



塑寶®

耐酸鹼化學自吸式

LD型機械軸封泵浦

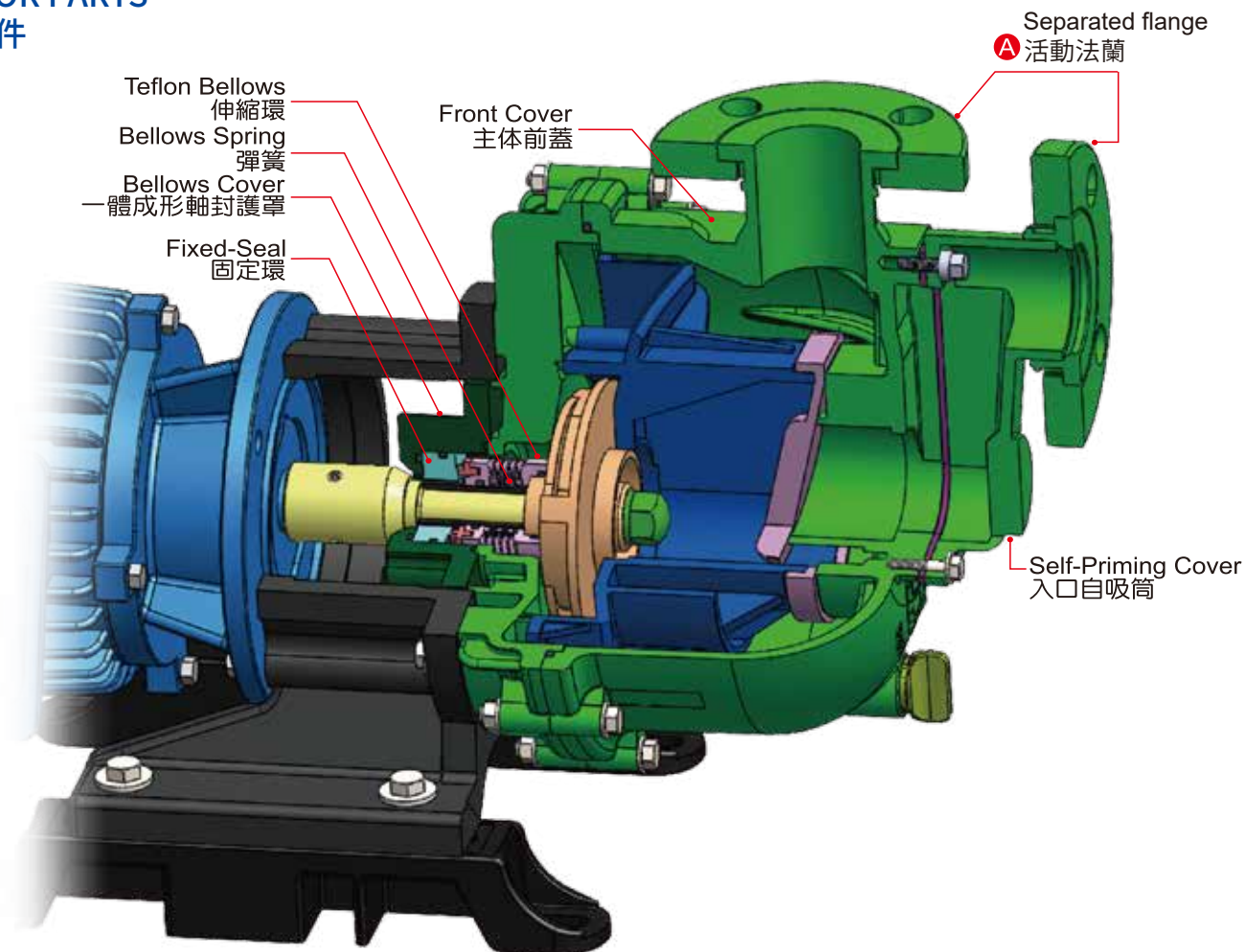
SELF-PRIMING CHEMICAL PUMPS



SUPER PUMPS

INTERIOR PARTS

內部元件



FEATURES OF CRITICAL PARTS

重要設計/特殊零件



Self-priming series, designed with self-priming cover (part No.#17), excellent self-priming performance. up of 3" in/outlet models.

LD 型有自吸筒設計(零件號碼 # 17)，自吸性能優異(出入口為3"之機型無自吸能力)

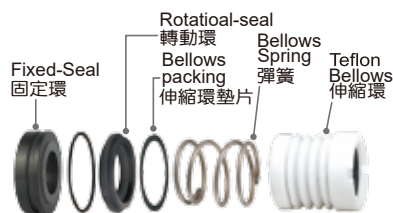
The plate surface of flange will not sink due to shrinkage.

自吸筒法蘭面不會因射出時縮水變形，而凹陷不平，造成密封不良。

Symmetrical body structure eliminates leakage due to deforming caused by injection molding.

主體前蓋法蘭以熱熔接合密封性佳，可避免因塑鋼本身的應力而造成縮水變形，真圓度不佳而密封不良。

A 進出口採用活動法蘭設計，方便角度變化易安裝及耐撞擊。



Hastelloy-C Spring ensure excellent durability in corrosion resistance.

Hastelloy-C 哈士合金彈簧可確保優異的耐久及耐腐蝕性。

The unique teflon bellows design with various seals such as Ceramic, Carbon, SSIC and Hastelloy-C Spring ensure excellent durability in corrosion resistance. 特殊的鐵氟龍彈性軸封設計，搭配各種材質的軸封如陶瓷、碳精、SSIC 及 Hastelloy-C 合金彈簧以確保優異的耐久及耐腐蝕性。

Fixed-seal & rotational-seal are made of various materials, SIC, Carbon, Ceramic and can withstand various chemicals.

固定環及轉動環由各種不同材質，SSIC,碳素,陶瓷製成，可承受各種不同的化學藥水。



LD series, several parts are combined into one brand-new rear cover. It lower the cost of pump head and parts, and makes it more easy to disassemble and repair.

But it's easier to be damaged in dry running due to the lack of cycling-return system.

為降低 LD 型的成本，數個零件整合成一個全新之後封蓋，這個新設計降低了泵頭及零件的成本，並使其易於拆卸及維修，但 LD 型無冷卻循環系統，空轉容易損壞。

MODEL IDENTIFICATION

型號說明

LD	-	40	02	2	N	-	B	L	CCS	6	-	N
1	2	3	4	5	6	7	8	9	10			
(1) Type機型編號 LD-FRPP.			(5) Elastomer橡膠材質 N-NBR. E-EPDM. V-VITON. T-O環VT其他TEFLON. H-HV高氟橡膠				(8) Seal內裝式軸封規格 CCS / SCS					
(2) In-Outlet出入口徑 40 - 1-1/2" 50 - 2" 75 - 3"			(6) Check Valve單向閥 A-with check valve有舌 B-without check valve無舌				(9) Frequency頻率 5:50Hz 6:60Hz					
(3) Power馬力 01:1HP 02:2HP 03:3HP 05:5HP			(7) Head揚程 L -Low Head低揚程 H -High Head高揚程				(10) Model規格 N-Standard/標準規格 S-Special/特殊規格 A-With Safty Pressure Release Valve /安全排氣閥					
(4) Pole極數 2 : 2 P 4 : 4 P												

- 適用溫度：泵體材質為FRPP-85°C以下，適合一般低腐蝕化學性廢水，海水使用。
- 適用化學性：一般酸鹼液及廢水處理設備。
- 獨特的軸封設計：採用Teflon Bellows Seal自冷式設計，依各種化學性選擇軸封材質Sic, Carbon, Ceramic。
- 自吸式設計：自吸力特強，自吸力可達4M，可選擇有舌單向閥設計，防止泵內液體的回流。
- 抗腐蝕性：採用FRPP塑鋼材料射出成型，可抵抗高腐蝕性。
- 後封蓋為一體成型，組裝簡易，無冷卻循環迴路設計。
- 組立配件成本較低，簡易組裝維修容易。

- Solution temperature : FRPP Under 85°C, for general chemicals and sea water.
- Applications : General chemical solutions and wastewater treatment.
- Unique seal : Self-cooling seal made of SIC, Carbon and Ceramic for various chemicals.
- Self-priming : Up to 4 meters lift. Optional check-lid to stop backflow.
- Corrosion resistance: Pump head made of FRPP, excellent for anti-corrosion.
- One-piece structure rear cover: Easy to assemble, without self-cooling circle.
- Lower cost parts: Easy to maintain.

SPECIFICATIONS PERFORMANCE CHART

規格/性能曲線

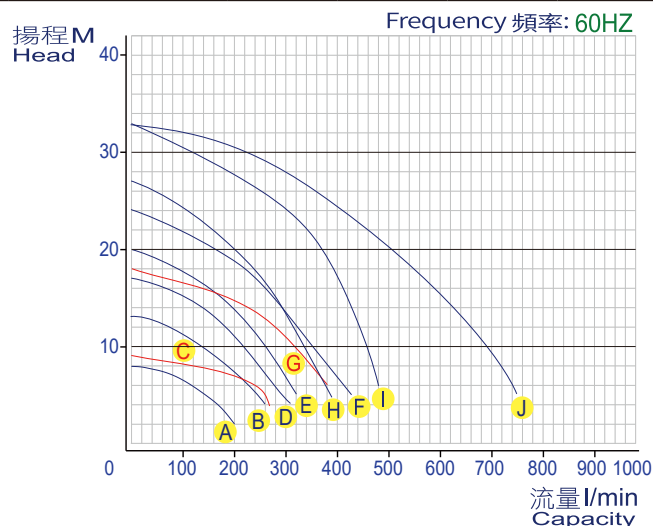
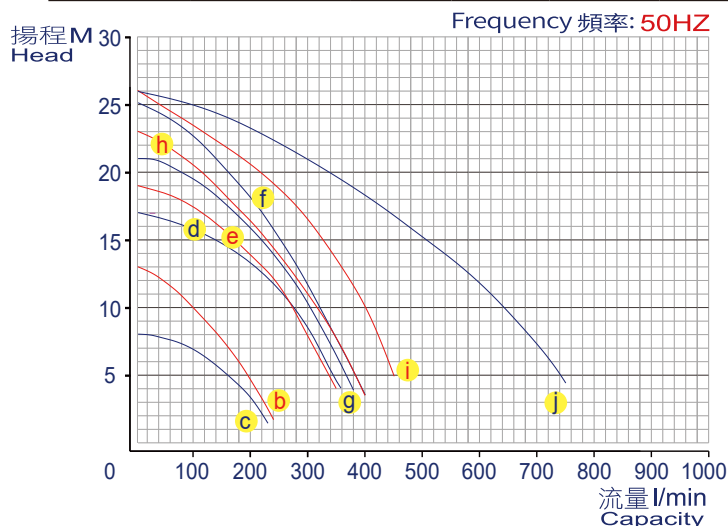
※ 重量/性能以實物為準

Weight / Performance Is For Reference Only Actual Product May Vary

(測試流體：水 比重1.0)

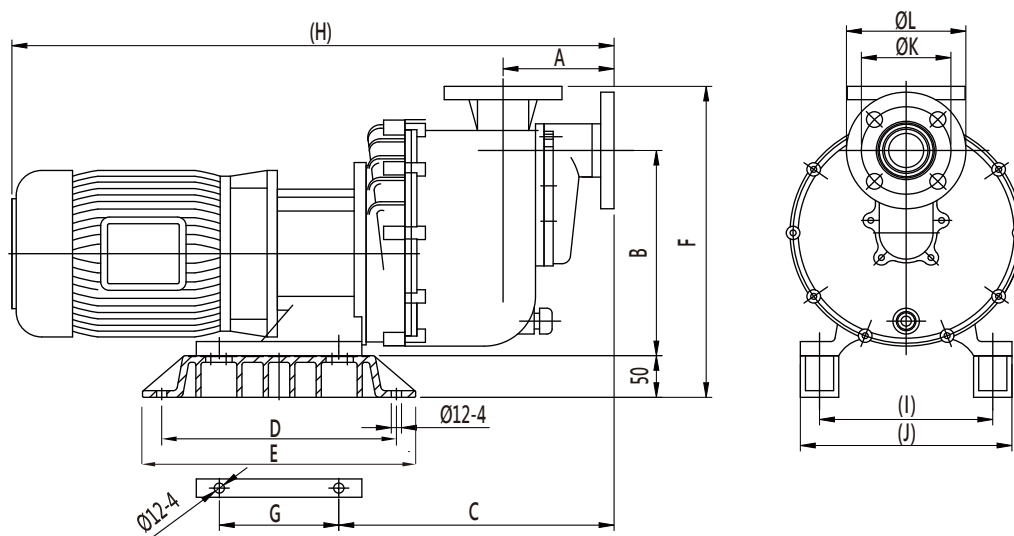
Test Fluid : Water Sp.Gravity 1.0

Model 型 式	In/Outlet 進出口徑 (mm)	Power馬力			50Hz			60Hz			Weight 重量kg (參考值)
		Phase 相 數	Pole 極 數	HP	Curve 曲線	Max.Head 全揚程 M	Max.Flow 全流量 L/min	Curve 曲線	Max.Head 全揚程 M	Max.Flow 全流量 L/min	
40011L	40x40	1ø	4	1/2				A	8	200	30
40013L	40x40	3ø	4	1/2				A	8	200	30
40012H	40x40	3ø	2	1	b	13	240	B	13	260	31
40014L	40x40	3ø	4	1	c	8	230	C	9	270	31
40022L	40x40	3ø	2	2	d	17	360	D	17	310	39
40022H	40x40	3ø	2	2	e	19	350	E	20	320	39
40032H	40x40	3ø	2	3	f	25	400	F	24	430	43
50032L	50x50	3ø	2	3	g	21	380	G	18	380	43
50032H	50x50	3ø	2	3	h	23	400	H	27	390	43
50052H	50x50	3ø	2	5	i	26	450	I	33	480	55
75052H	75x75	3ø	2	5	j	26	750	J	33	750	56



DIMENSIONS 外觀尺寸

LD 0.37~3.75 kW, 1-1/2"~2" with FRPP frame
LD 1/2HP~5 HP, 1-1/2"~2" 搭配 FRPP 腳座尺寸圖



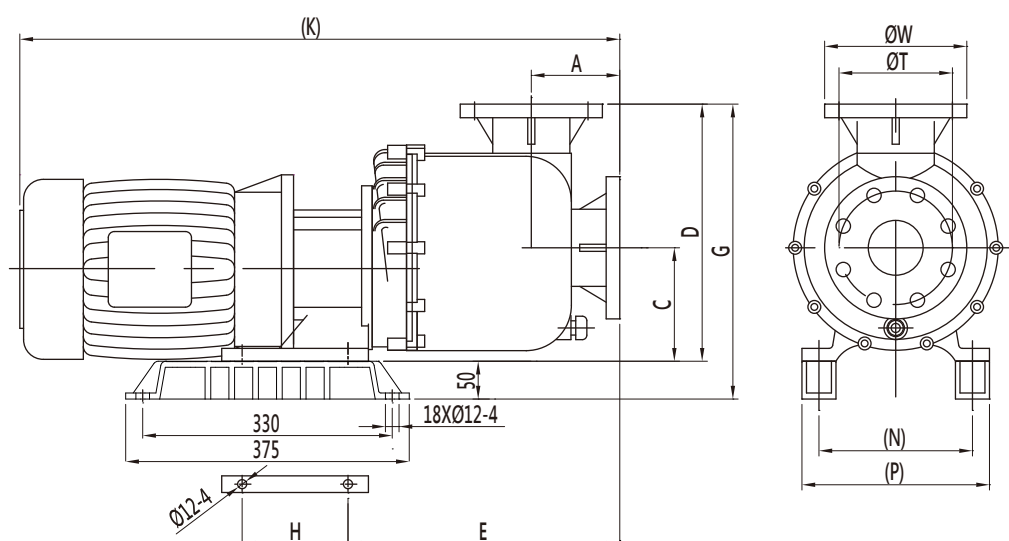
※尺寸表H會因電機品牌不同而改變

Dimension May Vary With Different Brand Motor

Unit:mm

MODEL	A	B	C	D	E	F	G	H	I	J	K	L
LD40011	132	250	315	280	330	375	140	640	204	250	105	140
LD40013	132	250	315	280	330	375	140	640	204	250	105	140
LD40012	132	250	315	280	330	375	140	640	204	250	105	140
LD40014	132	250	315	280	330	375	140	640	204	250	105	140
LD40022	132	250	315	280	330	375	140	720	204	250	105	140
LD40032	132	250	315	280	330	375	140	720	204	250	105	140
LD50032	132	250	315	280	330	375	140	720	204	250	120	155
LD50052	132	250	315	330	375	375	140	801	204	250	120	155

LD 3.75 kW, 3" with FRPP frame
LD 5 HP, 3" 搭配 FRPP 腳座尺寸圖



※尺寸表K會因電機品牌不同而改變

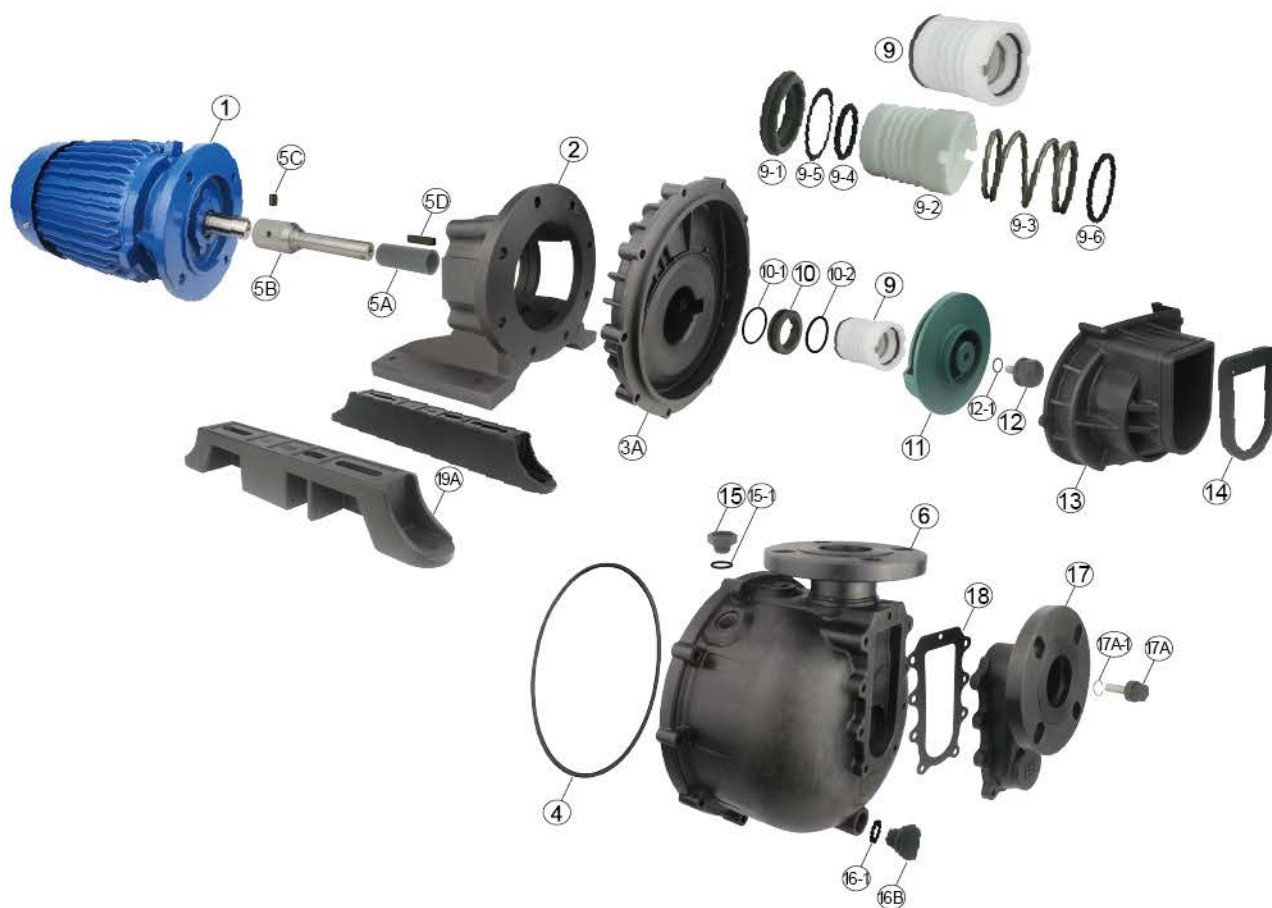
Dimension May Vary With Different Brand Motor

Unit:mm

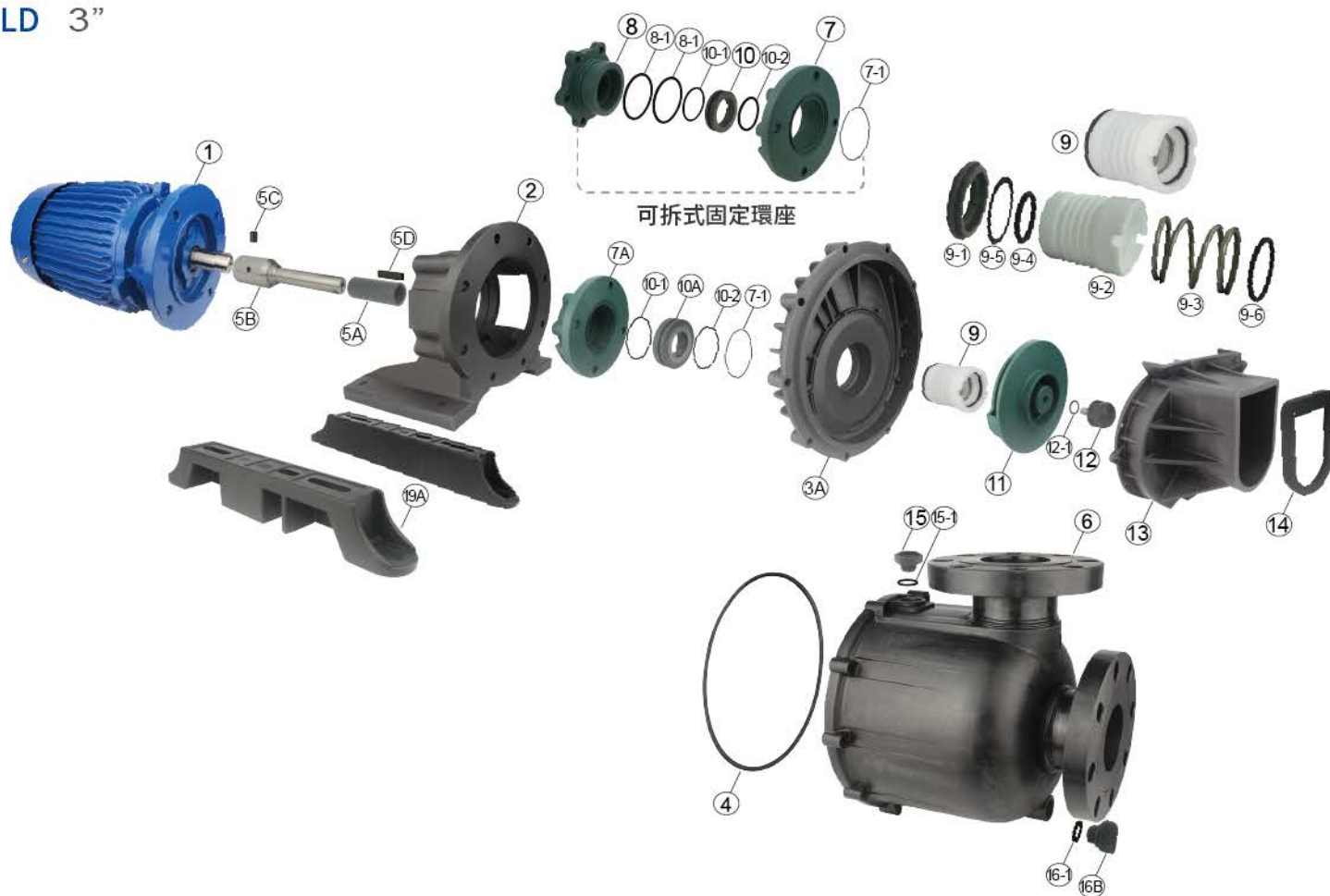
DIMENSION TABLE

MODEL	A	C	D	E	G	H	K	N	P	T	W
LD75052	117	150	340	360	390	140	860	204	250	150	185

LD 1-1/2"-2"



LD 3"



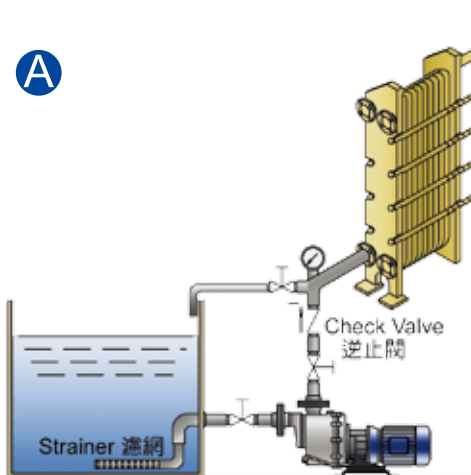
CONSTRUCTION

零件圖表

1 馬達 Motor  FC/Alu	2 腳座 Frame  FRPP	3A 後封蓋 Rear cover (1-1/2"-2") (3"專用)  FRPP		4 後蓋O環 Rear Cover O-ring  NBR / EPT VITON / HV	5A 軸套 Shaft Sleeve  TEFLON	5B 軸心 Shaft  SUS/TI	5C 軸心固定螺絲 Shaft Screw  SUS	5D 葉輪鍵 Impeller Pin  SUS	6 主體前蓋 Front Cover (1-1/2"-2") (3"專用)  FRPP	
7 可拆式軸封護罩 Seal Cover  FRPP/CFRPP CPVC/PVDF	7A 一體式軸封護罩 Seal Cover  (3"專用) FRPP	7-1 軸封護罩O環 Seal Cover O-ring  (3"專用) NBR / EPT VITON / HV	8 固定環座 Fixed-seal Socket  FRPP/CFRPP CPVC/PVDF	8-1 固定環座O環 Fixed-seal Socket O-ring  NBR / EPT VITON / HV (每套兩X2)	9 前軸封 Bellows-seal combination 	9-1 轉動環 Rotational-seal  CARBON SSIC	9-2 伸縮環 Bellows  TEFLON	9-3 彈簧 Bellows Spring  HASTELLOY-C SUS316	9-4 伸縮環前O環 Bellows Front O-ring  NBR / EPT VITON / HV	9-5 伸縮環墊片 Bellows Packing  NBR / EPT VITON / HV
9-6 伸縮環後O環 Bellows Rear O-ring  NBR / EPT VITON / HV	10 可拆式固定環 Fixed-seal  CERAMIC SSIC	10A 一體式固定環 Fixed-seal  (3"專用) CERAMIC SSIC	10A-1 一體式固定 環後O環 Fixed-Seal Rear O-ring  NBR / EPT VITON / HV	10A-2 一體式固定 環側O環 Fixed-Seal Side O-ring  NBR / EPT VITON / HV	10-1 可拆式固定 環後O環 Fixed-Seal Rear O-ring  NBR / EPT VITON / HV	10-2 可拆式固定 環側O環 Fixed-Seal Side O-ring  NBR / EPT VITON / HV	11 葉輪 Impeller  FRPP	12 葉輪螺絲 Impeller Screw  FRPP	12-1 葉輪螺絲O環 Impeller Screw O-ring  NBR / EPT VITON / HV	13 中封蓋 Check Cover (1-1/2"-2")  FRPP
13 中封蓋 Check Cover (3")  FRPP	14 單向閥 Check Valve  有齒 無齒 NBR / EPT / HV VITON/TEFLON	15 注水蓋 Water Filling Cap  FRPP	15-1 注水蓋O環 Water Filling Cap O-ring  NBR / EPT VITON / HV	16-1 循環接頭墊片 Recycle Joint Packing  NBR / EPT VITON / HV	16B 塞頭 Plug  FRPP	17 自吸筒 Self-Priming Cover  FRPP	17A 自吸筒螺絲 Self-Priming Cover Screw  PVDF / SUS	17A-1 自吸筒螺絲O環 Cover Screw O-ring  NBR / EPT VITON / HV	18 自吸筒墊片 Self-Priming Cover Packing  NBR / EPT / HV VITON/TEFLON	19A 腳架 Base  FRPP

EXAMPLES 應用範例

A

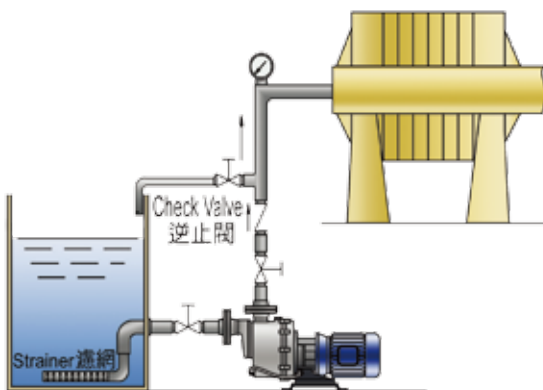


Example A

1. While applied to heat-exchanger, install a pressure gauge at the outlet to make sure no clog inside the pipeline.
2. Install a strainer at the inlet to stop articles or objects entering the pump. It also cut down the bubbles.
3. Install valves at the inlet and outlet for easy maintenance.
4. The diameter of each hole in the strainer should be approximately 5~7mm and the total mesh area of the strainer should be 5~10 times the area of the inlet.
It's better to enlarge the inlet pipeline. For example, enlarged 2-1/2" inlet pipeline could drop the resistance loss.
5. Set an overflow piping at the outlet pipeline and keep constantly opened to allow little overflow

1. 當應用於熱交換器時，於出口加裝壓力錶，以確定管路中有沒有阻塞。
2. 於入口加裝濾網，以阻止外物進入泵浦，也會減少氣泡的出現。
3. 於出入口的管路中加裝閥門，以便維護。
4. 濾網網孔的直徑應為約5~7mm，且濾網孔的面積應為入口管徑之5~10倍，入口管路最好加大管徑，如泵入口為2"，改配2-1/2"入口管，預防吸入量的不足。
5. 出水口配有回流管，正常開啟閥門，少量回流。

B

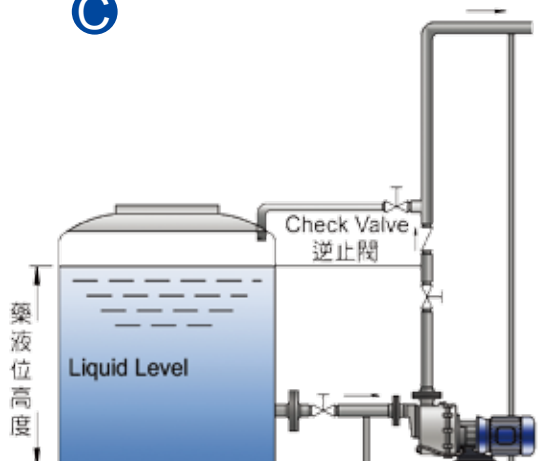


Example B

1. In order to monitor the flow and to detect possible clog of the filter, please set a pressure gauge at the outlet.
2. To eliminate damage caused by dry-running, please install a pressure safety shutoff.
3. Please clean up particles in the pump after operation.
4. Strainer is easy to be clogged. Clean it as usual.
5. The diameter of each hole in the strainer should be approximately 5~7mm and the total mesh area of the strainer should be 5~10 times the area of the inlet.
It's better to enlarge the inlet pipeline. For example, enlarged 2-1/2" inlet pipeline could drop the resistance loss.
6. Install valves at the inlet and outlet for easy maintenance.
7. Set an overflow piping at the outlet pipeline and keep constantly opened to allow little overflow.

1. 為了監視液體流動及偵測過濾機中可能的阻塞，請於出口加裝壓力錶。
2. 請加裝壓力保護斷電器以避免因空轉損壞。
3. 操作完畢，請清除泵浦中的外來物。
4. 注意入口濾網容易受阻塞，應時常清洗。
5. 濾網網孔的直徑應為約5~7mm，且濾網孔的面積應為入口之5~10倍，入口管路最好加大管徑，如泵入口為2"，改配2-1/2"入口管，預防吸入量的不足。
6. 於出入口的管路中加裝閥門，以便維護。
7. 出水口配有回流管，正常開啟閥門，少量回流。

C

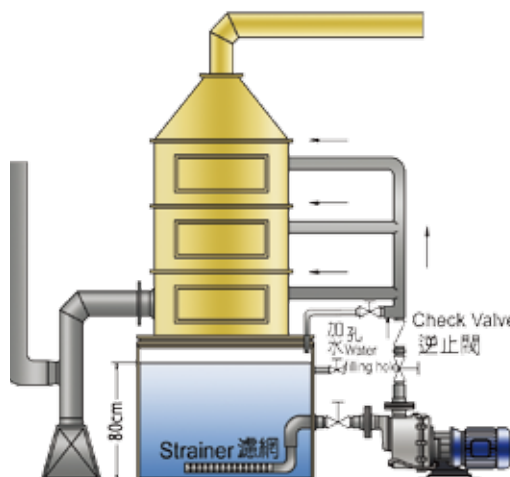


Example C

1. While applied to pump chemicals from the storage tank, please have a valve set at the inlet for the safety and convenience during maintenance.
2. Please monitor the level of the liquid in the tank to avoid dry-running.
3. Without check lid model is recommended.
4. Please install a check valve at the outlet while the height of piping exceeds 8M. It's better to enlarge the inlet pipeline. For example, enlarged 2-1/2" inlet pipeline could drop the resistance loss.
5. Please fasten in-outlet piping perfectly.
6. The motor shield must be applied while the pump is installed outdoors or in harsh conditions.
7. Set an overflow piping at the outlet pipeline and keep constantly opened to allow little overflow

1. 當應用於抽送儲存槽中之化學藥水時，請於入口加裝閥門，以維安全及維護上之便利。
2. 請監視槽內液體高度，以避免空轉。
3. 建議採用無單向閥機型。
4. 當配管高度大於8米時請於出口加裝逆止閥，逆止閥應高於液位以上，入口管路最好加大管徑，如泵入口為2"、改配2-1/2"入口管，以防吸入量的不足。
5. 請將出入口管線固定好。
6. 當泵浦裝於戶外或惡劣環境中，馬達必需加蓋護罩。
7. 出水口配有回流管，正常開啟閥門，少量回流。

D

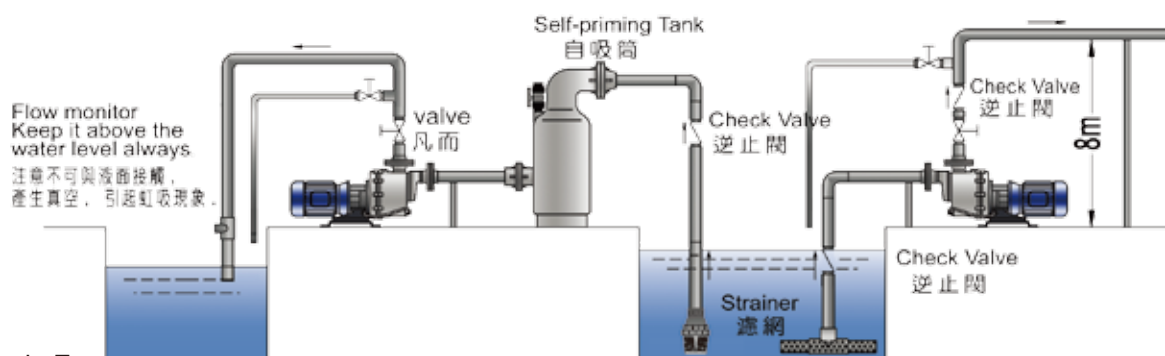


Example D

1. While applied to waste gas treatment tower, the tank should be large enough and the water-level in the tank should exceeds the inlet 80cm.
2. In order to avoid foreign particles clogging the inlet, please lower the inlet and install a strainer. (Mesh diameter approximately 5~7mm and the total mesh area of the strainer should be 5~10 times the area of the inlet.) It's better to enlarge the inlet pipeline. For example, enlarged 2-1/2" inlet pipeline could drop the resistance loss.
3. It should be easy to remove the strainer from the inlet for cleaning.
4. To avoid running out of liquid, please make sure that the water supplying system functions well.
5. To prevent the pump from dry running, please install a safety shutoff.
6. The motor shield must be applied while the pump is installed outdoors or in harsh conditions.
7. Install valves at the inlet and outlet for easy maintenance.
8. Set an overflow piping at the outlet pipeline and keep constantly opened to allow little overflow.

1. 當應用於廢氣塔時，水槽應夠大，且槽中水位應高於入口濾網80公分。
2. 為了避免外物阻塞入口，請降低入口並要裝濾網（網孔孔徑約5~7mm，且濾網孔的面積應為入口管徑之5~10倍）入口管路最好加大管徑，如泵入口為2"，改配2-1/2"入口管，預防吸入量的不足。
3. 入口濾網應易於取下清洗。
4. 請確認供水系統功能良好，以避免無水運轉（加裝自動補水系統）。
5. 請加裝保護斷電器，以防止泵浦空轉。
6. 當泵浦裝於戶外或惡劣環境中，馬達必需加蓋護罩。
7. 於出入口的管路中加裝閥門，以便維護。
8. 出水口配有回流管，正常開啟閥門，少量回流。

E



Example E

1. To stop articles or objects entering the pump, install a foot valve or strainer.
2. To prevent the inlet from sucking in bubble, please keep liquid level at least 30cm above the strainer.
3. Check valve must be installed if the height of piping exceeds 8M.
4. To avoid dry-running, please install a safety shutoff.
5. For the safety of repair, the valve must be installed at the outlet.
6. 3" in/outlet models cannot do self-priming well. Install a self-priming tank to get it.
7. In order to avoid foreign particles clogging the inlet, please lower the inlet and install a strainer. (Mesh diameter approximately 5~7mm and the total mesh area of the strainer should be 5~10 times the area of the inlet.) It's better to enlarge the inlet pipeline. For example, enlarged 2-1/2" inlet pipeline could drop the resistance loss.
8. If the head of the outlet too high or the long transfer distance and the pressure losing or over 1KG we suggest that install the outlet tee hose for backflow to tube. This can avoid the pressure of the backflow and the hot air can be exhausted will diminish the damage.
9. Set an overflow piping at the outlet pipeline and keep constantly opened to allow little overflow.
1. 加裝底閥或濾網，以防止外物進入泵浦。
2. 請保持液位最少高於入口濾網 30cm 以上，以防止吸入氣泡。
3. 當配管高度大於 8 米時，必需加裝逆止閥。
4. 請加裝保護斷電器，以防止泵浦空轉。
5. 為了維修安全，出口必需加裝閥門。
6. 出入口為 3" 之機型無自吸能力，請加裝自吸桶以獲得自吸能力。
7. 為了避免外物阻塞入口，請降低入口並要裝濾網（網孔孔徑約5~7mm，且濾網孔的面積應為入口管徑之5~10倍）。入口管路最好加大管徑，如泵入口為2"，改配2-1/2"入口管，預防吸入量的不足。
8. 出口揚程高或輸送距離較長，壓損超過1kg以上的使用場所建議在原出口加裝三通回流管，來防止反壓及熱氣排放減少損壞。
9. 出水口配有回流管，正常開啟閥門，少量回流。
※如安裝二台泵浦，不能共用入口管路



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E-mail: singtown@superpump.cn

Website: www.chemicalpump.cn

訂購時請提供下列資料:

1. 藥液條件: 名稱_____/溫度_____
濃度_____/比重_____/黏度_____
2. 需求流量: _____ L/min
3. 需求揚程: _____ M
4. 馬達: 電壓/頻率

While placing your order...

Please kindly provide us the following information.

1. Chemical: Name_____/Concentration_____
Temperature_____/Specific Gravity_____
Viscosity_____
2. Capacity needed: _____ L/min
3. Head needed: _____ M
4. Power: Voltage/Frequency