

BC/BP-Series Centrifugal Pump



Designed for conveying low viscosity fluids in a broad range of applications such as dairy, food, beverage, wine, and brewing markets.

Certifications

- 3A approved
- Elastomers meet FDA 21CFR 177.2600 and 3A 18-03 Class I

Sizes

- 1-1/2" - 4" x 1-1/2" - 6" inlet

Features

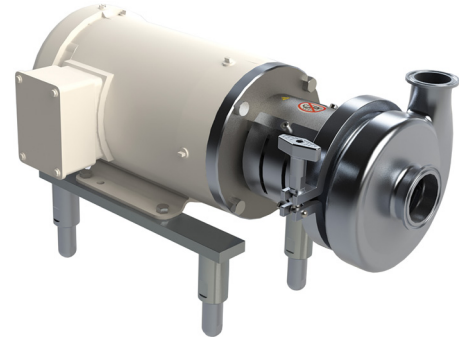
- Seal options: externally balanced 'D' seal, 'DG' seal with clamped in seat, or externally balanced 'F' flush seal
- Seal design
 - Robust single mechanical seal design with multiple material options
- Shaft design
 - BP sealed impeller with nut provides optimal hygienic performance while the split shaft compression collar improves shaft concentricity, reduces vibration, and improves seal life
 - BC design utilizes an impeller retainer; some BC models have a split shaft design available
- Drop-in replacement for other C-series pumps
- Wet end mounts to a standard NEMA C-face frame motor

Materials

- Product contact components: AISI 316L, FKM, silicone, EPDM, PTFE
- Non-product contact components: AISI 304
- Product contact seals: 316L, carbon, silicon carbide, tungsten carbide, and ceramic

Specifications

- Standard connection: clamp
- Minimum operating temperature: **32°F (0°C)**
- Maximum operating temperature: **212°F (100°C)**
- Viscosity range: 1-500 cP
- Surface Finish
 - Product contact metal components: ≤ 32 Ra
 - Non-product contact metal components: ≤ 63 Ra
- Seal type: single mechanical
- Performance characteristics
 - Nominal capacity: up to **1200 GPM**
 - Nominal speed: up to 3500 RPM - 60 Hz
- Motors and mounting
 - Motor frame size: NEMA C-face
 - Speeds: 1750 and 3450 RPM
 - Enclosure: TENV or TEFC, stainless steel or epoxy white washdown
- Cleaning method
 - CIP: clean-in-place



BC/BP-Series Centrifugal Pump - Part Number Key

BC/BP-Series Centrifugal Pump Part Number Key Example: BC114M101BAJA01		Series	Model	Connection	Seal Type	Impeller	Elastomer	Frame	Motor Type	Motor Electrical	HP RPM
		BC	114	M	1	01	B	A	J	A	01
Series	Code										
BC - impeller retainer	BC										
BP - threaded impeller nut	BP										
Model	Code										
1-1/2" inlet x 1-1/2" outlet	114										
2" inlet x 1-1/2" outlet	214										
2" inlet x 1-1/2" outlet	216										
2-1/2" inlet x 1-1/2" outlet	516										
2" inlet x 1-1/2" outlet	218										
3" inlet x 1-1/2" outlet	318										
3" inlet x 2" outlet	328										
4" inlet x 2" outlet	428										
4" inlet x 4" outlet ¹	441										
6" inlet x 4" outlet ¹	641										
Connection	Code										
Clamp (standard)	M										
Weld	B										
Seal Type	Code										
D type - carbon vs stainless steel	1										
DG C/SC - carbon vs silicon carbide	2										
DG C/CER - carbon vs ceramic	3										
DG C/TC - carbon vs tungsten carbide	4										
D type C/F - carbon vs stainless steel with cascade	5										
DG SC/SC - silicon carbide vs silicon carbide	6										
DG C/SC/F - carbon vs silicon carbide with cascade flush	7										
D type w/Wave Spring - carbon vs stainless steel	A										
DG C/SC w/Wave Spring - carbon vs silicon carbide	B										
D type C/F w/Wave Spring - carbon vs stainless steel with cascade	E										
Impeller	Code										
2-1/2"	01										
2-3/4"	02										
3"	03										
3-1/4"	04										
3-1/2"	05										
3-3/4"	06										
4"	07										
4-1/4"	08										
4-1/2"	09										
4-3/4"	10										
5"	11										
5-1/4"	12										
5-1/2"	13										

¹Only available as a BP with DG seal.

BC/BP-Series Centrifugal Pump - Part Number Key

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		BC	114	M	1	01	B	A	J	A	01
5-3/4"	14										
6"	15										
6-1/4"	16										
6-1/2"	17										
6-3/4"	18										
7"	19										
7-1/4"	20										
7-1/2"	21										
7-3/4"	22										
8"	23										
8-1/4"	70										
8-1/2"	71										
8-3/4"	72										
9"	73										
9-1/4"	74										
9-3/4"	76										
10"	77										
Elastomer	Code										
Nitrile rubber ²	B										
EPDM	E										
Silicone/EPDM	S										
FKM	V										
Frame	Code										
56C	A										
143/145TC	B										
182/184TC	C										
213/215TC	D										
254/256TC	E										
284/286TS (1.625" bore diameter)	F										
284/286TC (1.875" bore diameter)	H										
324/326TSC	G										
Stop here for fluid end.											
Motor Type	Code										
Baldor stainless steel wash down	J										
Baldor white wash down	Z										
Sterling stainless steel wash down	S										
Sterling painted wash down	W										
Baldor general purpose	M										
Baldor explosion proof CL1, DV1 GP D Class II GP F and G	E										
Brook Crompton CL1 DV 2 GP A, B, C, and D cast iron wash down	3										
Worldwide electric stainless steel wash down	4										
Baldor food safe stainless steel wash down	F										
WEG shark stainless steel wash down	G										
Baldor explosion proof CL1, DV 2, GP A, B, C, and D cast iron	H										

²BP models 441 and 641 nitrile rubber elastomer comes supplied with static FKM impeller nut O-ring seals (P25A).

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		BC	114	M	1	01	B	A	J	A	01
Motor Electrical	Code										
1PH, 60HZ, 115/230V	A	←									
3PH, 60HZ, 208-230/460V	B										
3PH, 60HZ, 575V	C										
3PH, 50HZ, 190/380V	D										
3PH, 50HZ, 380/460V	E										
3PH, 50HZ, 220/380/440V	F										
3PH, 50HZ, 220/380/415V	G										
HP RPM	Code										
0.33HP - 1750RPM	01	←									
0.50HP - 1750RPM	02										
0.75HP - 1750RPM	03										
1.0HP - 1750RPM	04										
1.5HP - 1750RPM	05										
2.0HP - 1750RPM	06										
3.0HP - 1750RPM	07										
5.0HP - 1750RPM	08										
7.5HP - 1750RPM	09										
10HP - 1750RPM	10										
15HP - 1750RPM	11										
20HP - 1750RPM	12										
25HP - 1750RPM	13										
30HP - 1750RPM	14										
40HP - 1750RPM	15										
50HP - 1750RPM	16										
60HP - 1750RPM	17										
0.33HP - 3500RPM	18										
0.50HP - 3500RPM	19										
0.75HP - 3500RPM	20										
1.0HP - 3500RPM	21										
1.5HP - 3500RPM	22										
2.0HP - 3500RPM	23										
3.0HP - 3500RPM	24										
5.0HP - 3500RPM	25										
7.5HP - 3500RPM	26										
10HP - 3500RPM	27										
15HP - 3500RPM	28										
20HP - 3500RPM	29										
25HP - 3500RPM	30										
30HP - 3500RPM	31										
40HP - 3500RPM	32										
50HP - 3500RPM	33										
60HP - 3500RPM	34										
2HP - 1200RPM	35										

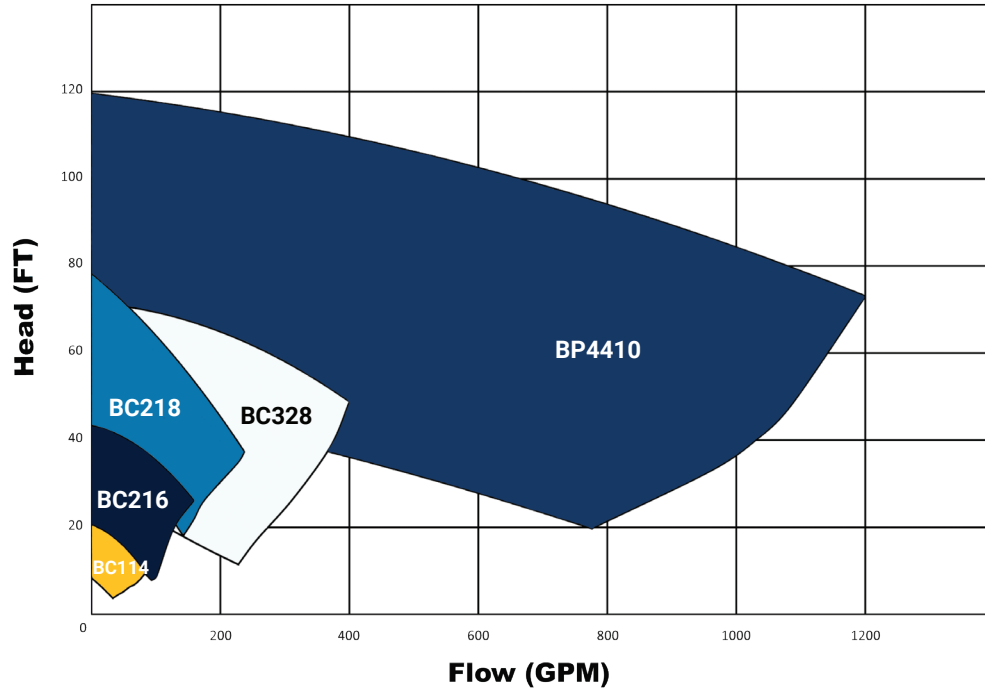
NOTE: BP models 114-428 are manufactured to 3A standards but do not carry a 3A certificate. BP model 441 and 641 do carry the 3A certificate.

Fluid end includes all parts required to assemble to your motor.

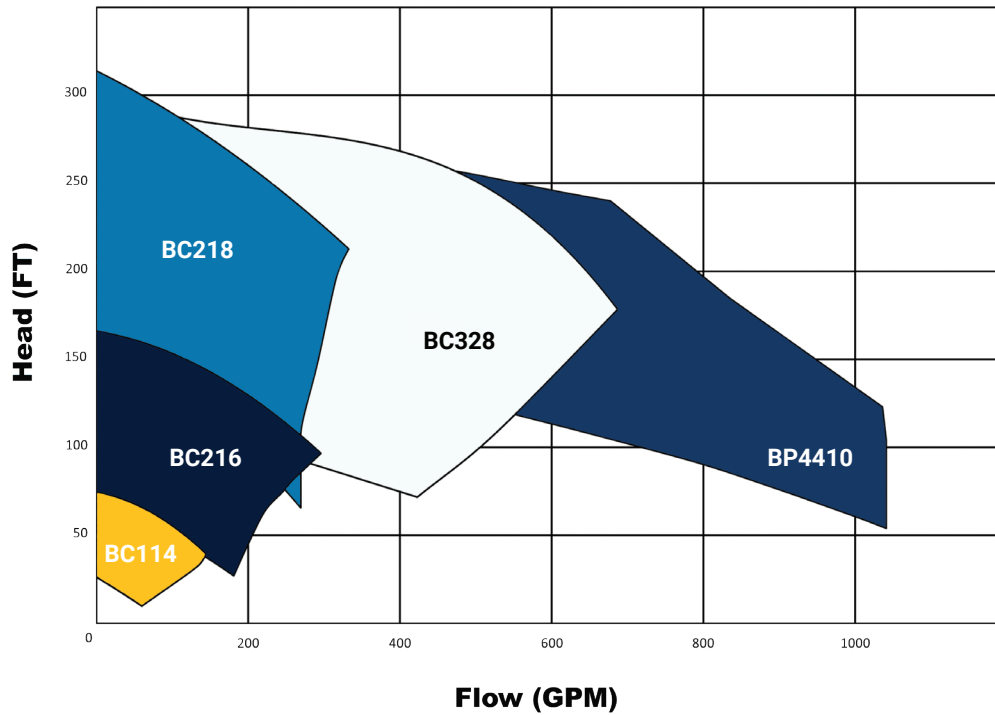
Specify adjustable leg kits at time of order. Leg kits will be shipped to match the frame size of motor as specified by model number. Leg kits will not be assembled. If there are options that are not listed above, please contact Dixon Sanitary at 800.789.1718 for availability and pricing.

BC/BP-Series Centrifugal Pump - Pump Curves

1750 RPM



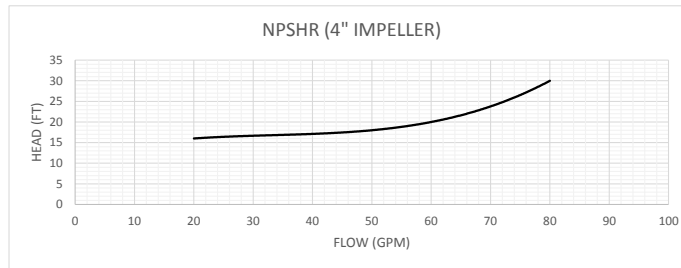
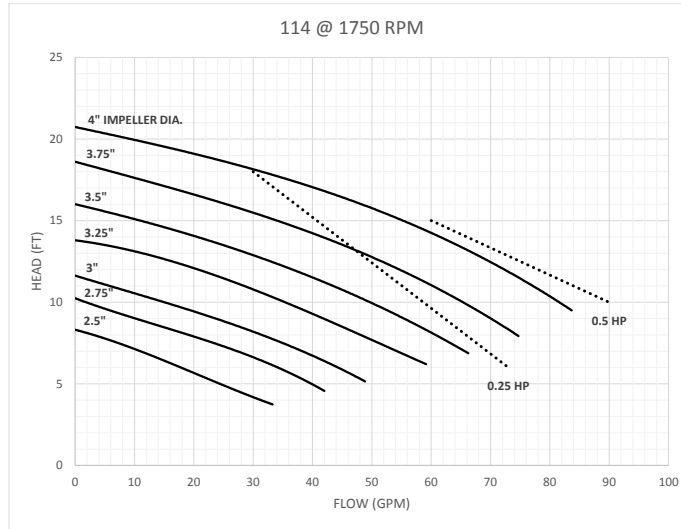
3500 RPM



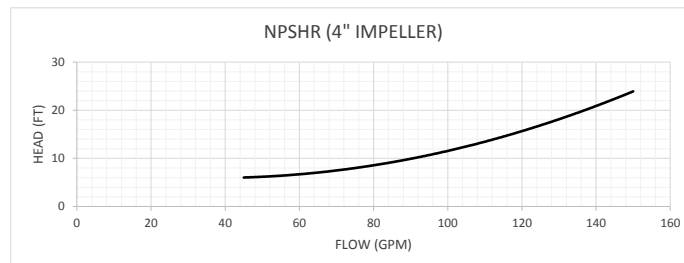
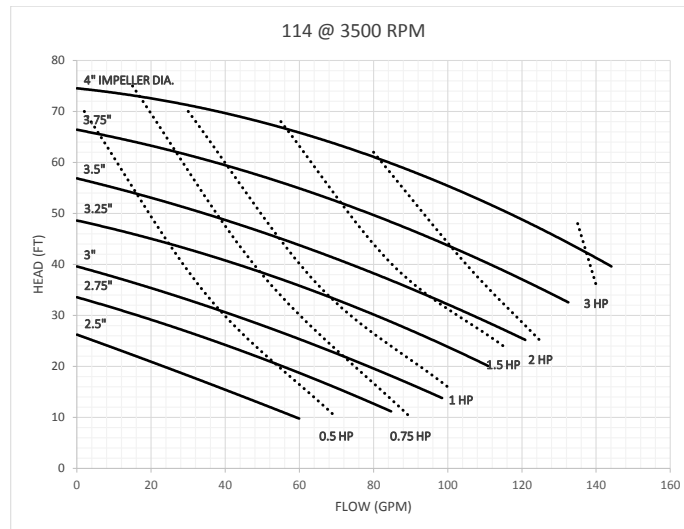
BC/BP-Series Centrifugal Pump - Pump Curves

BC/BP 114

Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 1750
 Size: 1-1/2" x 1-1/2" x 4"



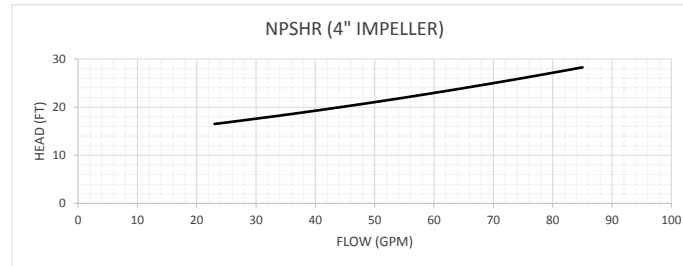
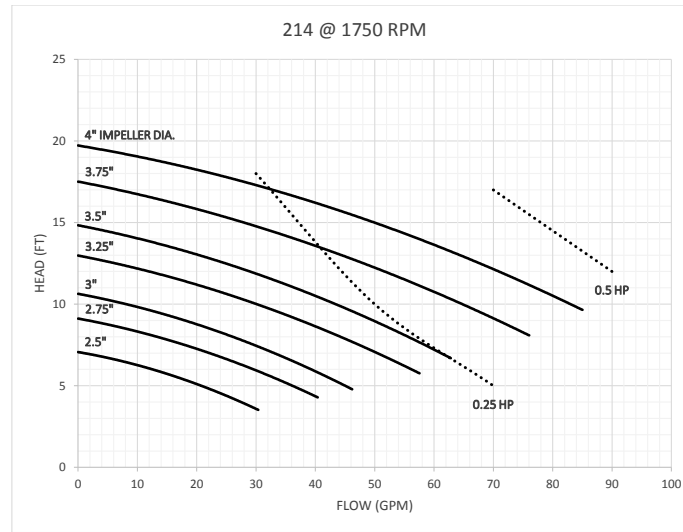
Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 3500
 Size: 1-1/2" x 1-1/2" x 4"



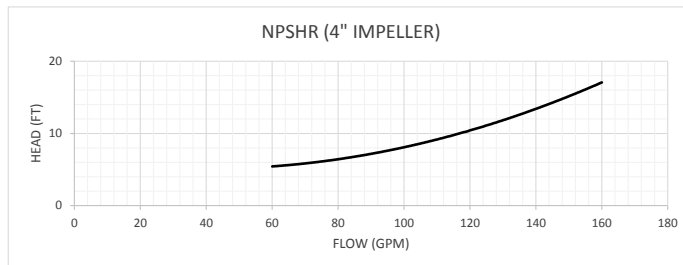
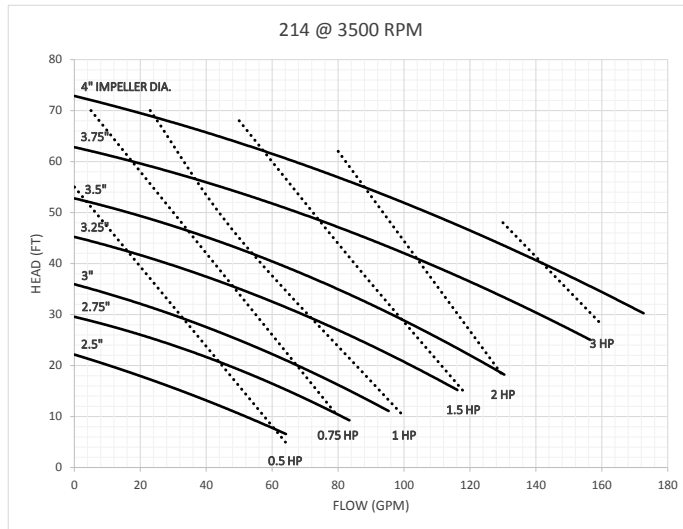
BC/BP-Series Centrifugal Pump - Pump Curves

BC/BP 214

Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 1750
 Size: 2" x 1-1/5" x 4"



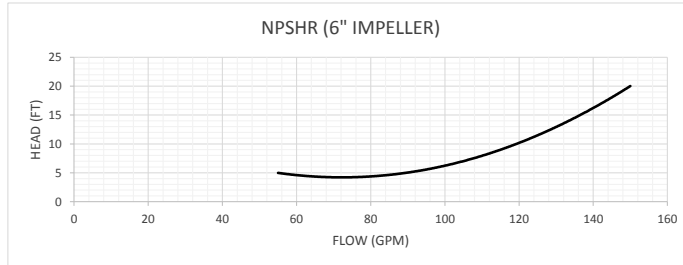
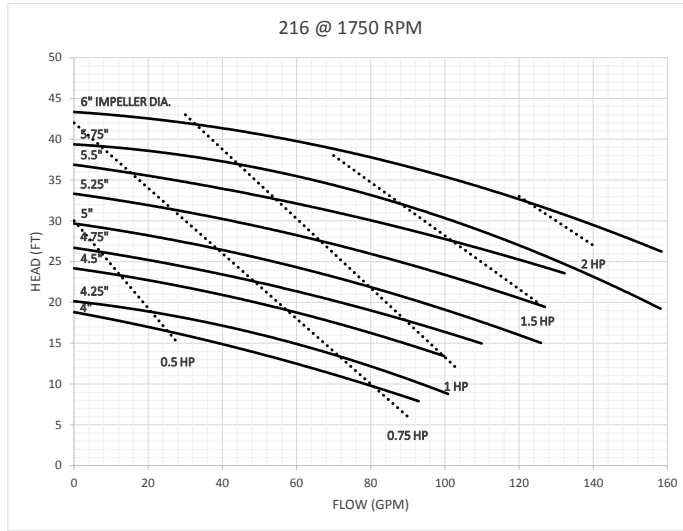
Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 3500
 Size: 2" x 1-1/2" x 4"



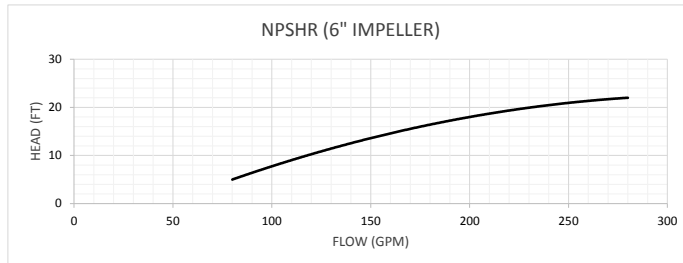
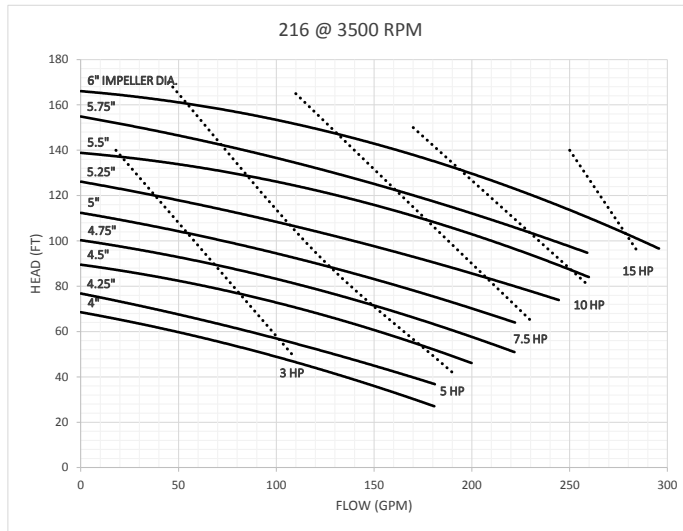
BC/BP-Series Centrifugal Pump - Pump Curves

BC/BP 216

Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 1750
 Size: 2" x 1-1/2" x 6"



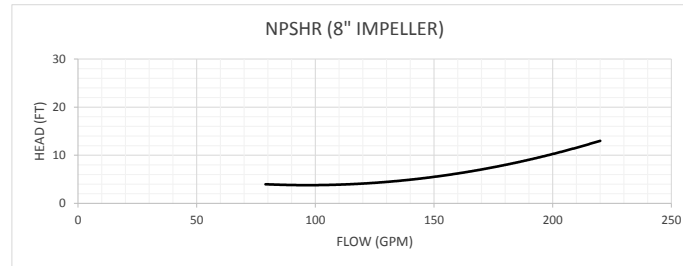
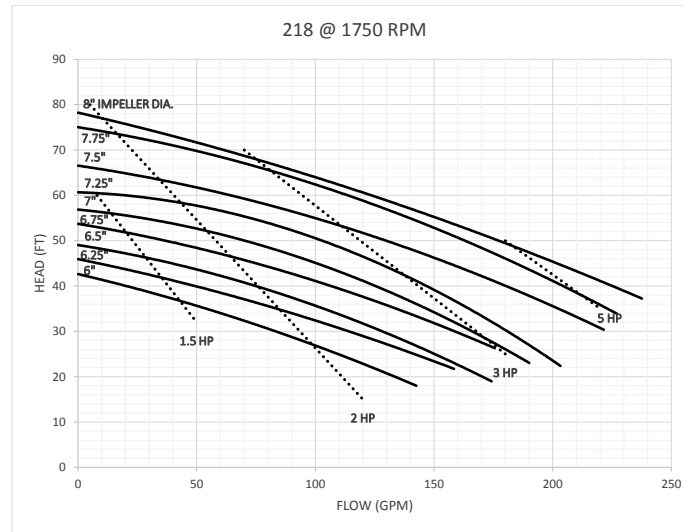
Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 3500
 Size: 2" x 1-1/2" x 6"



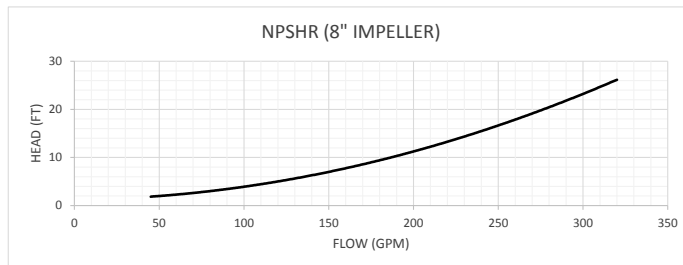
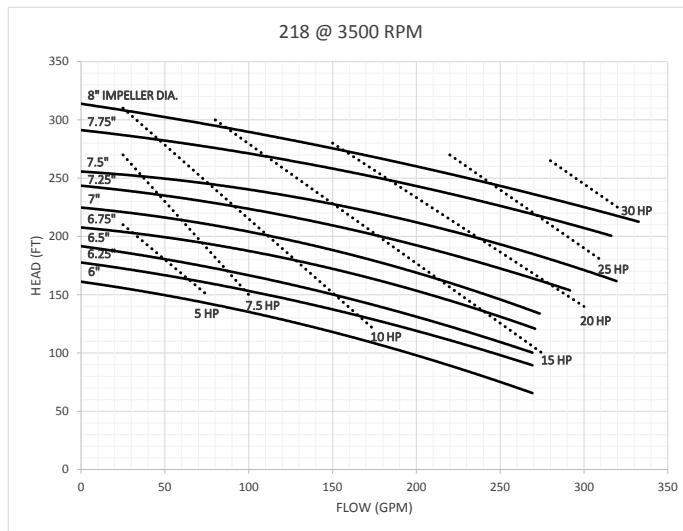
BC/BP-Series Centrifugal Pump - Pump Curves

BC/BP 218

Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 1750
 Size: 2" x 1" x 8"



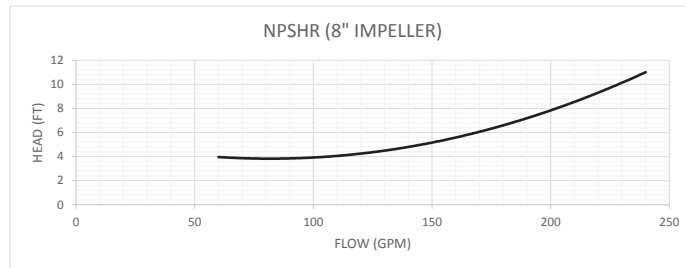
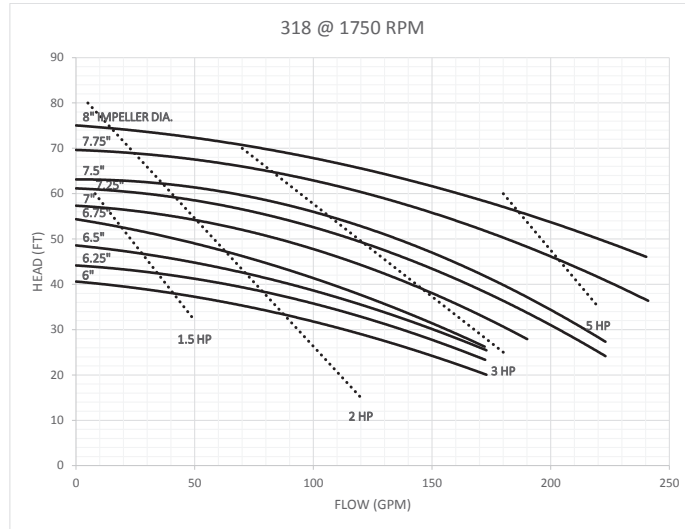
Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 3500
 Size: 2" x 1" x 8"



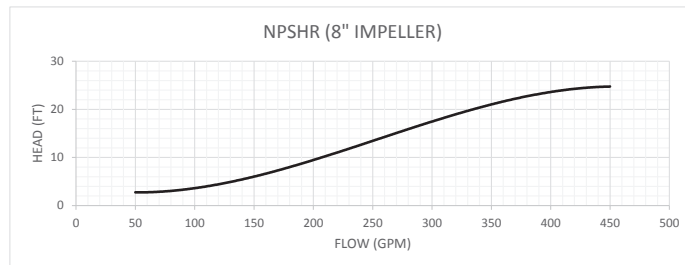
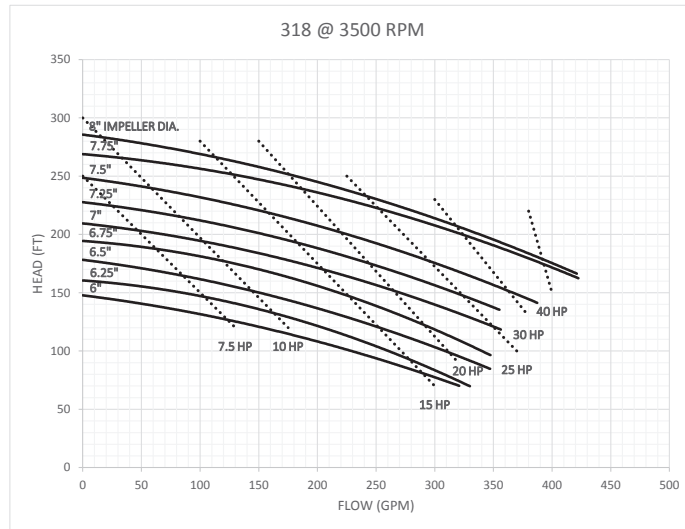
BC/BP-Series Centrifugal Pump - Pump Curves

BC/BP 318

Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 1750
 Size: 3" x 1-1/2" x 8"



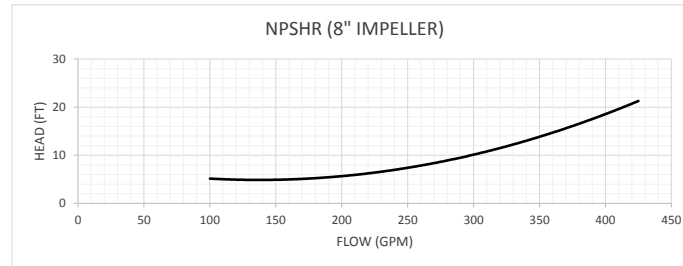
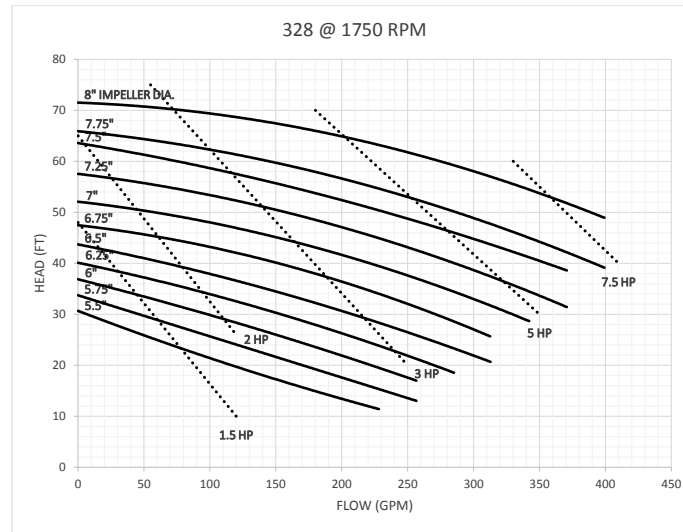
Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 3500
 Size: 3" x 1-1/2" x 8"



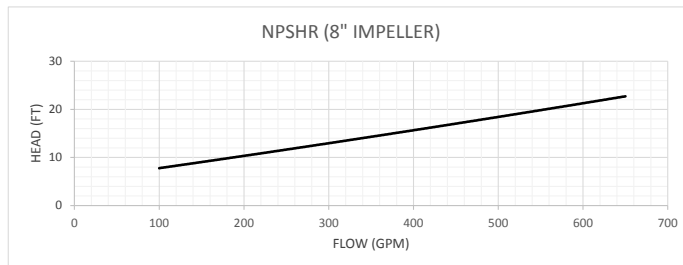
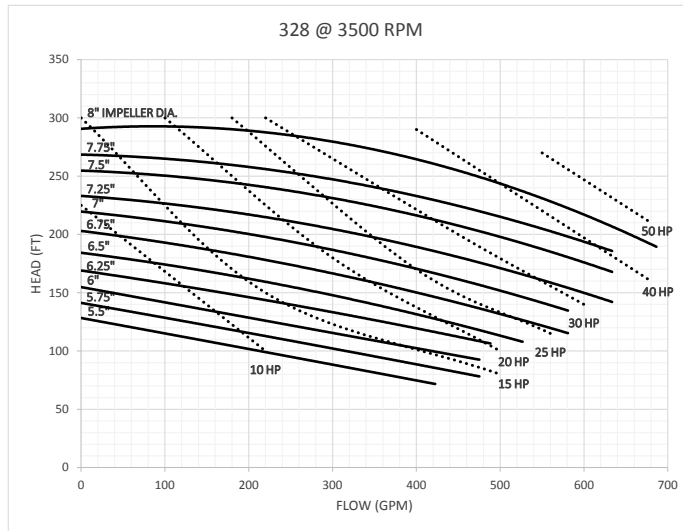
BC/BP-Series Centrifugal Pump - Pump Curves

BC/BP 328

Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 1750
 Size: 3" x 2" x 8"



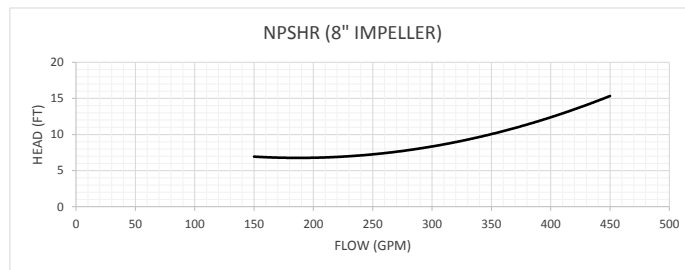
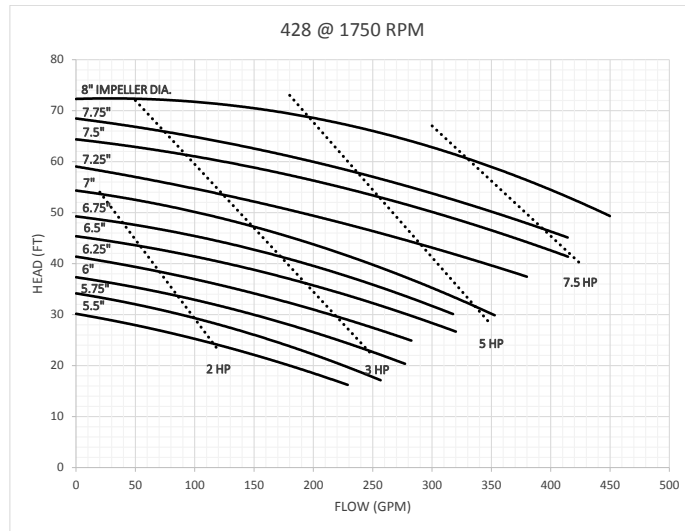
Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 3500
 Size: 3" x 2" x 8"



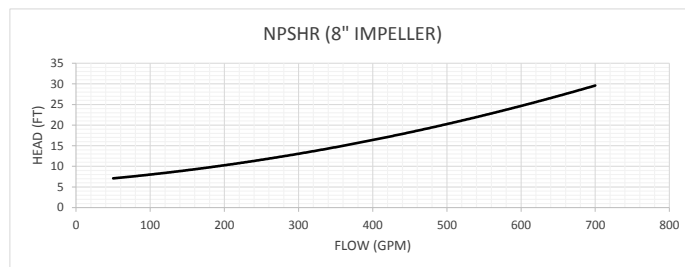
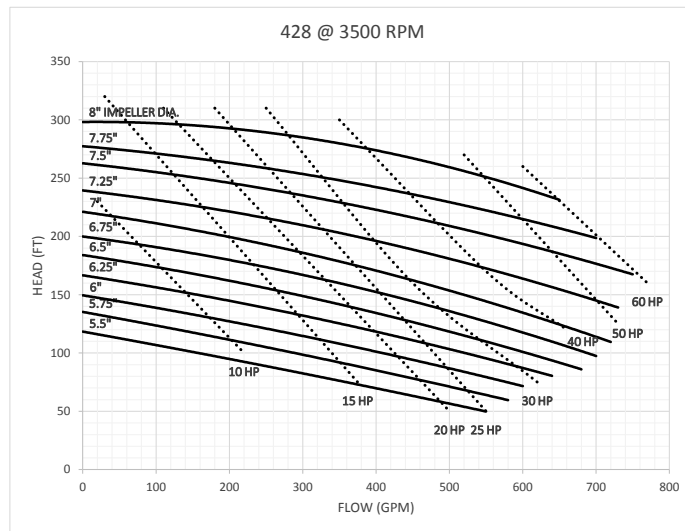
BC/BP-Series Centrifugal Pump - Pump Curves

BC/BP 428

Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 1750
 Size: 4" x 2" x 8"



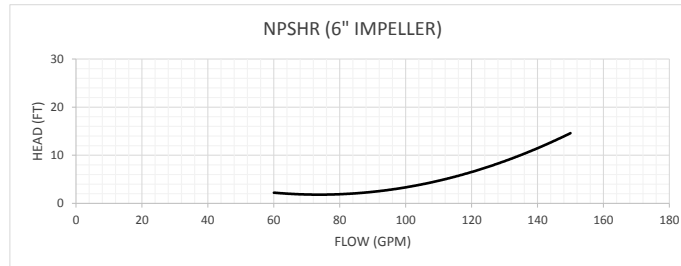
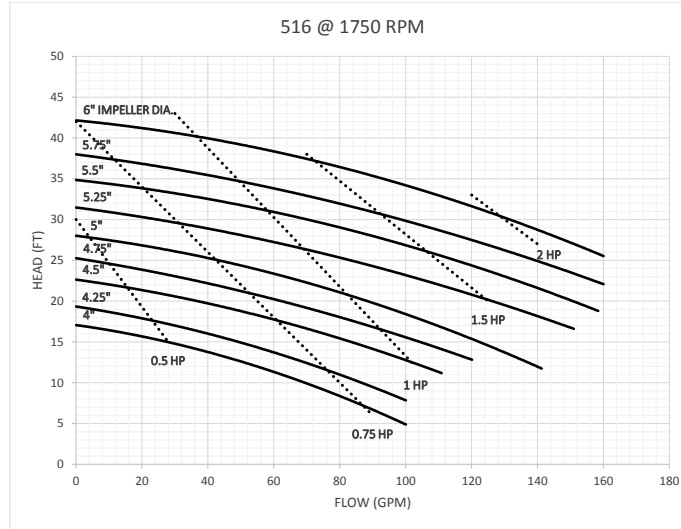
Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 3500
 Size: 4" x 2" x 8"



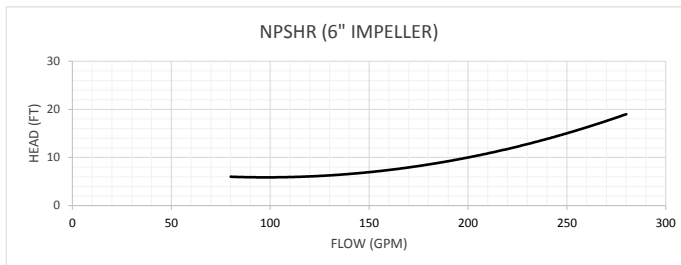
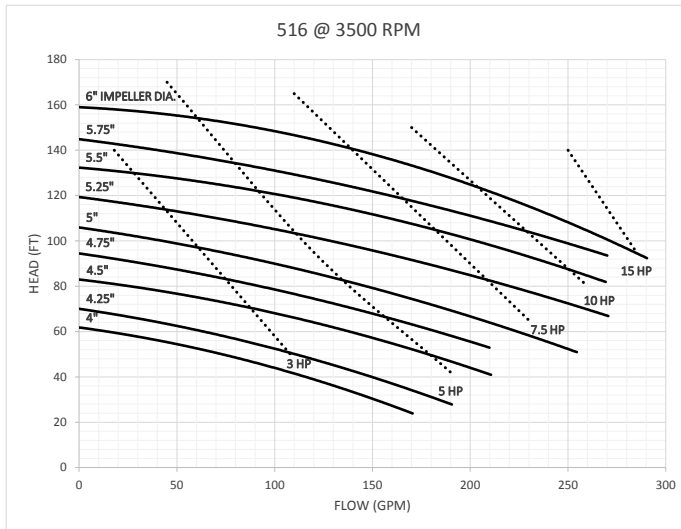
BC/BP-Series Centrifugal Pump - Pump Curves

BC/BP 516

Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 1750
 Size: 2-1/2" x 1-1/2" x 6"



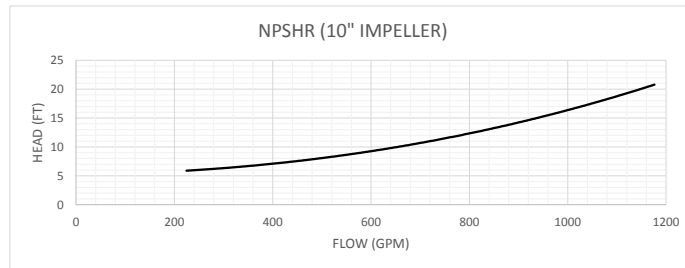
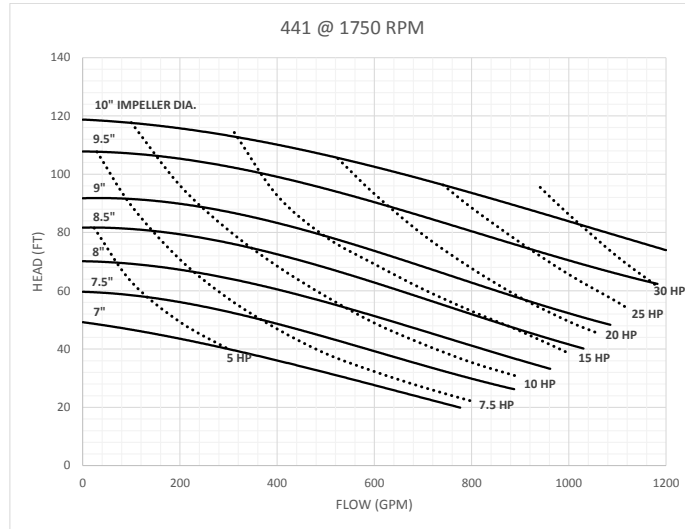
Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 3500
 Size: 2-1/2" x 1-1/2" x 6"



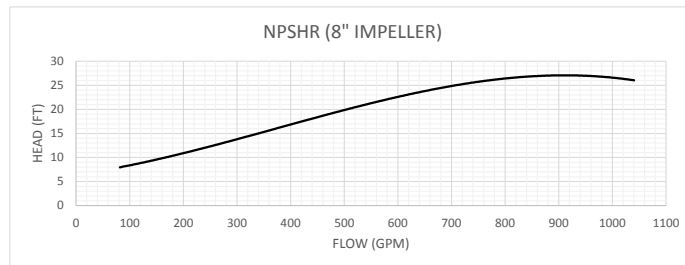
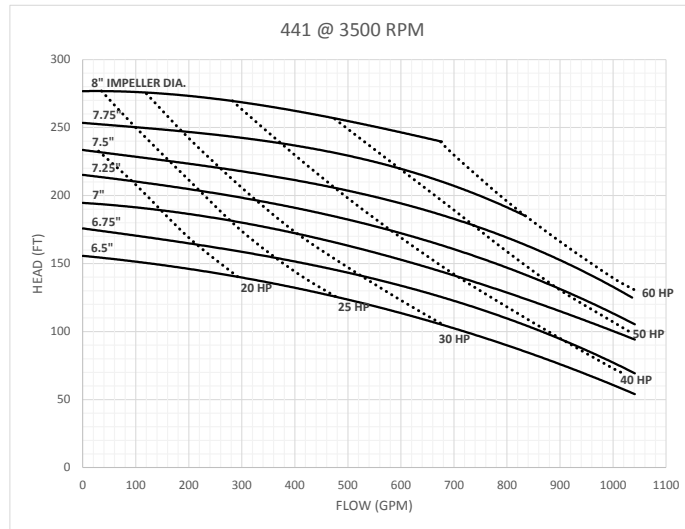
BC/BP-Series Centrifugal Pump - Pump Curves

BP 441

Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 1750
 Size: 4" x 4" x 8"



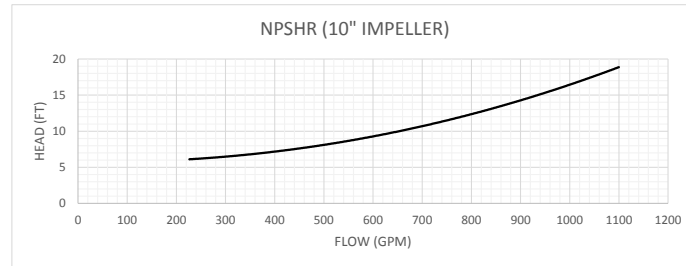
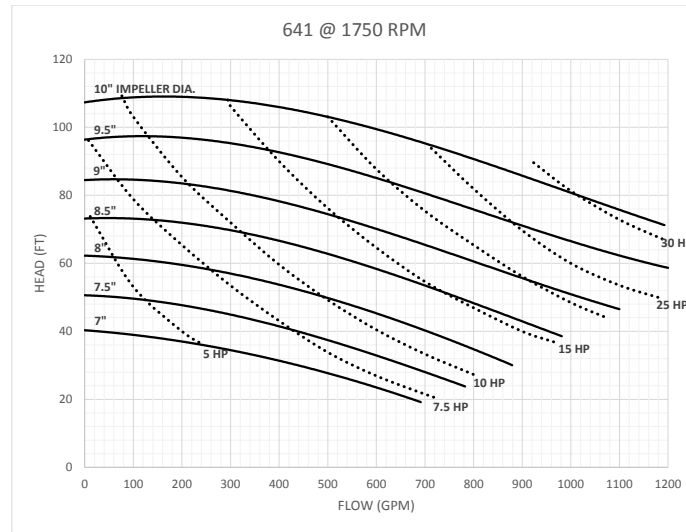
Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 3500
 Size: 4" x 4" x 8"



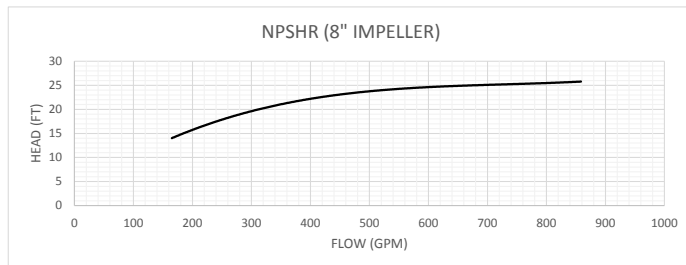
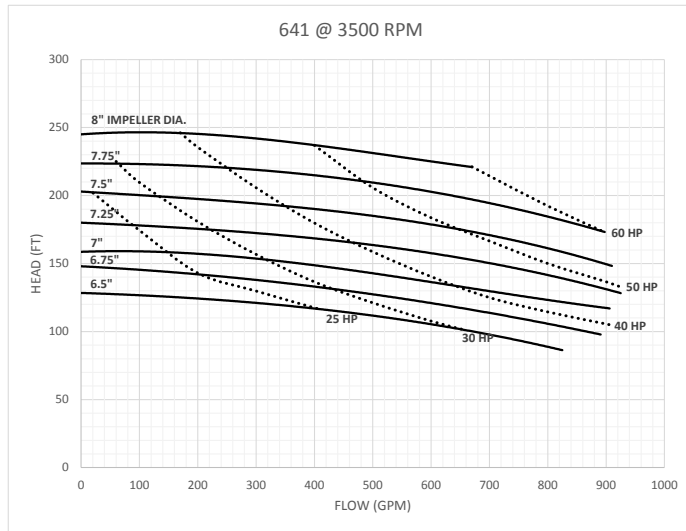
BC/BP-Series Centrifugal Pump - Pump Curves

BP 641

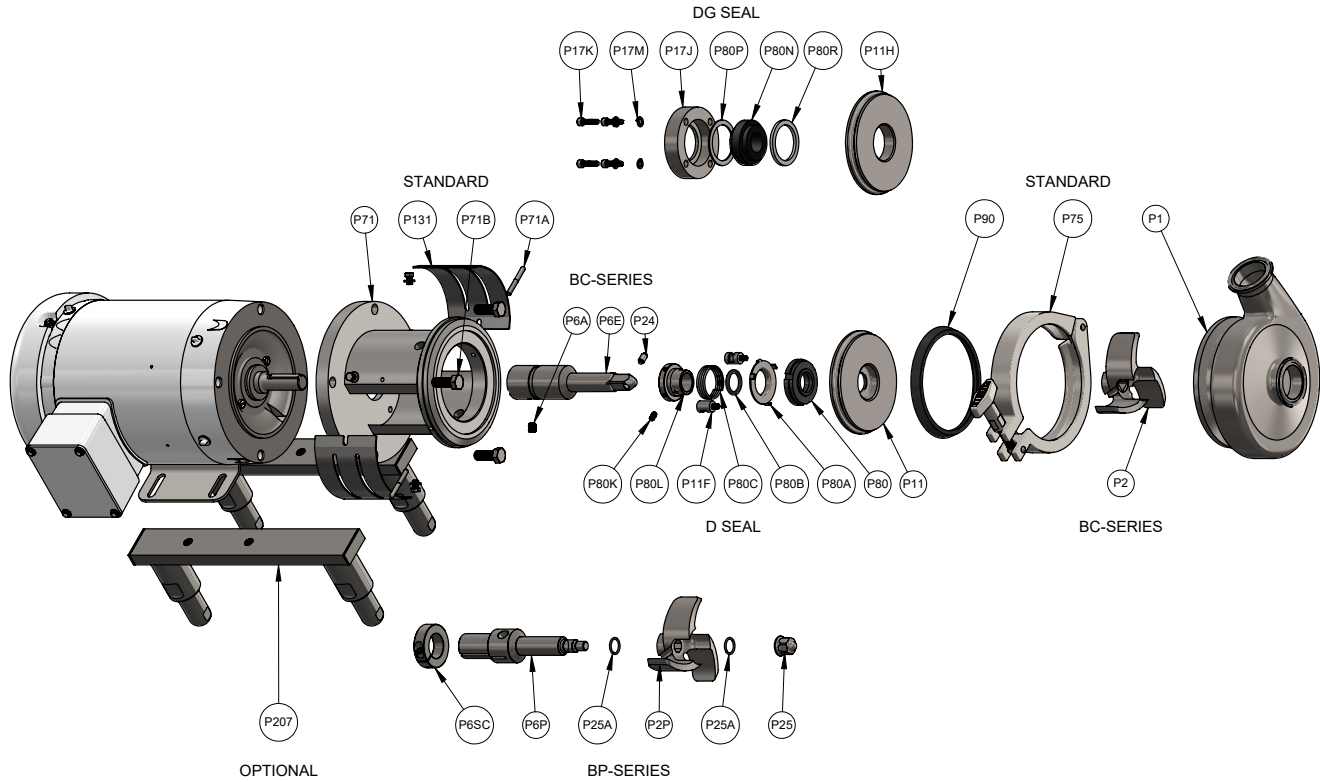
Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 1750
 Size: 6" x 4" x 10"



Based on H₂O at 70°F (21°C)
 Frequency: 60 HZ
 RPM: 3500
 Size: 6" x 4" x 10"



BC/BP-Series Centrifugal Pump - Bill of Materials



Item #	Description	Part #				
		BC114	BC216	BC218	BC328	BP441 ^{BP}
P1	casing	P1-114M	P1-216M	P1-218M	P1-328M	P1-441M
P1	enlarged inlet casing	P1-214M	P1-516M	P1-318M	P1-428M	P1-641M
P2	impeller ^{1,BC}	P2-114-400	P2-216-600	P2-218-800	P2-328-800	P2-441-1000
P2P	impeller ^{1,BP}	P2P-114-400	P2P-216-600	P2P-218-800	P2P-328-800	P2P-441-1000
P6A	stub shaft set screw	P6A-114SS	P6A-216BSS			P6A-441SS
P11	back plate ^D	P11-114DP	P11-216DP	P11-218BDP		-
P11F	back plate latch	P11F-114BPP		P11F-218BPP		P11F-441PP
P11H	back plate ^{DG}	P11H-114DGP	P11H-216DGP	P11H-218BDGP		P11H-441DGP
P17J	gland ring ^{DG}	P17J-114GR	P17J-216GR	P17J-218BGR		P17J-441GR
P17K	gland bolt ^{DG}	P17K-114BG	P217K-216BGB			P17K-441GB
P17M	washers ^{DG}	P17M-114GW	P17M-216BGW			P17M-441GW
P24	impeller retainer ^{BC}	P24-114R	P24-216R	P24-218BR		-
P25	threaded impeller nut ^{BP}	P25-114NUT-P	P25-216NUT-P	P25-218BNUT-P		P25-441NUT
P25A	nitrile rubber impeller O-ring ^{BP}	P25A-114NOB	P25A-216NOB	P25A-218BNOB		-
	EPDM impeller O-ring ^{BP}	P25A-114NOE	P25A-216NOE	P25A-218BNOE		P25A-441NOE
	FKM impeller O-ring ^{BP}	P25A-114NOV	P25A-216NOV	P25A-218BNOV		P25A-441NOV
P71A	adapter pins	P71A-114BAP				-
P75	clamp assembly	P75-114CA	P75-216CA	P75-218BCA		P75-441CA
P80	carbon seal	P80-114CS	P80-216CS	P80-218BCS		P80-441CS
P80	silicon carbide seal	P80-114SC	P80-216SC	P80-218BSC		P80-441SC
P80A	seal cup	P80A-114CP	P80A-216CP	P80A-218BCP		P80A-441CP
P80B	nitrile rubber seal O-ring	P80B-114SOB	P80B-216SOB	P80B-218BSOB		-
	EPDM seal O-ring	P80B-114SOE	P80B-216SOE	P80B-218BSOE		P80B-441SOE
	silicone seal O-ring	P80B-114SOS	P80B-216SOS	P80B-218BSOS		P80B-441SOS
	FKM seal O-ring	P80B-114SOV	P80B-216SOV	P80B-218BSOV		P80B-441SOV

BC/BP-Series Centrifugal Pump - Bill of Materials (cont.)

Item #	Description	Part #				
		BC114	BC216	BC218	BC328	BP441 ^{BP}
P80C	spring	P80C-114SG	P80C-216SG	P80C-218BSG		P80C-441SG
P80K	drive collar set screw	P80K-114DCS	P80K-216BDCS			P80K-441DCS
P80L	drive collar	P80L-114DC	P80L-216DC	P80L-218BDC		P80L-441DC
P80N	silicon carbide seat ^{DG}	P80N-114SC	P80N-216SC	P80N-218BSC		P80N-441SC
	ceramic seat ^{DG}	P80N-114CER	P80N-216CER	P80N-218BCER		-
	tungsten carbide seat ^{DG}	P80N-114TC	P80N-216TC	P80N-218BTC		-
P80P	outboard gasket ^{DG}	P80P-114OG	P80P-216OG	P80P-218BOG		P80P-441OG
P80R	inboard gasket ^{DG}	P80R-114IG	P80R-216IG	P80R-218BIG		P80R-441IG
P90	nitrile rubber casing gaskets	P90-114CGB	P90-216CGB	P90-218BCGB		-
	EPDM casing gaskets	P90-114CGE	P90-216CGE	P90-218BCGE		P90-441CGE
	silicone casing gaskets	P90-114CGS	P90-216CGS	P90-218BCGS		P90-441CGS
	FKM casing gasket	P90-114CGV	P90-216CGV	P90-218BCGV		P90-441CGV

¹Part number is for maximum sized impeller.

^DAvailable for D-seal type only.

^{DG}Available for DG-seal type only.

^{BC}Available for BC-series only.

^{BP}Available for BP-series only.

BC/BP-Series Centrifugal Pump - Bill of Materials - Variable Parts

BC/BP 114

Item #	Description	Part #		
		56C	140TC	180TC
P6E	stub shaft ^{BC}	P6E-114-56SH	P6E-114-14SH	P6E-114-18SH
P6P	stub shaft ^{BP}	P6P-114-56SH-P	P6P-114-14SH-P	P6P-114-18SH-P
P6SC	shaft collar ^{BP}	P6SC-56	P6SC-14	P6SC-18
P71	adapter	P71-114-56AN	P71-114-56AN	P71-114-18AN
P71B	adapter bolts	P71B-114B-56AB	P71B-114B-56AB	P71B-114B-18AB
P131	guard set	P131-114-56GAN	P131-114-56GAN	P131-114-18GAN

BC/BP 216

Item #	Description	Part #				
		56C	140TC	180TC	210TC	250TC
P6E	stub shaft ^{BC}	P6E-216-56SH	P6E-216-14SH	P6E-216-18SH	P6E-216-21SH	P6E-216-25SH
P6P	stub shaft ^{BP}	P6P-216-56SH-P	P6P-216-14SH-P	P6P-216-18SH-P	P6P-216-21SH-P	P6P-216-25SH-P
P6SC	shaft collar ^{BP}	P6SC-56	P6SC-14	P6SC-18	P6SC-21	P6SC-25
P71	adapter	P71-216-56AN	P71-216-56AN	P71-216-18AN	P71-216-21AN	P71-216-25AN
P71B	adapter bolts	P71B-114B-56AB	P71B-114B-56AB	P71B-114B-18AB	P71B-114B-18AB	P71B-114B-18AB
P131	guard set	P131-216-56GAN	P131-216-56GAN	P131-216-18GAN	P131-216-21GAN	P131-216-25GAN

BC/BP 218 BC/BP 328

Item #	Description	Part #				
		180TC	210TC	250TC	280TSC	320TSC
P6E	stub shaft ^{BC}	P6E-218B-18SH	P6E-218B-21SH	P6E-218B-25SH	P6E-218B-28SH	P6E-328-32SH
P6P	stub shaft ^{BP}	P6P-218B-18SH-P	P6P-218B-21SH-P	P6P-218B-25SH-P	P6P-218B-28SH-P	P6P-328-32SH-P
P6SC	shaft collar ^{BP}	P6SC-18	P6SC-21	P6SC-2528S	P6SC-2528S	P6SC-32
P71	adapter	P71-218B-18AN	P71-218B-21AN	P71-218B-25AN	P71-218B-28AN	P71-328-32AN
P71B	adapter bolts	P71B-114B-18AB	P71B-114B-18AB	P71B-114-18AB	P71B-114B-18AB	P71B-328-32AB
P131	guard set	P131-218B-18GAN	P131-218B-21GAN	P131-218B-25GAN	P131-218B-28GAN	P131-328-32GAN

BC/BP-Series Centrifugal Pump - Bill of Materials - Variable Parts

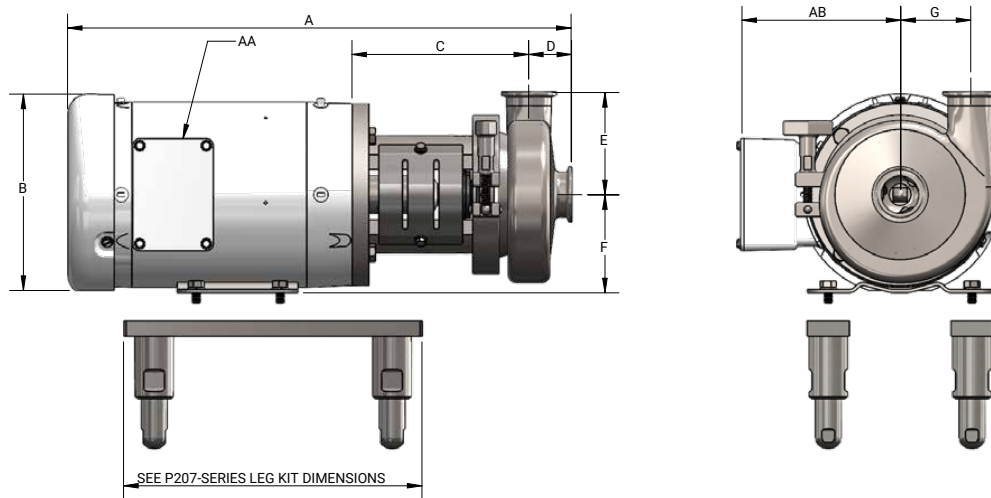
BP 441

Item #	Description	Part #			
		210TC	250TC	280TSC	320TSC
P6P	stub shaft ^{BP}	P6P-441-21SH	P6P-441-25SH	P6P-441-28SH	P6P-441-32TCSH
P71	adapter	P71-441B-21A	P71-441-25A	P71-441B-28A	P71B-441B-32A
P71B	adapter bolts	P71B-114B-18AB	P71B-114B-18AB	P71B-114B-18AB	P71B-441B-32AB
P131	guard set	P131-441-21GA	P131-441-25GA	P131-441-28GA	P131-441-32GA

^{BC}Available for BC-series only.

^{BP}Available for BP-series only.

BC/BP-Series Centrifugal Pump - Dimensions



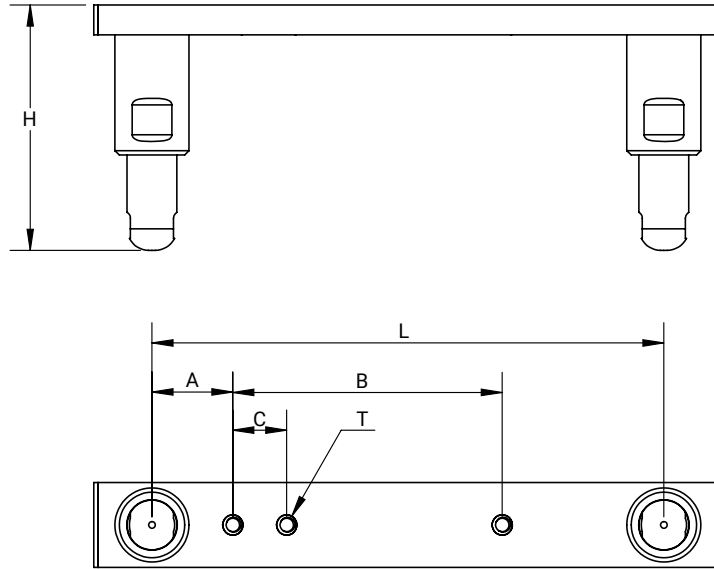
Pump Model	Frame Size	A (in)	AA (in) (conduit size)	AB (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)
BC/BP 114 BC/BP 214	56C	contact Dixon Sanitary for exact measurement ¹	0.50	5.00	6.63	6.22	1.63	3.63	3.50	2.63
	143/145TC		0.75	5.25					-	
	182/183TC		0.75	5.88	7.88	6.78			4.50	
BC/BP 216 BC/BP 516	56C		0.50	5.00	6.63	6.06	1.94	4.50	3.50	3.69
	143/145TC		0.75	5.25						
	182/183TC		0.75	5.88	7.88	6.69			4.50	
	213/215TC		1.00	7.38	9.56	7.81			5.25	
	254/256TC		1.00	9.63	12.94	8.50			6.25	
BC/BP 218 BC/BP 318 BC/BP 328 BC/BP 428	182/183TC		0.75	5.88	7.88	6.94	1.94 2.25 ²	5.50	4.50	4.75
	213/215TC		1.00	7.38	9.56	7.31			5.25	
	254/256TC	1.00	9.63	12.94	8.19	6.25				
	284/286TC	1.50	13.13	14.63	8.81	7.00				
	324/326TC	2.00	14.13	16.50	9.69	8.00				
BP 441 BP 641	213/215TC	1.00	7.38	9.56	10.52	3.25	7.35	5.25	7.60	
	254/256TC	1.00	9.63	12.94						
	284/286TC	1.50	13.13	14.63	11.16			7.00		
	324/326TC	2.00	14.13	16.50	10.53			8.00		

¹Dimensions dependent on motor selection.

²Dimension applies to BC/BP 328 and 428 only.

BC/BP-Series Centrifugal Pump - Dimensions

Leg Kit - Optional



Frame Size	Part #	A (in)	B (in)	C (in)	H (in)		L (in)	T
					min	max		
56C	P207-56LK-N	1.50	3.00	-	4.60	5.00	10.50	5/16"-18 UNC
	P207-56LK-N-60				6.75	7.50		
140TC	P207-14LK-N		5.00	1.00	4.60	5.00	11.50	
	P207-14LK-N-60				6.75	7.50		
180TC	P207-18LK-N		5.50	1.00	4.60	5.00	12.63	
	P207-18LK-N-60				6.75	7.50		
210TC	P207-21LK-N		7.00	1.50	4.60	5.00	15.88	
	P207-21LK-N-60				6.75	7.50		
250TC	P207-25LK-N		10.00	1.75	4.60	5.00	20.00	
	P207-25LK-N-60				6.75	7.50		
280TSC	P207-28LK-N		11.00	1.50	4.60	5.00	21.00	
	P207-28LK-N-60				6.75	7.50		
320TSC	P207-32LK-N	12.00	1.50	4.60	5.00	22.50		
	P207-32LK-N-60			6.75	7.50			

BC/BP-Series Centrifugal Pump - Friction Loss Chart

Capacity in U.S. GPM	O.D. Tube Size																	
	1" I.D. = 0.870"			1-1/2" I.D. = 1.370"			2" I.D. = 1.870"			2-1/2" I.D. = 2.370"			3" I.D. = 2.870			4" I.D. = 3.834"		
	Tube	Elbow	Tee	Tube	Elbow	Tee	Tube	Elbow	Tee	Tube	Elbow	Tee	Tube	Elbow	Tee	Tube	Elbow	Tee
5	.035	.025	.25															
10	.12	.06	.40	.02	.01	.15	.005	.015	.10									
15	.25	.10	.80	.04	.02	.25	.013	.02	.15									
20	.43	.22	1.5	.06	.03	.30	.02	.025	.20	.005	.02	.10	.003	.02	.06			
25	.66	.40	2.3	.08	.04	.40	.025	.03	.25	.006	.03	.15	.004	.03	.08			
30	.93	.70	3.3	.105	.55	.55	.035	.05	.30	.008	.05	.20	.005	.04	.10			
35	1.22	1.25	5.2	.135	.80	.80	.04	.06	.40	.011	.06	.25	.006	.05	.13			
40				.17	1.0	1.0	.05	.08	.50	.015	.07	.30	.007	.06	.15			
45				.21	1.3	1.3	.063	.10	.60	.02	.09	.35	.008	.065	.18			
50				.25	1.6	1.6	.073	.12	.70	.022	.10	.40	.01	.07	.20			
60				.34	2.2	2.2	.10	.18	.90	.03	.12	.45	.015	.08	.25			
80				.57	3.7	3.7	.16	.30	1.5	.05	.15	.55	.02	.10	.40			
100				.85	5.8	5.8	.23	.44	2.3	.075	.18	.60	.03	.11	.50	.008	.04	.10
120				1.18	9.1	9.1	.32	.64	3.3	.105	.21	1.0	.04	.13	.60	.01	.05	.15
140							.42	.85	4.5	.14	.23	1.25	.05	.16	.80	.013	.06	.20
160							.54	1.13	5.8	.17	.28	1.6	.07	.20	1.1	.015	.07	.25
180							.67	1.45	7.4	.205	.31	2.0	.08	.21	1.3	.02	.08	.30
200							.81	1.82	9.0	.245	.35	2.5	.10	.26	1.6	.025	.09	.40
220							.95	2.22	11.0	.29	.41	3.0	.12	.30	1.9	.028	.10	.50
240							1.10	2.63	13.5	.34	.48	3.7	.14	.33	2.2	.035	.11	.55
260										.39	.53	4.5	.165	.39	2.5	.04	.115	.60
280										.45	.61	5.3	.19	.42	2.8	.045	.12	.65
300										.515	.70	6.2	.22	.50	3.1	.05	.13	.70
350										.68	1.05	8.5	.28	.67	4.1	.07	.15	.90
400										.86	1.55	11.0	.38	.88	5.2	.085	.18	1.2
450										1.05	2.25	13.5	.44	1.1	6.6	.105	.20	1.5
500													.54	1.4	8.0	.13	.23	1.75
550													.64	1.7	9.5	.15	.27	2.1
600													.75	2.05	10.2	.175	.30	2.5
650													.87	2.41	13.0	.20	.34	2.8
700													.10	2.8	15.0	.23	.40	3.4
750																.26	.43	3.8
800																.30	.50	4.4

BC/BP-Series Centrifugal Pump - Viscosity Chart

N - Newtonian, T - Thixotropic, D - Dilatent

	Fluid	Specific Gravity	Viscosity CPS	Viscosity Type
Reference	Water	1.0	1.0	N
Adhesives	"box" adhesives	1+-	3,000	T
	PVA	1.3	100	T
	rubber and solvents	1.0	15,000	N
Bakery	batter	1.0	2,000	T
	butter (melted)	0.98	18 at 140°F	N
	egg (whole)	0.5	60 at 50°F	N
	emulsifier	-	20	T
	frosting	1.0	10,000	T
	lectithin	-	3,250 at 125°F	T
	77% sweetened condensed milk	1.3	10,000 at 77°F	N
	yeast slurry 15%	1.0	180	T
Beer/Wine	beer	1.0	1.1 at 40°F	N
	brewers concentrated yeast (80% solids)	-	16,000 at 40°F	T
	wort	-	-	-
	wine	1.0	-	-
Confectionery	caramel	1.2	400 at 140°F	-
	chocolate	1.1	17,000 at 120°F	T
	fudge (hot)	1.1	36,000	T
	toffee	1.2	87,000	T
Cosmetics/Soaps	face cream	-	10,000	T
	hair gel	1.4	5,000	T
	shampoo	-	5,000	T
	toothpaste	-	20,000	T
	hand cleaner	-	2,000	T
Dairy	cottage cheese	1.08	225	T
	cream	1.02	20 at 40°F	N
	milk	1.03	1.2 at 60°F	N
	process cheese	-	30,000 at 160°F	T
	yogurt	-	1,100	T
Detergents	detergent concentrate	-	10	N
Dyes and Inks	printers ink	1 to 1.38	10,000	T
	dye	1.1	10	N
	gum	-	5,000	T
Fats and Oils	corn oil	0.92	30	N
	lard	0.96	60 at 100°F	N
	linseed oil	0.93	30 at 100°F	N
	peanut oil	0.92	42 at 100°F	N
	soybean oil	0.95	36 at 100°F	N
	vegetable oil	0.92	3 at 300°F	N
Misc. Foods	black bean paste	-	10,000	T
	cream style corn	-	130 at 190°F	T
	ketchup	1.11	560 at 145°F	T
	pablum	-	4,500	T
	pear pulp	-	4,000 at 160°F	T
	mashed potato	1.0	20,000	T
	potato skins and caustic	-	20,000 at 100°F	T
	prune juice	1.0	60 at 120°F	T
	orange juice concentrate	1.1	5,000 at 38°F	T
	tapioca pudding	0.7	1,000 at 235°F	T
	mayonnaise	1.0	5,000 at 75°F	T
	33% tomato paste	1.14	7,000	T
honey	1.5	1,500 at 100°F	-	

BC/BP-Series Centrifugal Pump - Viscosity Chart

N - Newtonian, T - Thixotropic, D - Dilatent

	Fluid	Specific Gravity	Viscosity CPS	Viscosity Type
Meat Products	melted animal fat	0.9	43 at 100°F	N
	ground beef fats	0.9	11,000 at 60°F	T
	meat emulsion	1.0	22,000 at 40°F	T
	pet food	1.0	11,000 at 40°F	T
	pork fat slurry	1.0	650 at 40°F	T
Misc. Chemicals	glycols	1.1	35 at range	-
Paint	metallic auto paints	-	220	T
	solvents	0.8 to 0.9	0.5 to 10	N
	titanium dioxide slurry	-	10,000	T
	varnish	1.06	140 at 100°F	-
	turpentine	0.86	2 at 60°F	-
Paper and Textile	black liquor tar	-	2,000 at 300°F	-
	paper coating 35%	-	400	-
	sulfide 6%	-	1,600	-
	black liquor	1.3	1,100 at 122°F	-
	black liquor soap	-	7,000 at 122°F	-
Petroleum and Petroleum Products	asphalt (unblended)	1.3	500 to 2,500	-
	gasoline	0.7	0.8 at 60°F	N
	kerosene	0.8	3 at 68°F	N
	fuel oil #6	0.9	660 at 122°F	N
	auto lube oil SAE 40	0.9	200 at 100°F	N
	auto lube oil SAE 90	0.9	320 at 100°F	N
	propane	0.46	0.2 at 100°F	N
	tars	1.2	wide range	-
Pharmaceuticals	castor oil	0.96	350	N
	cough syrup	1.0	190	N
	"stomach" remedy slurries	-	1,500	T
	pill pastes	-	5,000 +-	T
Plastic Resins ¹	butadiene	0.94	0.17 at 40°F	-
	polyester resin (typ)	1.4	3,000	T
	PVA resin (typ)	1.3	65,000	-
Starches and Gums	corn starch Sol 22°B	1.18	32	T
	corn starch Sol 25°B	1.21	300	T
Sugars, Syrups, Molasses	corn syrup 41 Be	1.39	15,000 at 60°F	N
	corn syrup 45 Be	1.45	12,000 at 130°F	N
	glucose	1.42	10,000 at 100°F	-
	molasses A	1.42	280 to 5,000 at 100°F	-
	molasses B	1.43 to 1.48	1,400 to 13,000 at 100°F	-
	molasses C	1.46 to 1.49	2,600 to 5,000 at 100°F	-
	sugar syrups	-	-	-
	60 Brix	1.29	75 at 60°F	N
	68 Brix	1.34	360 at 60°F	N
76 Brix	1.39	4,000 at 60°F	N	
Water and Waste Treatment	clarified sewage sludge	1.1	2,000 range	-

¹Wide variety of plastics can be pumped, viscosity varies greatly.

BC/BP-Series Centrifugal Pump - Repair Kits

Repair Kit 1

Series	Model #	Elastomer				Items Included
		Nitrile Rubber	EPDM	Silicone	FKM	
BC	114	PRK1-114B	PRK1-114E	PRK1-114S	PRK1-114V	(1) casing gasket (P90)
	216	PRK1-216B	PRK1-216E	PRK1-216S	PRK1-216V	(1) carbon seal (P80)
	218/328	PRK1-218BB	PRK1-218BE	PRK1-218BS	PRK1-218BV	(1) seal O-ring (P80B) (1) impeller retainer (P24)
BP	114	PRK1-114BP	PRK1-114EP	PRK1-114SP	PRK1-114VP	(1) casing gasket (P90)
	216	PRK1-216BP	PRK1-216EP	PRK1-216SP	PRK1-216VP	(1) carbon seal (P80)
	218/328	PRK1-218BBP	PRK1-218BEP	PRK1-218BSP	PRK1-218BVP	(1) seal O-ring (P80B)
	441	PRK1-441B	PRK1-441E	-	PRK1-441V	(2) impeller O-rings (P25A)

Repair Kit 2

Series	Model #	Elastomer				Items Included
		Nitrile Rubber	EPDM	Silicone	FKM	
BC/BP	114	PRK2-114B	PRK2-114E	PRK2-114S	PRK2-114V	(3) casing gaskets (P90) (3) seal O-rings (P80B) (3) carbon seals (P90)
	216	PRK2-216B	PRK2-216E	PRK2-216S	PRK2-216V	
	218/328	PRK2-218BB	PRK2-218BE	PRK2-218BS	PRK2-218BV	
	441	PRK2-441B	PRK2-441E	-	PRK2-441V	

Repair Kit 3

Series	Model #	Elastomer				Items Included
		Nitrile Rubber	EPDM	Silicone	FKM	
BC/BP	114	PRK3-114B	PRK3-114E	PRK3-114S	PRK3-114V	(1) carbon seal (P80)
	216	PRK3-216B	PRK3-216E	PRK3-216S	PRK3-216V	(1) seal cup (P80A)
	218/328	PRK3-218BB	PRK3-218BE	PRK3-218BS	PRK3-218BV	(1) seal O-ring (P80B)
	441	PRK3-441B	PRK3-441E	-	PRK3-441V	(1) spring (P80C)

Repair Kit 4

Series	Model #	Elastomer				Items Included
		Nitrile Rubber	EPDM	Silicone	FKM	
BC	114	PRK4-114B	PRK4-114E	PRK4-114S	PRK4-114V	(1) casing gasket (P90)
	216	PRK4-216B	PRK4-216E	PRK4-216S	PRK4-216V	(1) carbon seal (P80)
	218/328	PRK4-218BB	PRK4-218BE	PRK4-218BS	PRK4-218BV	(1) seal cup (P80A) (1) seal O-ring (P80B) (1) spring (P80C) (1) impeller retainer (P24)
BP	114	PRK4-114BP	PRK4-114EP	PRK4-114SP	PRK4-114VP	(1) casing gasket (P90)
	216	PRK4-216BP	PRK4-216EP	PRK4-216SP	PRK4-216VP	(1) carbon seal (P80)
	218/328	PRK4-218BBP	PRK4-218BEP	PRK4-218BSP	PRK4-218BVP	(1) seal cup (P80A) (1) seal O-ring (P80B)
	441	PRK4-441B	PRK4-441E	-	PRK4-441V	(1) spring (P80C) (2) impeller O-rings (P25A)

BC/BP-Series Centrifugal Pump - Repair Kits

DG Repair Kit

Series	Model #	Elastomer	Seal Seat Material			Items Included
			Ceramic	Silicon Carbide	Tungston Carbide	
BC	114	nitrile rubber	PRKDG-114BCER	PRKDG-114BSC	PRKDG-114BTC	(1) seal seat (P80N) (1) carbon seal (P80) (1) seal cup (P80A) (1) seal O-ring (P80B) (1) spring (P80C) (1) outboard gasket (P80P) (1) inboard gasket (P80R) (1) casing gasket (P90) (1) impeller retainer (P24)
		EPDM	PRKDG-114ECER	PRKDG-114ESC	PRKDG-114ETC	
		silicone	PRKDG-114SCER	PRKDG-114SSC	PRKDG-114STC	
		FKM	PRKDG-114VCER	PRKDG-114VSC	PRKDG-114VTC	
	216	nitrile rubber	PRKDG-216BCER	PRKDG-216BSC	PRKDG-216BTC	
		EPDM	PRKDG-216ECER	PRKDG-216ESC	PRKDG-216ETC	
		silicone	PRKDG-216SCER	PRKDG-216SSC	PRKDG-216STC	
		FKM	PRKDG-216VCER	PRKDG-216VSC	PRKDG-216VTC	
	218/328	nitrile rubber	PRKDG-218BBCER	PRKDG-218BBSC	PRKDG-218BBTC	
		EPDM	PRKDG-218BECER	PRKDG-218BESC	PRKDG-218BETC	
		silicone	PRKDG-218BSCER	PRKDG-218BSSC	PRKDG-218BSTC	
		FKM	PRKDG-218BVCER	PRKDG-218BVSC	PRKDG-218BVTC	
BP	114	nitrile rubber	PRKDG-114BCERP	PRKDG-114BSCP	PRKDG-114BTCP	(1) seal seat (P80N) (1) carbon seal (P80) (1) seal cup (P80A) (1) seal O-ring (P80B) (1) spring (P80C) (1) outboard gasket (P80P) (1) inboard gasket (P80R) (1) casing gasket (P90) (2) impeller O-rings (P25A)
		EPDM	PRKDG-114ECERP	PRKDG-114ESCP	PRKDG-114ETCP	
		silicone	PRKDG-114SCERP	PRKDG-114SSCP	PRKDG-114STCP	
		FKM	PRKDG-114VCERP	PRKDG-114VSCP	PRKDG-114VTCP	
	216	nitrile rubber	PRKDG-216BCERP	PRKDG-216BSCP	PRKDG-216BTCP	
		EPDM	PRKDG-216ECERP	PRKDG-216ESCP	PRKDG-216ETCP	
		silicone	PRKDG-216SCERP	PRKDG-216SSCP	PRKDG-216STCP	
		FKM	PRKDG-216VCERP	PRKDG-216VSCP	PRKDG-216VTCP	
	218/328	nitrile rubber	PRKDG-218BBCERP	PRKDG-218BBSCP	PRKDG-218BBTCP	
		EPDM	PRKDG-218BECERP	PRKDG-218BESCP	PRKDG-218BETCP	
		silicone	PRKDG-218BSCERP	PRKDG-218BSSCP	PRKDG-218BSTCP	
		FKM	PRKDG-218BVCERP	PRKDG-218BVSCP	PRKDG-218BVTCP	
	441	nitrile rubber	PRKDG-441BCER	PRKDG-441BSC	PRKDG-441BTC	
		EPDM	PRKDG-441ECER	PRKDG-441ESC	PRKDG-441ETC	
		FKM	PRKDG-441VCER	PRKDG-441VSC	PRKDG-441VTC	

DG Seal Conversion Kit

Series	Model #	Seal Seat Material			Items Included
		Ceramic	Silicon Carbide	Tungston Carbide	
BC/BP	114	PCK-114DGCER	PCK-114DGSC	PCK-114DGTC	(1) DG backplate (P11H) (1) gland ring (P17J) (4) gland bolts (P17K) (1) seal seat (P80N) (1) outboard gasket (P80P) (1) inboard gasket (P80R)
	216	PCK-216DGCER	PCK-216DGSC	PCK-216DGTC	
	218/328	PCK-218BDGCER	PCK-218BDGSC	PCK-218BDGTC	

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