



# External Gear Pump



**EGA : A系列小型化低噪音外嚙合齒輪泵**

A Series Compact Low noise External Gear Pump

**EGB : B系列低噪音外嚙合齒輪泵**

B Series Low noise External Gear Pump

**DEGB : 雙排B系列低噪音外嚙合齒輪泵**

Double-gear B Series Low noise External Gear Pump

**EGC : C系列低脈衝外嚙合齒輪泵**

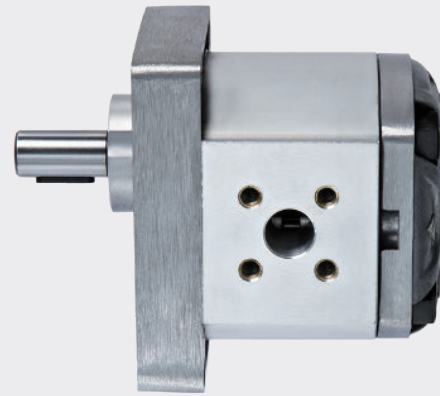
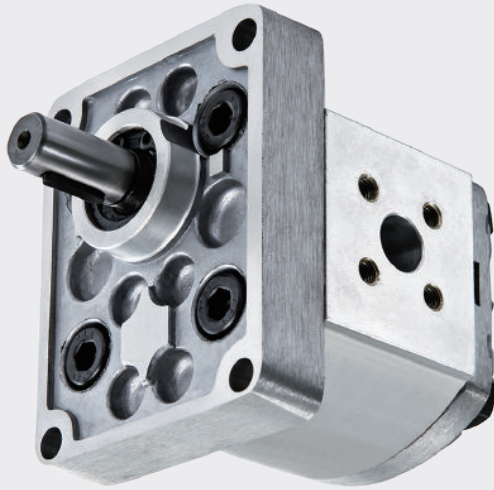
C Series Low Pulsation External Gear Pump

**VCM+EGA : 變量葉片泵+外嚙合齒輪泵**

Variable Displacement Vane Pump with External Gear Pump Series

## EGA:A系列小型化低噪音 外嚙合齒輪泵

### A Series Compact Low noise External Gear Pump



■ EGA-1.2-R

## 特性

- EGA的本體為鋁擠型打造，高強度、高密度，確保本體之型態，提高產品穩定度。
- 低噪音、高效率、壽命長、質輕且堅固。
- 特殊鋼製成之齒輪，經精密加工後，使齒輪接觸面獲得高精細的表面粗糙度，符合高壓力產品的要求。
- 體積小、省空間，適用於儀器及小型化精密機械。

## 應用

EGA壓力最高可達210bar，適合低流量高壓力機械，如裁斷機械、板金機械產業、折彎機產業、各類壓機產業。

## FEATURE

- Aluminum extrusion housing, gravity casting housing high strength and high density, to ensure the body shape and pump stability.
- Low noise, high efficiency, long life, Lightweight and sturdy.
- Gears are made of special steel that are precisely machined so that the gear contact surface possesses high-precision surface roughness, which meets the requirements of high-pressure products.
- Compact size, space-saving suitable for instruments and small precision machinery.

## APPLICATION

EGA pressure can reach 210bar, suitable for small flow and high-pressure applications such as cutting machinery, sheet metal machinery industry, bending machine industry, press industry, etc.

# 形式編碼

## MODEL CODE

EGA 4.3 R



# 技術資料

## TECHNICAL DATA

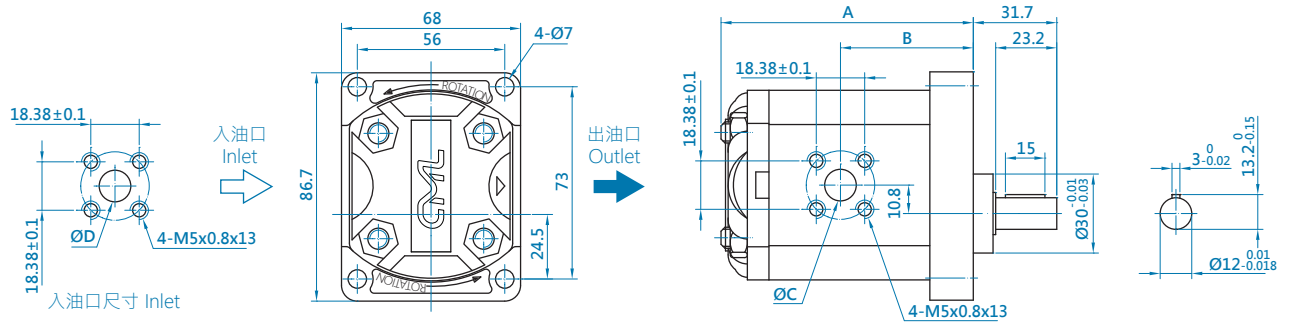
型式 Model	泵流量 (無負荷時) Delivery At No Load (c.c./rev)	最高壓力 MAX. Pressure (bar)	容許迴轉速 Shaft Speed Range (rpm)		重量 Weight (kg)	出入油口尺寸 IN/OUTLET Dimension(mm)	
			Min.	Max.		入口 Inlet	出口 Outlet
EGA-1.2	1.2	210	600	4000	1.0	10	10
EGA-1.7	1.7	210	600	4000	1.0	10	10
EGA-2.2	2.2	210	600	4000	1.0	10	10
EGA-2.6	2.6	210	600	4000	1.1	10	10
EGA-3.2	3.2	210	600	4000	1.1	12	12
EGA-3.8	3.8	210	600	4000	1.2	12	12
EGA-4.3	4.3	210	600	4000	1.2	12	12
EGA-6.2	6.2	210	600	3500	1.3	12	12
EGA-7.8	7.8	210	600	3100	1.4	12	12

# 外型尺寸 MEASUREMENT

EGA

型號 Model	(mm)			
	A	B	C	D
EGA-1.2	75.5	37.8	10	10
EGA-1.7	77	38.5	10	10
EGA-2.2	79	39.5	10	10
EGA-2.6	81	40.5	10	10
EGA-3.2	83	41.5	12	12
EGA-3.8	85	42.5	12	12
EGA-4.3	87	43.5	12	12
EGA-6.2	94	47	12	12
EGA-7.8	100	50	12	12

單位 Unit: mm



EGB : B系列低噪音  
外嚙合齒輪泵

B Series Low noise  
External Gear Pump



■ EGB-19-R

## 特性

- 加大軸心與軸鍵的設計，大幅提高使用壓力，運轉時低噪音。
- 特殊鋼製成之齒輪，經精密加工後，使齒輪接觸面獲得高精細的表面粗糙度，符合高精度與高壓力產品的要求。
- 體積小，節省空間，適用於儀器及小型化精密機械。
- 本體鋁合金材質重力鑄造，材質輕、高強度、高密度、耐高壓。
- 齒輪泵內的襯套，具有高荷重與低磨擦系數之特性，降低軸心磨耗增加產品壽命。
- DEGB採用雙排齒輪設計，減少輸出脈動、降低噪音。

## 應用

適用於裁斷機械、板金機械產業、折彎機產業、升降系統設備、各類壓機產業。

## FEATURE

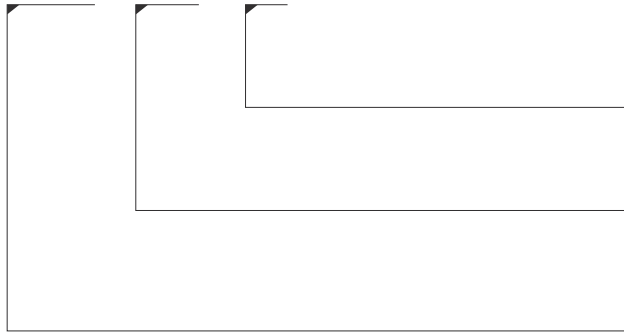
- Enlarged shaft and shaft key design, which increases the working pressure and lowers noise during operation.
- Gears are made of special steel that are precisely machined so that the gear contact surface possesses high-precision surface roughness, which meets the requirements of high-pressure products.
- Compact size and space saving, suitable for instruments and miniature precision machinery.
- Aluminum alloy, gravity casting housing high strength and high density, to ensure the body shape and pump stability.
- The bushing in the gear pump has the characteristics of high load and low coefficient of friction, which reduces shaft wear and increases product life.
- DEGB adopts a double-gear design to reduce output pulsation and noise.

## APPLICATION

Suitable for low flow and high-pressure machinery such as cutting machinery, sheet metal machinery industry, bending machine industry, press industry, etc.

## 形式編碼 MODEL CODE

EGB 6.2 R



迴轉方向(軸側觀之) Direction of Rotation (View from Shaft End)

**R** : 順時針 **R**: Clockwise

泵排量 (無負荷時) Delivery at No Load(c.c./rev)

**EGB** : 6.2 - 19.5

**DEGB** : 22.7 - 26.5

外嚙合齒輪泵系列 External Gear Pump

**EGB** : B系列低噪音外嚙合齒輪泵

B series Low noise External Gear Pump

**DEGB** : 雙排B系列低噪音外嚙合齒輪泵

Double-gear B series Low noise External Gear Pump

## 技術資料

### TECHNICAL DATA

型式 Model	泵流量 (無負荷時) Delivery At No Load (c.c./rev)	最高壓力 MAX. Pressure (bar)	容許迴轉速 Shaft Speed Range (rpm)		重量 Weight (kg)	出入油口尺寸 IN/OUTLET Dimension(mm)	
			Min.	Max.		入口 Inlet	出口 Outlet
EGB-6	6.2	210	600	3500	2.6	1-1/16-12UN	7/8-14UN
EGB-8	8.4	210	600	3500	2.7	1-1/16-12UN	7/8-14UN
EGB-11	11	210	600	3500	2.8	1-1/16-12UN	7/8-14UN
EGB-14	14.3	210	600	3500	3.0	1-1/16-12UN	7/8-14UN
EGB-16	16.5	210	600	3500	3.1	1-1/16-12UN	7/8-14UN
EGB-19	19.5	210	600	3000	3.3	1-1/16-12UN	7/8-14UN
DEGB-22	22.7	210	600	2500	3.6	EGB轉接頭: 入口端3/4 PT, 出口端1/2 PT EGB Adapter: inlet 3/4 PT, outlet 1/2 PT	
DEGB-26	26.5	210	600	2300	3.8		

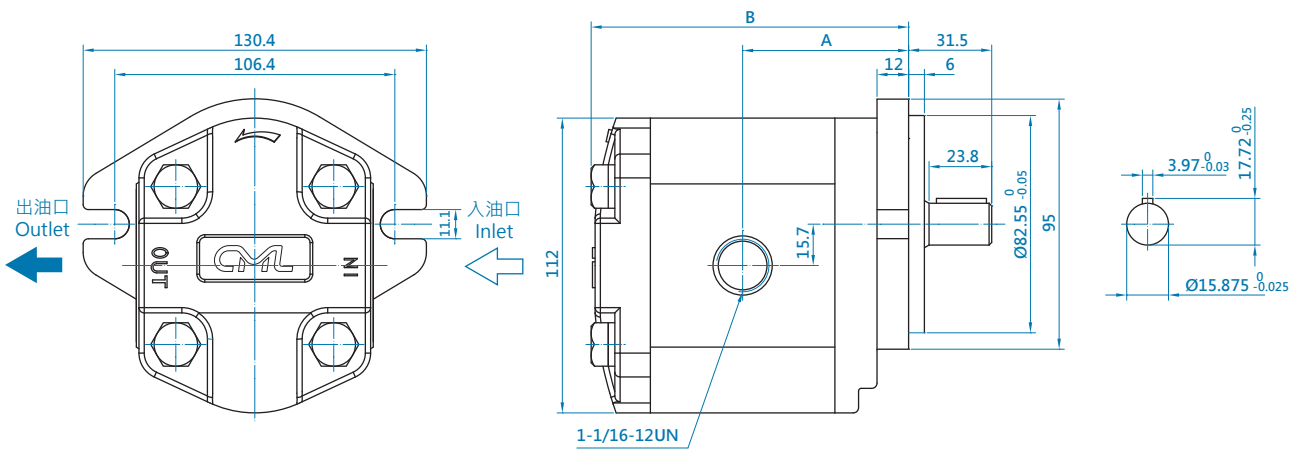
# 外型尺寸 MEASUREMENT

## EGB

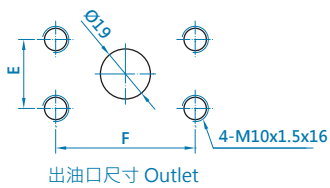


型號 Model	(mm)	
	A	B
EGB-6	54	101
EGB-8	56	105
EGB-11	58	109
EGB-14	61	115
EGB-16	63	119
EGB-19	65.5	122.4

單位 Unit: mm

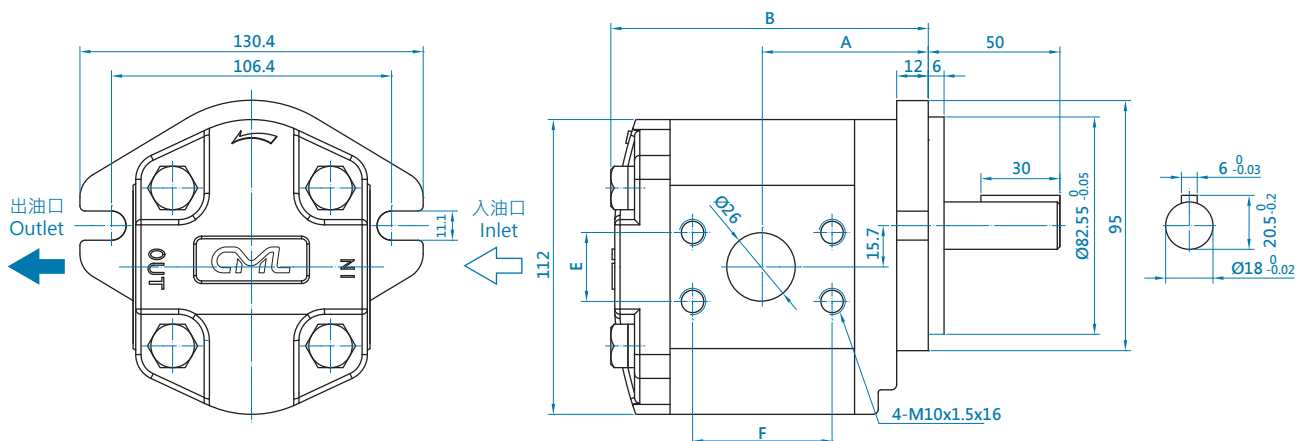


## DEGB



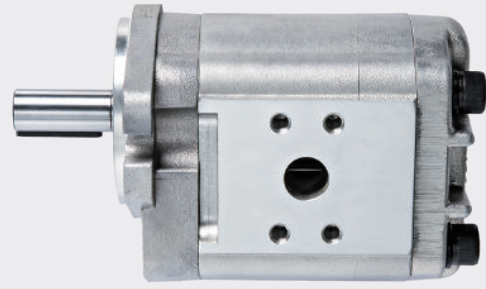
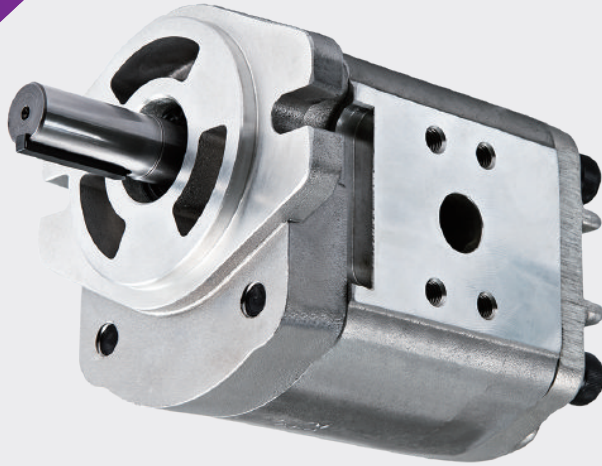
型號 Model	(mm)		尺寸 DIMENSION (mm)	$\varnothing 26$ 入油口 INLET	$\varnothing 19$ 出油口 OUTLET
	A	B			
DEGB-22	76	137	E	26.2	22.2
DEGB-26	81	142	F	52.4	47.6

單位 Unit: mm



## EGC：C系列低脈衝 外嚙合齒輪泵

### C Series Low Pulsation External Gear Pump



■ EGC-32-R

## 特性

- 高壓力、高效率。
- 特殊齒型設計，噪音較低。
- 體積小，節省空間，適用於儀器及小型化精密機械。
- 本體鋁合金材質重力鑄造，材質輕、高強度、高密度、耐高壓。
- 採用標準SAE雙孔法蘭。

## 應用

適用於鞋機與其他專用機械。

## FEATURE

- High pressure and high efficiency.
- Special gear design, very low noise.
- Compact size and space-saving, suitable for instruments and downsized precision machinery.
- Aluminum alloy, gravity casting housing. Light weight, high strength & density, and high pressure-resistant.
- Standard SAE two ports flange.

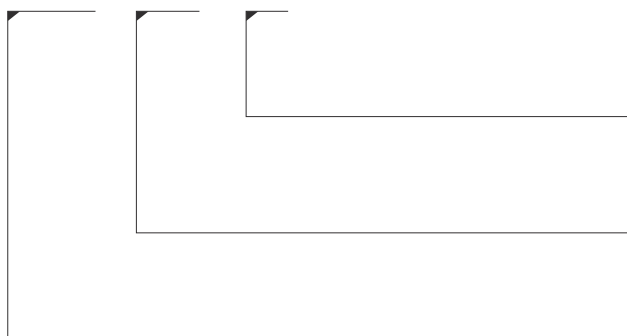
## APPLICATION

Suitable for shoemaking machines and other specific machines.



# 形式編碼 MODEL CODE

EGC 19 R



迴轉方向(軸側觀之) Direction of Rotation (View form Shaft End)

R: 順時針 R: Clockwise

泵排量(無負荷時) Delivery at No Load(c.c./rev)

19 - 32

外嚙合齒輪泵系列 External Gear Pump

EGC : C 系列低脈衝外嚙合齒輪泵

EGC : C series Low Pulse External Gear Pump

## 技術資料

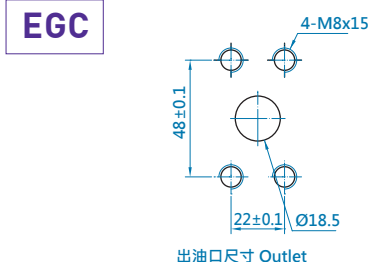
### TECHNICAL DATA

型式 Model	泵流量(無負荷時) Delivery At No Load (c.c./rev)	最高壓力 MAX. Pressure (bar)	容許迴轉速 Shaft Speed Range (rpm)		重量 Weight (kg)	出入油口尺寸 IN/OUTLET Dimension(mm)	
			Min.	Max.		入口 Inlet	出口 Outlet
EGC-19	19	250	600	3500	4.0	25	18.5
EGC-22	22	250	600	3500		25	18.5
EGC-26	26	230	600	2500	4.0	25	18.5
EGC-32	32	230	600	2500		25	18.5

## 外型尺寸

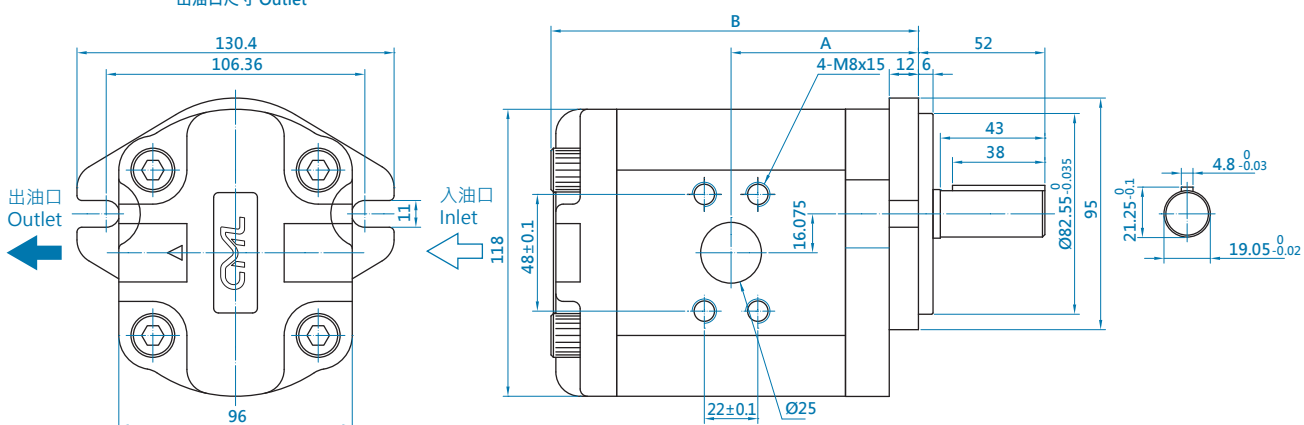
### MEASUREMENT

EGC



型號 Model	(mm)	
	A	B
EGC-19	66	132
EGC-22	68	136
EGC-26	70.5	141
EGC-32	75	150

單位 Unit: mm



## VCM+EGA：變量葉片泵 +外嚙合齒輪泵

Variable Displacement  
Vane Pump with External  
Gear Pump Series



■ VCM-SF-30D\_EGA-6.2-R

### 特性

- 採取直結式同一軸心組合。
- 有效節省功率，達到節能的效果。
- 共用一台電機，節省成本與安裝空間。
- 在待機狀態下，變量泵VCM閉迴路與外齒泵EGA開迴路的設計，能有效避免油溫快速升高。

### 應用

適用高低壓的綜合應用或是將小排量齒輪泵做為系統的冷卻循環泵使用，如壓合成型機、專用機械產業(燙金機、小型油壓機)。

### FEATURE

- Direct-coupled same shaft combination.
- Power saving and achieve energy saving effect
- Saving cost and space by sharing a motor.
- Under the standby mode, the vane pump VCM is running with close loop and the external gear pump EGA is in open loop, this design can effectively avoid the rapid rise of oil temperature.

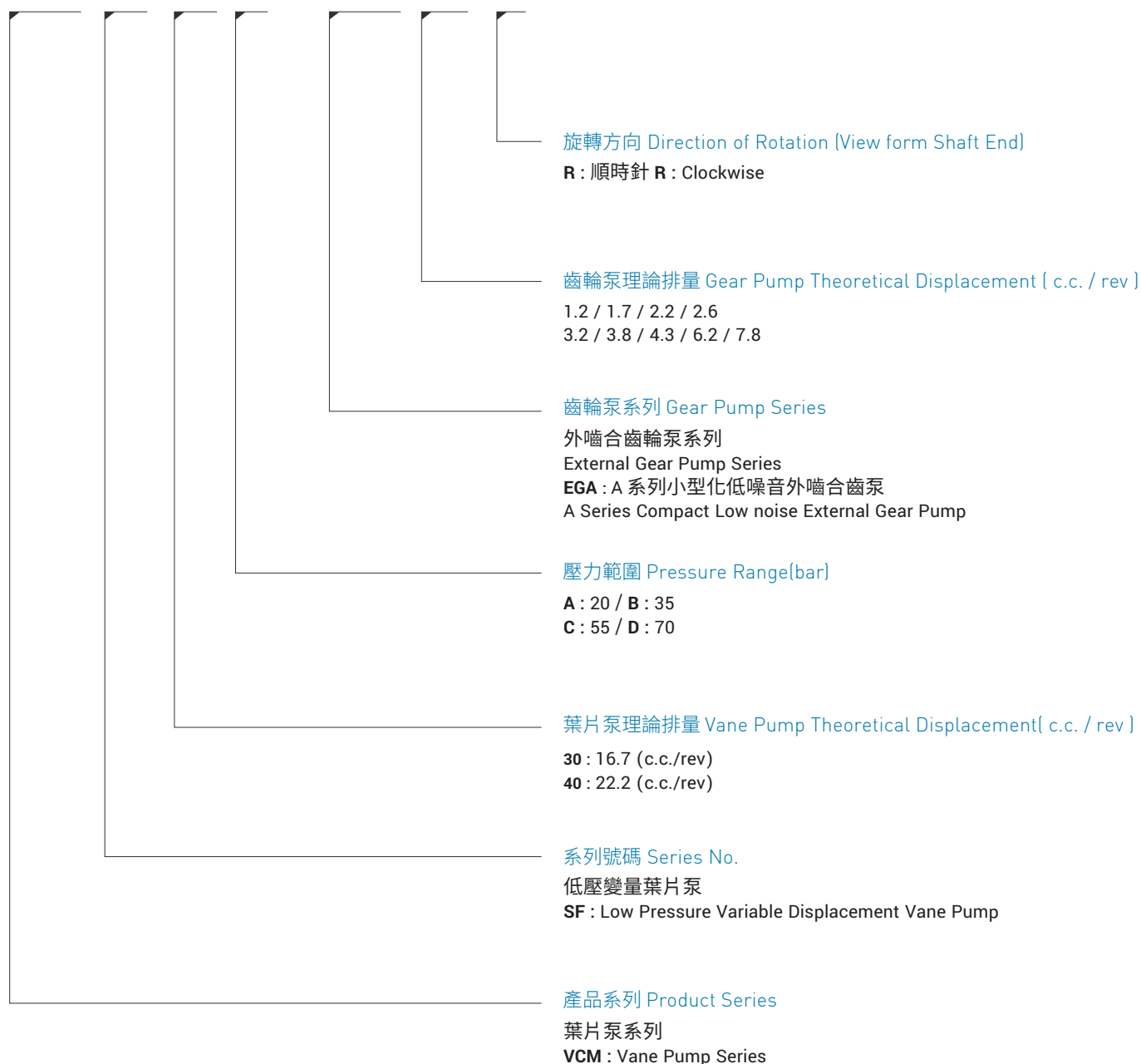
### APPLICATION

Suitable for low flow and high-pressure machinery such as cutting machinery, sheet metal machinery industry, bending machine industry, press industry, etc.

# 形式編碼

## MODEL CODE

VCM SF 30 A / EGA 4.3 R



# 技術資料

## TECHNICAL DATA

齒輪泵浦 EGA SERIES		1.2 c.c	1.7 c.c	2.2 c.c	2.6 c.c	3.2 c.c	3.8 c.c	4.3 c.c	6.2 c.c	7.8 c.c
最高壓力 MAX.PRESSURE (bar)		210				175			140	
尺寸 DIMENSION(mm)	A	37.8	38.5	39.5	40.5	41.5	42.5	43.5	47	50
	B	75.5	77	79	81	83	85	87	94	100
出入口尺寸 IN/OUT DIMENSION	INLET 入油口	10	10	10	10	12	12	12	12	12
	OUTLET 出油口	10	10	10	10	12	12	12	12	12
重量 WEIGHT (kg)		1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.4

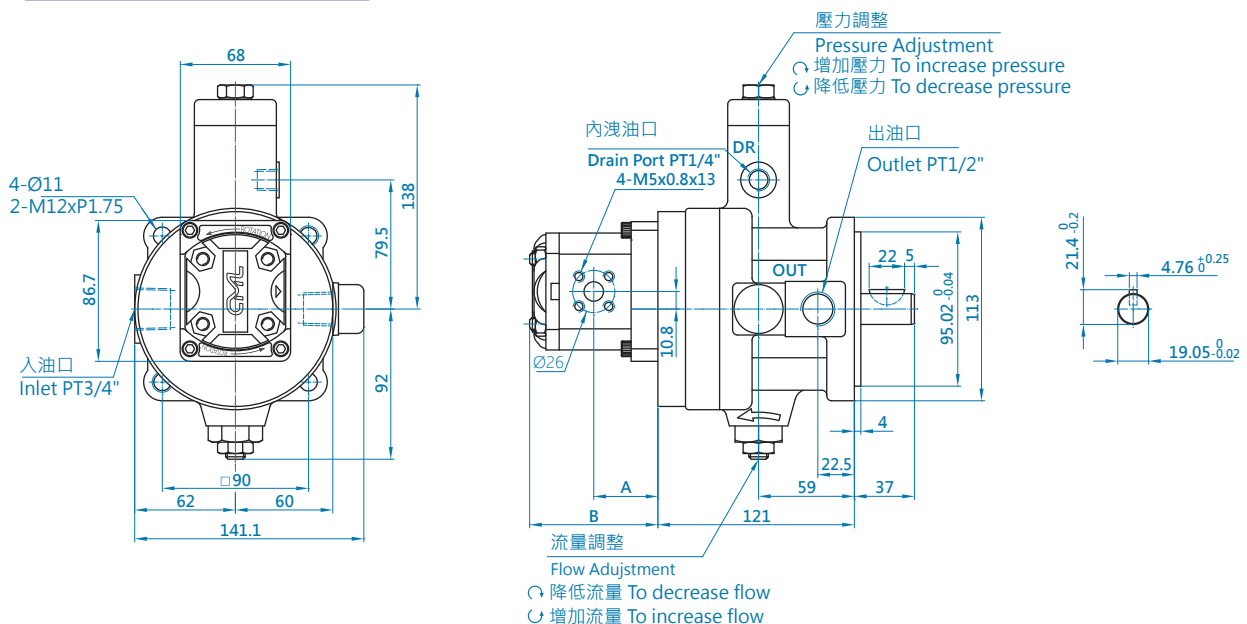
單位 Unit: mm

型式 Model	葉片泵 VANE PUMP		容許回轉速 Shaft Speed Range (rpm)		外齒輪泵 External Gear Pump		重量 Weight (kg)
	理論排量 Theoretical Displacement (c.c. / rev)	最高壓力 MAX. Pressure (bar)	最高 MAX.	最低 MIN.	理論排量 Theoretical Displacement (c.c. / rev)	最高壓力 MAX. Pressure (bar)	
SF - 30A / EGA - *	16.7	20	1800	800	1.2	210	10.4 kgs + EGA pump
SF - 30B / EGA - *		35	1800	800	1.7		
SF - 30C / EGA - *		55	1800	800	2.2		
SF - 30D / EGA - *		70	1800	800	2.6		
SF - 40A / EGA - *	22.2	20	1800	800	3.2	175	
SF - 40B / EGA - *		35	1800	800	3.8		
SF - 40C / EGA - *		55	1800	800	4.3		
SF - 40D / EGA - *		70	1800	800	6.2 7.5	140	

## 外型尺寸

### MEASUREMENT

VCM-SF- 30 -\*/EGA- \*



# 操作指南

## OPERATING INSTRUCTION

1. 安裝時須注意油泵與馬達的同心性，油泵的軸心不得承受任何的徑向或軸向壓力。
  2. 液壓油：  
請使用添加抗氧化劑之石油基液壓油，以避免氧化、腐蝕及氣泡產生。亦或可使用機油，建議使用礦物油黏度ISO 46~68。  
操作溫度範圍:15-70°C  
黏度:15cSt，啟動最大黏度:200cSt
  3. 過濾在注油時應確保整個迴路清潔，並且須注意選用適當的濾油器，最好加裝油路阻塞感應器，並請依照濾油網規定按時更換。建議選用:吸入油口:100µm，回油口:25µm。
  4. 管路安裝須知
    - 禁止折彎迴路及阻塞迴路。
    - 最大吸入壓力0.8~1.3 bar。
    - 吸入口最大流速:0.5~1.5M/sec。
    - 排出口最大:3~8M/sec。
    - 回油最大流速:2~3M/sec。
  5. 驅動系統
    - 驅動軸上不能承受任何徑向及軸向之壓力。
    - 馬達及油泵的同心性必須仔細調整。
    - 請使用連軸器時以補償軸心之偏心量。
    - 安裝連軸器時必須避免產生軸向壓力，嚴禁使用敲擊或強壓方式安裝。
  6. 通則
    - 所有油泵在出廠前已做過性能及功能測試，任何企圖對油泵所做的修改，本公司不予任何保證。
    - 所有油泵維修僅限於本廠及經過授權之經銷商，任何非經授權之維修行為，本公司不予保證。
1. When installing, pay attention to the concentricity of the pump and motor. The pump shaft should not bear any axial or radial forces.
  2. Hydraulic fluid:  
Use a mineral based hydraulic oil with oxidation-resistant additive to avoid corrosion or foaming, or use engine oil ISO 46~68.  
Operating Temperature range: 15-70°C  
Viscosity: 15 cSt °  
Maximum viscosity during starting: 200 cSt °
  3. Filtration:  
Before filling the fluid, ensure that the oil circuit is perfectly clean. Filter must be adequate in capacity and preferably to use a blockage indicators. Filter must be changed periodically according to operating instructions. Recommended filtration density: Suction side 100 µm, Return side 25 µm.
  4. Piping Instruction:
    - Avoid sharp bends and blockages on the circuit.
    - Maximum inlet pressure: 0.8~1.3 bar
    - Maximum flow speed at suction side: 0.5~1.5M/sec
    - Maximum flow speed at outlet side: 3~8M/sec
    - Maximum flow speed at return side: 2~3M/sec
  5. Drive system:
    - No radial or axial forces may be permitted against the drive shaft.
    - The concentricity of motor and pump must be carefully adjusted.
    - Use a coupling for the compensation of eccentricity if possible.
    - When mounting a coupling, avoid applying axial force and never attempt to press or knock into place using a hammer or similar instrument.
  6. Notification:
    - All pumps supplied by Camel have been passed performance and function test before delivery. Any modification to the pump is not allowed and will be out of its warranty.
    - Maintenance must be performed by the manufacturer or authorized dealers. Warranty will not be supported for unauthorized repairs.





# Passion Drives

Your question, our motivation



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23-01