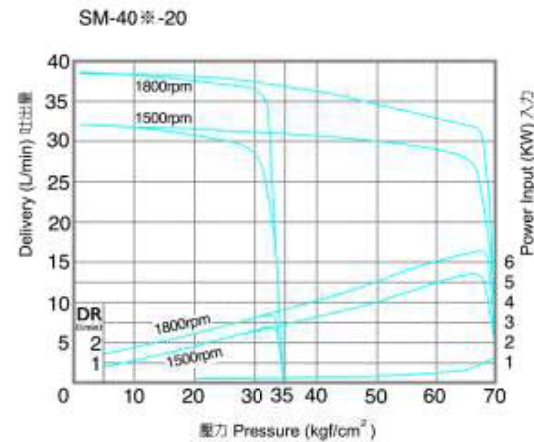
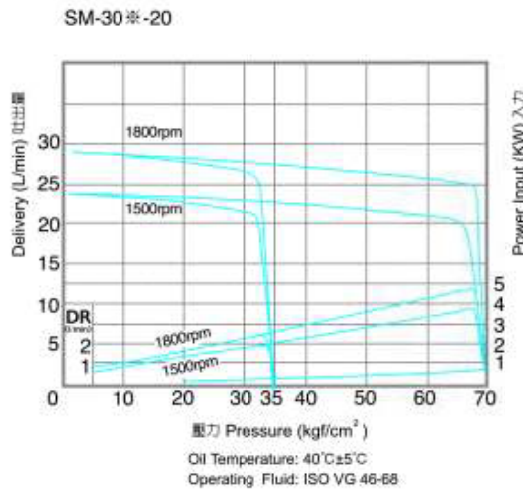
| 型式<br>MODEL | 泵排量 (無負荷時)<br>DELIVERY AT NO LOAD<br>(L/min) |         | 壓力調整範圍<br>PRESSURE ADJ.<br>RANGE<br>(kgf/cm <sup>2</sup> ) | 容許回轉速<br>SHAFT SPEED<br>RANGE (rpm) |            | 最高壓力<br>MAX.<br>PRESSURE<br>(kgf/cm <sup>2</sup> ) | 重量<br>WEIGHT<br>(kg) |
|-------------|----------------------------------------------|---------|------------------------------------------------------------|-------------------------------------|------------|----------------------------------------------------|----------------------|
|             | 1800rpm                                      | 1500rpm |                                                            | 最高<br>MAX.                          | 最低<br>MIN. |                                                    |                      |
| SM-30A      | 30                                           | 25      | 15-35                                                      | 1800                                | 800        | 35                                                 | 9.7                  |
| SM-30B      |                                              |         | 20-70                                                      |                                     |            | 70                                                 | 9.7                  |
| SM-30C      |                                              |         | 50-105                                                     |                                     |            | 105                                                | 9.7                  |
| SM-30D      |                                              |         | 70-140                                                     |                                     |            | 140                                                | 9.7                  |
| SM-40A      | 40                                           | 35      | 15-35                                                      | 1800                                | 800        | 35                                                 | 9.7                  |
| SM-40B      |                                              |         | 20-70                                                      |                                     |            | 70                                                 | 9.7                  |



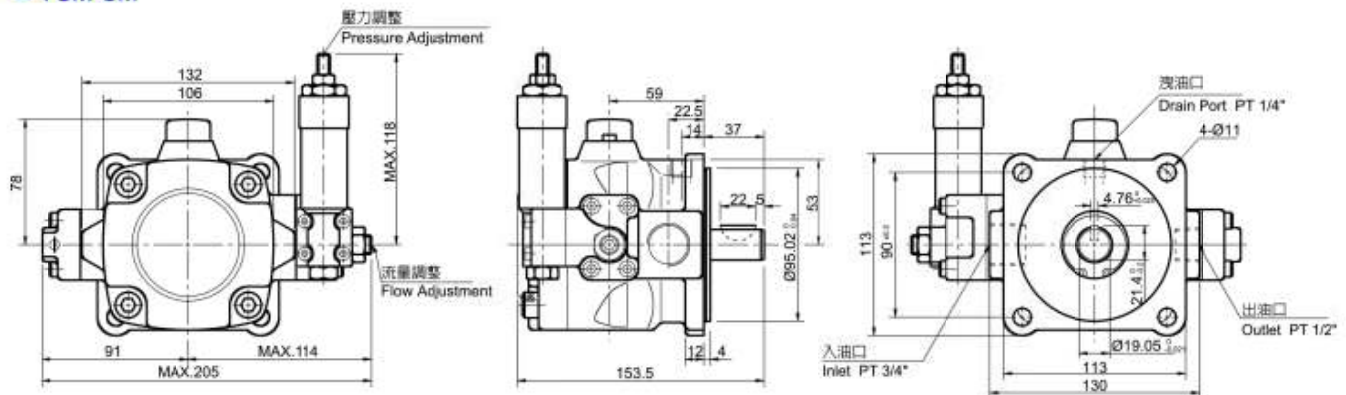
# Variable Displacement Vane Pump

## 變量葉片泵

### 性能曲線圖/PERFORMANCE CURVES



### ■ VCM-SM



### 操作須知:

1. 轉動方向: 標準泵的回轉方向乃以從軸心方向時正視為順時針方向。
2. 液壓油: 70 kgf/cm<sup>2</sup>以下, 40°C時, 黏度為30-50 cSt(ISO VG 32)的液壓油。  
70 kgf/cm<sup>2</sup>以上, 40°C時, 黏度為50-70 cSt(ISO VG 32)的液壓油。
3. 洩油管: 洩油管請務必連接到油箱液面下, 背壓請保持在0.3 kgf/cm<sup>2</sup>以下。
4. 工作油溫: 連續運轉溫度約為15~60°C。
5. 軸心配差: 泵與馬達軸心偏心誤差須在0.05mm以下, 角度誤差1°。
6. 吸油壓力: 吸油口壓力必須低於-0.3 kgf/cm<sup>2</sup>。
7. 流量調整: 調整流量時須先放鬆螺帽, 再旋轉調整螺絲, 右轉時為減量反之則為增量, 調整完畢請務必鎖緊螺帽。
8. 壓力調整: 右轉壓力調整螺絲則輸出壓力降低, 左轉則升高。
9. 初次使用: 請在無負載狀況下先行反覆啟動馬達, 以排除管路及泵中的空氣。為確保泵系統中所含空氣已排除, 請讓泵浦在無負載狀況下運轉十分鐘。

### Handling

1. The rotation of VCM-SM pump is clockwise when viewed from the shaft end.
2. The drain pipe is directly connected to the oil tank and the position must be below the level of oil.
3. Keep the suction pressure within -0.3 kgf/cm<sup>2</sup> at the suction port.
4. Pressure adjusting screw is turned clockwise to increase pressure and Counterclockwise to decrease pressure.
5. Flow adjusting screw is turned clockwise to increase flow and counterclockwise to decrease flow.
6. For proper alignment of pump and electric motor shaft, the eccentricity between them must be kept within 0.05mm and the eccentric angle error between them must be kept within 1°.
7. When pressure is under 70 kgf/cm<sup>2</sup> the viscosity of oil must be within 30-50 cSt, when pressure is over 70 kgf/cm<sup>2</sup> the viscosity of oil must be within 50-70 cSt, at the temperature of 40 °C.
8. When first time operation, the pump should be at no-load state-on delivery side and be repeated on and off the electric motor a number of times to make sure the air have been bled out of the system.