STA-RITE®

C/CC Series™

Bronze or Cast Iron Pump for Flooded Suction Applications

For semi-commercial and commercial swimming pools and spas recirculation.

All C/CC Series™ pumps are available in high head and medium head models, providing a complete range of performance characteristics. Select from 3 to 5 HP models with 2½" NPT suction and 2" discharge ports. Motors are open drip-proof, continuous duty rated at 3450 RPM. Suitable for outdoor installation.

Standard Features

- Easy access back pull-out design – entire motor may be removed for servicing impeller, seal or motor without disturbing plumbing.
- Centerline discharge for ease of installation.
- Precision cast and machined silicon brass impeller is dynamically balanced for long seal life and quiet operation. Non-overloading; contains no lead.
- Choice of hair and lint strainer sizes to fit exact application.
- 200 Volt and 575 Volt models available. Special duty motors available (consult factory).

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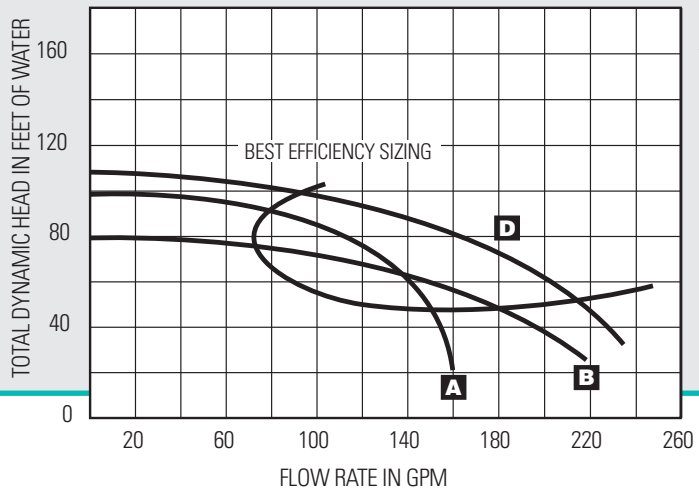
Performance Curves



KEY

A. CHH/CCHH

B. CMH/CCMH

D. CHJ/CHJ3/CCHJ/CCHJ

For detailed efficiency curves for each model, please contact the factory.

MATERIALS AND DESIGN

Pump Body

- **Port Size**
  Single suction port: 2½" NPT on centerline
  Discharge port: 2" NPT on centerline
  Winterizing drain port: ¼" NPT
- **Material**
  Series "C": Red brass
  Series "CC": Cast iron
- **Impeller**
  Silicon brass (non-leaded); closed, non-overloading design
- **Shaft Seal**
  Self-flushing, mechanical John Crane® Type 2. Ceramic and carbon seal faces. Stainless steel, brass and Buna N spring bellows

Motor

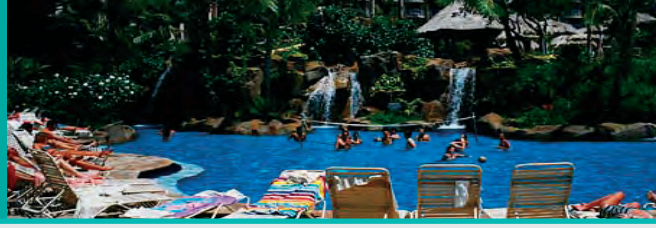
- **Frame Size**
  NEMA® Series, JM construction
- **Shaft**
  Carbon steel inside a 300 Series stainless steel sealed removable shaft sleeve.
- **Design**
  3 to 5 HP, 3450 RPM, open drip-proof (unless otherwise specified), continuous duty rated. 40°C ambient maximum
- **Bearings**
  Permanently sealed ball type, pre-lubricated
- **Thermal Overload Protection**
  Single-phase motors: Automatic reset
  Three-phase motors: External thermal protection required.

Maximum Limits

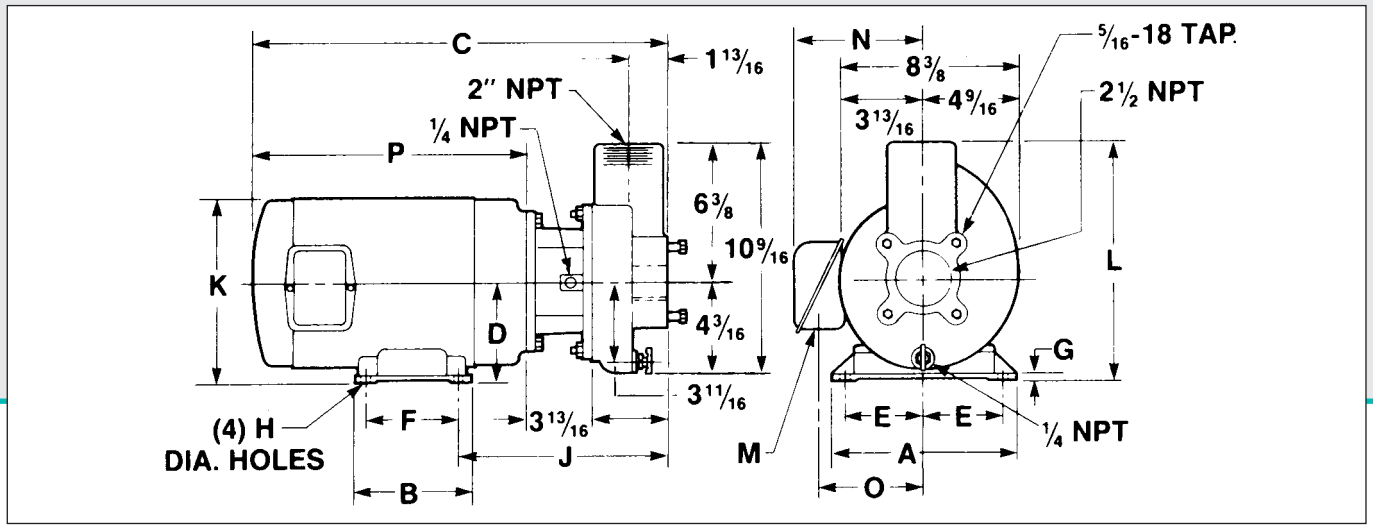
Liquid Temperature 125°F
Ambient Air Temperature: 104ºF
Pressure: 75 psi
pH Range: 4-10 bronze, 6-14 cast iron

Certifications

3 HP Models are certified to meet the requirements of NSF Standard 50 with strainers installed. Does not apply to models other than 3 HP.



C/CC Commercial Pump



Outline Dimensions

Catalog Number	A	B	C*	D	E	F	G*	H*	J	K	L	M*	N*	O*	P*
CHH3, CCHH3, CMH3, CCMH3	7	6	18 13/32	3½	2¾	5	9/32	11/32	9 9/32	7 7/32	9⅞	¾	6 29/32	5 13/32	11
CHH, CCHH, CMH, CCMH	9	6½	21½	4½	3¾	4½	7/16	7/16	10 5/16	9 23/32	10⅞	¾	8⅛	6½	14⅛
CHJ3, CCHJ3 CCHJ, CHJ	9	7½	22½	4½	3¾	5½	7/16	7/16	10 5/16	9 23/32	10⅞	¾	9	6 15/16	15⅛

All dimensions shown in inches. Dimensions may vary with motor supplier.

Ordering Information

Catalog No. Bronze	Catalog No. Cast Iron	Nominal HP	Phase	Motor Voltage	Max. Load Amps**	Wire Size to 50 Ft.	Approx. Ship Weight (lbs.) Bronze	Cast Iron
HIGH HEAD								
CHH	CCHH	3	1	230	33/30	10	116	106
CHH3	CCHH3	3	3	230/460	16.6/15/8	14	91	86
CHJ3	CCHJ3	5	3	230/460	27.6/25/12	12/14	115	110
CHJ	CCHJ	5	1	230	31	–	131	126
MEDIUM HEAD								
CMH	CCMH	3	1	230	33/30	10	111	106
CMH3	CCMH3	3	3	230/460	16.6/15/8	14	91	86

Note: Available in 575 volt models. Call factory.

**Dimensions and Max Load Amps may vary per motor manufacturer. The standard motor is made by Baldor.
ALL PUMP MODELS require external overload protection. 3-phase models, and 5 HP single phase, require a magnetic starter.
Maximum ambient temperature: 104°F (40°C).
200 and 575 volt models available. Consult factory.

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ENGINEERING SPECIFICATIONS

C/CC Series Pump

- Recirculating pump shall be Sta-Rite Model No. _____ Centrifugal Pump _____ phase, 60 Hz.

General Notes

- Install pump in a cool, dry, well vented location away from pool heaters, and chemical storage.
- Pump should be firmly mounted with pipe supported, to prevent vibration and undue operational noise.
- Allow 12" minimum clearance behind motor for servicing.
- Motor overheating may be caused by a voltage drop or excessive voltage. Be sure that wire size and voltage input is properly regulated.

Specifications

- The recirculating pump shall be a flooded suction centrifugal type pump, equipped with a hair and lint strainer installed as shown in the plans.
- The pump body seal plate and attached hair and lint strainer shall be cast of _____ (red brass or gray iron) and close coupled to the electric motor by means of an adapter of the same material. The pump body shall have a single suction port of 2½" NPT, a centerline discharge port of 2" NPT, and a drain port of ¼" NPT for winterizing. The pump shall be a back pull-out design to allow servicing without disturbing piping. Impeller wear ring shall be of bronze material and be replaceable.
- The impeller shall be cast of silicon brass material and be of the closed design, non-overloading at any point on the performance curve. The self-flushing mechanical shaft seal shall be of the John Crane® Type 2 or equivalent and constructed of ceramic and carbon in the seal faces, and stainless steel, brass, and Buna N in the spring bellows portion. The impeller shall be secured to the motor shaft by means of a stainless steel key and a locking screw into the end of the motor shaft.
- All fasteners in the pump shall be stainless steel. There shall be a shaft slinger made of Neoprene to protect the motor bearings from any seal leakage.
- The pump shall be capable of operating at a 75 psi pressure, 125°F continuous liquid temperature, and within a pH range of 4-10.
- The electric motor coupled to the pump shall be of the NEMA® Series JM construction with carbon steel shaft inside a sealed removable shaft sleeve of 300 Series stainless steel. The motor shall be of an open, drip-proof design (unless otherwise specified) with permanently sealed ball bearings. Single-phase motors shall have built-in thermal overload protection of the automatic reset type. Motors shall be continuous duty rated at 40°C, or better, and be suitable for outdoor installation. The pump assembly shall have a stable mounting base capable of being anchored to the mounting surface.
- The pump motor shall be a _____ HP, _____ phase, 60 Hz, 3450 RPM for service on _____ volt electrical supply. The pump and motor shall be non-overloading at any point on the performance curve. The pump shall be rated for _____ GPM at _____ TDH.

Pentair Water
Commercial Pool and Spa™

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