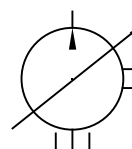


Care in Application



SYMBOL

1.Power Unit Circuit

In variable displacement vane Pump systems , the close circuit is recommended.

2.Shaft Rotation

Clockwise rotation viewed from the shaft end is standard.

3.Fluids Permissible

When working pressure lower than 70 bar , Hydraulic oil with a viscosity from 30 ~ 50(cst), (VG32) at 40°C is recommended.

4.Drain Pipe

External drain control type. Drain connection,must be piped directly to tank and backpressure must not exceed 0.3 bar.

5.Oil Temperature Range

Oil temperature range should be from 15°C~60°C during running operation and should be more than 7°C at starting.

6.Alignment and Installation of Pumps

In case the pump is connected to an electric motor , limit the defection of the alignment between the shafts to 0.05 mm TIR , and angle ± 1 degree.Be sured the electric motor direction is accordingly with the pump's shaft before starting.

7.Suction Port min. Pressure

Suction port minimum working pressure is ± 0.03 bar.

8.Cautions for Starting

When the pump is to be operated for the first time , place the pump delivery side in NO-Load condition and repeat starting and stopping of the motor for several times to eject the air from,inside of the pump and piping. If keep on 10 minutes operation will be much better.

9. sure the maximum peak pressure (setting pressure + surge pressure) during operation does not exceed 14Mpa.

1. 一般輪葉變量泵建議使用閉迴路的設計

2. 泵的迴轉是順時針。

3. 作動油的黏度建議使用(VG32)。

4. 泵的內漏回油管，須單獨直接進入油箱並且控制背壓在0.3bar以內。

5. 作動油的溫度最好在(15°~60°)之間。

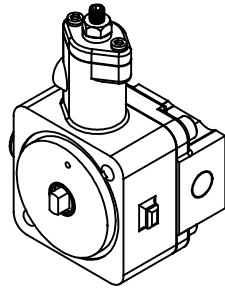
6. 泵與馬達心軸連接時的偏心量在0.05m/m或 $\pm 1^\circ$ 以內。

7. 進油口的壓力必須控制在0.03bar以內。

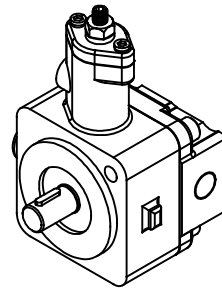
8. 當泵是第一次運作時，須無載啟動停止操作數次將泵及管內空氣排出並最好保持10分鐘的無載運轉

9. 設定壓力時, 要確認沖擊壓不可超過14Mpa

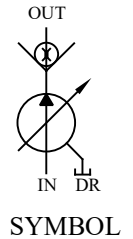
KVDN-8
KVDN-12
KVDN-16
KVDN-21



(A型：馬達端防漏型)



(B型：泵軸端防漏型)



FEATURES 特點

- *. Energy efficient high performance up 30~40% (高效高性能)
- *. Lightweight, compact design (重量輕 · 結構緊湊)
- *. Low noise, long life (噪音低 · 壽命長)
- *. Low heat generation, low temperature rise (低發熱 · 低溫升)

Model	Capacity (cm ³ /rev)	Operating Pressure Mpa (Kgf/cm ²)	No-load discharge Rate (L/min)		Input power (HP)	Net Weight (Kg)
			50HZ	60HZ		
KVDN-8	8	1.5~ 4.0(15.3~40.8)	12	14.4	1~2	7
		3.5~ 6.0 (35.7~61.2)				
		5.5~ 8.0 (56.1~81.6)				
KVDN-12	12	1.5~ 4.0(15.3~40.8)	18	21.6	1~2	
		3.5~ 6.0 (35.7~61.2)			2~3	
		5.5~ 8.0 (56.1~81.6)			2~3	
KVDN-16	16	1.5~ 4.0(15.3~40.8)	24	28.8	1~2	
		3.5~ 6.0 (35.7~61.2)			2~3	
		5.5~ 8.0 (56.1~81.6)			3~5	
KVDN-21	21	1.5~ 4.0(15.3~40.8)	31.5	37.8	2~3	
		3.5~ 6.0 (35.7~61.2)			3~5	
		5.5~ 8.0 (56.1~81.6)			3~5	

ORDERING CODE 訂購指引

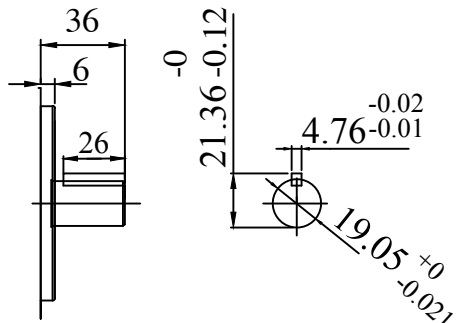
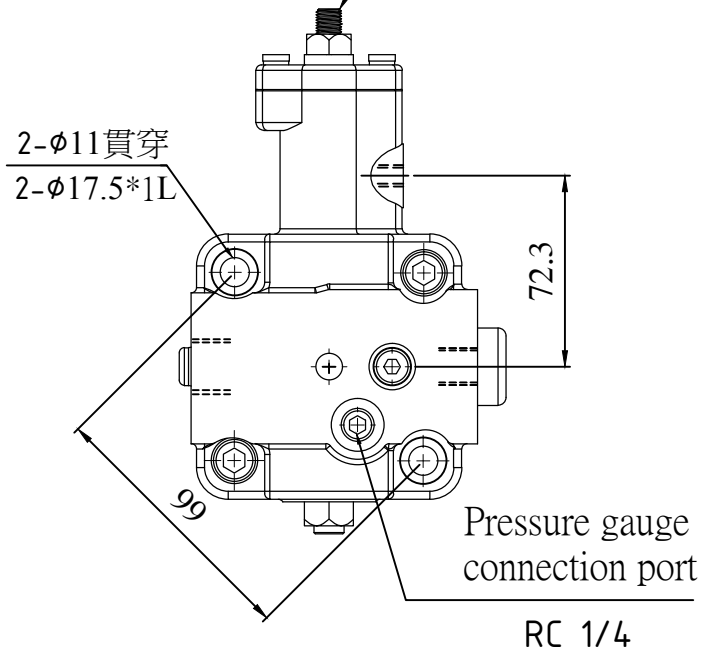
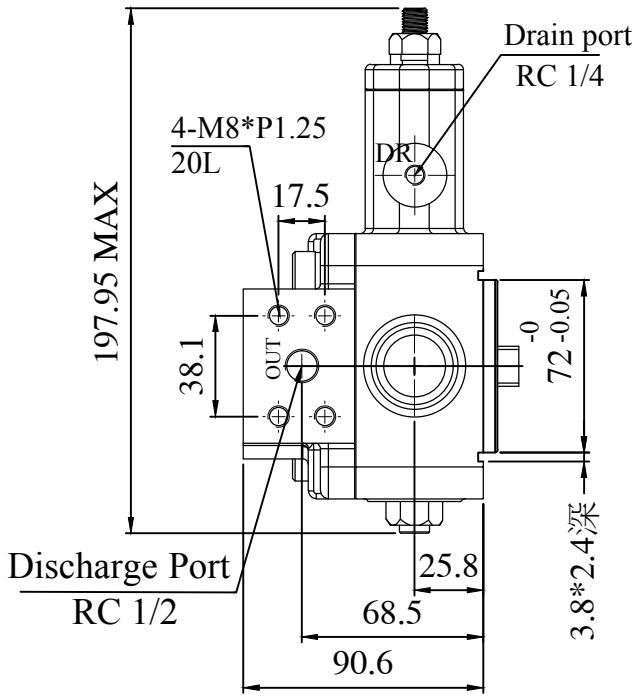
KVDN - 8 - A - 3 - 1 - A

① ② ③ ④ ⑤ ⑥

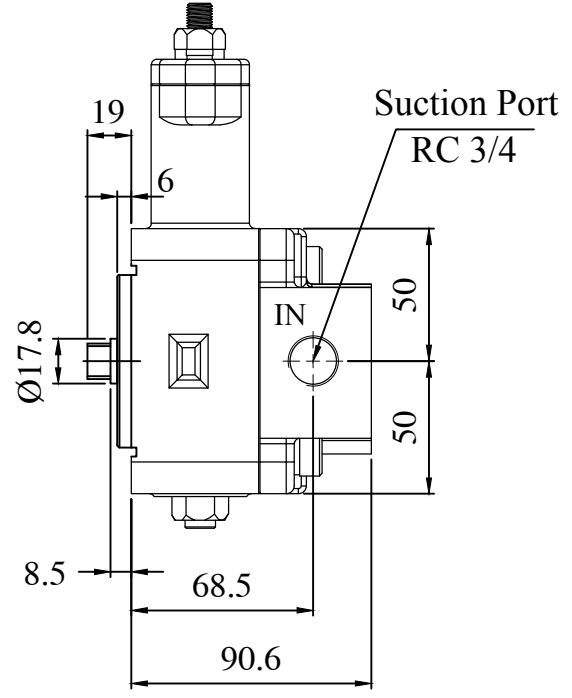
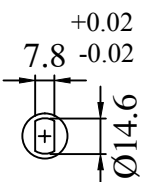
- | | |
|--|--|
| <p>① KUVN Series Uni-pump</p> <p>② Displacement (cm³ /rev) : 8 , 12 , 16 , 21</p> <p>③ A : Motor-side leak-proof (馬達端防漏型)
B : Pump-side leak-proof (泵軸端防漏型)</p> <p>④ Pressure adjustment range
 2 : 15 ~ 40 (Kgf/cm²)
 3 : 35 ~ 61 (Kgf/cm²)
 4 : 56 ~ 80 (Kgf/cm²)</p> | <p>⑤ Shaft Type
 1 : 長鍵 3 : Splined
 2 : 一字鍵 4 : 長鍵</p> <p>⑥ Type of Suction Port & Discharge Port
 A or No : RC
 B: NPT
 C: SAE
 D: BSP</p> |
|--|--|

- KVDN-8 **Motor-side leak-proof** (馬達端防漏型 KVDN-*-A-*)
- KVDN-12 **Shaft end without seal** (泵心軸無防漏)
- KVDN-16
- KVDN-21

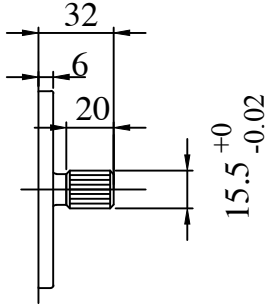
Pressure adjusting
bolt(M10*P1.25)



NO : 01 - Shaft



NO : 02 - Shaft

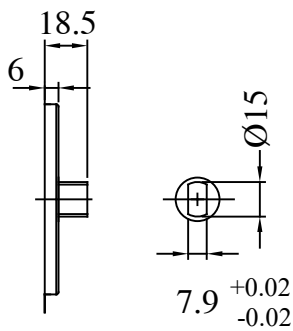
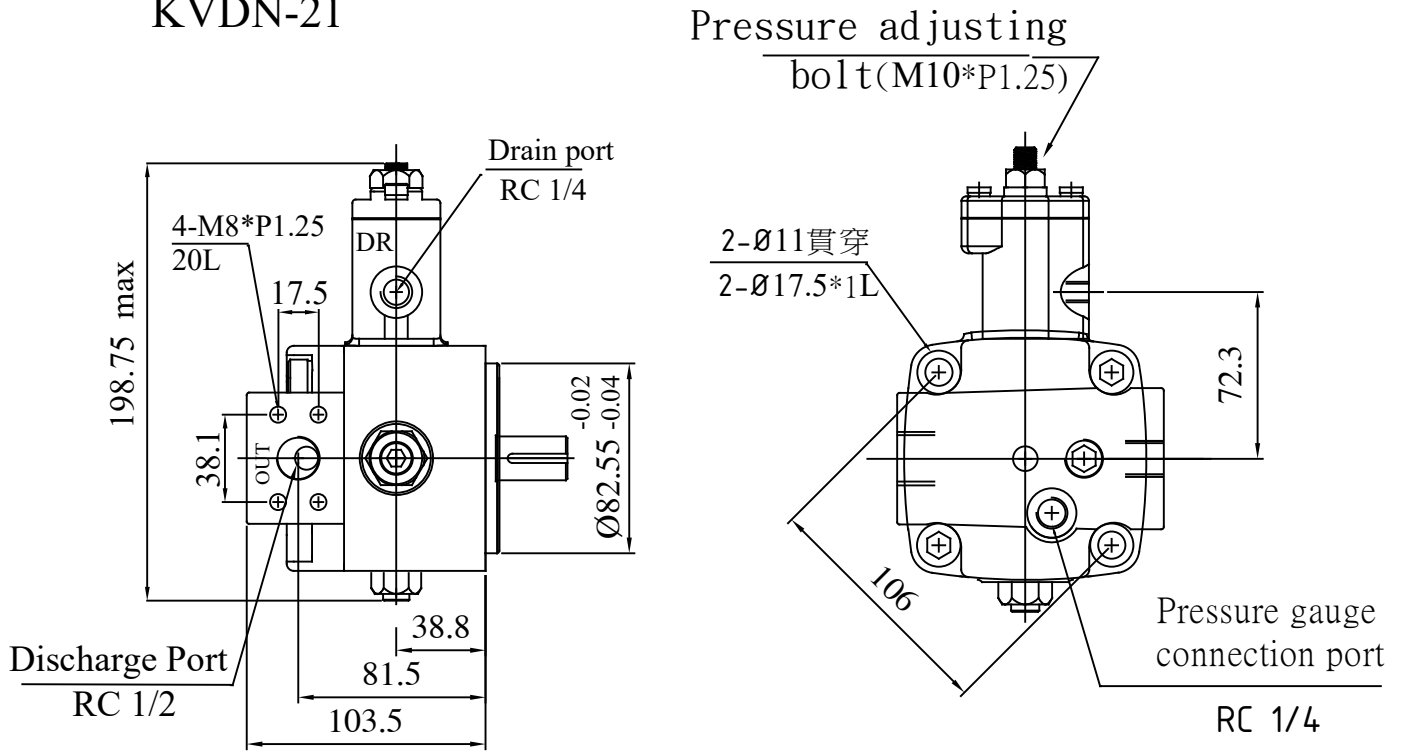


Diametral Pitch : 16/32
Pressure Angle : 30°
No. of Teeth : 9

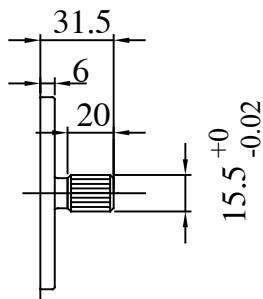
NO : 03-Shaft

KVDN-8
KVDN-12
KVDN-16
KVDN-21

Pump-side leak-proof (泵端防漏型 KVDN-*-B-*)

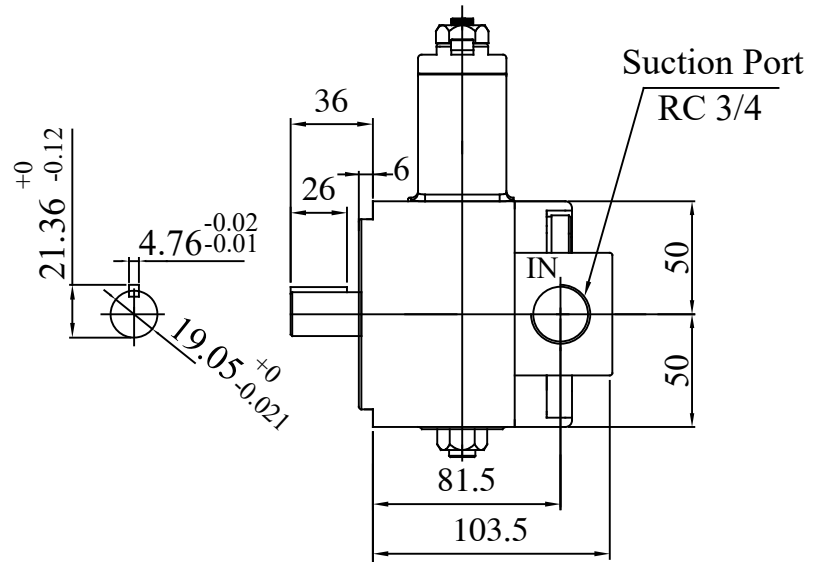


NO:02 - Shaft

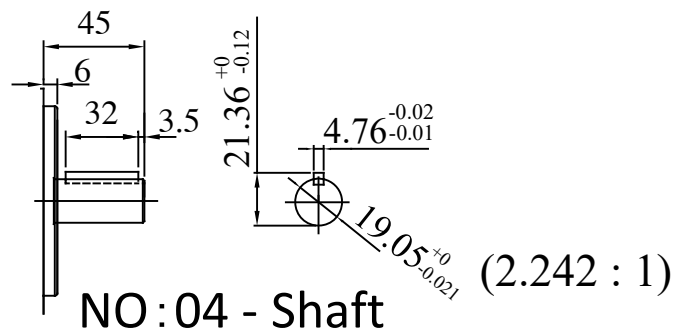


Diametral Pitch : 16/32
Pressure Angle : 30°
No. of Teeth : 9

NO : 03-Shaft



NO:01 - Shaft



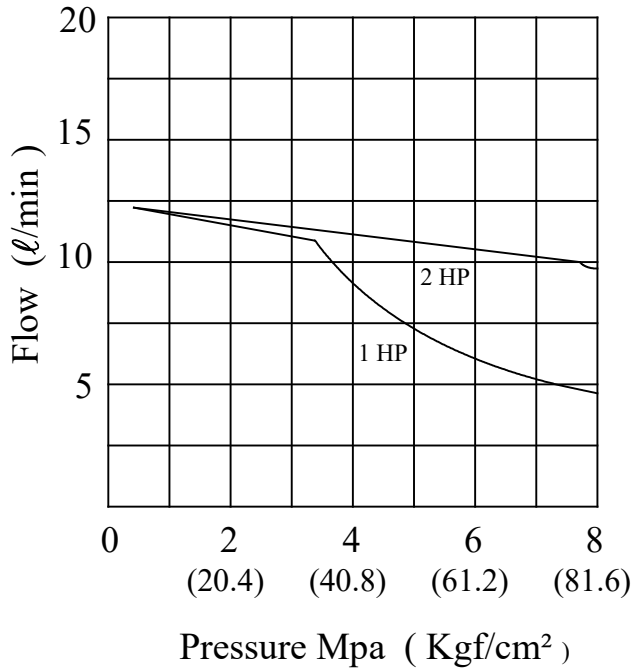
NO:04 - Shaft

Motor Hp selection curves

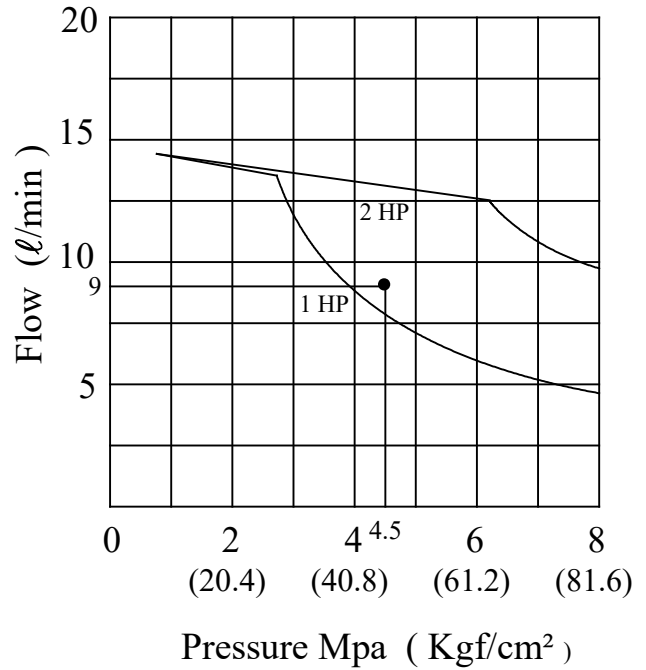
select a uni-pump that has a Pressure and flow rate that is within the range of the drive so that the drive will not overload

Example: $Q = 9 \text{ l/min}$, $P = 4.5 \text{ Mpa}$ must be used 2HP motor

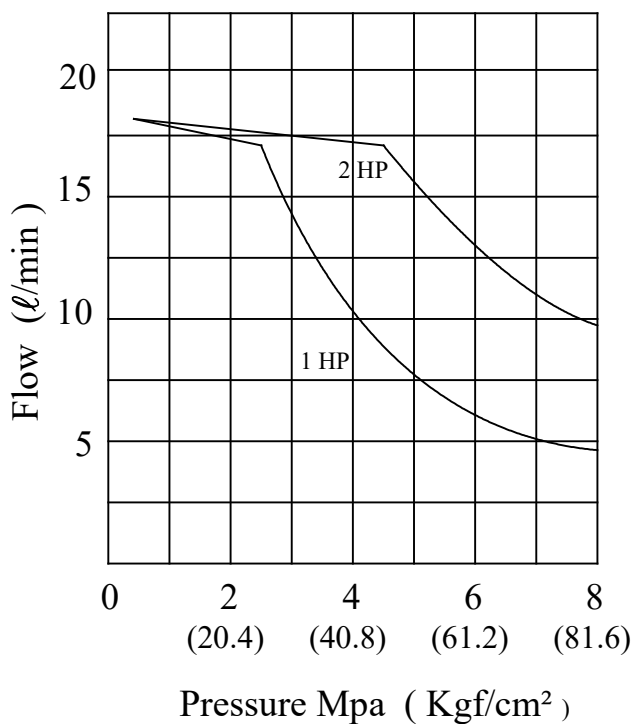
KVDN - 8 - * - * (1500rpm)



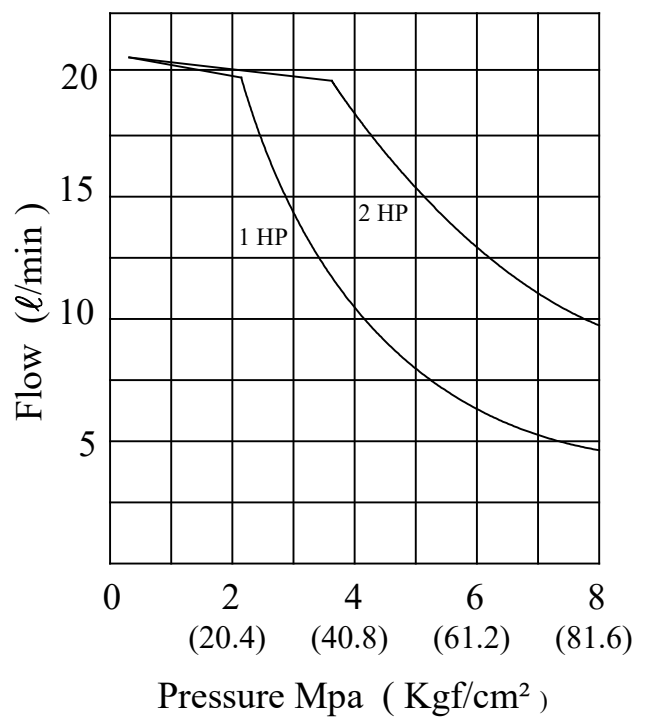
KVDN - 8 - * - * (1800rpm)



KVDN - 12 - * - * (1500rpm)



KVDN - 12 - * - * (1800rpm)

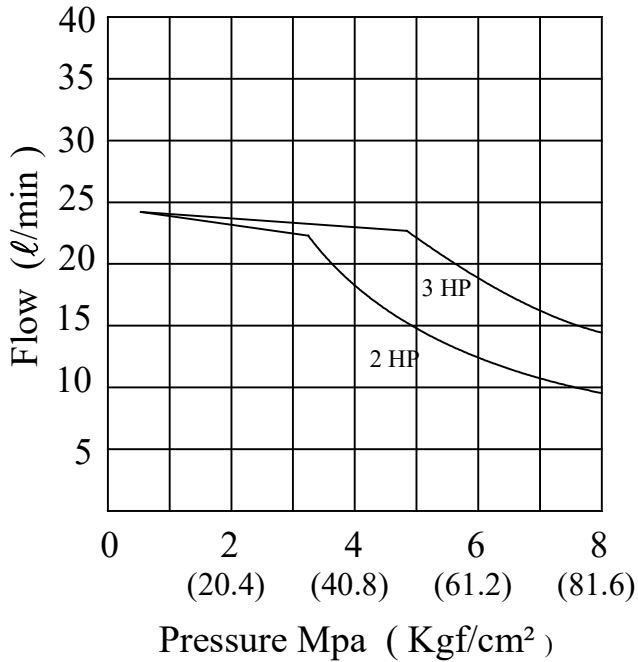


Motor Hp selection curves

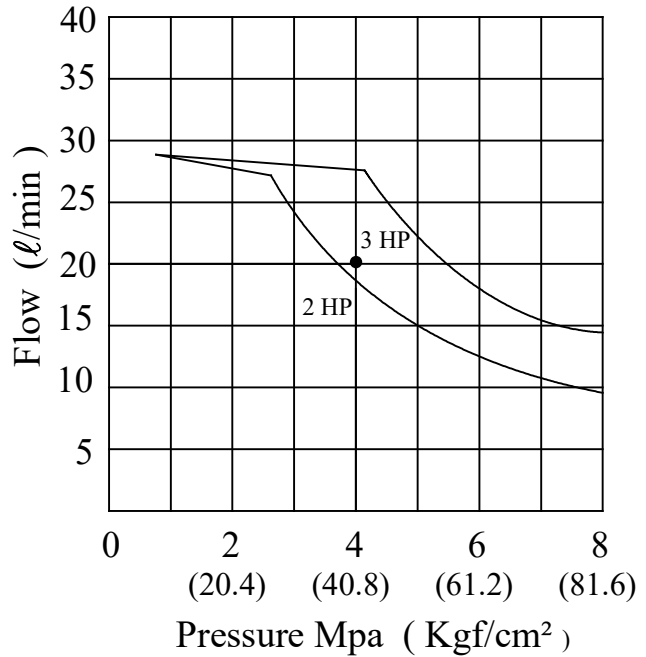
select a uni-pump that has a Pressure and flow rate that is within the range of the drive so that the drive will not overload

Example: $Q = 20 \text{ l/min}$, $P = 4.0 \text{ Mpa}$ must be used 3HP motor

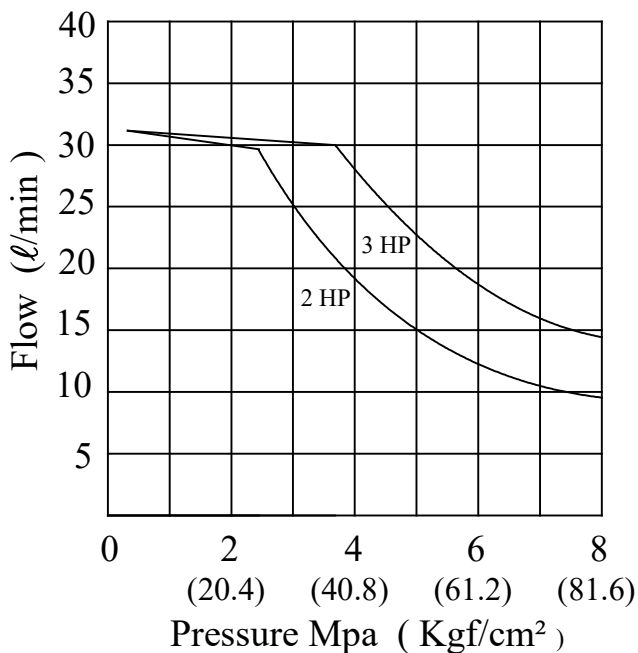
KVDN - 16 - * - * (1500rpm)



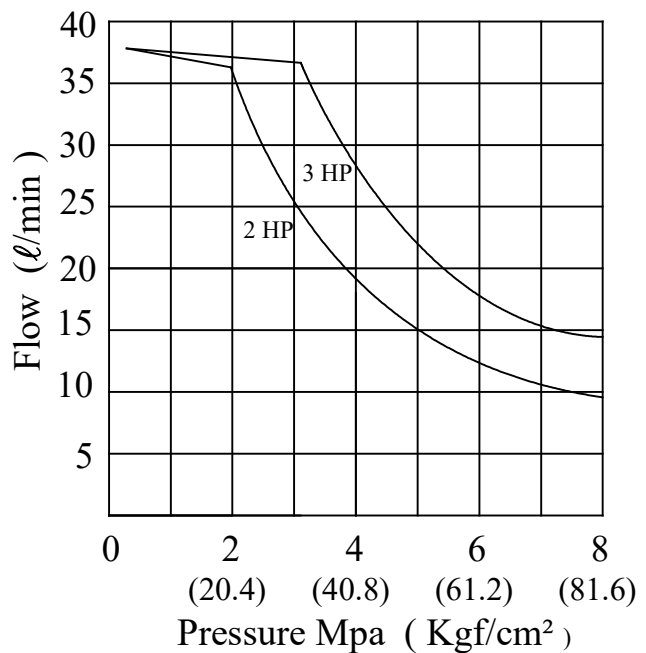
KVDN - 16 - * - * (1800rpm)



KVDN - 21 - * - * (1500rpm)

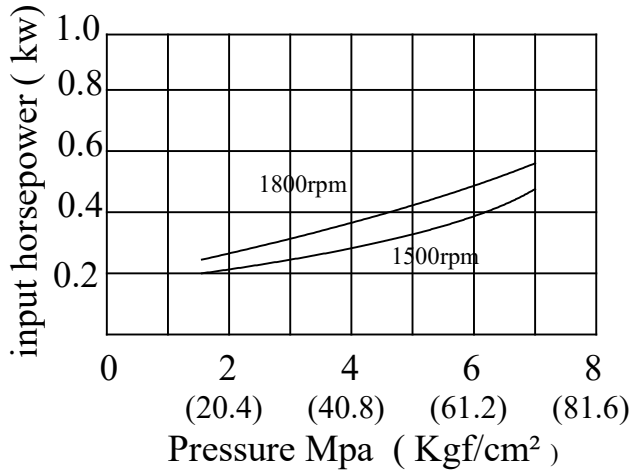


KVDN - 21 - * - * (1800rpm)

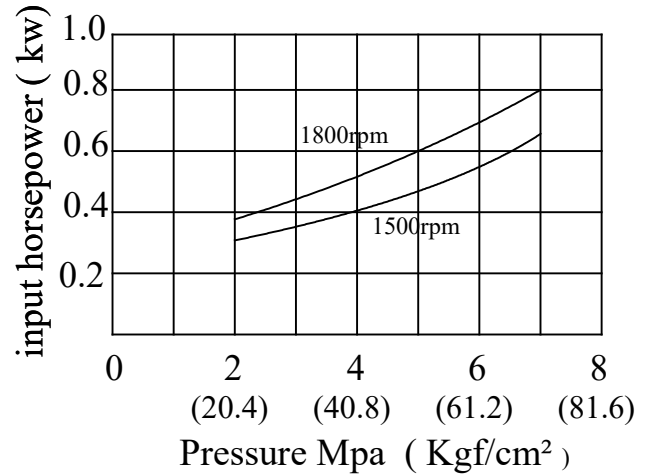


Deadhead input horsepower

KVDN - 8 / 12 - * - *

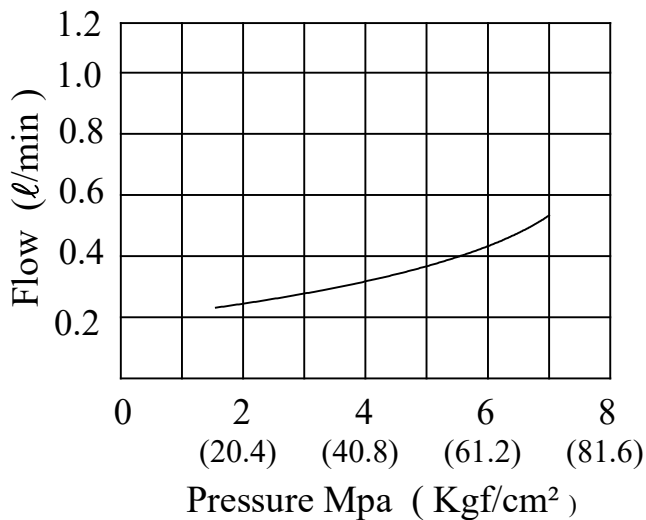


KVDN - 16 / 21 - * - *

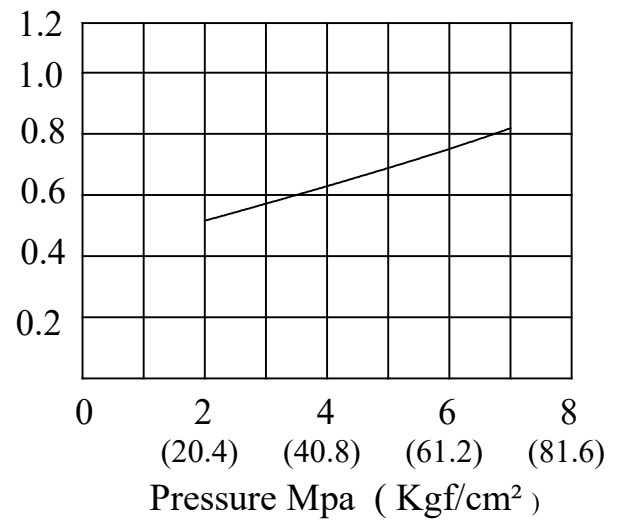


Deadhead drain volume

KVDN - 8 / 12 - * - *

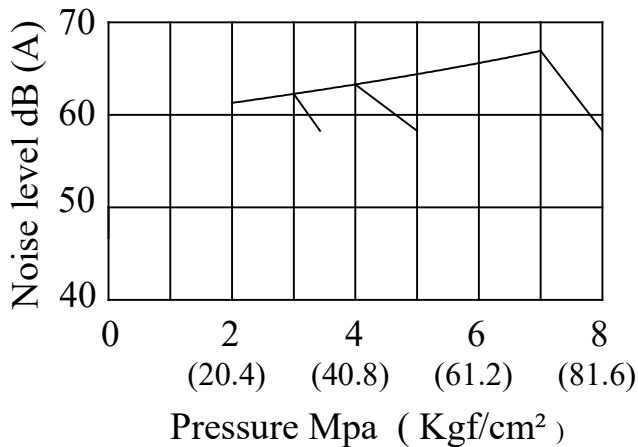


KVDN - 16 / 21 - * - *

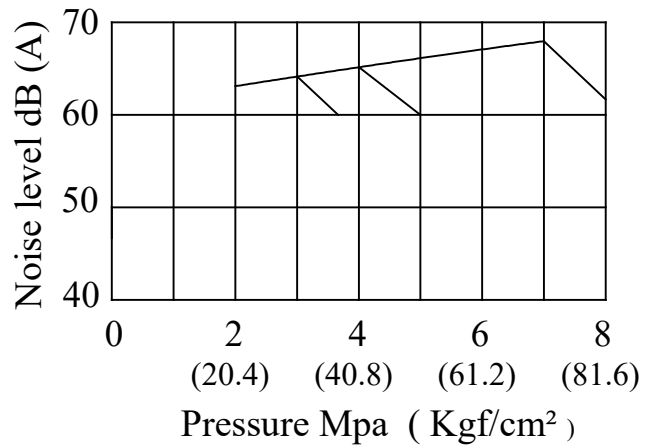


Noise characteristics

KUVN-8/12-* -4- 2 -4-A-10
(2HP*4P @1800 rpm)

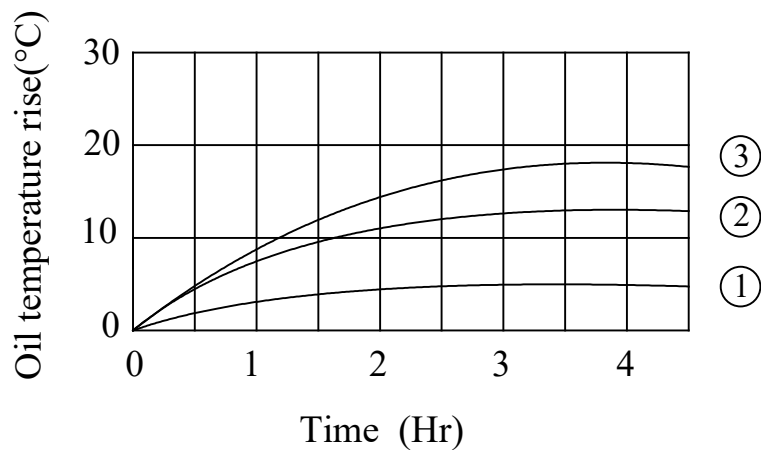


KUVN-16/21-* -4- 3 -4-A-10
(3HP*4P @1800 rpm)



Oil temperature rise characteristics

KUVN-16-* -4- * -4-A-10
(1800 rpm ,Tank capacity 20 liter)



PS:

- ③ cutoff Pressure 7.0 Mpa (71.4 Kgf/cm²)
- ② cutoff Pressure 5.0 Mpa (51.0 Kgf/cm²)
- ① cutoff Pressure 3.5 Mpa (35.7 Kgf/cm²)