

BERKELEY® CP/CB Series General Purpose Cast Iron Centrifugal Pumps



The CP/CB Series Pumps have a heavy-duty cast iron construction and are offered in high and medium head models, with Noryl® or brass impeller.

Options Available:

- TEFC motors
- Seal options include
 - Viton with Carbon/Ceramic faces, includes Viton O-ring change out in pump volute.
 - Viton with Carbon/Silicon Carbide faces, includes Viton O-ring change out in pump volute.

APPLICATIONS

- Water systems and sprinkling... for homes, farms and industry.

SPECIFICATIONS

Body and Seal Plate – Close-grained cast iron

Base – Steel 10 gauge

Impeller – CP Series – Noryl®

Impeller – CB Series – Brass

Shaft – 416 stainless steel

Mechanical Seal – Carbon/ceramic, Buna-N

FEATURES

1/3 through 2-1/2 HP – High head and medium head models, with heavy-duty motors, easy service design and four-position discharge.

Drain Port – Provided for easy winterizing.

Medium Head Models – Deliver up to 110' of head with capacities to 140 GPM.

High Head Models – Deliver up to 140' of head with capacities to 90 GPM.

Easy Serviceability – All models include replaceable wear ring and feature back pull-out design.

CP Series with Noryl® Impellers – Abrasion-resistant for normal applications with working temperatures to 140°F.

CB Series with Silicon Bronze Impellers – CB pumps equipped with shaft seals rated for temperatures to 225°F.

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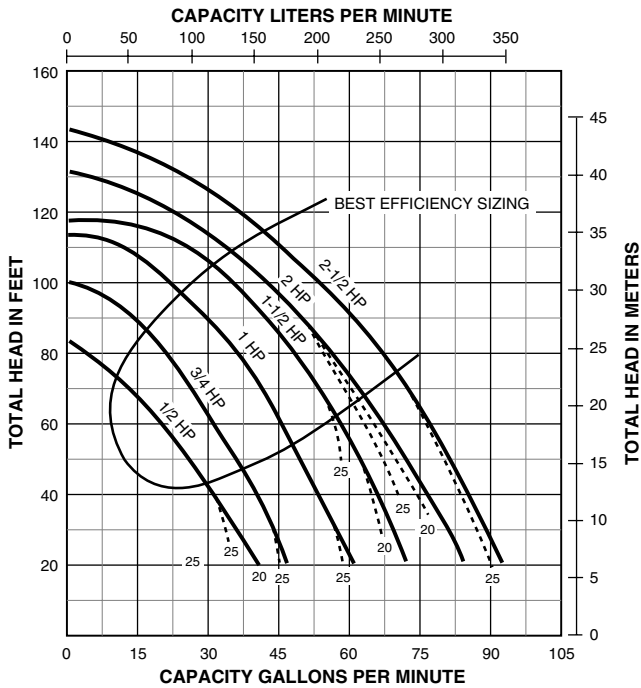
ORDERING INFORMATION

| HIGH HEAD | | | | | | | | | |
|-----------------|----------------|-------------------------|----------------|-------|--------------------|--------|---------------|-------|------------------|
| Noryl® Impeller | | Silicon Bronze Impeller | | HP | Pipe Tapping Sizes | | Motor Voltage | Phase | Approx. Wt. Lbs. |
| Model Number | Catalog Number | Model Number | Catalog Number | | Suct. | Disch. | | | |
| CP1XPHS | S39516 | CB1XPHS | S39529 | | 1-1/4" | 1" | 115/230 | 1 | 39 |
| CP1XPHS | S39517 | CB1XPHS | S39530 | 1/2 | 1-1/4" | 1" | 208-230/460 | 3 | 39 |
| CP1XPHS | S39517-575T | CB1XPHS | S39530-575T | | 1-1/4" | 1" | 575 | 3 | 40 |
| CP1XPHS | S39518 | CB1XPHS | S39531 | | 1-1/4" | 1" | 115/230 | 1 | 42 |
| CP1XPHS | S39519 | CB1XPHS | S39532 | 3/4 | 1-1/4" | 1" | 208-230/460 | 3 | 42 |
| CP1XPHS | S39519-575T | CB1XPHS | S39532-575T | | 1-1/4" | 1" | 575 | 3 | 43 |
| CP1XPHS | S39520 | CB1XPHS | S39533 | | 1-1/4" | 1" | 115/230 | 1 | 45 |
| CP1XPHS | S39521 | CB1XPHS | S39534 | 1 | 1-1/4" | 1" | 208-230/460 | 3 | 45 |
| CP1XPHS | S39521-575T | CB1XPHS | S39534-575T | | 1-1/4" | 1" | 575 | 3 | 46 |
| CP1XPHS | S39522 | CB1XPHS | S39535 | | 1-1/4" | 1" | 115/230 | 1 | 49 |
| CP1XPHS | S39523 | CB1XPHS | S39536 | 1-1/2 | 1-1/4" | 1" | 208-230/460 | 3 | 49 |
| CP1XPHS | S39523-575T | CB1XPHS | S39536-575T | | 1-1/4" | 1" | 575 | 3 | 50 |
| CP1-1/4TPHS | S39524 | CB1-1/4TPHS | S39537 | | 1-1/2" | 1-1/4" | 230 | 1 | 69 |
| CP1-1/4TPHS | S39525 | CB1-1/4TPHS | S39538 | 2 | 1-1/2" | 1-1/4" | 208-230/460 | 3 | 69 |
| CP1-1/4TPHS | S39525-575T | CB1-1/4TPHS | S39538-575T | | 1-1/2" | 1-1/4" | 575 | 3 | 70 |
| CP1-1/2TPHS | S39526 | CB1-1/2TPHS | S39539 | | 2" | 1-1/2" | 230 | 1 | 74 |
| CP1-1/2TPHS | S39527 | CB1-1/2TPHS | S39540 | 2-1/2 | 2" | 1-1/2" | 208-230/460 | 3 | 74 |
| CP1-1/2TPHS | S39527-575T | CB1-1/2TPHS | S39540-575T | | 2" | 1-1/2" | 575 | 3 | 75 |
| MEDIUM HEAD | | | | | | | | | |
| Noryl® Impeller | | Silicon Bronze Impeller | | HP | Pipe Tapping Sizes | | Motor Voltage | Phase | Approx. Wt. Lbs. |
| Model Number | Catalog Number | Model Number | Catalog Number | | Suct. | Disch. | | | |
| CP1MPS | S39489 | - | - | 1/3 | 1-1/4" | 1" | 115 | 1 | 39 |
| CP1MPS | S39490 | CB1MPS | S39503 | | 1-1/4" | 1" | 115/230 | 1 | 39 |
| CP1MPS | S39491 | CB1MPS | S39504 | 1/2 | 1-1/4" | 1" | 208-230/460 | 3 | 39 |
| CP1MPS | S39491-575T | CB1MPS | S39504-575T | | 1-1/4" | 1" | 575 | 3 | 40 |
| CP1MPS | S39492 | CB1MPS | S39505 | | 1-1/4" | 1" | 115/230 | 1 | 42 |
| CP1MPS | S39493 | CB1MPS | S39506 | 3/4 | 1-1/4" | 1" | 208-230/460 | 3 | 42 |
| CP1MPS | S39493-575T | CB1MPS | S39506-575T | | 1-1/4" | 1" | 575 | 3 | 43 |
| CP1-1/4XPS | S39494 | CB1-1/4XPS | S39507 | | 1-1/2" | 1-1/4" | 115/230 | 1 | 43 |
| CP1-1/4XPS | S39495 | CB1-1/4XPS | S39508 | 1 | 1-1/2" | 1-1/4" | 208-230/460 | 3 | 43 |
| CP1-1/4XPS | S39495-575T | CB1-1/4XPS | S39508-575T | | 1-1/2" | 1-1/4" | 575 | 3 | 44 |
| CP1-1/4XPS | S39496 | CB1-1/4XPS | S39509 | | 1-1/2" | 1-1/4" | 115/230 | 1 | 54 |
| CP1-1/4XPS | S39497 | CB1-1/4XPS | S39510 | 1-1/2 | 1-1/2" | 1-1/4" | 208-230/460 | 3 | 54 |
| CP1-1/4XPS | S39497-575T | CB1-1/4XPS | S39510-575T | | 1-1/2" | 1-1/4" | 575 | 3 | 55 |
| CP1-1/4XPS | S39498 | CB1-1/4XPS | S39511 | | 1-1/2" | 1-1/4" | 230 | 1 | 66 |
| CP1-1/4XPS | S39499 | CB1-1/4XPS | S39512 | 2 | 1-1/2" | 1-1/4" | 208-230/460 | 3 | 66 |
| CP1-1/4XPS | S39499-575T | CB1-1/4XPS | S39512-575T | | 1-1/2" | 1-1/4" | 575 | 3 | 67 |
| | | CB1-1/2XPS | S39513 | | 2" | 1-1/2" | 230 | 1 | 74 |
| | | CB1-1/2XPS | S39514 | 2-1/2 | 2" | 1-1/2" | 208-230/460 | 3 | 74 |
| | | CB1-1/2XPS | S39514-575T | | 2" | 1-1/2" | 575 | 3 | 75 |

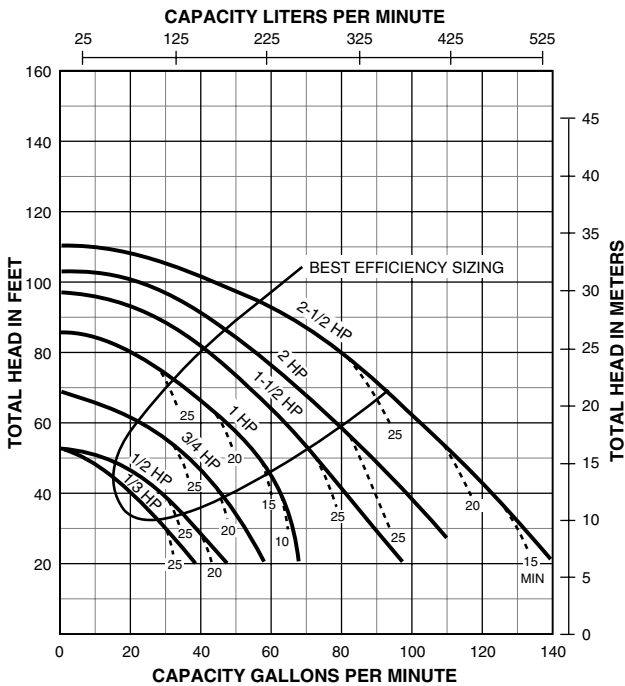
BERKELEY® CP/CB Series General Purpose Cast Iron Centrifugal Pumps

PUMP PERFORMANCE

HIGH HEAD



MEDIUM HEAD



NOTE: Dotted lines indicate performance reduction at high suction lift.

PUMP PERFORMANCE (Capacity in Gallons Per Minute)

| HIGH HEAD | | | | | | | |
|-----------|--------------------|-----------|----------------------|-----|-----|-----|-----|
| HP | Discharge Pressure | | Dynamic Suction Lift | | | | |
| | PSI | Feet Head | 5' | 10' | 15' | 20' | 25' |
| 1/2 | 10 | 23.1 | — | 34 | 32 | 29 | 26 |
| | 20 | 46.2 | 25 | 21 | 18 | 15 | 11 |
| | 30 | 69.3 | 10 | — | — | — | — |
| 3/4 | 10 | 23.1 | — | — | 42 | 39 | 37 |
| | 20 | 46.2 | 35 | 32 | 30 | 28 | 26 |
| | 30 | 69.3 | 24 | 22 | 19 | 15 | 10 |
| 1 | 20 | 46.2 | 48 | 46 | 45 | 43 | 40 |
| | 30 | 69.3 | 38 | 35 | 31 | 28 | 25 |
| | 40 | 92.4 | 23 | 20 | 15 | — | — |
| 1-1/2 | 20 | 46.2 | 62 | 60 | 58 | 55 | 52 |
| | 30 | 69.3 | 50 | 48 | 44 | 40 | 37 |
| | 40 | 92.4 | 37 | 32 | 29 | 22 | — |
| 2 | 20 | 46.2 | 71 | 68 | 66 | 62 | 60 |
| | 30 | 69.3 | 60 | 57 | 52 | 59 | 45 |
| | 40 | 92.4 | 45 | 40 | 36 | 31 | 24 |
| | 50 | 115.5 | 22 | 15 | — | — | — |
| 2-1/2 | 20 | 46.2 | 81 | 79 | 76 | 74 | 71 |
| | 30 | 69.3 | 69 | 67 | 63 | 60 | 56 |
| | 40 | 92.4 | 56 | 51 | 47 | 44 | 38 |
| | 50 | 115.5 | 33 | 30 | 22 | 15 | — |

Tested and rated in accordance with Water Systems Council Standards.

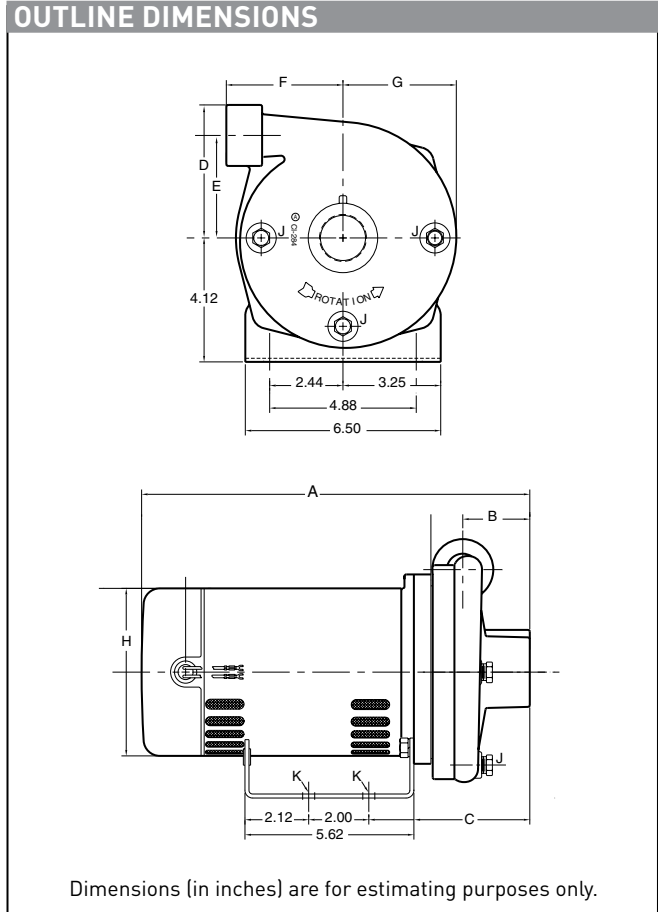
NOTE: Pumps installed with a PRO-Source® tank require a 100 PSI relief valve. Pumps with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

BERKELEY® CP/CB Series General Purpose Cast Iron Centrifugal Pumps

| PUMP PERFORMANCE (Capacity in Gallons Per Minute) | | | | | | | |
|---|--------------------|-----------|----------------------|-----|-----|-----|-----|
| MEDIUM HEAD | | | | | | | |
| HP | Discharge Pressure | | Dynamic Suction Lift | | | | |
| | PSI | Feet Head | 5' | 10' | 15' | 20' | 25' |
| 1/3 | 10 | 23.1 | 32 | 27 | 18 | — | — |
| | 20 | 46.2 | — | — | — | — | — |
| 1/2 | 10 | 23.1 | 40 | 37 | 32 | 27 | 17 |
| | 20 | 46.2 | — | — | — | — | — |
| 3/4 | 10 | 23.1 | — | 50 | 46 | 42 | 32 |
| | 20 | 46.2 | 37 | 29 | 21 | — | — |
| 1 | 20 | 46.2 | 54 | 51 | 44 | 40 | 33 |
| | 30 | 69.3 | 33 | 28 | 18 | — | — |
| 1-1/2 | 20 | 46.2 | 71 | 69 | 62 | 57 | 51 |
| | 30 | 69.3 | 52 | 47 | 34 | 30 | 20 |
| 2 | 20 | 46.2 | 88 | 84 | 78 | 70 | 66 |
| | 30 | 69.3 | 67 | 60 | 50 | 45 | 40 |
| | 40 | 92.4 | 25 | 13 | — | — | — |
| 2-1/2 | 20 | 46.2 | 111 | 106 | 101 | 95 | 90 |
| | 30 | 69.3 | 90 | 83 | 77 | 70 | 60 |
| | 40 | 92.4 | 46 | 38 | 20 | — | — |

Tested and rated in accordance with Water Systems Council Standards.

NOTE: Pumps installed with a PRO-Source® tank require a 100 PSI relief valve. Pumps with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.



| DIMENSIONS (In Inches) | | | | | | | | | | | | | |
|------------------------|-----------|------------|-----------|-----------|---------|--------|---------|---------|-------|---------|--------|-------|----------|
| HIGH HEAD | | | | | | | | | | | | | |
| HP | NPT Suct. | NPT Disch. | A | | B | C | D | E | F | G | H | NPT J | K |
| | | | (1 Phase) | (3 Phase) | | | | | | | | | |
| 1/2 | 1-1/4 | 1 | 11-21/32 | 13-3/8 | 2-1/16 | 5-9/16 | 4-1/2 | 3-7/16 | 3-7/8 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 3/4 | 1-1/4 | 1 | 11-25/32 | 13-3/8 | 2-1/16 | 5-9/16 | 4-1/2 | 3-7/16 | 3-7/8 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1 | 1-1/4 | 1 | 12-25/32 | 13-7/8 | 2-1/16 | 5-9/16 | 4-1/2 | 3-7/16 | 3-7/8 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1-1/2 | 1-1/4 | 1 | 13-39/64 | 14-3/8 | 2-1/16 | 5-9/16 | 4-1/2 | 3-7/16 | 3-7/8 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 2 | 1-1/2 | 1-1/4 | 16-3/4 | 16-15/16 | 2-13/16 | 6-5/16 | 4-27/32 | 3-13/32 | 4-5/8 | 4 | 6-7/16 | 1/4 | 3/8 Dia. |
| 2-1/2 | 2 | 1-1/2 | 17-3/4 | 17-1/4 | 2-13/16 | 6-5/16 | 4-27/32 | 3-13/32 | 4-5/8 | 4 | 6-7/16 | 1/4 | 3/8 Dia. |
| MEDIUM HEAD | | | | | | | | | | | | | |
| 1/3 | 1-1/4 | 1 | 12-9/16 | 12-15/16 | 1-7/16 | 5-1/8 | 4-7/16 | 3-1/4 | 2-1/4 | 3-1/4 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1/2 | 1-1/4 | 1 | 11-7/32 | 12-15/16 | 1-7/16 | 5-1/8 | 4-7/16 | 3-1/4 | 2-1/4 | 3-1/4 | 5-5/8 | 1/4 | 3/8 Dia. |
| 3/4 | 1-1/4 | 1 | 11-31/32 | 12-15/16 | 1-7/16 | 5-1/8 | 4-7/16 | 3-1/4 | 2-1/4 | 3-1/4 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1 | 1-1/2 | 1-1/4 | 12-11/32 | 13-7/16 | 1-7/16 | 5-1/8 | 4-7/16 | 3-1/4 | 2-1/4 | 3-1/4 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1-1/2 | 1-1/2 | 1-1/4 | 13-25/32 | 14-9/16 | 2 | 5-3/4 | 4-13/16 | 3-1/2 | 4-1/4 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 2 | 1-1/2 | 1-1/4 | 16-3/16 | 16-3/8 | 2 | 5-3/4 | 4-13/16 | 3-1/2 | 4-1/4 | 3-15/16 | 6-7/16 | 1/4 | 3/8 Dia. |
| 2-1/2 | 2 | 1-1/2 | 17-3/16 | 16-11/16 | 2 | 5-3/4 | 4-13/16 | 3-1/2 | 4-1/4 | 3-15/16 | 6-7/16 | 1/4 | 3/8 Dia. |

