

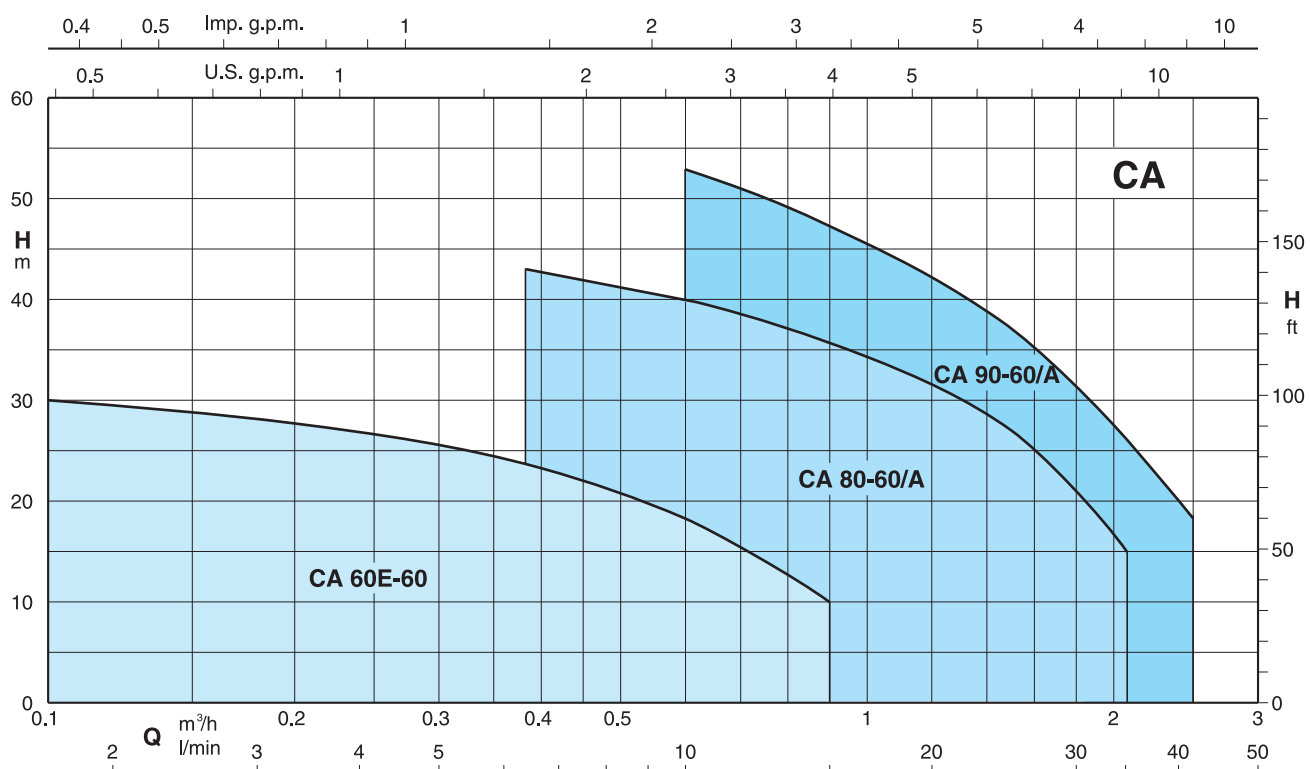
## Self-Priming Liquid Ring Pumps

直結離心式泵浦 開放式葉片



Coverage chart - 性能總表

n ≈ 3450 rpm



## Construction

Close-coupled self-priming liquid ring pumps with star impeller.  
**Connections:** threaded ports **ISO 228/1**.  
 threaded ports **NPT** (ANSI/ASME B1.20.1) on request

CA: version with pump casing and lantern bracket in cast iron.  
 B-CA: version with pump casing and lantern bracket in bronze  
 (the pumps are supplied fully painted).

## Applications

- For clean liquids without abrasives, without suspended solids, non-explosive, non-aggressive for the pump materials.
- If the liquid to be pumped has entrained air or gas or the flow in the suction pipe is not stable.
- For drawing water out of a well.
- For increasing network pressure (follow local specifications).

## Operating conditions

Liquid temperature from -10 °C to +90 °C.  
 Ambient temperature up to 40 °C.  
 Negative suction pressure up to 9 m.  
 Continuous duty.

## Motor

2-pole induction motor, 60 Hz (n ≈ 3450 rpm).  
**CA:** three-phase 220/380 V, 220/440 V,  
**CAM:** single-phase 110 V, 127 V, 220 V.  
 with thermal protector only 220V.  
 Capacitor inside the terminal box.

Insulation class F.  
 Protection IP 54.  
**Classification scheme IE2 for three-phase motors from 0,75 kW.**  
 Constructed in accordance with: EN 60034-1; EN 60034-30.  
 EN 60335-1, EN 60335-2-41.

## Special features on request

- Other voltages.
- Protection IP 55.
- Special mechanical seal
- Higher or lower liquid or ambient temperatures.

## Materials

Components	CA	B-CA
Pump casing Lantern bracket	Cast iron GJL 200 EN 1561	Bronze G-Cu Sn 10 EN 1982
Impeller	Brass P- Cu Zn 40 Pb 2 UNI 5705	
Shaft	Chrome steel 1.4104 EN 10088 (AISI 430)	Cr-Ni-Mo steel 1.4401 EN 10088 (AISI 316)
Mechanical seal	Carbon - Ceramic - NBR	

## 結構

直結自吸摩擦式泵浦；星型式葉片。  
 接口方式：牙口 **ISO228/1**  
 牙口 **NPT** (ANSI/ASME B1.20.1) 依需求提供

CA：泵浦外殼及托架為鑄鐵材質。  
 B-CA：泵浦外殼及托架為青銅材質(泵浦整體烤漆)。

## 應用

- 無雜質、懸浮微粒或顆粒、無爆裂物質或不具腐蝕性之乾淨水。
- 輸送之液體如含有空氣、氣體在吸入管裡流動則不適用
- 井水抽水應用。
- 供水系統之加壓應用（按照當地規範）。

## 操作條件

液體溫度 -10°C 至 +90°C  
 周圍溫度至 40°C  
 負壓吸入壓力至：9 m  
 連續運轉

## 馬達

**2極感應電動馬達，60Hz(n=3450 rpm)**  
**CA：** 三相220/380V，220/440V  
**CAM：** 單相110V，127V，220V  
 僅有220V配置過熱保護器。  
 接線盒內有電容器。

絕緣等級：F  
 保護等級：IP54  
**三相馬達0.75kW使用歐盟效能指標高效率IE2。**  
 結構設計符合EN 60034-1; EN 60034-30;  
 EN 60335-1; EN 60335-2-41之規範。

## 可依需求客製

- 其他電壓值
- 保護等級IP55
- 特殊機械軸封
- 更高或是更低的液體或是周圍溫度之需求

## 材質

零件	CA	B-CA
泵浦外殼 托架	鑄鐵 GJL 200 EN 1561	青銅 G-Cu Sn 10 EN 1982
葉片	黃銅 P- Cu Zn 40 Pb 2 UNI 5705	
泵浦軸心	不鏽鋼 1.4104 EN 10088 (AISI 430)	不鏽鋼 1.4401 EN 10088 (AISI 316)
機械軸封	碳精 - 陶瓷 - NBR	

## Performance - 性能

3 ~	1 ~	P <sub>2</sub>		Q m <sup>3</sup> /h l/min	0,12	0,24	0,38	0,48	0,6	0,75	0,9	1	1,2	1,5	1,89	2,1	2,4	2,5		
		kW	HP		2	4	6,3	8	10	12,5	15	16	20	25	31,5	35	40	41,6		
<b>CA 60E-60</b> B-CA 60E-60	<b>CAM 60E-60</b> B-CAM 60E-60	0,33	0,45	H m	29	27	24	22	18	14	10									
<b>CA 80-60/A</b> B-CA 80-60/A	<b>CAM 80-60/A</b> B-CAM 80-60/A	0,55	0,75					43	42	40	37,5	36	34	31	27	19	15			
<b>CA 90-60/A</b> B-CA 90-60/A	<b>CAM 90-60/A</b> B-CAM 90-60/A	0,75	1							53	50	48	47	42	36,5	29	25	20	18	

B-CA, B-CAM = Bronze construction.  
青銅結構

P<sub>2</sub> Rated motor power output.  
馬達額定輸出功率

H Total head in m.  
總揚程 (單位m)

Tolerances according to UNI EN ISO 9906:2012.  
水量誤差值依據ISO 9906:2012之標準。

## Rated currents - 額定電流

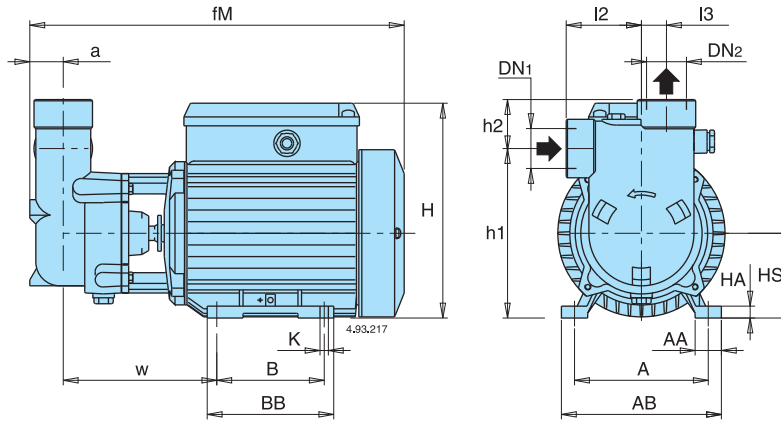
P <sub>2</sub>		single-phase - 單相 1~			I <sub>A</sub> /I <sub>N</sub>
kW	HP	220V I <sub>N</sub> A	127V I <sub>N</sub> A	110V I <sub>N</sub> A	
0,33	0,45	2,8	4,8	5,6	2,7
0,55	0,75	5,2	9	10,4	3,1
0,75	1	6,9	12	13,8	2,9

P <sub>2</sub>		three-phase - 三相 3~		I <sub>A</sub> /I <sub>N</sub>
kW	HP	220/380V I <sub>N</sub> A	220/440V I <sub>N</sub> A	
0,33	0,45	2/1,2	2,2/1,3	4
0,55	0,75	3,6/2,1	3,8/2,2	3,7
0,75	1	4,5/2,6	4,7/2,7	6,8

P<sub>2</sub> Rated motor power output.  
馬達額定輸出功率

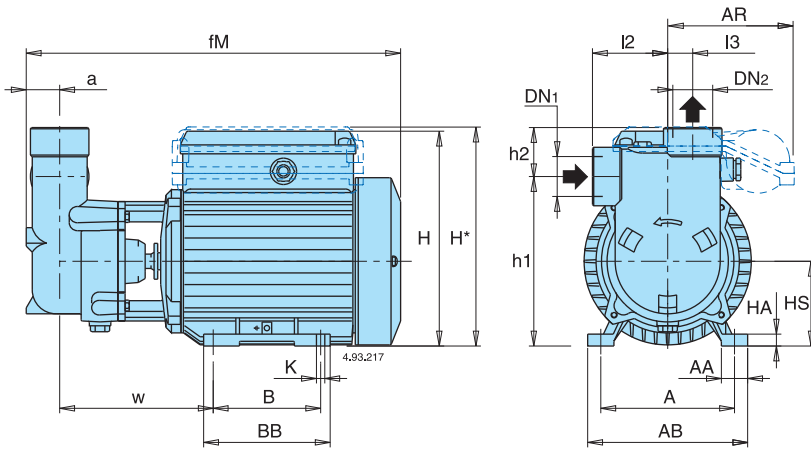
I<sub>A</sub>/I<sub>N</sub> D.O.L. starting current / Rated current  
啟動電流 / 額定電流

## Dimensions and weights - 尺寸及重量



TYPE 型號	DN1 ISO 228	DN2 ISO 228	DN NPT	mm																	kg	
				a	fM	HS	h2	h1	H	BB	B	AB	A	AA	K	I2	I3	w	HA	CA	B-CA	
CA 60E-60 B-CA 60E-60	G 1/2	G 1/2	✓	18	256	63	25	103	158	96	80	122	100	22	7	45	14	103	8	6	6.8	
CA 80-60/A	-	G 3/4	✓	23	306	71	27	134	182	106	90	134	112	22	7	55	17	122	10	9.5	-	
CA 90-60/A	-	G 1	✓	28	318	71	41	142	182	106	90	134	112	22	7	63	21	128	10	10,8	-	

✓ NPT Version on demand - NPT依需求提供



TYPE	H*	AR mm		
		220V	127V	110V
CAM 90-60/A, B-CAM 90-60/A	147	●	116	116

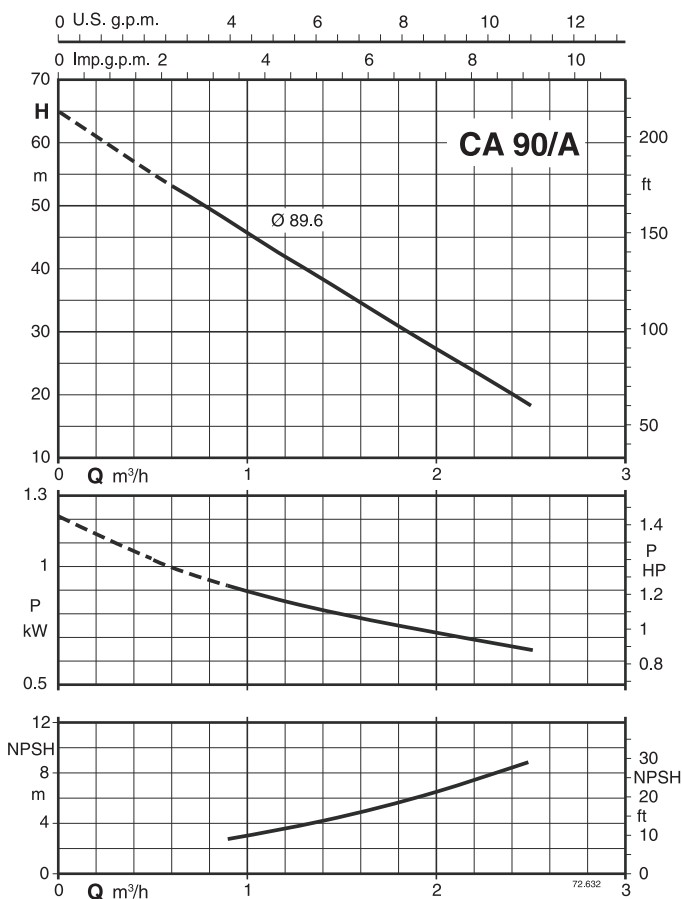
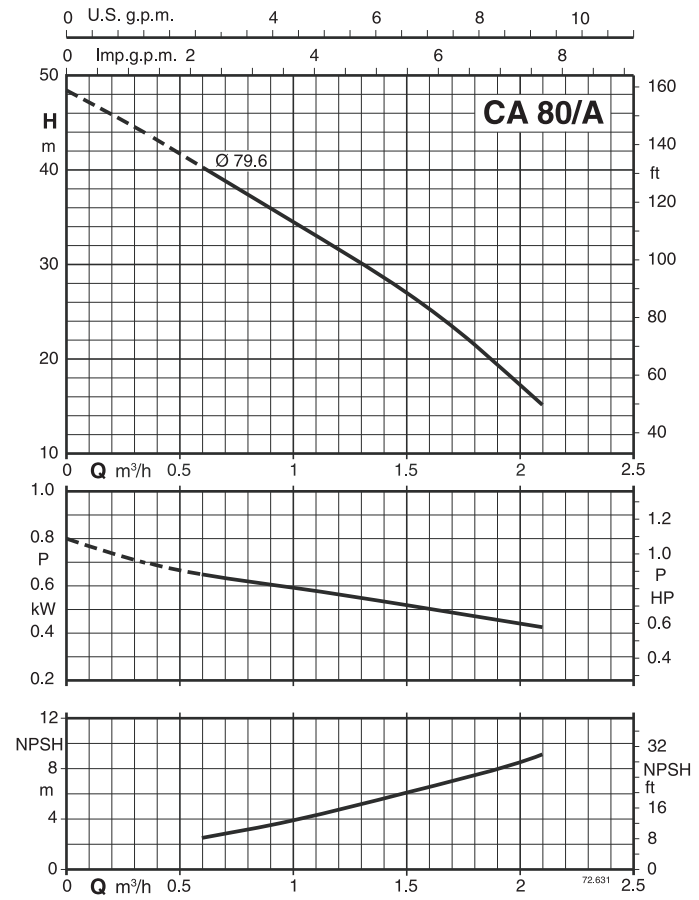
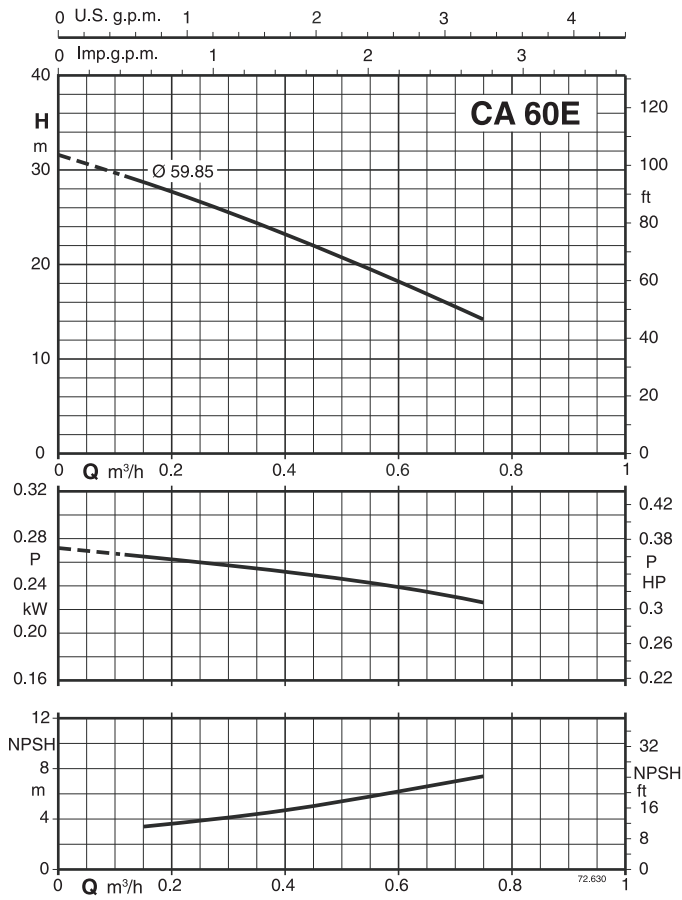
● Standard dimensions - 標準尺寸  
□ Cannot constructed - 未供應

TYPE 型號	DN1 ISO 228	DN2 ISO 228	DN NPT	mm																	kg
				a	fM	HS	h2	h1	H	BB	B	AB	A	AA	K	I2	I3	w	HA		
B-CA 80-60/A	G 3/4	G 3/4	✓	23	307	71	27	134	182	106	90	134	112	22	7	55	17	122	10	10	
B-CA 90-60/A	G 1	G 1	✓	28	318	71	41	142	182	106	90	134	112	22	7	63	21	128	10	13.1	

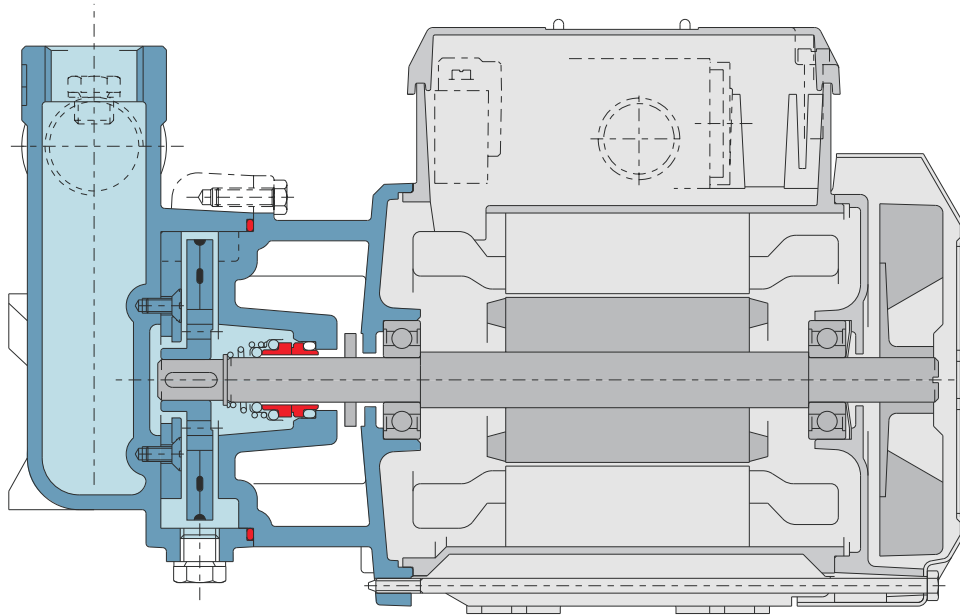
✓ NPT Version on demand - NPT依需求提供

## Characteristic curves - 性能曲線

$n \approx 3450$  rpm



## Features - 特色



### Fast self priming

The hydraulic design ensures fast self priming once the pump body is filled with water.

### Flexibility

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows CA series pumps to be selected for use with different types of liquids.

### Easy maintenance

The construction features an anti-wear ring screwed to the pump body, allowing for rapid replacement in case of wear.

### 快速自吸

水液壓零件設計使泵浦注滿水即能快速自吸。

### 靈活性

接觸液體零件有鑄鐵及青銅材質可供選擇，使CA系列泵浦能適用於不同類型之液體。

### 維護簡易

結構特色為泵浦裡的可替換式抗磨損環，使替換零件更加快速。