



Construction

Close-coupled self-priming liquid ring pumps with star impeller.

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, 50 Hz (n = 2900 rpm).
CA: three-phase 230/400 V ± 10%.
CAM: single-phase 230 V ± 10%, with thermal protector.
Capacitor inside the terminal box.
Insulation class F.
Protection IP 54.
Constructed in accordance with IEC 34.

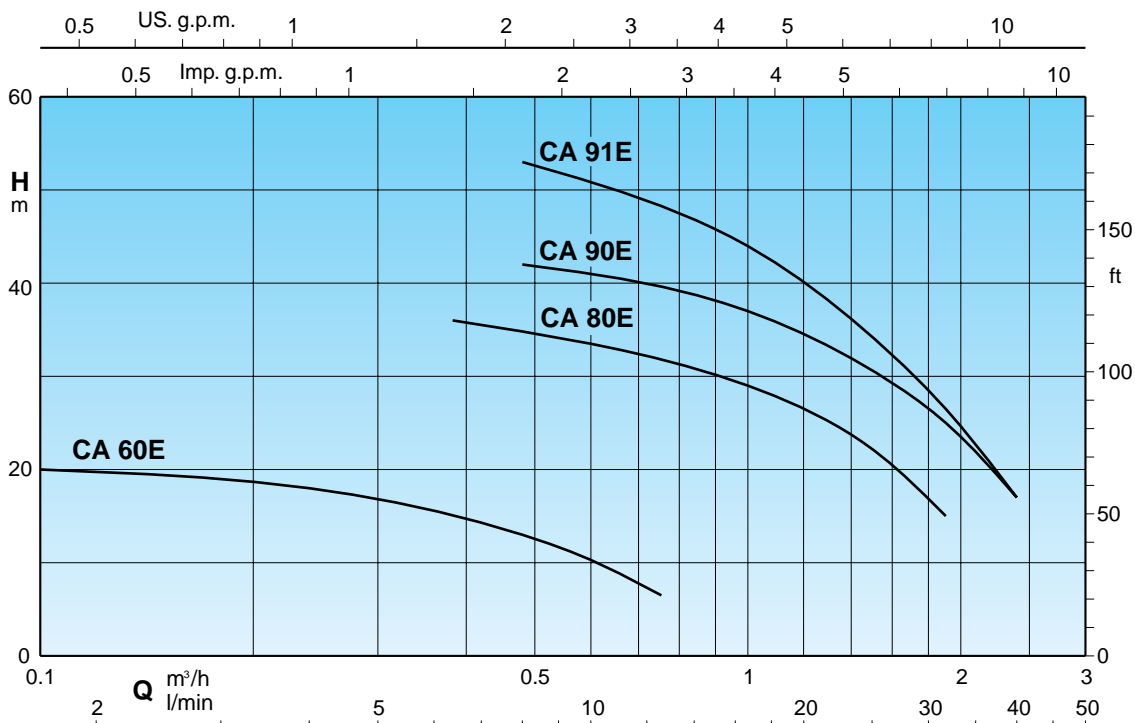
Materials

| Components | CA | B-CA |
|-----------------|---|---|
| Pump casing | Cast iron | Bronze |
| Lantern bracket | GJL 200 EN 1561 | G-Cu Sn 10 UNI 7013 |
| Impeller | Brass P- Cu Zn 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 | |

Special features on request

- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).
- Protection IP 55.
- Special mechanical seal
- Higher or lower liquid or ambient temperatures.

Coverage chart $n \approx 2900$ rpm



Performance $n \approx 2900$ rpm

| 3 ~ | 230 V 400 V | | 1 ~ | 230 V | | P ₁ | P ₂ | Q | | | | | | | | | | | | | | |
|--------------------|-------------|-----|----------------------|-------|------|----------------|----------------|---|----|----|-------------------|------|------|------|------|-----|------|----|------|-----|------|-----|
| | A | A | | A | kW | | | | kW | HP | m ³ /h | 0,12 | 0,24 | 0,38 | 0,48 | 0,6 | 0,75 | 1 | 1,2 | 1,5 | 1,89 | 2,4 |
| | | | | | | | | H | m | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| CA 60E B-CA 60E | 1,7 | 1 | CAM 60E B-CAM 60E | 1,6 | 0,26 | 0,15 | 0,2 | H | 20 | 18 | 15,5 | 13 | 10,5 | 6,5 | | | | | | | | |
| CA 80E B-CA 80E | 2,8 | 1,6 | CAM 80E B-CAM 80E | 3,3 | 0,72 | 0,45 | 0,6 | | | | 36 | 35 | 33,5 | 31,5 | 29 | 26 | 22 | 15 | | | | |
| CA 90E B-CA 90E | 3 | 1,7 | CAM 90E B-CAM 90E | 4,5 | 0,9 | 0,55 | 0,75 | | | | | | 42 | 41 | 40 | 37 | 34 | 30 | 25 | 17 | | |
| CA 91E B-CA 91E | 3,7 | 2,2 | CAM 91E B-CAM 91E | 5,7 | 1,2 | 0,75 | 1 | | | | | | 53 | 51 | 48 | 44 | 39 | 34 | 26,5 | 17 | | |

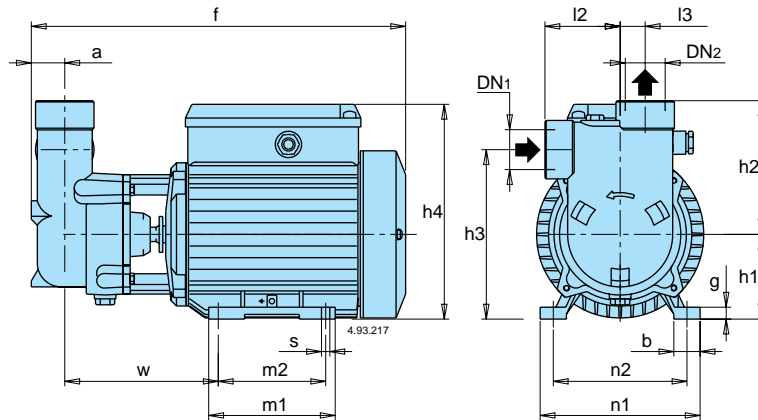
P₁ Maximum power input.

P₂ Rated motor power output.

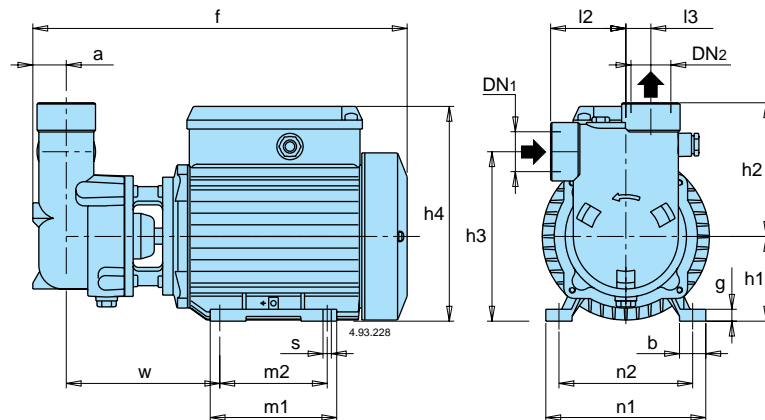
B-CA = Bronze construction.

H Total head in m.

Dimensions and weights



| TYPE | DN ₁ | DN ₂ | mm | | | | | | | | | | | | | | kg | | | | |
|-------------------|-----------------|-----------------|---------|----|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----|----|----------------|----------------|-----|----|------|------|
| | | | ISO 228 | a | f | h ₁ | h ₂ | h ₃ | h ₄ | m ₁ | m ₂ | n ₁ | n ₂ | b | s | l ₂ | l ₃ | w | g | CA | B-CA |
| CA 60E - B-CA 60E | G 1/2 | G 1/2 | | 18 | 256 | 63 | 65 | 103 | 158 | 96 | 80 | 122 | 100 | 22 | 7 | 45 | 14 | 103 | 8 | 6 | 6,8 |
| CA 80E | G 3/4 | G 3/4 | | 23 | 272 | 63 | 90 | 126 | 158 | 96 | 80 | 122 | 100 | 22 | 7 | 55 | 17 | 109 | 8 | 7,6 | - |
| CA 90E | G 1 | G 1 | | 28 | 318 | 71 | 112 | 142 | 180 | 106 | 90 | 134 | 112 | 22 | 10 | 63 | 21 | 128 | 10 | 10,8 | - |
| CA 91E | | | | | | | | | | | | | | | | | | | | | 11,4 |



| TYPE | DN ₁ | DN ₂ | mm | | | | | | | | | | | | | | kg | | | | |
|----------|-----------------|-----------------|---------|----|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----|----|----------------|----------------|-----|----|------|------|
| | | | ISO 228 | a | f | h ₁ | h ₂ | h ₃ | h ₄ | m ₁ | m ₂ | n ₁ | n ₂ | b | s | l ₂ | l ₃ | w | g | B-CA | |
| B-CA 80E | G 3/4 | G 3/4 | | 23 | 307 | 71 | 90 | 134 | 180 | 106 | 90 | 134 | 112 | 22 | 10 | 55 | 17 | 122 | 10 | 10 | |
| B-CA 90E | G 1 | G 1 | | 28 | 318 | 71 | 112 | 142 | 180 | 106 | 90 | 134 | 112 | 22 | 10 | 63 | 21 | 128 | 10 | 13,1 | |
| B-CA 91E | | | | | | | | | | | | | | | | | | | | | 13,9 |

Characteristic curves $n \approx 2900$ rpm

