



Customer Service
800.789.1718

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

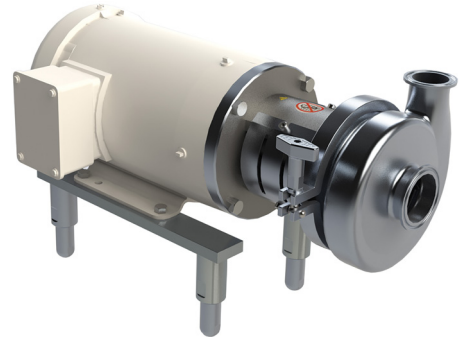
- Seal options: externally balanced 'D' seal, 'DG' seal with clamped in seat, or externally balanced 'F' flush seal
- Seal design
 - Robust single mechanical seal design with multiple material options
- Shaft design
 - BP sealed impeller with nut provides optimal hygienic performance while the split 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	114	M	1	01	B	A	J	A	01
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.

¹Only available as a BP with DG seal.

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
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										

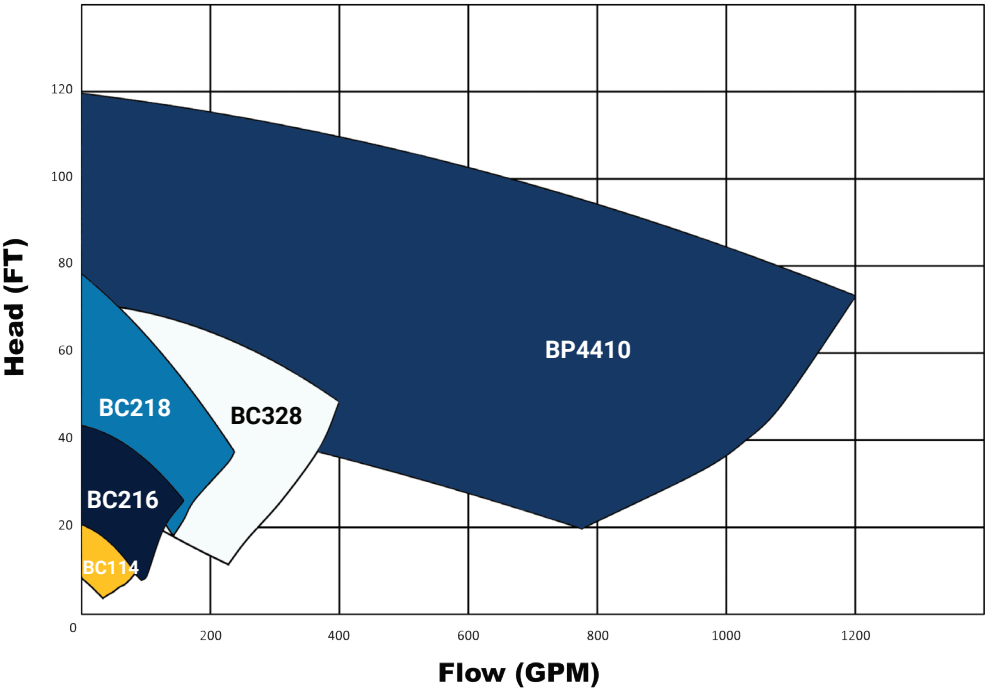
NOTE: BP models 114-428 are manufactured to 3A standards but do not carry a 3A certificate. BP model 441 and 641 do carry the 3A certificate.

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

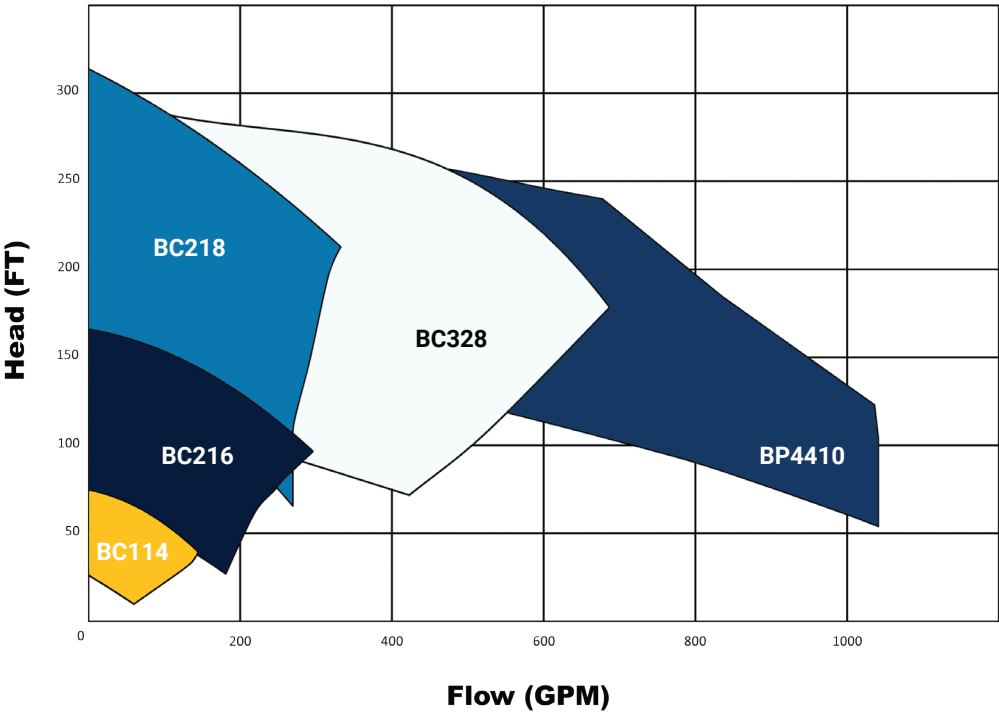
Specify adjustable leg kits at time of order. Leg kits will be shipped to match the frame size of motor as specified by model number. Leg kits will not be assembled. If there are options that are not listed above, please contact Dixon Sanitary at 800.789.1718 for availability and pricing.

BC/BP-Series Centrifugal Pump - Pump Curves

1750 RPM



3500 RPM



BC/BP-Series Centrifugal Pump - Pump Curves

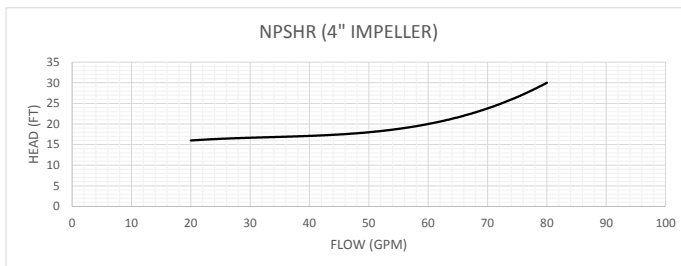
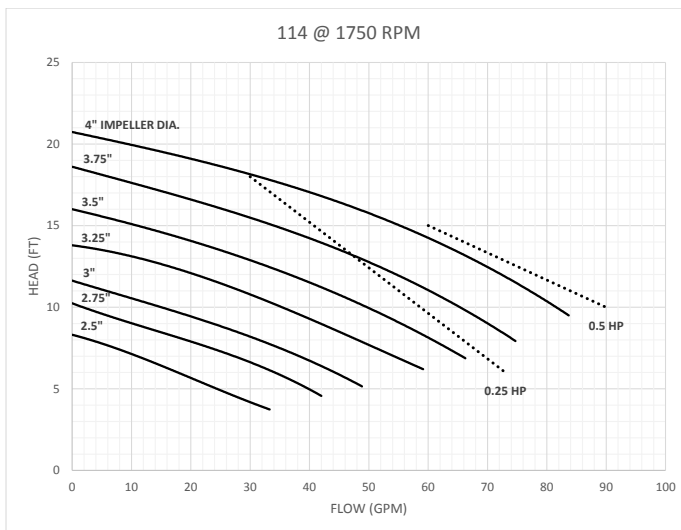
BC/BP 114

Based on H₂O at 70°F (21°C)

Frequency: 60 HZ

RPM: 1750

Size: 1-1/2" x 1-1/2" x 4"

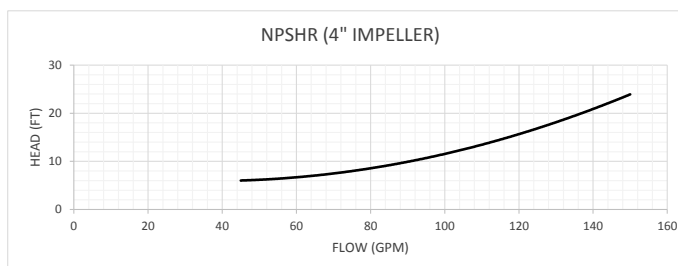
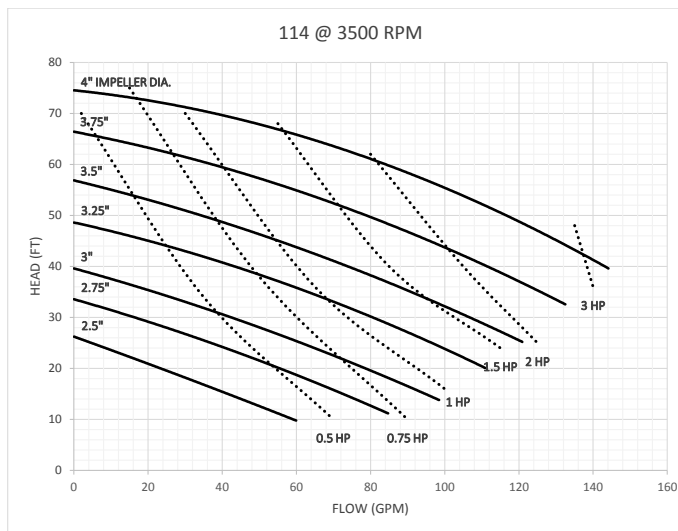


Based on H₂O at 70°F (21°C)

Frequency: 60 HZ

RPM: 3500

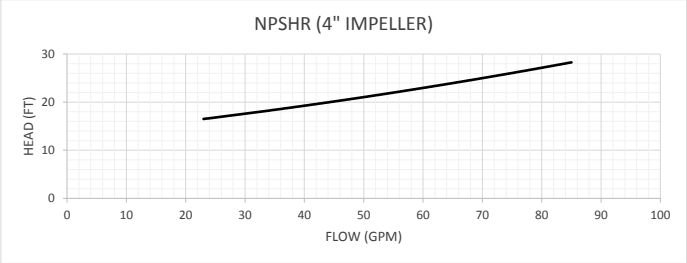
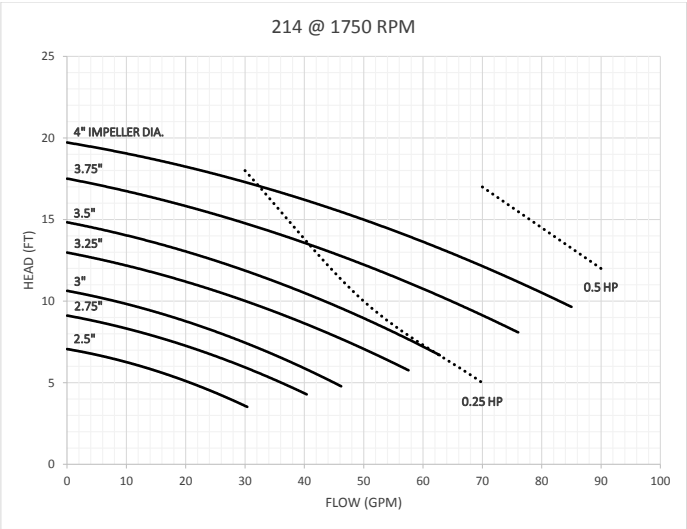
Size: 1-1/2" x 1-1/2" x 4"



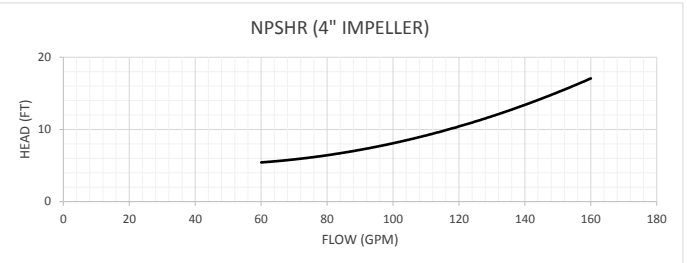
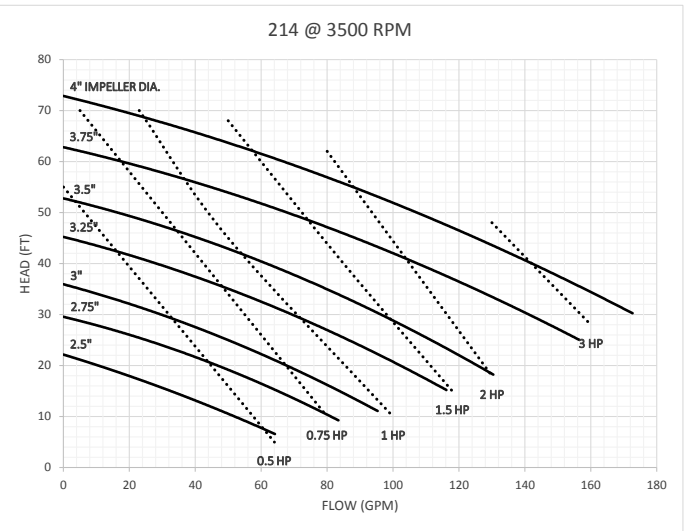
BC/BP-Series Centrifugal Pump - Pump Curves

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

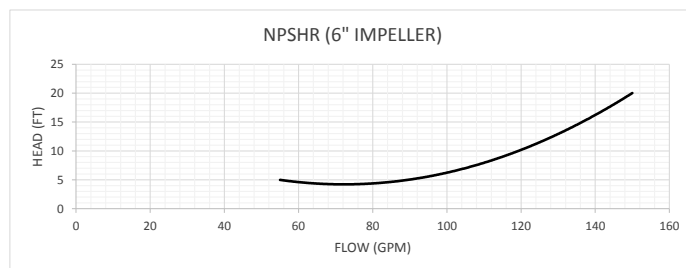
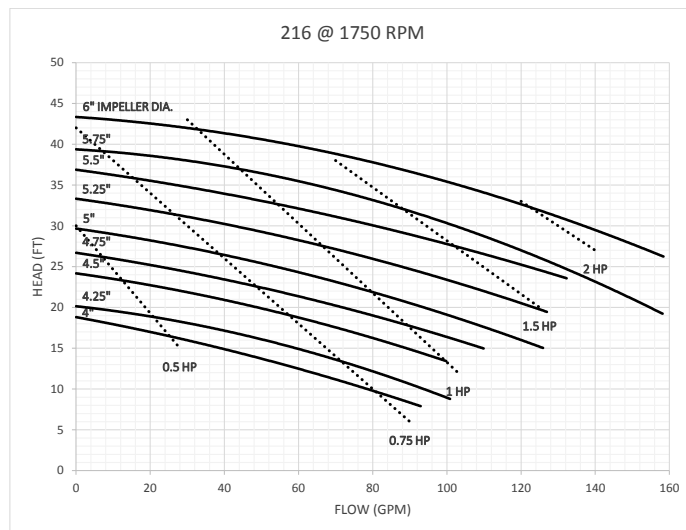
BC/BP 216

Based on H₂O at 70°F (21°C)

Frequency: 60 HZ

RPM: 1750

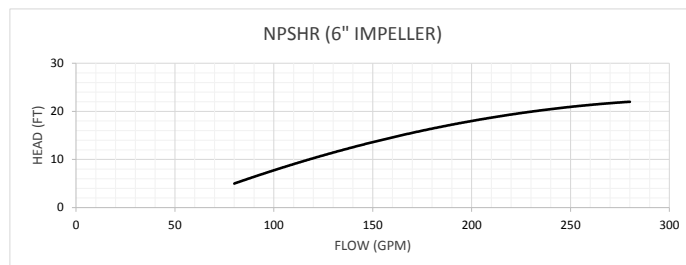
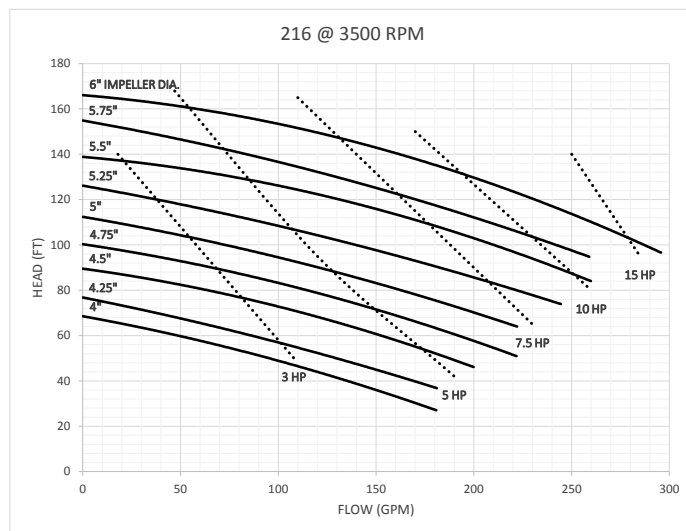
Size: 2" x 1-1/2" x 6"

Based on H₂O at 70°F (21°C)

Frequency: 60 HZ

RPM: 3500

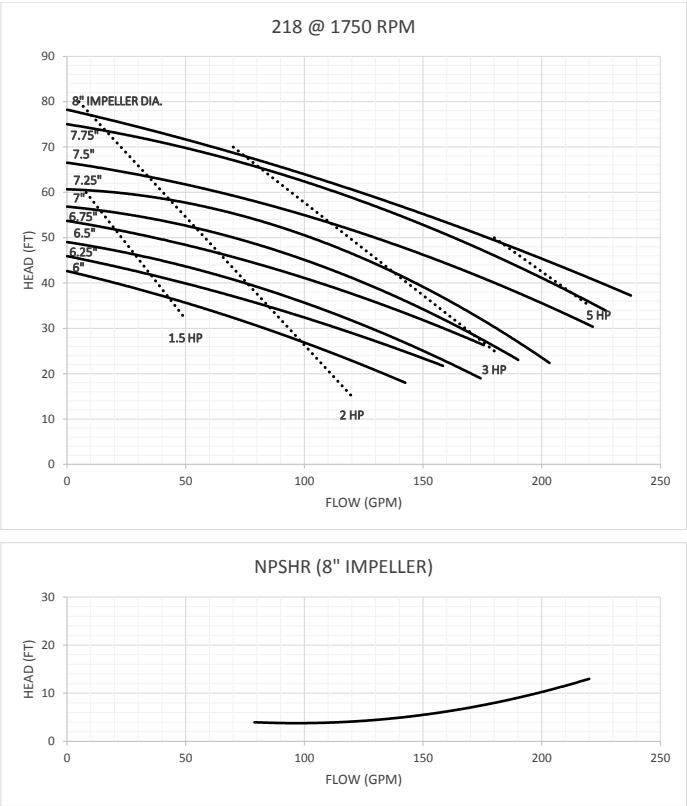
Size: 2" x 1-1/2" x 6"



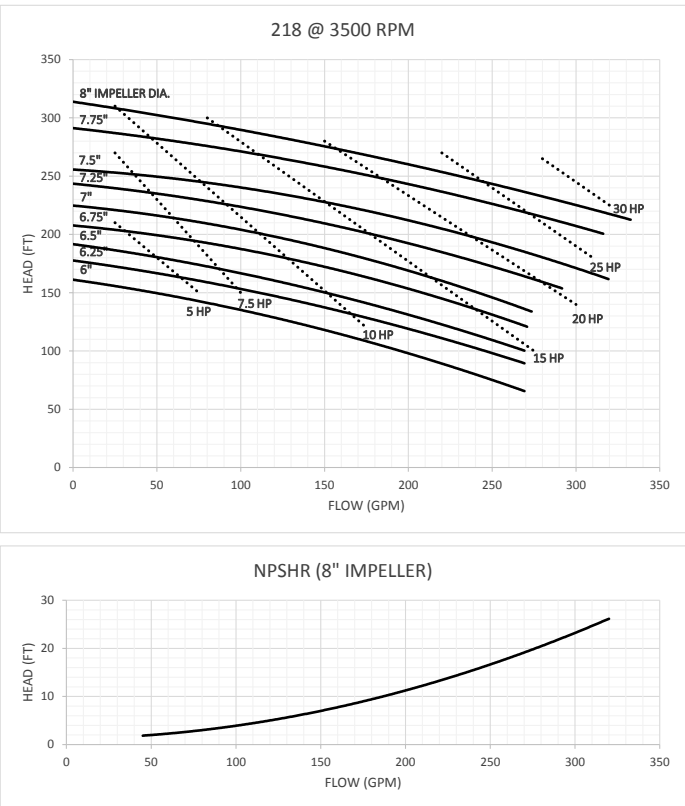
BC/BP-Series Centrifugal Pump - Pump Curves

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

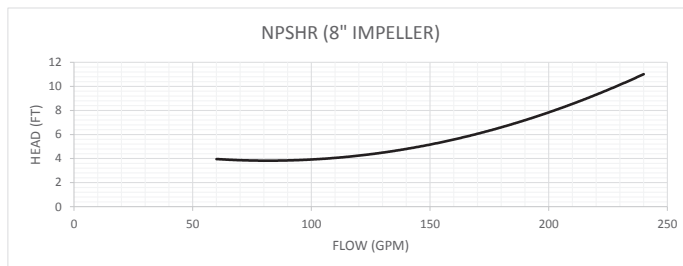
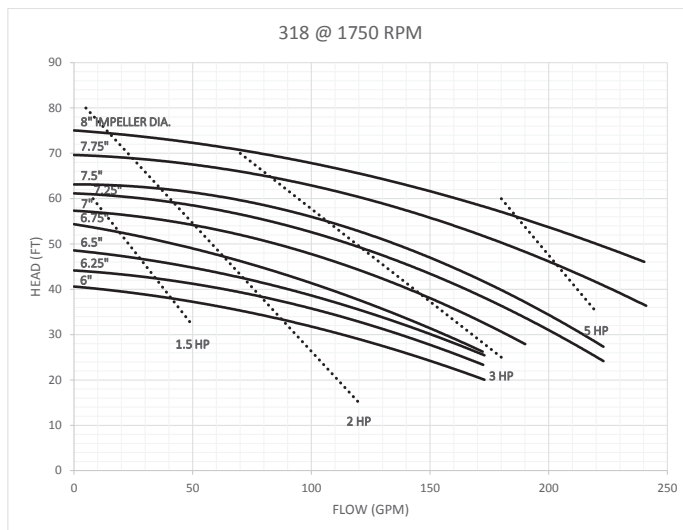
BC/BP 318

Based on H₂O at 70°F (21°C)

Frequency: 60 HZ

RPM: 1750

Size: 3" x 1-1/2" x 8"

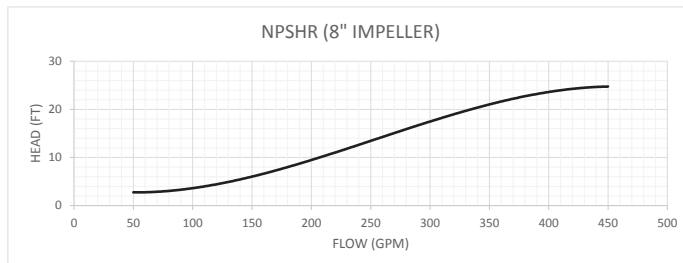
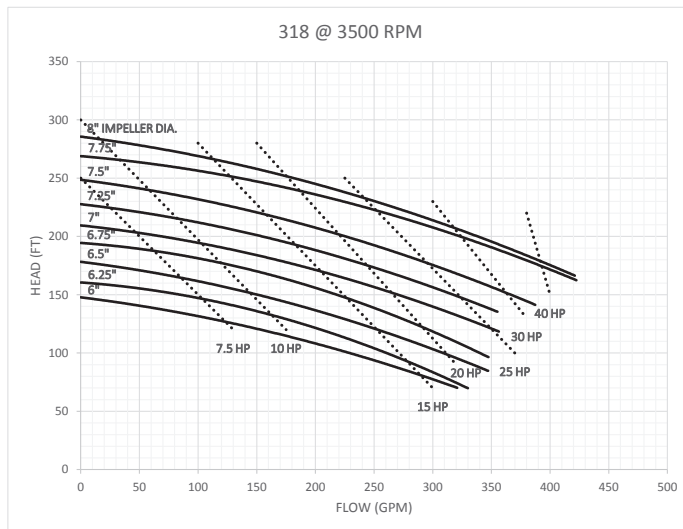


Based on H₂O at 70°F (21°C)

Frequency: 60 HZ

RPM: 3500

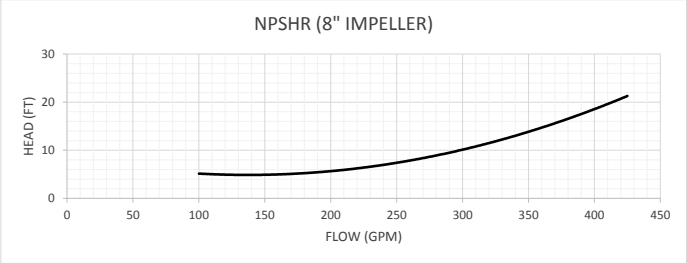
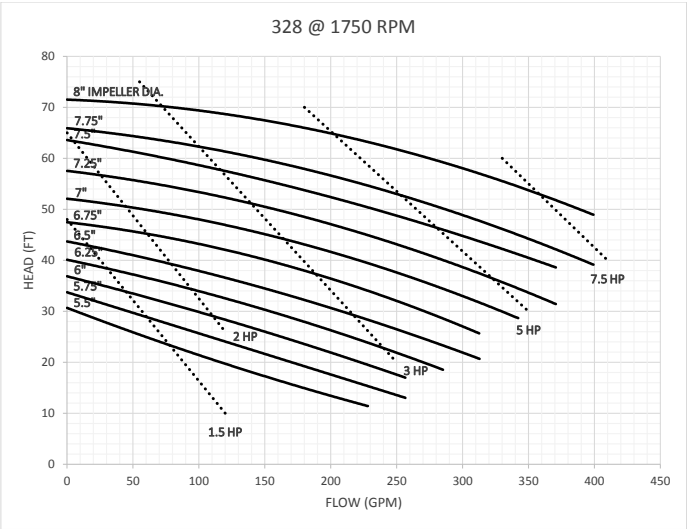
Size: 3" x 1-1/2" x 8"



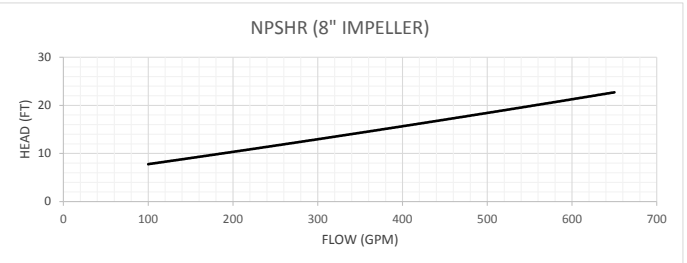
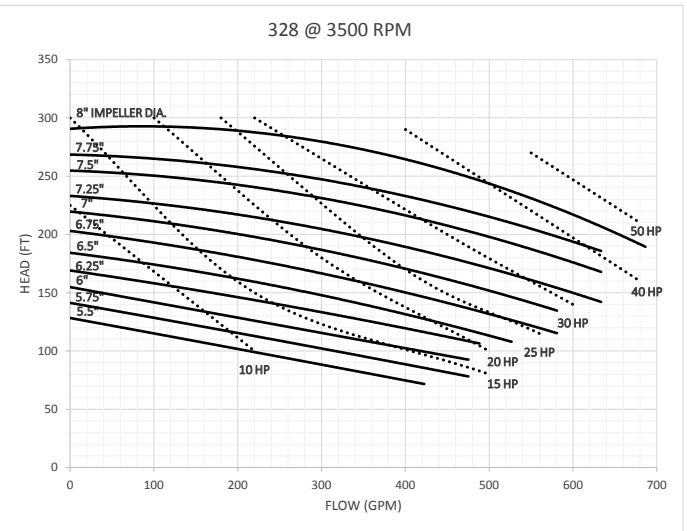
BC/BP-Series Centrifugal Pump - Pump Curves

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

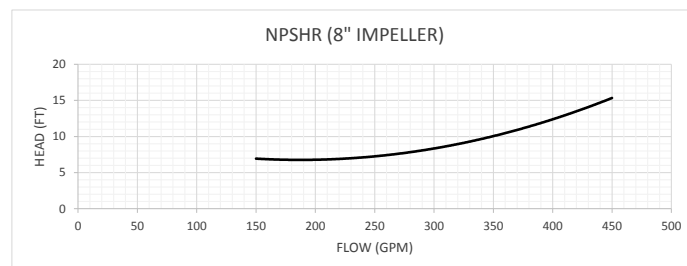
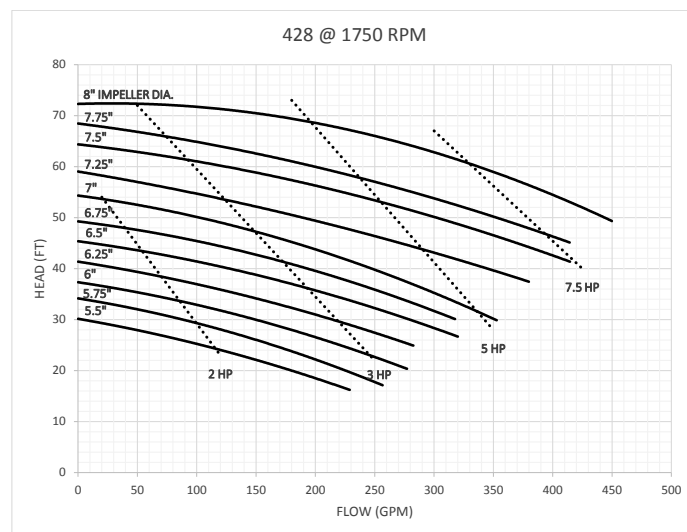
BC/BP 428

Based on H₂O at 70°F (21°C)

Frequency: 60 HZ

RPM: 1750

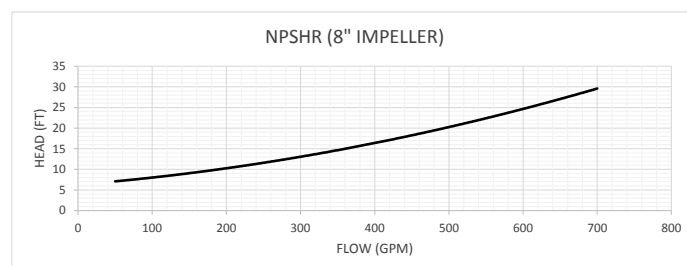
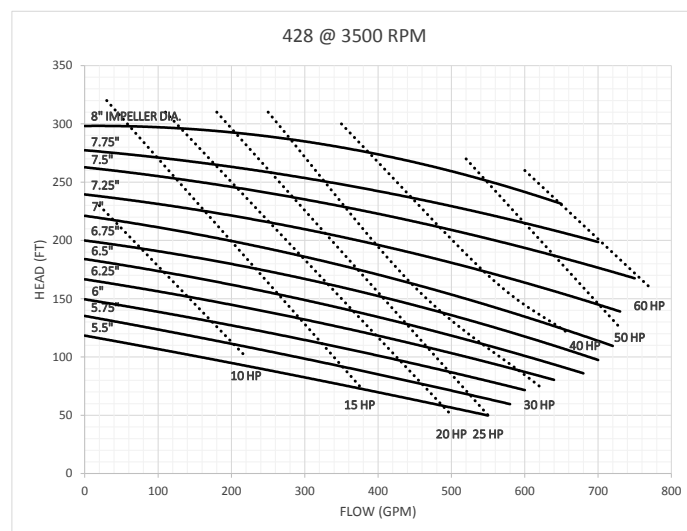
Size: 4" x 2" x 8"

Based on H₂O at 70°F (21°C)

Frequency: 60 HZ

RPM: 3500

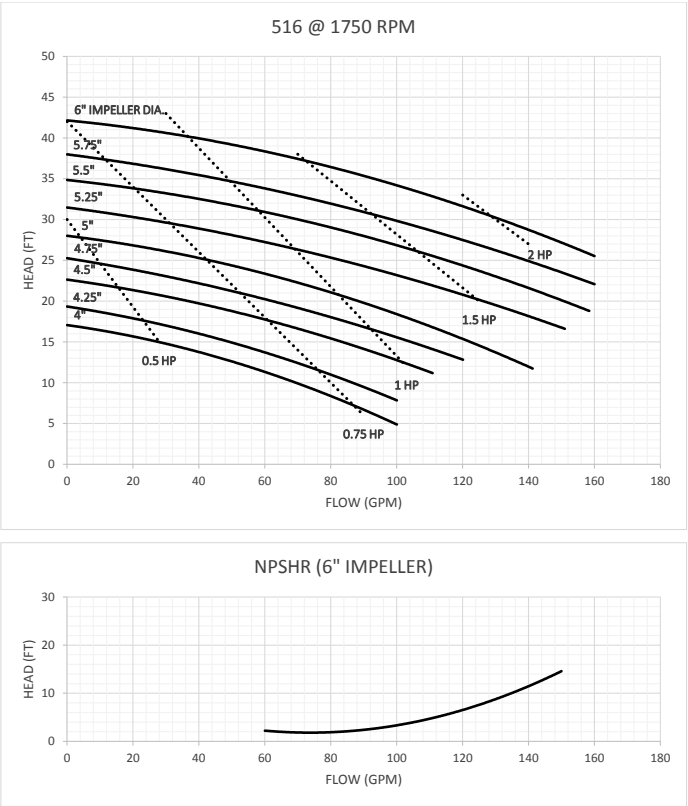
Size: 4" x 2" x 8"



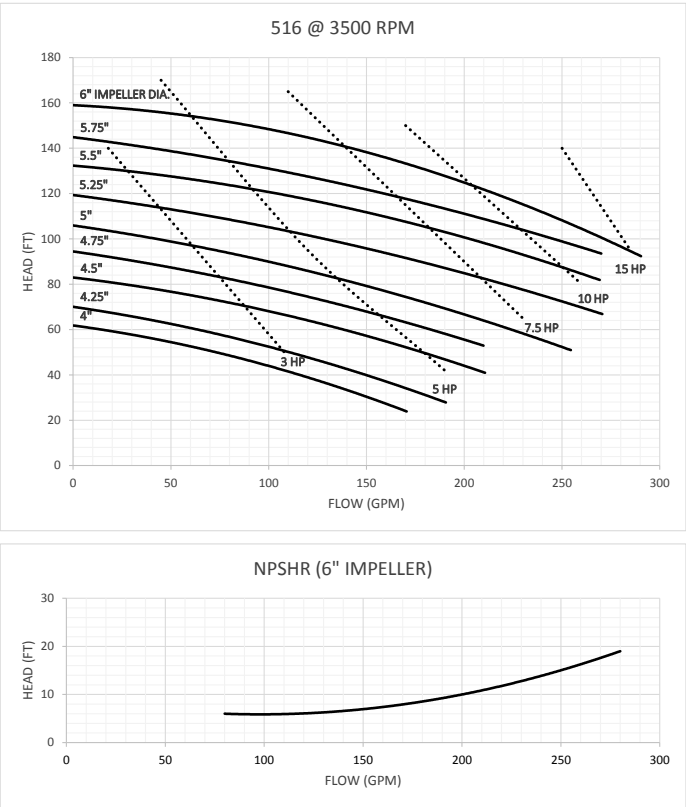
BC/BP-Series Centrifugal Pump - Pump Curves

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

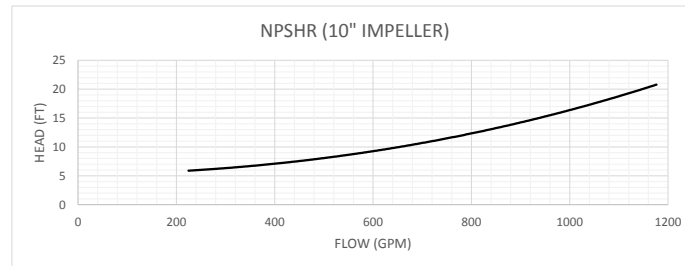
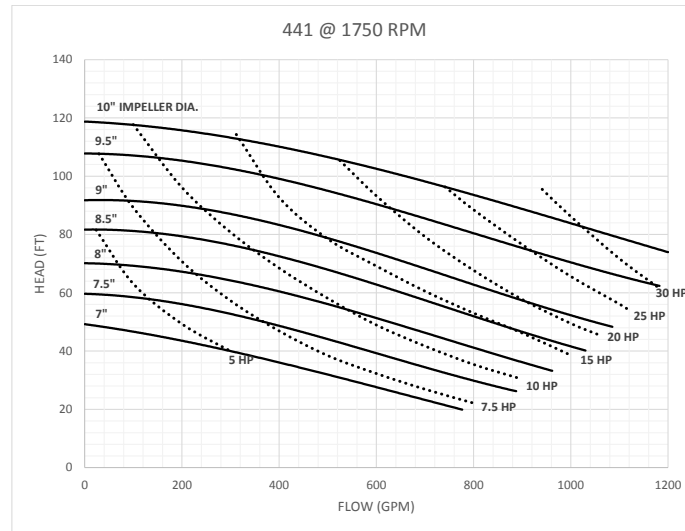
BP 441

Based on H₂O at 70°F (21°C)

Frequency: 60 HZ

RPM: 1750

Size: 4" x 4" x 8"

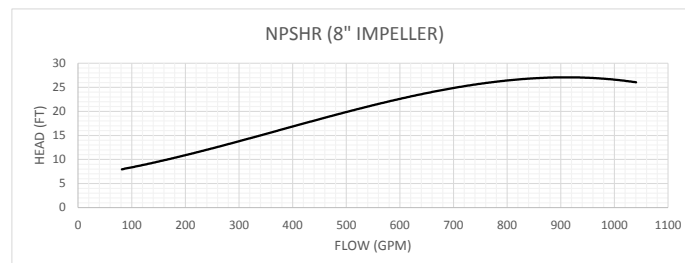
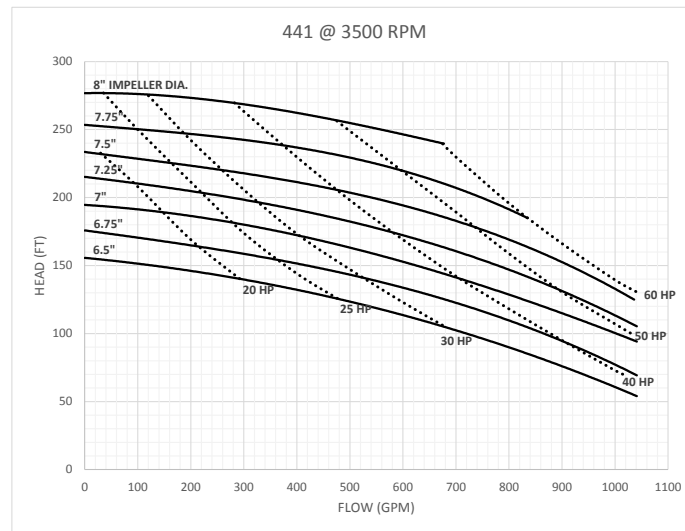


Based on H₂O at 70°F (21°C)

Frequency: 60 HZ

RPM: 3500

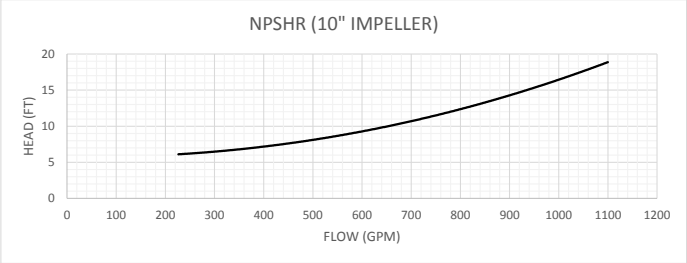
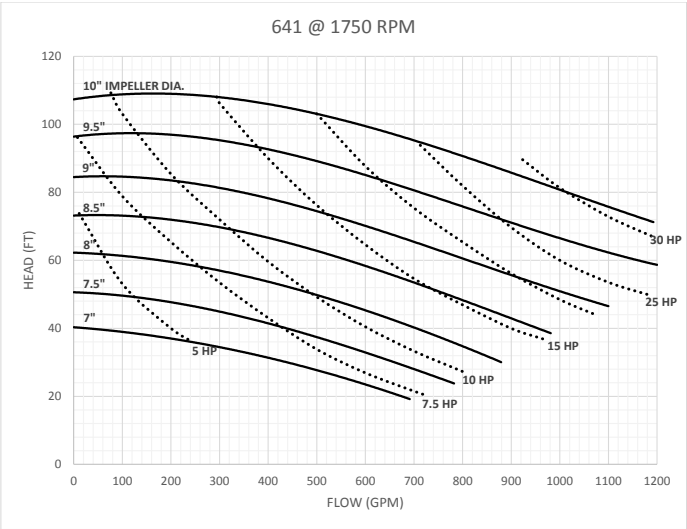
Size: 4" x 4" x 8"



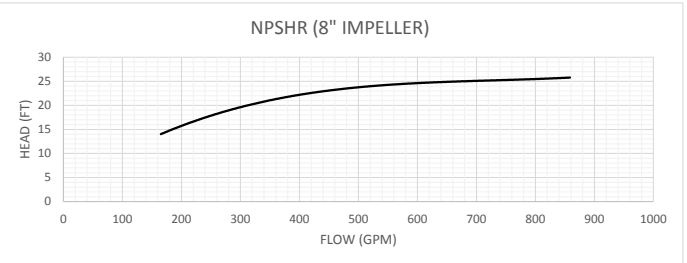
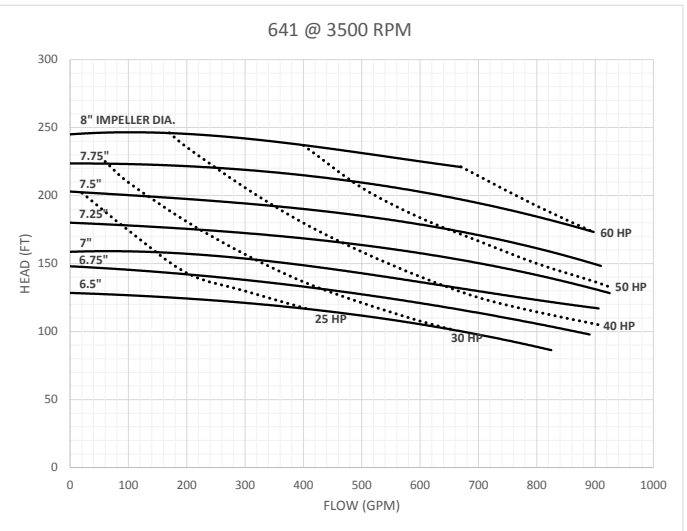
BC/BP-Series Centrifugal Pump - Pump Curves

BP 641

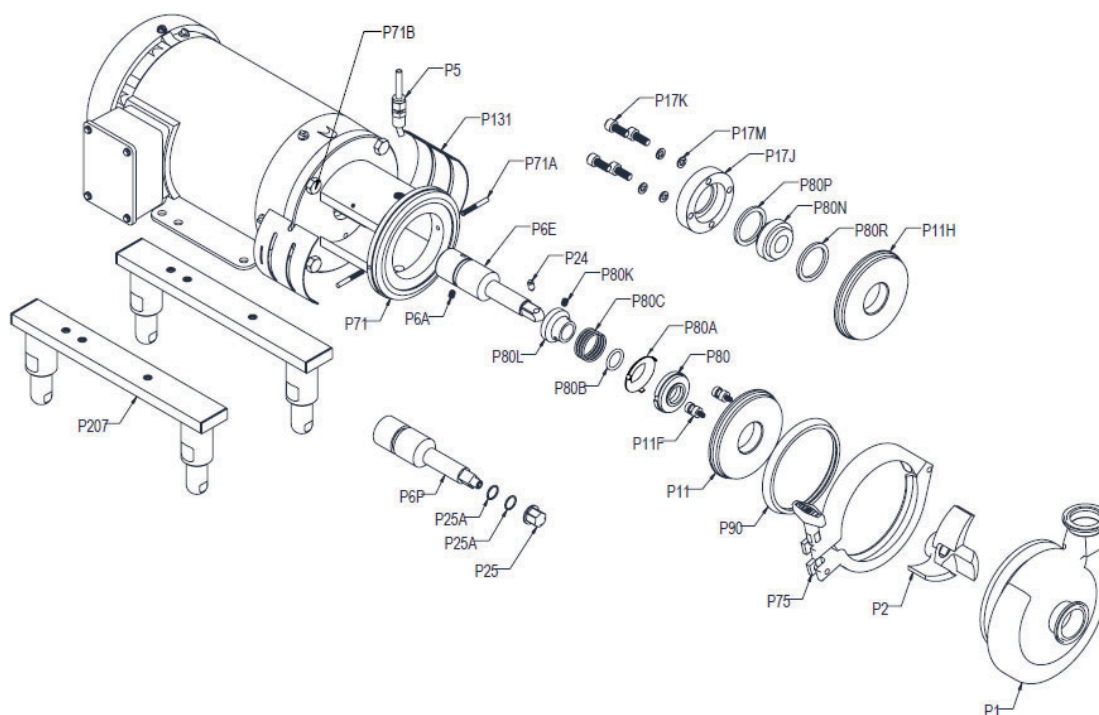
Based on H₂O at 70°F (21°C)
Frequency: 60 HZ
RPM: 1750
Size: 6" x 4" x 10"



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	P2-114-400	P2-216-600	P2-218-800	P2-328-800	P2-441-1000
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
	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		P80P-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

^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 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
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
P207	adjustable leg kit	P207-56LK	P207-14LK	P207-18LK

BC 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
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
P207	adjustable leg kit	P207-56LK	P207-14LK	P207-18LK	P207-21LK	P207-25LK

BC 218/328

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
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
P207	adjustable leg kit	P207-18LK	P207-21LK	P207-25LK	P207-28LK	P207-32LK

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

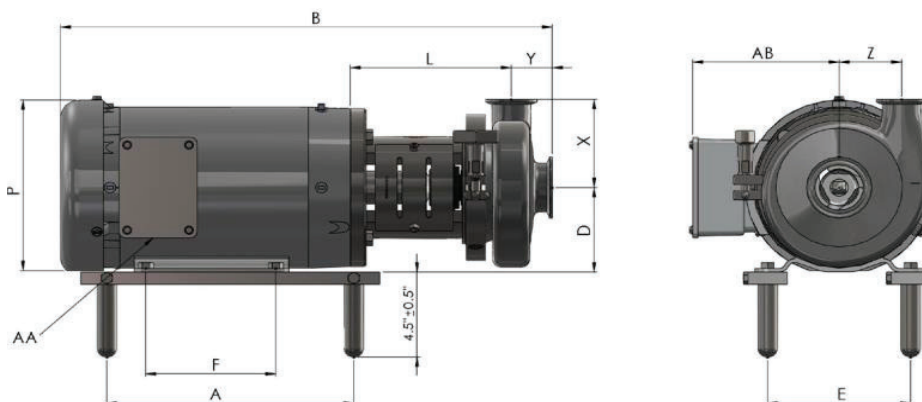
BP 441

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
P207	adjustable leg kit	P207-21LK	P207-25LK	P207-28LK	P207-32LK

^{BC}Available for BC-series only.

^{BP}Available for BP-series only.

BC/BP-Series Centrifugal Pump - Dimensions



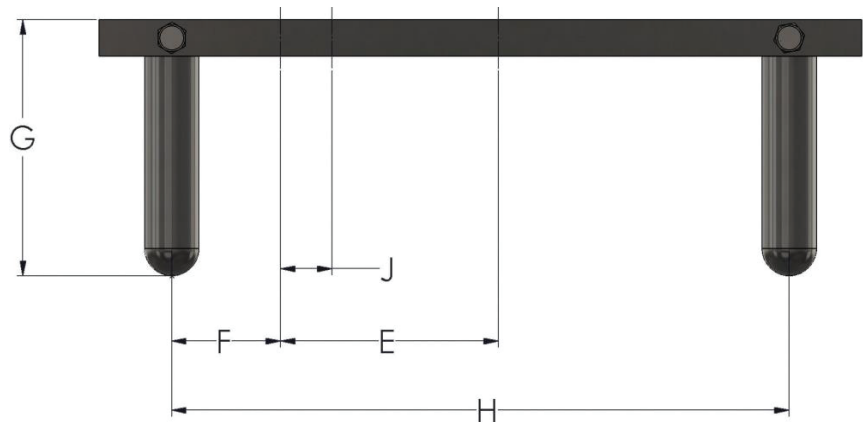
Pump Model	Frame Size	A (in)	AA (in) (conduit size)	AB (in)	B (in)	D (in)	E (in)	F (in)	L (in)	P (in)	X (in)	Y (in)	Z (in)
BC/BP 114 BC/BP 214	56C	8.50	0.50	5.00	**	3.50	4.88	3.00	6.22	6.63	3.63	1.63	2.63
	143/145TC	9.50	0.75	5.25		-	5.50	4.00	6.22	6.63			
	182/184TC	10.63	0.75	5.88		4.50	7.50	4.50	6.78	7.88			
BC/BP 216 BC/BP 516	56C	8.50	0.50	5.00	**	3.50	4.88	3.00	6.06	6.63	4.50	1.94	3.69
	143/145TC	9.50	0.75	5.25		3.50	5.50	4.00	6.06	6.63			
	182/184TC	10.63	0.75	5.88		4.50	7.50	4.50	6.69	7.88			
	213/215TC	13.88	1.00	7.38		5.25	8.50	5.50	7.81	9.56			
	254/256TC	18.00	1.00	9.63		6.25	10.00	8.25	8.50	12.94			
BC/BP 218/318 BC/BP 328/428	182/184TC	10.63	0.75	5.88	**	4.50	7.50	4.50	6.94	7.88	5.50	1.94	4.75
												2.25*	
	213/215TC	13.88	1.00	7.38		5.25	8.50	5.50	7.31	9.56		1.94	
												2.25*	
	254/256TC	18.00	1.00	9.63		6.25	10.00	8.25	8.19	12.94		1.94	
												2.25*	
	284/286TC	19.00	1.50	13.13		7.00	11.00	9.50	8.81	14.63		1.94	
												2.25*	
BP 441 BP 641	324/326TC	20.50	2.00	14.13	**	8.00	12.50	10.50	9.69	16.50	7.35	3.25	7.60
	213/215TC	13.88	1.00	7.38		5.25	8.50	5.50	10.53	9.56			
	254/256TC	18.00	1.00	9.63		6.25	10.00	8.25	10.53	12.94			
	284/286TC	19.00	1.50	13.13		7.00	11.00	9.50	11.16	14.63			
	324/326TC	20.50	2.00	14.13		8.00	12.50	10.50	10.53	16.50			

*Only applies to BC/BP 328/428

**Contact Dixon Sanitary for exact measurement

BC/BP-Series Centrifugal Pump - Dimensions

Leg Kit - Optional



Frame Size	E (in)	F (in)	G (in)	H (in)	J (in)
56C	3.00	1.50	5.00	8.50	-
140TC	5.00			9.50	1.00
180TC	5.50			10.63	1.00
210TC	7.00			13.88	1.50
250TC	10.00			18.00	1.75
280TSC	11.00			19.00	1.50
320TSC	12.00			20.50	1.50

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
	lecithin	-	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	1.0	1.1 at 40°F	N
Beer/Wine	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

BC-Series

- 1 - Casing gasket (P90)
- 1 - Carbon seal (P80)
- 1 - Seal O-ring (P80B)
- 1 - Impeller retainer (P24)

BP-Series*

- 1 - Casing gasket (P90)
- 1 - Carbon seal (P80)
- 1 - Seal O-ring (P80B)
- 1 - Impeller nut O-ring (P25B)
- 1 - Impeller nut O-ring (P25A)*

* For models 114, 216, and 218/328 needing a BP repair kit, please add BP to the end of the kit part number.

Model Number	Nitrile Rubber	EPDM	Silicone	FKM
BC114	PRK1-114B	PRK1-114E	PRK1-114S	PRK1-114V
BC216	PRK1-216B	PRK1-216E	PRK1-216S	PRK1-216V
BC218/BC328	PRK1-218BB	PRK1-218BE	PRK1-218BS	PRK1-218BV
BP441	PRK1-441B	PRK1-441E	-	PRK1-441V

*BP441 only

Repair Kit #2

- 3 - Casing gasket (P90)
- 3 - Seal O-ring (P80B)
- 3 - Carbon seal (P80)

Model Number	Nitrile Rubber	EPDM	Silicone	FKM
BC114	PRK2-114B	PRK2-114E	PRK2-114S	PRK2-114V
BC216	PRK2-216B	PRK2-216E	PRK2-216S	PRK2-216V
BC218/BC328	PRK2-218BB	PRK2-218BE	PRK2-218BS	PRK2-218BV
BP441	PRK2-441B	PRK2-441E	-	PRK2-441V

Repair Kit #3

- 1 - Carbon seal (P80)
- 1 - Spring (P80C)
- 1 - Seal O-ring (P80B)
- 1 - Cup (P80A)

Model Number	Nitrile Rubber	EPDM	Silicone	FKM
BC114	PRK3-114B	PRK3-114E	PRK3-114S	PRK3-114V
BC216	PRK3-216B	PRK3-216E	PRK3-216S	PRK3-216V
BC218/BC328	PRK3-218BB	PRK3-218BE	PRK3-218BS	PRK3-218BV
BP441	PRK3-441B	PRK3-441E	-	PRK3-441V

Repair Kit #4

BC-Series

- 1 - Casing gasket (P90)
- 1 - Carbon seal (P80)
- 1 - Seal O-ring (P80B)
- 1 - Impeller retainer (P24)
- 1 - Seal cup (P80A)
- 1 - Spring (P80C)

BP-Series*

- 1 - Casing gasket (P90)
- 1 - Carbon seal (P80)
- 1 - Seal O-ring (P80B)
- 1 - Impeller nut (P25B)
- 1 - Seal cup (P80A)
- 1 - Spring (P80C)
- 1 - Impeller O-ring (P25A)*

*For models 114, 216, and 218/328 needing a BP repair kit, please add BP to the end of the kit part number

Model Number	Nitrile Rubber	EPDM	Silicone	FKM
BC114	PRK4-114B	PRK4-114E	PRK4-114S	PRK4-114V
BC216	PRK4-216B	PRK4-216E	PRK4-216S	PRK4-216V
BC218/BC328	PRK4-218BB	PRK4-218BE	PRK4-218BS	PRK4-218BV
BP441	PRK4-441B	PRK4-441E	-	PRK4-441V

*BP441 only

BC/BP-Series Centrifugal Pump - Repair Kits

DG Repair Kit

BC-Series

- 1 - Seal seat (P80N)
- 1 - Seal O-ring (P80B)
- 1 - Impeller pin (P24)
- 1 - Carbon seal (P80)
- 1 - Spring (P80C)
- 1 - Inboard gasket (P80R)
- 1 - Seal cup (P80A)
- 1 - Casing gasket (P90)
- 1 - Outboard gasket (P80P)

BP-Series

- 1 - Seal seat (P80N)
- 1 - Seal O-ring (P80B)
- 1 - Impeller nut O-ring (P25B)
- 1 - Carbon seal (P80)
- 1 - Spring (P80C)
- 1 - Inboard gasket (P80R)
- 1 - Seal cup (P80A)
- 1 - Casing gasket (P90)
- 1 - Outboard gasket (P80P)
- 1 - Impeller O-ring (P25A)*

Model Number	Elastomer	Ceramic	SC	TC
BC114	nitrile rubber	PRKDG-114BCER	PRKDG-114BSC	PRKDG-114BTC
	EPDM	PRKDG-114ECER	PRKDG-114ESC	PRKDG-114ETC
	silicone	PRKDG-114SCER	PRKDG-114SSC	PRKDG-114STC
	FKM	PRKDG-114VCER	PRKDG-114VSC	PRKDG-114VTC
BC216	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
B218/BC328	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
BP441	nitrile rubber	PRKDG-441BCER	PRKDG-441BSC	PRKDG-441BTC
	EPDM	PRKDG-441ECER	PRKDG-441ESC	PRKDG-441ETC
	FKM	PRKDG-441VCER	PRKDG-441VSC	PRKDG-441VTC

*BP441 only

*For models 114, 216, and 218/328 needing a BP repair kit, please add BP to the end of the kit part number

DG Seal Conversion Kit

- 1 - DG backplate (P11H)
- 4 - Lock washers (P17M)
- 1 - Inboard gasket (P80R)
- 1 - Gland ring (P17J)
- 1 - Seal seat (P80N)
- 4 - Gland bolts (P17K)
- 1 - Outboard gasket (P80P)

Model Number	Ceramic	SC	TC
BC114	PCK-114DGCER	PCK-114DGSC	PCK-114DGTGTC
BC216	PCK-216DGCER	PCK-216DGSC	PCK-216DGTGTC
BC218/328	PCK-218BDGCER	PCK-218BDGSC	PCK-218BDGTGTC

Notes

Limited Warranty

DIXON VALVE & COUPLING COMPANY, LLC (herein called "Dixon") warrants the products described herein and manufactured by Dixon to be free from defects in material and workmanship for a period of one (1) year from date of shipment by Dixon under normal use and service. Its sole obligation under this warranty being limited to repairing or replacing, as hereinafter provided, at its option any product found to Dixon's satisfaction to be defective upon examination by it, provided that such product shall be returned for inspection to Dixon's factory within three (3) months after discovery of the defect. The repair or replacement of defective products will be made without charge for parts or labor. This warranty shall not apply to: (a) parts or products not manufactured by Dixon, the warranty of such items being limited to the actual warranty extended to Dixon by its supplier; (b) any product that has been subject to abuse, negligence, accident, or misapplication; (c) any product altered or repaired by others than Dixon; and (d) normal maintenance services and the replacement of service items (such as washers, gaskets, and lubricants) made in connection with such services. To the extent permitted by law, this limited warranty shall extend only to the buyer and any other person reasonably expected to use or consume the goods who is injured in person by any breach of the warranty. No action may be brought against Dixon for an alleged breach of warranty unless such action is instituted within one (1) year from the date the cause of action accrues. This limited warranty shall be construed and enforced to the fullest extent allowable by applicable law.

Other than the obligation of Dixon set forth herein, Dixon disclaims all warranties, express or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose, and any other obligation or liability. The foregoing constitutes Dixon's sole obligation with respect to damages, whether direct, incidental, or consequential, resulting from the use or performance of the product.

Some products and sizes may be discontinued when stock is depleted or may require a minimum quantity for ordering.

Limits of Liability

This brochure is intended as a product offering. It is not intended to be a user or technical manual. Information in this brochure is subject to change without notice. All users and distributors of products sold through this brochure should contact Dixon with questions of use, compatibilities, coupling procedures, and life of product. Our full-time engineering and test staff are always available to recommend uses and to assist distributors and users with any questions.



Safety



Safety logos, which appear throughout our catalog, are used as a reminder that the user should carefully review for the appropriateness of the product for the media, application, and environment in which it will be used.

NOTE: Because of the health hazards associated with contamination and lead content in drinking water systems, Dixon couplings, unless otherwise specifically approved, are not recommended for potable water service and should not be used in applications where drinking water will contact the wetted surfaces of the coupling.

All Dixon products are shipped in cartons with the following warning:

"WARNING: This product contains lead, a chemical known to the State of California to cause cancer and birth defects or other reproductive harm."

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