



CP/CB series

# General Purpose 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.

BERKELEY® is a registered trademark of Pentair Water. Noryl® is a registered trademark of General Electric Co.

In order to provide the best products possible, specifications are subject to change.



# General Purpose Centrifugal Pumps

## 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

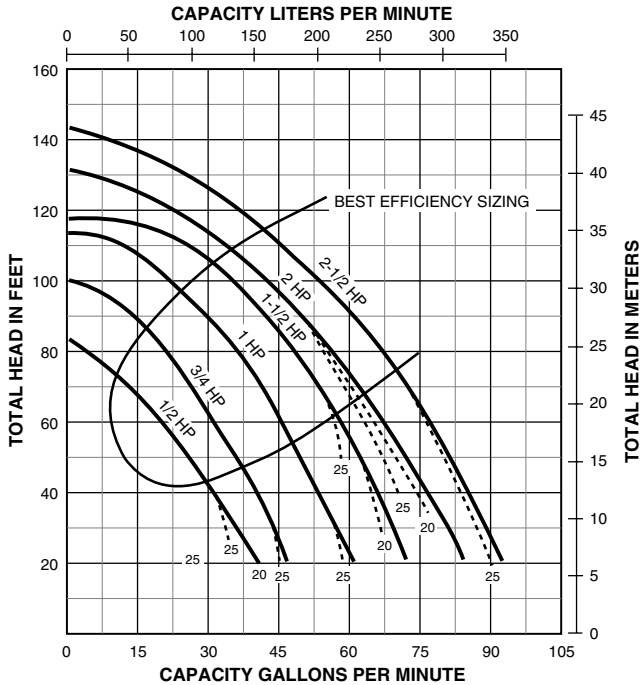
Noryl® Impeller		Silicon Bronze Impeller		HP	Pipe Tapping Sizes		Motor Voltage	Phase	Approx. Wt. Lbs.
Model Number	Catalog Number	Model Number	Catalog Number		Suct.	Disch.			
CP1MPS	S39489	-	-	1/3	1-1/4"	1"	115	1	39
CP1MPS	S39490	CB1MPS	S39503		1-1/4"	1"	115/230	1	39
CP1MPS	S39491	CB1MPS	S39504	1/2	1-1/4"	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



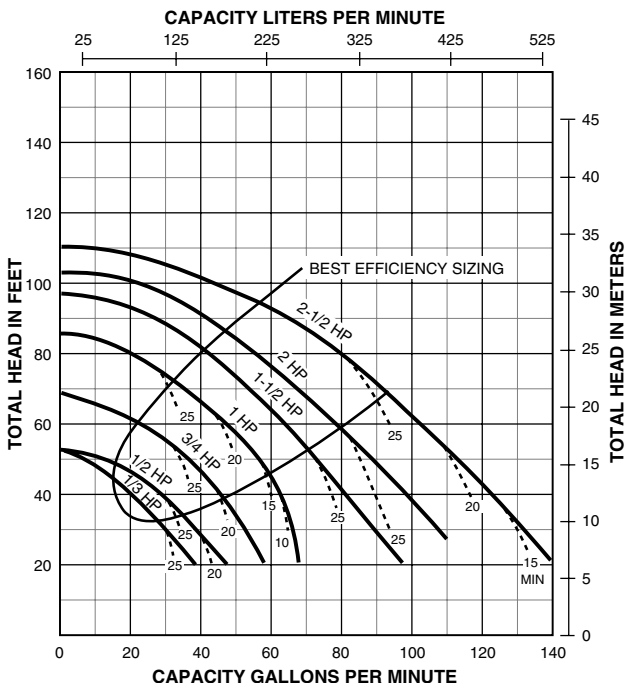
# General Purpose Centrifugal Pumps

## 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.

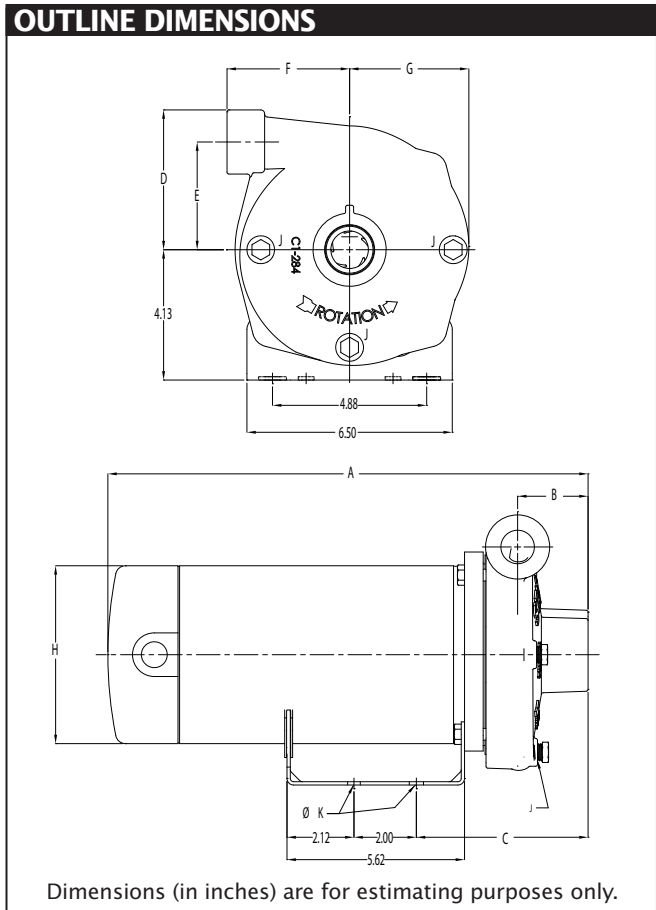


# General Purpose Centrifugal Pumps

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) are for estimating purposes only.

## 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.