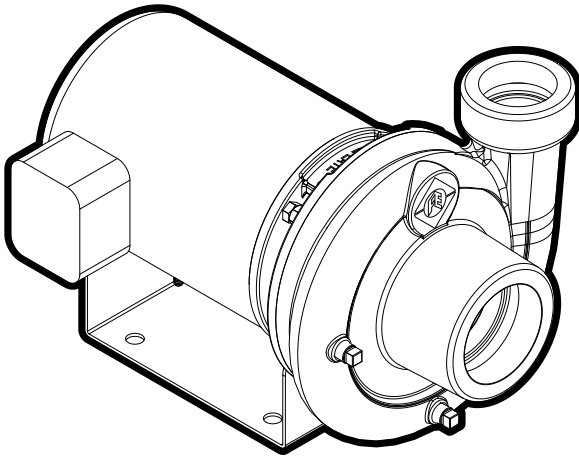


## Close-Coupled D-Series

**BOOK:** CCD-005  
**DATE:** Mar. 1, 2013



### Specifications:

**Capacities:** to 650 gpm

**Heads:** to 300 feet

**Working Pressure:** 150 psi

**Temperature:** maximum 212 °F

**Rotation:** clockwise viewed from motor end

**Pipe Connections:** NPT, 4 x 5 Flanged

Discharge	Suction
1"	1-1/4"
1"	1-1/2"
1-1/2"	2"
2"	3"
3"	4"
4"	4"
4" Flanged	5" Flanged

### Features:

- Heavy-duty cast iron body for increased durability.
- DA1A and DA1B have stainless steel impellers.
- DB1 through DB2 have bronze impellers.
- DB3 and DC4 have cast iron impellers.
- 1/2-2HP models have 56C frame motors with shaft coupling design for easy removal of pump motor.
- 5 - 50HP models have JM frame motors with shaft sleeve/O-ring design for added protection against shaft damage.
- 3HP models can use either JM frame or 56 frame motors.
- Single or three phase motors available on selected models.
- Seal: Standard carbon/ceramic faces, BUNA elastomers and 300 series stainless components.
- All units are equipped with open drip-proof motors.

### Applications:

- Irrigation
- Commercial
- Construction
- Municipal
- Light Industrial
- General Services

## Close-Coupled D-Series

### Dimensional Drawings:

FIGURE 1

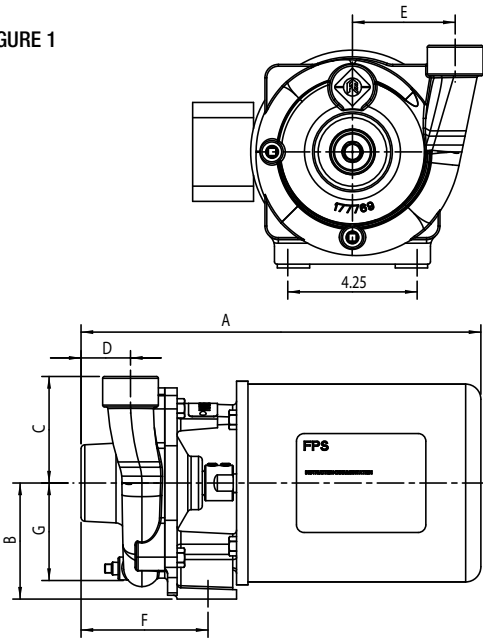
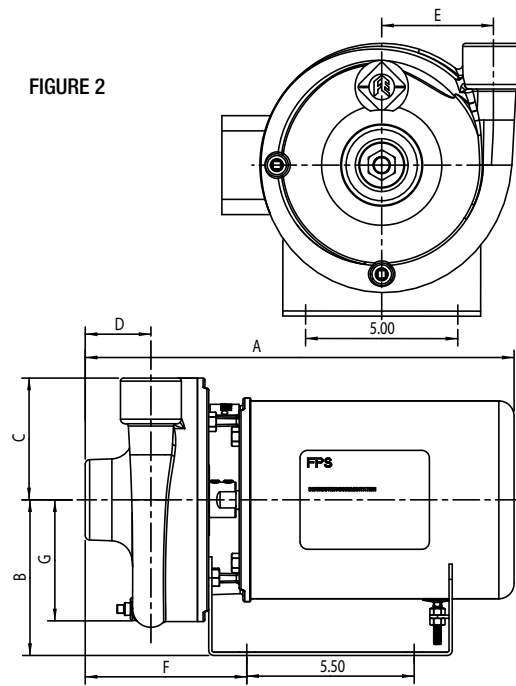


FIGURE 2



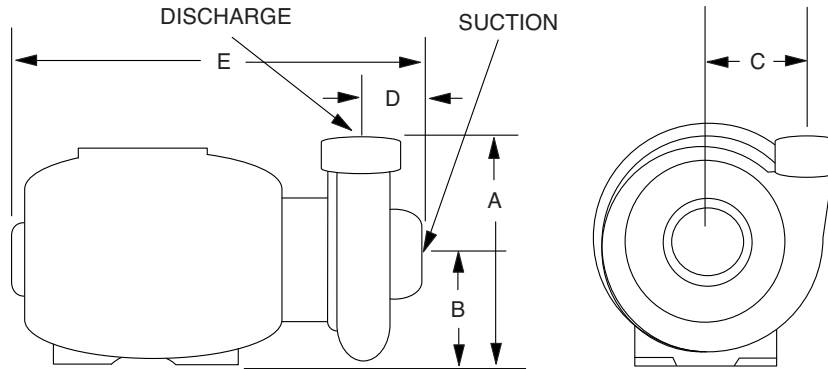
### Dimensional Data:

Pump Model		Fig.	Mtr. HP	Suct. NPT	Disch. NPT	Dimensions In Inches						
Single Phase	Three Phase					A	B	C	D	E	F	G
5DA1A-S	5DA1A-T	1	1/2	1-1/4	1	10.44	3.81	3.50	3.86	3.38	4.17	3.4
7DA1A-S	7DA1A-T		3/4			10.84						
1DA1A-S	1DA1A-T		1			11.44						
5DA1B-S	5DA1B-T	1	1/2	1-1/4	1	15.93	3.81	3.5	3.86	3.38	4.17	3.4
7DA1B-S	7DA1B-T		3/4			16.33						
1DA1B-S	1DA1B-T		1			16.93						
15DA1B-S	15DA1B-T		1-1/2			17.43						
2DA1B-S	2DA1B-T		2			15.8						
7DB1-S	7DB1-T	2	3/4	1-1/2	1	16.28	5.11	4	2.16	3.67	5.31	4.19
1DB1-S	1DB1-T		1			16.88						
15DB1-S	15DB1-T		1-1/2			17.38						
2DB1-S	2DB1-T		2			15.75						
3DB1-S	3DB1-T		3			16.25						
1DB1-1/2-S	1DB1-1/2-T	2	1	2	1-1/2	16.94	5.11	4.50	2.37	3.91	5.35	4.53
15DB1-1/2-S	15DB1-1/2-T		1-1/2			17.44						
2DB1-1/2-S	2DB1-1/2-T		2			15.81						
3DB1-1/2-S	3DB1-1/2-T		3			16.31						
15DB2-S	15DB2-T	2	1-1/2	3	2	18.76	5.11	4.75	3.6	4.119	6.69	4.92
2DB2-S	2DB2-T		2			17.13						
3DB2-S	3DB2-T		3			17.63						

Notes: Dimensions shown are based on 56C O.D.P. 3500 RPM motor. In some cases dimensions "G" may be greater than "B".

## Close-Coupled D-Series

### Dimensional Drawings:



### Dimensional Data:

Pump Model	Suction (NPT)	Disch. (NPT)	A (HP)						B (HP)						C	D	E (HP)					
			3	5	7-1/2	10	15	20	3	5	7-1/2	10	15	20			3	5	7-1/2	10	15	20
DB1	1-1/2	1	-	8.50	-	-	-	-	-	4.50	-	-	-	-	3.63	2.06	-	18.13	-	-	-	-
DB1-1/2	2	1-1/2	-	9.00	9.75	-	-	-	-	4.50	5.25	-	-	-	3.88	2.44	-	18.19	19.50	-	-	-
DC1-1/2	2	1-1/2	10.13	10.13	10.88	10.88	10.88	-	4.50	4.50	5.25	5.25	5.25	-	5.19	2.50	17.13	18.13	19.44	19.44	21.00	-
DB2	3	2	-	9.25	10.00	10.00	11.38	12.38	-	4.50	5.25	5.25	5.25	6.25	4.19	3.63	-	19.63	21.00	21.00	22.50	22.50
DB3	4	3	-	11.56	11.56	12.56	12.56	13.56	-	4.50	4.50	5.25	5.25	5.25	4.06	3.50	-	19.19	20.19	21.75	24.00	28.00

Notes: Dimensions shown are for units using 60 cycle open-dripproof JM frame motors, 3500 RPM Total pump length will vary with motor manufacturer.

### JM Frame Motors:

Extended shaft with keyway

Pump Model	Suction (NPT)	Disch. (NPT)	A	B	C	D	JM Frame Motor Horsepower				
							20	25	30	40	50
DC4-FNPT	4	4	16.50	7.63	6.45	4.72	28.66	28.66	29.53	30.00	30.00
DC4-flanged	5	4	16.50	7.63	6.45	3.81	28.66	28.66	29.53	30.00	30.00

Notes: Total pump length will vary with motor manufacturer.

## Close-Coupled D-Series

### Ordering Information:

Series	Suct./Disc.	HP	RPM	PH	Volts	Sealing	Order #	Description	Wt.		
DA1A	1.25" x 1"	0.5	3500	1	115/230	Mech. Seal	93160020	5FPDA1A-S	35		
		0.75			115/230	Mech. Seal	93160038	7FPDA1A-S	36		
		1			115/230	Mech. Seal	93160046	1FPDA1A-S	37		
		0.5		3	208-230/460	Mech. Seal	93160061	5FPDA1A-T	34		
		0.75			208-230/460	Mech. Seal	93160079	7FPDA1A-T	37		
		1			208-230/460	Mech. Seal	93160087	1FPDA1A-T	38		
DA1B	1.25" x 1"	0.5	3500	1	115/230	Mech. Seal	93160137	5FPDA1B-S	36		
		0.75			115/230	Mech. Seal	93160145	7FPDA1B-S	38		
		1			115/230	Mech. Seal	93160152	1FPDA1B-S	40		
		1.5			115/230	Mech. Seal	93160160	15FPDA1B-S	46		
		2			115/230	Mech. Seal	93160178	2FPDA1B-S	49		
		0.5			3	208-230/460	Mech. Seal	93160186	5FPDA1B-T	31	
		0.75		208-230/460		Mech. Seal	93160194	7FPDA1B-T	33		
		1		208-230/460		Mech. Seal	93160202	1FPDA1B-T	35		
		1.5		208-230/460		Mech. Seal	93160210	15FPDA1B-T	45		
		2		208-230/460		Mech. Seal	93160228	2FPDA1B-T	48		
		0.75		DB1		1.5" x 1"	1	115/230	Mech. Seal	93160285	7FPDB1-S
		1			115/230			Mech. Seal	93160293	1FPDB1-S	45
1.5	115/230	Mech. Seal	93160301		15FPDB1-S			55			
2	115/230	Mech. Seal	93160319		2FPDB1-S			53			
3	230	Mech. Seal	93160327		3FPDB1-S			74			
5	230	Mech. Seal	93160335		5FPDB1-S			122			
0.75	3	208-230/460	Mech. Seal	93160343	7FPDB1-T		48				
1		208-230/460	Mech. Seal	93160350	1FPDB1-T		50				
1.5		208-230/460	Mech. Seal	93160368	15FPDB1-T		52				
2		208-230/460	Mech. Seal	93160376	2FPDB1-T		54				
3		208-230/460	Mech. Seal	93160384	3FPDB1-T		64				
5		208-230/460	Mech. Seal	93160392	5FPDB1-T		82				
DB1-1/2	2" x 1.5"	1	3500	1	115/230	Mech. Seal	93160467	1FPDB1-1/2-S	50		
		1.5			115/230	Mech. Seal	93160475	15FPDB1-1/2-S	54		
		2			115/230	Mech. Seal	93160483	2FPDB1-1/2-S	58		
		3			230	Mech. Seal	93160491	3FPDB1-1/2-S	74		
		5			230	Mech. Seal	93160509	5FPDB1-1/2-S	122		
		7.5			230	Mech. Seal	93160517	75FPDB1-1/2-S	184		
		1		3	208-230/460	Mech. Seal	93160525	1FPDB1-1/2-T	47		
		1.5			208-230/460	Mech. Seal	93160533	15FPDB1-1/2-T	52		
		2			208-230/460	Mech. Seal	93160541	2FPDB1-1/2-T	55		
		3			208-230/460	Mech. Seal	93160558	3FPDB1-1/2-T	63		
		5			208-230/460	Mech. Seal	93160566	5FPDB1-1/2-T	102		
		7.5			208-230/460	Mech. Seal	93160574	75FPDB1-1/2-T	110		
DC1-1/2	2" x 1.5"	3	3500	1	230	Mech. Seal	93160830	3FPDC1-1/2-S	122		
		5			230	Mech. Seal	93160848	5FPDC1-1/2-S	142		
		7.5			230	Mech. Seal	93160855	75FPDC1-1/2-S	162		
		10			230	Mech. Seal	93161168	10FPDC1-1/2-S	190		
		3			3	208-230/460	Mech. Seal	93160863	3FPDC1-1/2-T	117	
		5		208-230/460		Mech. Seal	93160871	5FPDC1-1/2-T	98		
		7.5		208-230/460		Mech. Seal	93160889	75FPDC1-1/2-T	132		
		10		208-230/460		Mech. Seal	93160897	10FPDC1-1/2-T	171		
		15		208-230/460		Mech. Seal	93160905	15FPDC1-1/2-T	175		

## Close-Coupled D-Series

### Ordering Information:

Series	Suct./Disc.	HP	RPM	PH	Volts	Sealing	Order #	Description	Wt.			
DB2	3" x 2"	1.5	3500	1	115/230	Mech. Seal	93160657	15FPDB2-S	57			
		2			115/230	Mech. Seal	93160665	2FPDB2-S	60			
		3			230	Mech. Seal	93160673	3FPDB2-S	80			
		5			230	Mech. Seal	93160681	5FPDB2-S	119			
		7.5			230	Mech. Seal	93160699	75FPDB2-S	150			
		10			230	Mech. Seal	93161150	10FPDB2-S	171			
		1.5			208-230/460	Mech. Seal	93160707	15FPDB2-T	57			
		2		208-230/460	Mech. Seal	93160715	2FPDB2-T	60				
		3		208-230/460	Mech. Seal	93160723	3FPDB2-T	72				
		5		208-230/460	Mech. Seal	93160731	5FPDB2-T	110				
		7.5		208-230/460	Mech. Seal	93160749	75FPDB2-T	116				
		10		208-230/460	Mech. Seal	93160756	10FPDB2-T	146				
		15		208-230/460	Mech. Seal	93161051	15FPDB2-T	210				
		20		208-230/460	Mech. Seal	93161069	20FPDB2-T	243				
DB3	4" x 3"	5	3500	1	230	Mech. Seal	93167330	5FPDB3-S	132			
		7.5			230	Mech. Seal	93167348	75FPDB3-S	160			
		10			230	Mech. Seal	93167355	10FPDB3-S	174			
		5			208-230/460	Mech. Seal	93167363	5FPDB3-T	95			
		7.5		208-230/460	Mech. Seal	93167371	75FPDB3-T	120				
		10		208-230/460	Mech. Seal	93167389	10FPDB3-T	180				
		15		208-230/460	Mech. Seal	93167397	15FPDB3-T	183				
		20		208-230/460	Mech. Seal	93167405	20FPDB3-T	232				
		DC4		4" x 4"	20	3500	3	208-230/460	Mech. Seal	93167710	20FPDC4-T	312
					25			208-230/460	Mech. Seal	93167728	25FPDC4-T	325
30	208-230/460		Mech. Seal		93167736			30FPDC4-T	389			
5" x 4" Flanged	40		208-230/460	Mech. Seal	93167744			40FPDC4-T	433			
	50		208-230/460	Mech. Seal	93167785			50FPDC4-T	593			

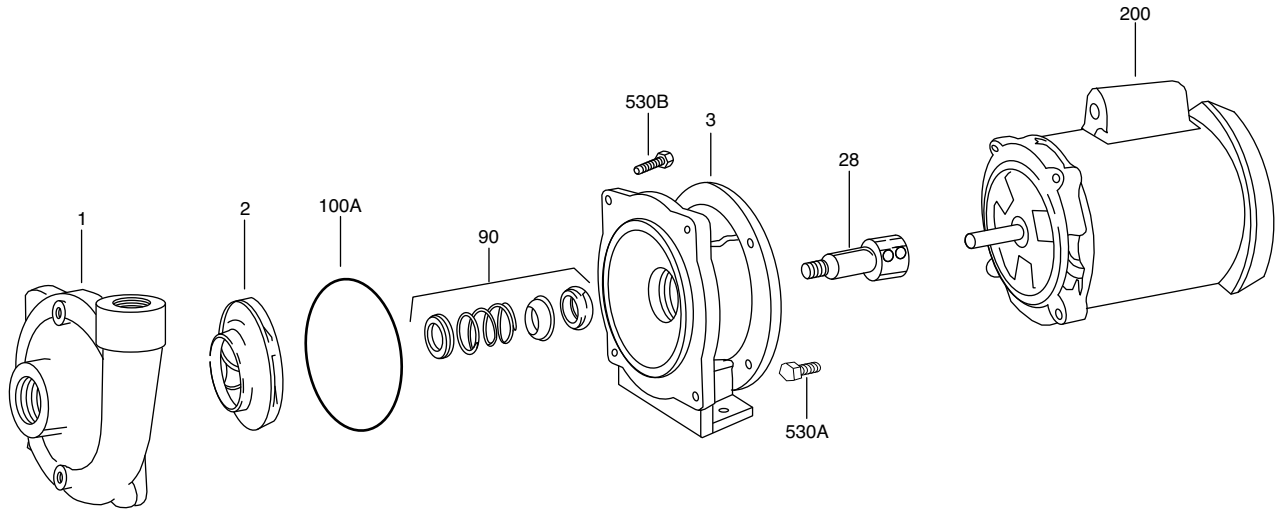
### Pump End Kits - Ordering Information:

D SERIES CENTRIFUGAL PUMP END KITS for 1800 R.P.M. - O.D.P. MOTORS								
Series	Suction x Discharge	HP Range	Phase	Motor Frame Size	Max. Imp. Diameter	PUMP END KIT		
						Model No.	Order No.	Wt.
DB1	1-1/2" x 1"	1/3 - 1/2	1 or 3	56C	6-7/16"	FPDB1-K1	93167413R242	25
DB1-1/2	2" x 1-1/2"	1/3 - 1	1 or 3	56C	6-7/16"	FPDB1-1/2-K1	93167413R252	30
DB2	3" x 2"	1/2 - 3/4	1 or 3	56C	6-7/16"	FPDB2-K1	93167413R262	40
		1 - 1-1/2	1 or 3	56C	6-7/16"	FPDB2-K2	93167413R272	40

**Notes:** Maximum O.D. impeller supplied with P.E. Kits. Impeller must be trimmed to match motor H.P.  
Consult catalog for specific trim sizes and performance. Impellers should be rebalanced after trimming.

## Close-Coupled D-Series DA1A

### Exploded Parts Drawing:

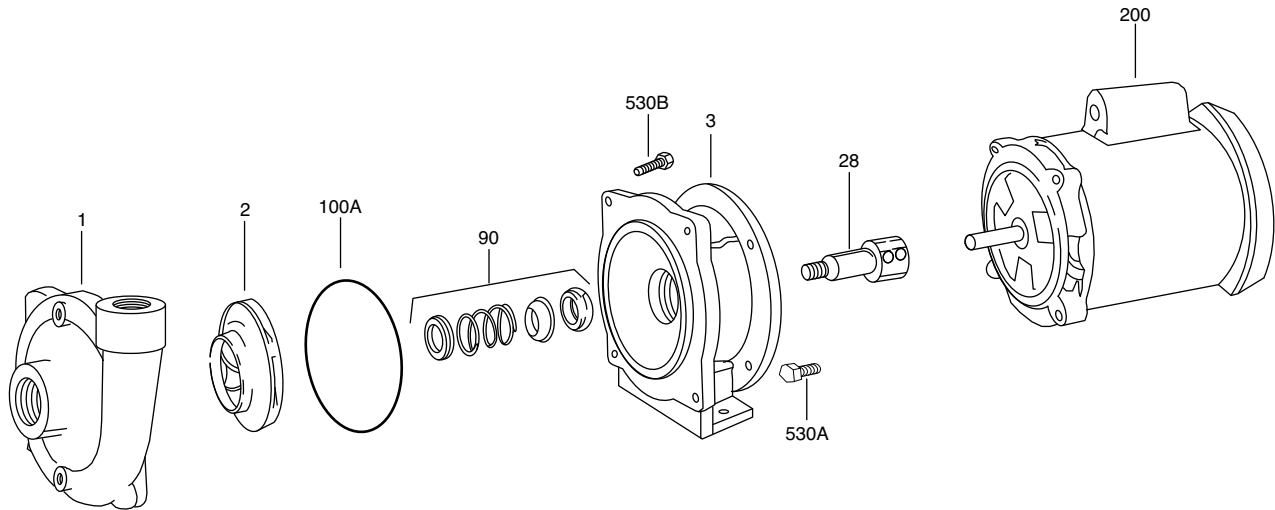


### Materials and Parts:

Fig. No.	Part Description	Repair No.	Materials of Construction
1	Volute Case (NPT) w/plugs	305717001	Cast Iron, ASTM-A48 CL30
2	1/2hp Impeller Trim 4.13" (9/16-18 Thd)	305717003	304 stainless steel
2	3/4hp Impeller Trim 4.70" (9/16-18 Thd)	305717004	304 stainless steel
2	1hp Impeller Trim 5.06" (9/16-18 Thd)	305717005	304 stainless steel
3	Motor Bracket	305717006	Cast Iron, ASTM-A48 CL30
28	Coupling (includes set screws)	305447022	416 Stainless steel
90	Mechanical Shaft Seal	305463203	Carbon/Ceramic/Buna/316SS
100A	Volute Case O-Ring (2-pack)	305463209	Nitrile
200	Motor	See Motor Section	
<b>Not Shown</b>	Pipe Plug (4-pack)	305463009	Cad-Plated Steel
<b>530A</b>	Motor Bracket Hex Cap Screw	305463030	Zinc Plated Steel
<b>530B</b>	Volute Case Hex Cap Screw	305463030	Zinc Plated Steel

## Close-Coupled D-Series DA1B

### Exploded Parts Drawing:

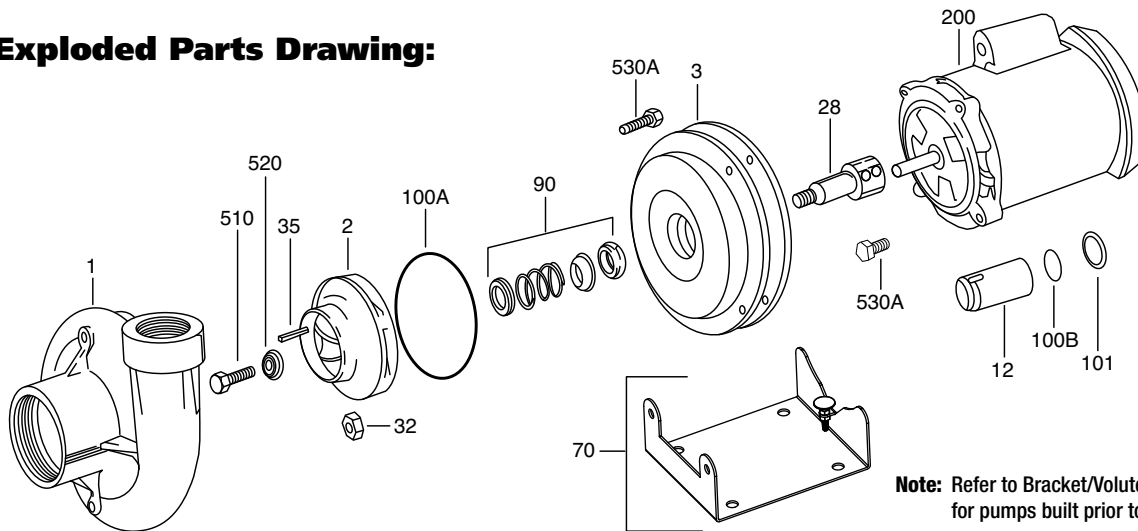


### Materials and Parts:

Fig. No.	Part Description	Repair No.	Materials of Construction
1	Volute Case (NPT) w/plugs	305717001	Cast Iron, ASTM-A48 CL30
2	1/2hp Impeller Trim 3.75" (9/16-18 Thd)	305717007	Silicon Brass, ASTM B584
2	3/4hp Impeller Trim 4.00" (9/16-18 Thd)	305717008	Silicon Brass, ASTM B584
2	1hp Impeller Trim 4.25" (9/16-18 Thd)	305717009	Silicon Brass, ASTM B584
2	1.5hp Impeller Trim 4.69" (9/16-18 Thd)	305717010	Silicon Brass, ASTM B584
2	2hp Impeller Trim 5.06" (9/16-18 Thd)	305717011	Silicon Brass, ASTM B584
3	Motor Bracket	305717006	Cast Iron, ASTM-A48 CL30
28	Coupling (includes set screws)	305447022	416 Stainless steel
90	Mechanical Shaft Seal	305463203	Carbon/Ceramic/Buna/316SS
100A	Volute Case O-Ring (2-pack)	305463209	Nitrile
200	Motor	See Motor Section	
Not Shown	Pipe Plug (4-pack)	305463009	Cad-Plated Steel
530A	Motor Bracket Hex Cap Screw	305463030	Zinc Plated Steel
530B	Volute Case Hex Cap Screw	305463030	Zinc Plated Steel

## Close-Coupled D-Series DB1

### Exploded Parts Drawing:



### Materials and Parts: 3/4 - 3 hp with 56C Motor

Fig. No.	Part Description	Repair No.	Materials of Construction
1	Volute Case (NPT) w/plugs	305447001	Cast Iron, ASTM-A48 CL30
2	3/4hp Impeller Trim 4.25" (9/16-18 Thd)	305447017	Silicon Brass, ASTM B584
2	1hp Impeller Trim 4.750" (9/16-18 Thd)	305447018	Silicon Brass, ASTM B584
2	1.5hp Impeller Trim 5.19" (9/16-18 Thd)	305447019	Silicon Brass, ASTM B584
2	2hp Impeller Trim 5.50" (9/16-18 Thd)	305447020	Silicon Brass, ASTM B584
2	3hp Impeller Trim 6.12" (9/16-18 Thd)	305447025	Silicon Brass, ASTM B584
2	1800 RPM Pump End Kits Impeller Trim 6.44" max. (9/16-18 Thd)*	305447026	Silicon Brass, ASTM B584
3	Motor Bracket	305447021	Cast Iron, ASTM-A48 CL30
28	Coupling (includes set screws)	305447022	416 Stainless steel
32	Impeller Jam Nut	305447023	18-8 Stainless steel
70	Base Assy	305447024	Various
90	Mechanical Shaft Seal	305463203	Carbon/Ceramic/Buna/316SS
100A	Volute Case O-Ring (2-pack)	305463004	Nitrile
200	Motor		See Motor Section
Not Shown	Pipe Plug (4-pack)	305463009	Cad-Plated Steel
530A	Motor Bracket Hex Cap Screw	305463030	Zinc Plated Steel
530B	Volute Case Hex Cap Screw	305463030	Zinc Plated Steel

**Notes:** Max O.D. impeller supplied with repair kits. Impeller must be trimmed to match motor hp.  
Consult catalog for specific trim sizes and performance. Impellers should be rebalanced after trimming.

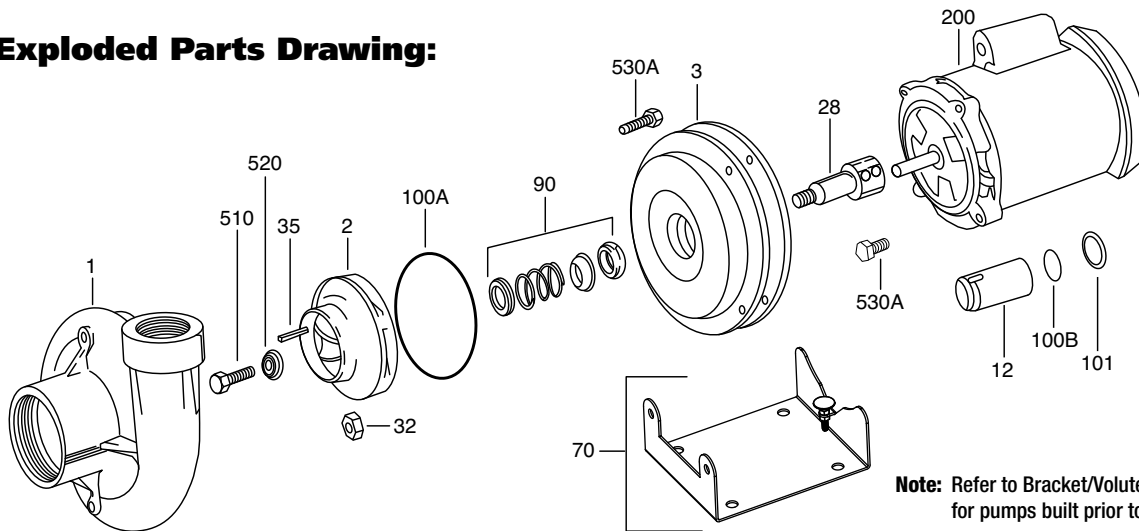
### Materials and Parts: 3 - 5 hp 4.5 AK

Fig. No.	Part Description	Repair No.	Materials of Construction
1	Volute Case (NPT) w/plugs	305447001	Cast Iron, ASTM-A48 CL30
2	3hp Impeller Trim 6.13" (.875 bore)	305447010	Silicon Brass, ASTM B584
2	5hp Impeller Trim 6.44" (.875 bore)	305447011	
3	Motor Bracket	305447014	Cast Iron, ASTM-A48 CL30
12	Shaft Sleeve	305447015	416 Stainless steel
35	Impeller Shaft Key	305463001	301 Stainless steel
90	Mechanical Shaft Seal	305463002	Carbon/Ceramic/Buna/316SS
100A	Volute Case O-Ring (2-pack)	305463004	Nitrile
100B	Sleeve O-Ring (2-Pack)	305463200	Nitrile
101	Sleeve Seal	305447016	Nitrile
200	Motor - see MOTOR section		See Motor Section
Not Shown	Pipe Plug (4-pack)	305463009	Cad-Plated Steel
Not Shown	Water Slinger	305447008	Neoprene
510	Impeller Hex Cap Screw	305463201	316 Stainless-Grade 5
520	Impeller Washer	305447009	300-Series stainless Steel
530A	Motor Bracket Hex Cap Screw (12-Pack)	305463010	Zinc Plated Steel
530B	Volute Case Hex Cap Screw (4-Pack)	305463202	Zinc Plated Steel



## Close-Coupled D-Series DB1-1/2

### Exploded Parts Drawing:



**Note:** Refer to Bracket/Volute Kits page 15 for pumps built prior to August 2008

### Materials and Parts: 3/4 - 3 hp with 56C Motor

Fig. No.	Part Description	Repair No.	Materials of Construction
1	Volute Case (NPT) w/plugs	305448001	Cast Iron, ASTM-A48 CL30
2	1hp Impeller Trim 3.94" (9/16-18 Thd)	305448021	Silicon Brass, ASTM B584
2	1-1/2hp Impeller Trim 4.31" (9/16-18 Thd)	305448022	Silicon Brass, ASTM B584
2	2hp Impeller Trim 4.59" (9/16-18 Thd)	305448023	Silicon Brass, ASTM B584
2	3hp Impeller Trim 5.12" (9/16-18 Thd)	305448024	Silicon Brass, ASTM B584
2	1800 RPM Pump End Kits Impeller Trim 6.44" max. (9/16-18 Thd)*	305447025	Silicon Brass, ASTM B584
3	Motor Bucket	305447021	Cast Iron, ASTM-A48 CL30
28	Coupling (includes set screws)	305447022	DDA 360 Brass or 304 Stainless Steel
32	Impeller Jam Nut	305447023	18-8 Stainless steel
70	Base Assembly	305447024	Various
90	Mechanical Shaft Seal	305463203	Carbon/Ceramic/Buna/316SS
100A	Volute Case O-Ring (2-pack)	305463004	Nitrile
200	Motor		See Motor Section
Not Shown	Pipe Plug (4-pack)	305463009	Cad-Plated Steel
530A	Motor Bracket Hex Cap Screw (4-Pack)	305463030	Zinc Plated Steel
530B	Volute Case Hex Cap Screw (4-Pack)	305463030	Zinc Plated Steel

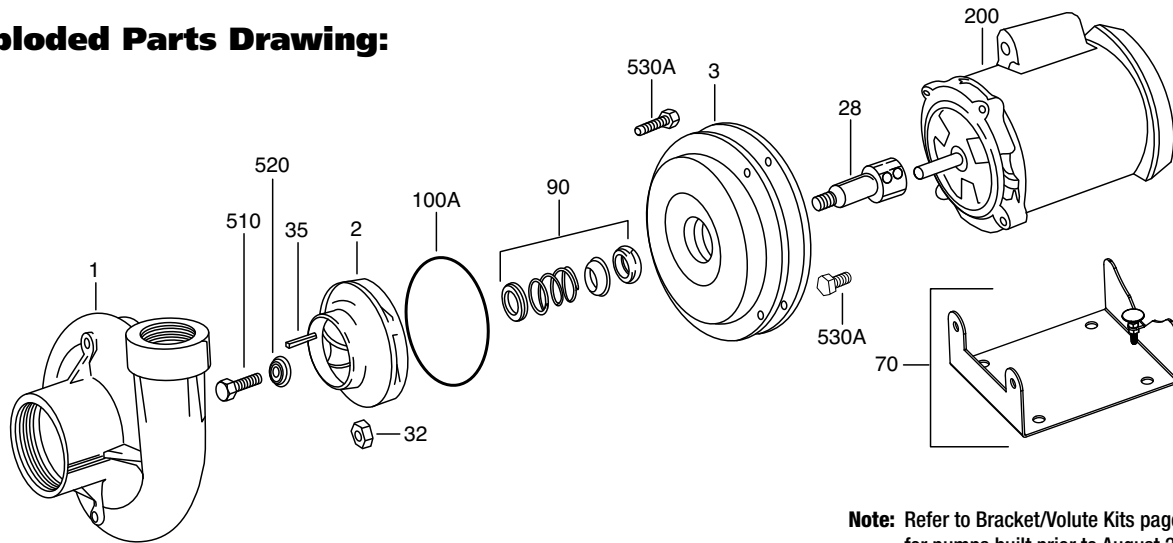
**Notes:** Max O.D. impeller supplied with repair kits. Impeller must be trimmed to match motor hp.  
Consult catalog for specific trim sizes and performance. Impellers should be rebalanced after trimming.

### Materials and Parts: 3 - 7.5 hp 4.5 AK

Fig. No.	Part Description	Repair No.	Materials of Construction
1	Volute Case (NPT) w/plugs	305448001	Cast Iron, ASTM-A48 CL30
2	3hp Impeller Trim 5.12" (.875 bore)	305448015	Silicon Brass, ASTM B584
2	5hp Impeller Trim 5.75" (.875 bore)	305448016	Silicon Brass, ASTM B584
2	7-1/2hp Impeller Trim 6.44" (1.250 bore)	305448017	Silicon Brass, ASTM B584
3	Motor Bucket	305447014	Cast Iron, ASTM-A48 CL30
12	Shaft Sleeve	305447015	416 Stainless steel
35	Impeller Shaft Key	305463001	301 Stainless steel
90	Mechanical Shaft Seal	305463002	Carbon/Ceramic/Buna/316SS
100A	Volute Case O-Ring (2-pack)	305463004	Nitrile
100B	Sleeve O-Ring (2-Pack)	305463200	Nitrile
101	Sleeve Seal	305447016	Nitrile
200	Motor		See Motor Section
Not Shown	Pipe Plug (4-pack)	305463009	Cad-Plated Steel
Not Shown	Water Slinger	305447008	Neoprene
510	Impeller Hex Cap Screw	305463201	316 Stainless-Grade 5
520	Impeller Washer	305447009	300-Series stainless Steel
530A	Motor Bracket Hex Cap Screw (4-Pack)	305463202	Zinc Plated Steel
530B	Volute Case Hex Cap Screw (12-Pack)	305463010	Zinc Plated Steel

## Close-Coupled D-Series DB2

### Exploded Parts Drawing:



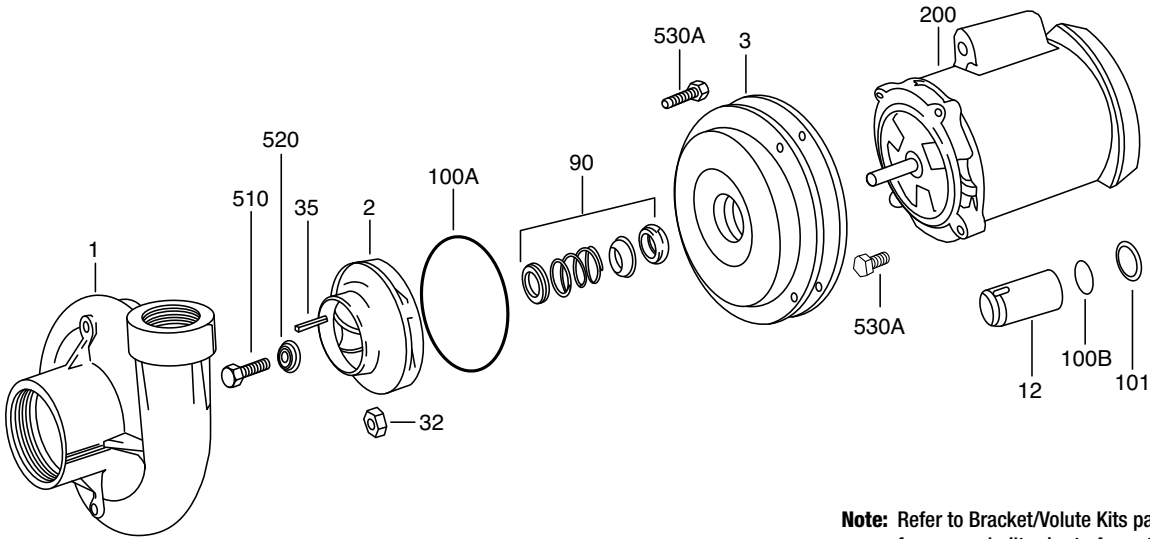
**Note:** Refer to Bracket/Volute Kits page 15 for pumps built prior to August 2008

### Materials and Parts: 1-1/2 - 2 hp with 56C Motor

Fig. No.	Part Description	Repair No.	Materials of Construction
1	Volute Case 3hp-10hp (NPT) w/plugs	305450001	Cast Iron, ASTM-A48 CL30
2	1.5hp Impeller Trim 3.81" (9/16-18 Thd)	305450017	Silicon Brass, ASTM B584
2	2hp Impeller Trim 4.00" (9/16-18 Thd)	305450018	Silicon Brass, ASTM B584
2	3hp Impeller Trim 4.50" (9/16-18 Thd)	305450024	Silicon Brass, ASTM B584
2	1800 RPM Pump End Kits Impeller Trim 6.44" max. (9/16-18 Thd)*	305450026	Silicon Brass, ASTM B584
2	1800 RPM Pump End Kits Impeller Trim 6.44" max. (.875 Bore)*	305450027	Silicon Brass, ASTM B584
3	Motor Bucket	305447021	Cast Iron, ASTM-A48 CL30
28	Coupling (includes set screws)	305447022	416 Stainless steel
32	Impeller Jam Nut	305447023	301 Stainless steel
70	Base Assembly	305447024	316 Stainless steel
90	Mechanical Shaft Seal	305463203	Carbon/Ceramic/Buna/316SS
100A	Volute Case O-Ring (2-pack)	305463004	Nitrile
200	Motor - see MOTOR section		See Motor Section
<b>Not Shown</b>	Pipe Plug (4-pack)	305463009	Cad-Plated Steel
<b>Not Shown</b>	Motor Bracket Hex Cap Screw	305463030	Zinc Plated Steel
<b>530B</b>	Volute Case Hex Cap Screw (4-Pack)	305463030	Zinc Plated Steel

**Notes:** Max O.D. impeller supplied with repair kits. Impeller must be trimmed to match motor hp.  
Consult catalog for specific trim sizes and performance. Impellers should be rebalanced after trimming.

## Close-Coupled D-Series DB2



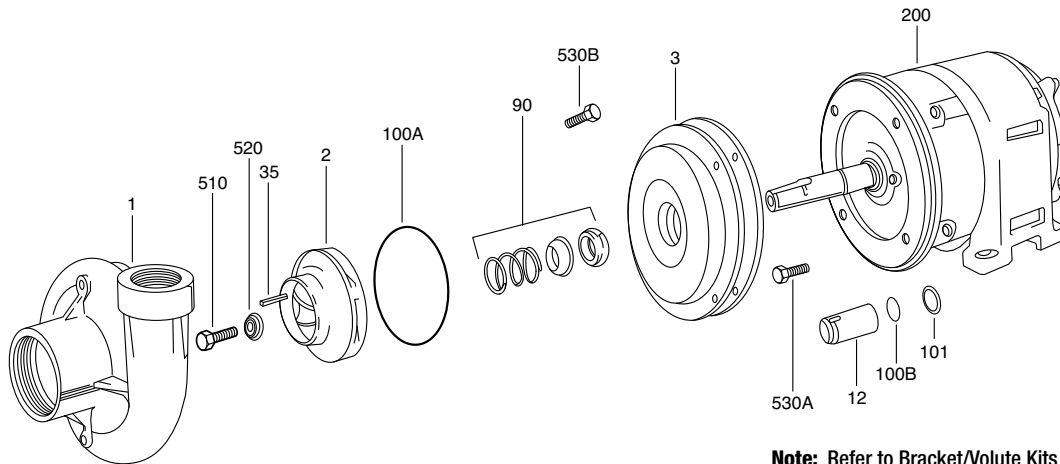
**Note:** Refer to Bracket/Volute Kits page 15 for pumps built prior to August 2008

### Materials and Parts: 3 - 20 hp

Fig. No.	Part Description	Repair No.		Materials of Construction
		4.5AK* Models (3 - 7.5 hp)	8.5AK* Models (10 - 20 hp)	
1	Volute Case 3hp-10hp (NPT) w/plugs	305450001		Cast Iron, ASTM-A48 CL30
1	Volute Case 15hp-20hp (NPT) w/plugs	n/a	305450002	Cast Iron, ASTM-A48 CL30
2	3hp Impeller Trim 4.50" (.875 bore)	305450008	n/a	Silicon Brass, ASTM B584
2	5hp Impeller Trim 5.13" (.875 bore)	305450009	n/a	Silicon Brass, ASTM B584
2	7-1/2hp Impeller Trim 5.81" (.875 bore)	305450010	n/a	Silicon Brass, ASTM B584
2	10hp Impeller Trim 6.44" (.875 bore)	n/a	305450019	Silicon Brass, ASTM B584
2	15hp Impeller Trim 7.25" (.875 bore)	n/a	305450020	Silicon Brass, ASTM B584
2	20hp Impeller Trim 7.94" (1.250 bore)	n/a	305450014	Silicon Brass, ASTM B584
3	Motor Bucket	305447014	n/a	Cast Iron, ASTM-A48 CL30
3	Motor Bucket 10hp	n/a	305450021	Cast Iron, ASTM-A48 CL30
3	Motor Bucket 15hp	n/a	305449017	Cast Iron, ASTM-A48 CL30
3	Motor Bucket 20hp	n/a	305450025	Cast Iron, ASTM-A48 CL30
12	Shaft Sleeve 3hp-15hp	305447015		416 Stainless steel
12	Shaft Sleeve 20hp	n/a	305450022	416 Stainless steel
35	Impeller Shaft Key 3hp-15hp	305463001		301 Stainless steel
35	Impeller Shaft Key 20hp	n/a	305450006	316 Stainless steel
90	Mechanical Shaft Seal 3hp-15hp	305463002		Carbon/Ceramic/Buna/316SS
90	Mechanical Shaft Seal 20hp	n/a	305463204	Carbon/Ceramic/Buna/316SS
100A	Volute Case O-Ring 3hp-10hp (2-Pack)	305463004		Nitrile
100A	Volute Case O-Ring 15hp-20hp (2-Pack)	n/a	305463018	Nitrile
100B	Sleeve O-Ring 3hp-15hp (2-Pack)	305463200		Nitrile
100B	Sleeve O-Ring 20hp (2-Pack)	n/a	305463205	Nitrile
101	Sleeve Seal 3hp-15hp	305447016		Nitrile
101	Sleeve Seal 20hp	n/a	305463206	Nitrile
200	Motor	See Motor Section		
Not Shown	Pipe Plug (4-pack)	305463009		Cad-Plated Steel
Not Shown	Water Slinger	305450007	305447008	Neoprene
510	Impeller Hex Cap Screw	305463201		316 Stainless-Grade 5
510	Impeller Hex Cap Screw 15hp-20hp	n/a	305463185	316 Stainless-Grade 5
520	Impeller Washer	305447009		300-Series stainless Steel
520	Impeller Washer 15hp-20hp	n/a	305450015	300-Series stainless Steel
530A	Motor Bracket Hex Cap Screw 3hp-15hp (12-Pack)	305463010	305463026	Zinc Plated Steel
530A	Motor Bracket Hex Cap Screw 20hp (4-Pack)	n/a	305463207	Zinc Plated Steel
530B	Volute Case Hex Cap Screw (4-Pack)	305463202	305463030	Zinc Plated Steel
530B	Volute Case Hex Cap Screw 15hp (4-Pack)	n/a	305463064	Zinc Plated Steel

## Close-Coupled D-Series DC1-1/2

### Exploded Parts Drawing:



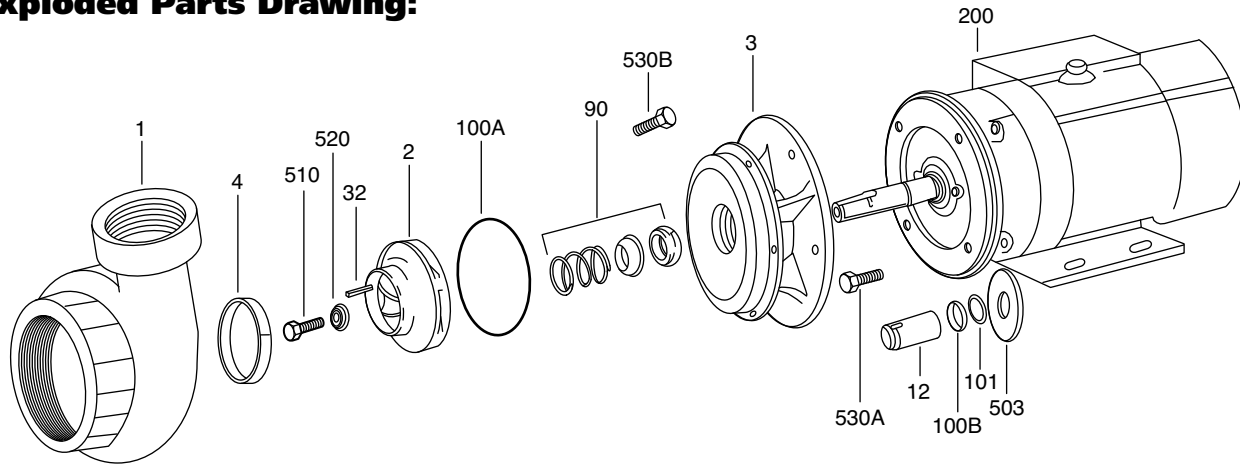
**Note:** Refer to Bracket/Volute Kits page 15 for pumps built prior to August 2008

### Materials and Parts:

Fig. No.	Part Description	Repair No.		Materials of Construction
		4.5AK* Models (3 - 7.5 hp)	8.5AK* Models (10 - 15 hp)	
1	Volute Case (NPT) w/plugs	305449001		Cast Iron, ASTM-A48 CL30
2	3hp Impeller Trim 5.06" (.875 bore)	305449007	n/a	Silicon Brass, ASTM B584
2	5 hp Impeller Trim 5.81" (.875 bore)	305449008	n/a	Silicon Brass, ASTM B584
2	7-1/2hp Impeller Trim 6.63" (.875 bore)	305449009	n/a	Silicon Brass, ASTM B584
2	10hp Impeller Trim 7.31" (1.250 bore)	n/a	305449014	Silicon Brass, ASTM B584
2	15hp Impeller Trim 8.38" (.875 bore)	n/a	305449015	Silicon Brass, ASTM B584
3	Motor Bucket	305449016	305449017	Cast Iron, ASTM-A48 CL30
12	Shaft Sleeve	305447015		416 Stainless steel
35	Impeller Shaft Key	305463001		301 Stainless steel
90	Mechanical Shaft Seal	305463002		Carbon/Ceramic/Buna/316SS
100A	Volute Case O-Ring (2-pack)	305463018		Nitrile
100B	Sleeve O-Ring (2-Pack)	305463200		Nitrile
101	Sleeve Seal	305447016		Nitrile
200	Motor	See Motor Section		
Not Shown	Pipe Plug (4-pack)	305463009		Cad-Plated Steel
Not Shown	Water Slinger	305447008		Neoprene
510	Impeller Hex Cap Screw	305463201		316 Stainless-Grade 5
520	Impeller Washer	305447009		300-Series stainless Steel
530A	Motor Bracket Hex Cap Screw (12-Pack)	305463010	305463026	Zinc Plated Steel
530B	Volute Case Hex Cap Screw (12-Pack)	305463010		Zinc Plated Steel

## Close-Coupled D-Series DB3

### Exploded Parts Drawing:



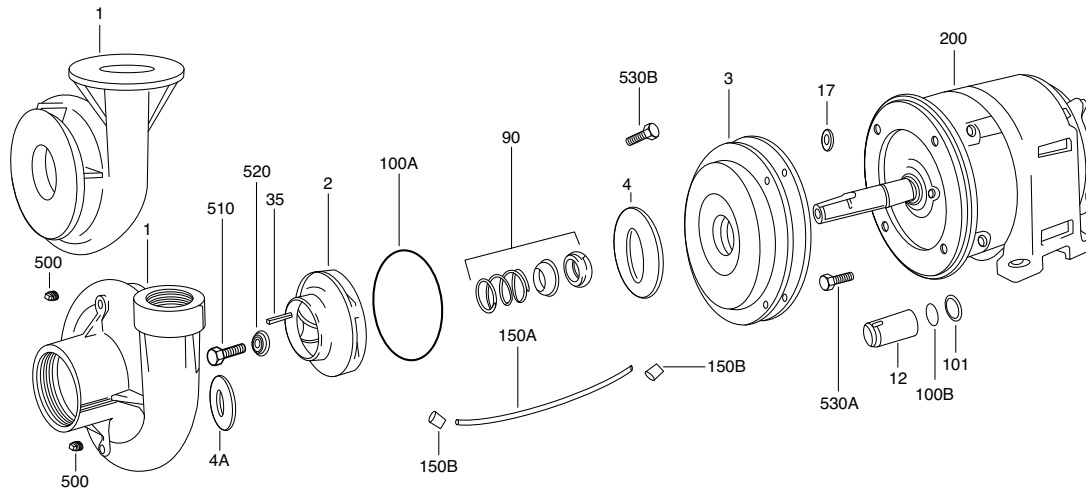
**Note:** Refer to Bracket/Volute Kits page 15 for pumps built prior to August 2008

### Materials and Parts:

Fig. No.	Part Description	Repair No.		Materials of Construction
		4.5AK* Models (3 - 7.5 hp)	8.5AK* Models (10 - 20 hp)	
1	Volute Case 5hp-20hp (NPT) w/plugs	305451001		Cast Iron, ASTM-A48 CL30
2	5hp Impeller Trim 4.50" (.875 bore)	305451004	n/a	Cast Iron, ASTM-A48 CL30
2	7-1/2hp Impeller Trim 4.94" (.875 bore)	305451005	n/a	Cast Iron, ASTM-A48 CL30
2	10hp Impeller Trim 5.31" (.875 bore)	n/a	305451010	Cast Iron, ASTM-A48 CL30
2	15hp Impeller Trim 5.75" (.875 bore)	n/a	305451011	Cast Iron, ASTM-A48 CL30
2	20hp Impeller Trim 6.00" (1.250 bore)	n/a	305451009	Cast Iron, ASTM-A48 CL30
3	Motor Bracket 5hp - 15hp	305447014	305450021	Cast Iron, ASTM-A48 CL30
3	Motor Bracket 20hp	n/a	305451012	Cast Iron, ASTM-A48 CL30
4	Wear Ring (Suction)	305451002		SAE 660 Bronze
12	Shaft Sleeve	305447015		416 Stainless steel
12	Shaft Sleeve 20hp	n/a	305451013	416 Stainless steel
35	Impeller Shaft Key	305463001		301 Stainless steel
35	Impeller Shaft Key 20hp	n/a	305450006	301 Stainless steel
90	Mechanical Shaft Seal	305463002		Carbon/Ceramic/Buna/316SS
90	Mechanical Shaft Seal 20hp	n/a	305463204	Carbon/Ceramic/Buna/316SS
100A	Volute Case O-Ring (2-pack)	305463004		Nitrile
100B	Sleeve O-Ring (2-Pack)	305463200		Nitrile
100B	Sleeve O-Ring (2-Pack)	n/a	305463205	Nitrile
101	Sleeve Seal	305447016		Nitrile
101	Sleeve Seal 20hp	n/a	305463206	Nitrile
200	Motor - see MOTOR section	See Motor Section		
<b>Not Shown</b>	Pipe Plug (4-pack)	305463020		Cad-Plated Steel
503	Water Slinger	305450007		Neoprene
503	Water Slinger 20hp	n/a	305447008	Neoprene
510	Impeller Hex Cap Screw	305463201		316 Stainless-Grade 5
510	Impeller Hex Cap Screw 20hp	n/a	305463019	316 Stainless-Grade 5
520	Impeller Washer	305447009		300-Series stainless Steel
520	Impeller Washer 20hp	n/a	305450015	300-Series stainless Steel
530A	Motor Bracket Hex Cap Screw	305463202	305463026	Zinc Plated Steel
530A	Motor Bracket Hex Cap Screw	n/a	305463207	Zinc Plated Steel
530B	Volute Case Hex Cap Screw (4-Pack)	305463010		Zinc Plated Steel

## Close-Coupled D-Series DC4

### Exploded Parts Drawing:



### Materials and Parts:

Fig. No.	Part Description	Repair No.		Materials of Construction
		8.5AK* Models	12.5AK* Models	
1	Volute Case 20hp-30hp (NPT)	305452001		Cast Iron, ASTM-A48 CL30
1	Volute Case 40hp-50hp (Flanged)	305452002		Cast Iron, ASTM-A48 CL30
2	20hp Impeller Trim 7.03"	305452014	n/a	Cast Iron, ASTM-A48 CL30
2	25hp Impeller Trim 7.47"	305452015	n/a	Cast Iron, ASTM-A48 CL30
2	30hp Impeller Trim 7.88"	n/a	305452016	Cast Iron, ASTM-A48 CL30
2	40hp Impeller Trim 8.44"	n/a	305452017	Cast Iron, ASTM-A48 CL30
2	50hp Impeller Trim 9.03"	n/a	305452018	Cast Iron, ASTM-A48 CL30
3	Motor Bracket	305452021	305452022	Cast Iron, ASTM-A48 CL30
4A/B	Wear Ring (Suction/Hub)	305452005		SAE 660 Bronze
12	Shaft Sleeve	305452009		416 Stainless steel
35	Impeller Shaft Key	305450006		316 Stainless steel
90	Mechanical Shaft Seal	305463204		Carbon/Ceramic/Buna/316SS
100A	Volute Case Square-Ring (2-pack)	305463021		Nitrile
100B	Sleeve O-Ring (2-pack)	305463205		Nitrile
101	Sleeve Seal	305463206		Nitrile
150A	TUBING, Balance	305463022		Polypropylene
150B	Hose Connector (2-pack)	305463023		Bronze
200	Motor	See Motor Section		
500	Pipe Plug (4-pack)	305463020		Cad-Plated Steel
503	Water Slinger	305447008		Neoprene
510	Impeller Hex Cap Screw	305463019		316 Stainless-Grade 5
520	Impeller Washer	305450015		300-Series stainless Steel
530A	Motor Bracket Hex Cap Screw (12-pack)	305463026	305463208	Zinc Plated Steel
530B	Volute Case Hex Cap Screw (12 pack)	305463026		Zinc Plated Steel

## Close-Coupled D-Series

### Cross Reference for New Bracket/Volute Kits:

Model	AK	HP	Frame Size	Old Bracket Number	Old Volute Number	New Bracket Volute Kit Number
DB1 (56C)	4.5	3/4 - 3	56C	177736901	03076403	305429901
DB1-1/2 (56C)		1 - 3			03076700	305429903
DB2 (56C)		3 - 5			03076601	305429907
DB1		3 - 5	145JM/182JM/184JM	177735901	03076403	305429902
DB1-1/2		3 - 7.5			03076700	305429904
DB2		3 - 7.5			03076601	305429908
DB3		5 - 7.5			03084001	305429912
DC1-1/2		3 - 7.5			145JM/182JM/184JM	177741901
DC1-1/2		8.5	10 - 15	213JM/215JM	177739901	03076502
DB2	15		03076205			305429910
DB2	10		213JM/215JM	177737901	03076601	305429909
DB3	10 - 15				03084001	305429913
DB2	20				254JM	177740901
DB3	20		254JM	177738901	03084001	305429914

**Note:** Pumps built prior to August 2008

If replacement is required for the bracket or volute, the new bracket/volute kit must be ordered. All of the other components of the pump are interchangeable.

Old bracket and volute models cannot be mixed with the newly designed bracket and volute (with the exception of the DA1A/B and the DC4 Series).

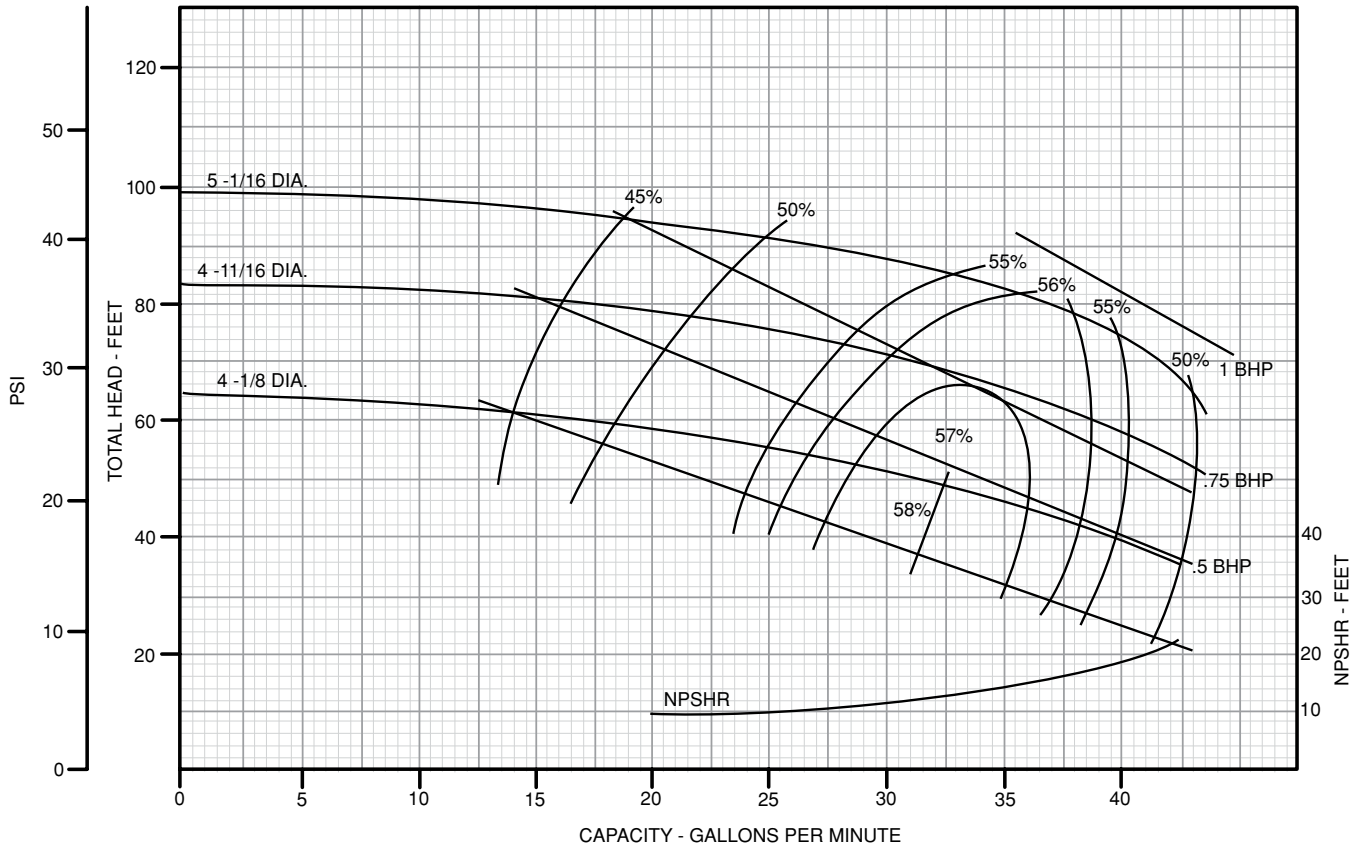
All of the new volutes have the FE logo cast in them.

The newly designed components will be phased in as the inventory of the current design is depleted.

## Close-Coupled D-Series

### Model DA1A Performance:

1" Discharge x 1-1/4" Suction (3600 RPM)

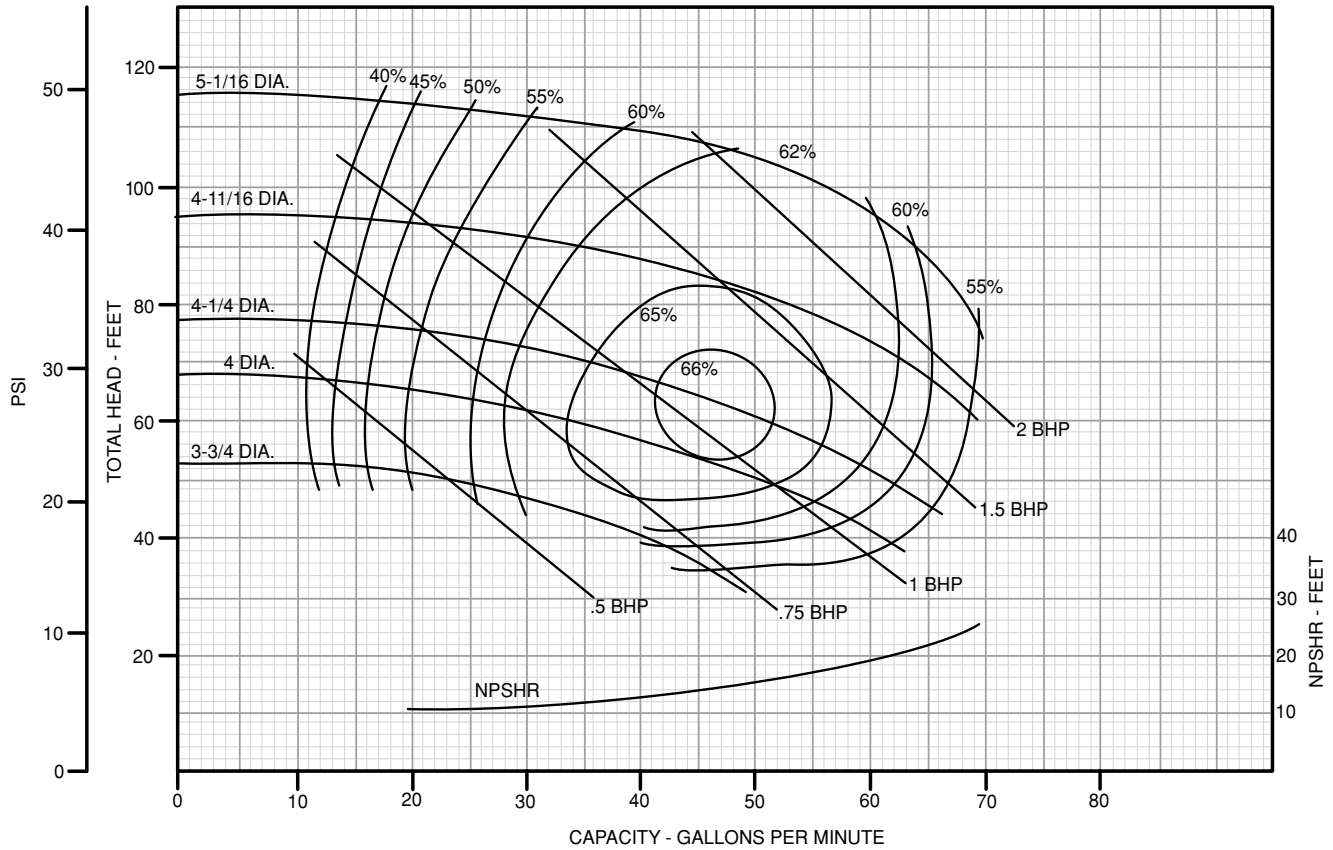




## Close-Coupled D-Series

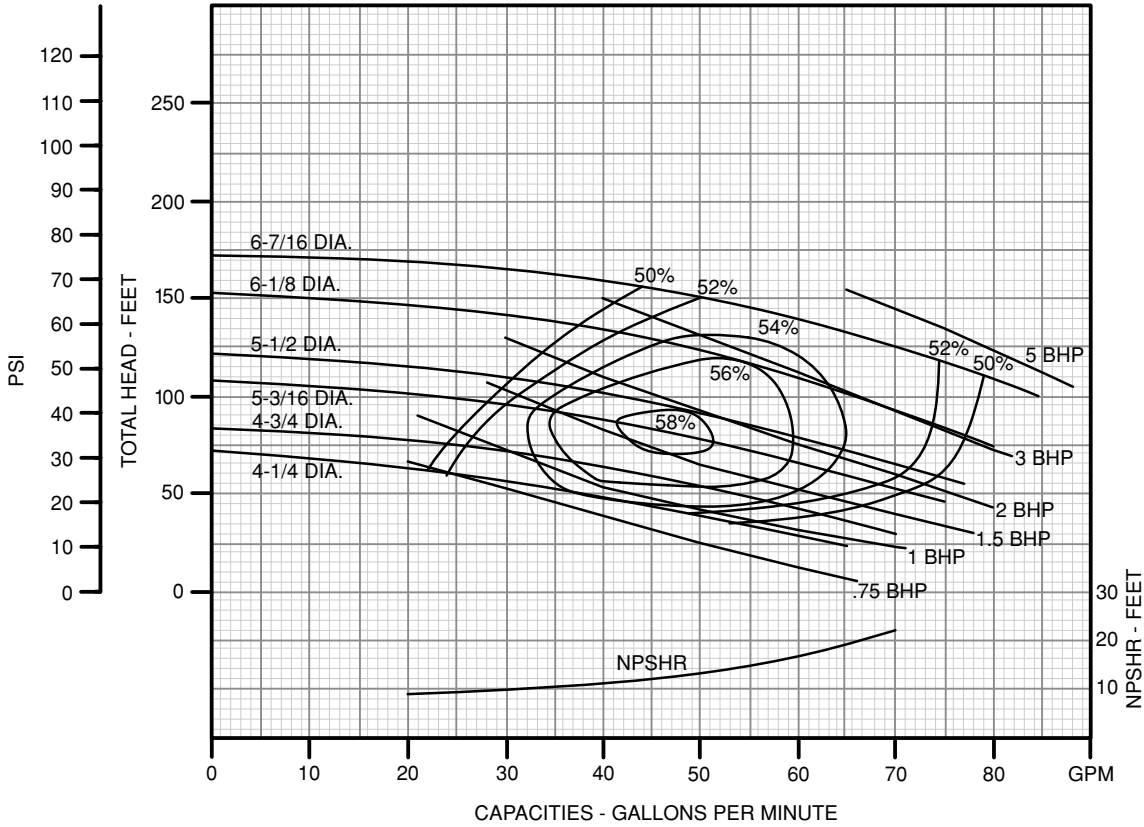
### Model DA1B Performance:

1" Discharge x 1-1/4" Suction (3600 RPM)

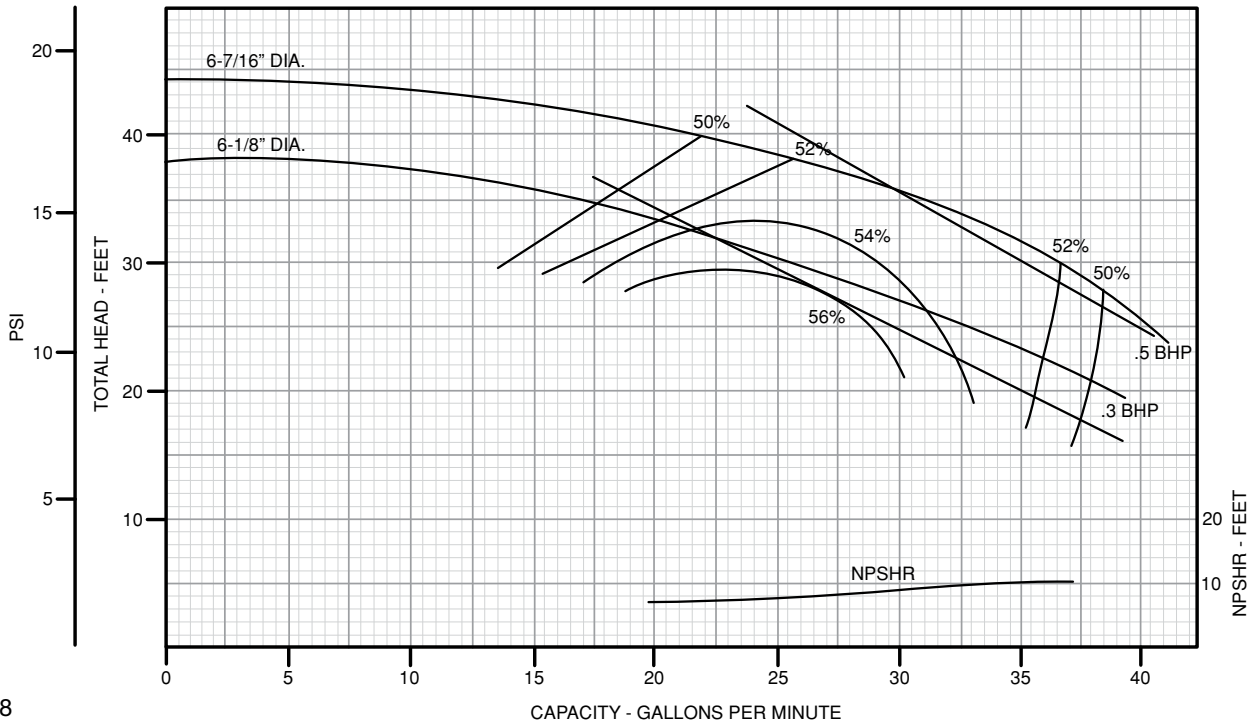


## Close-Coupled D-Series

### Model DB1 Performance: 1" Discharge x 1-1/2" Suction (3600 RPM)

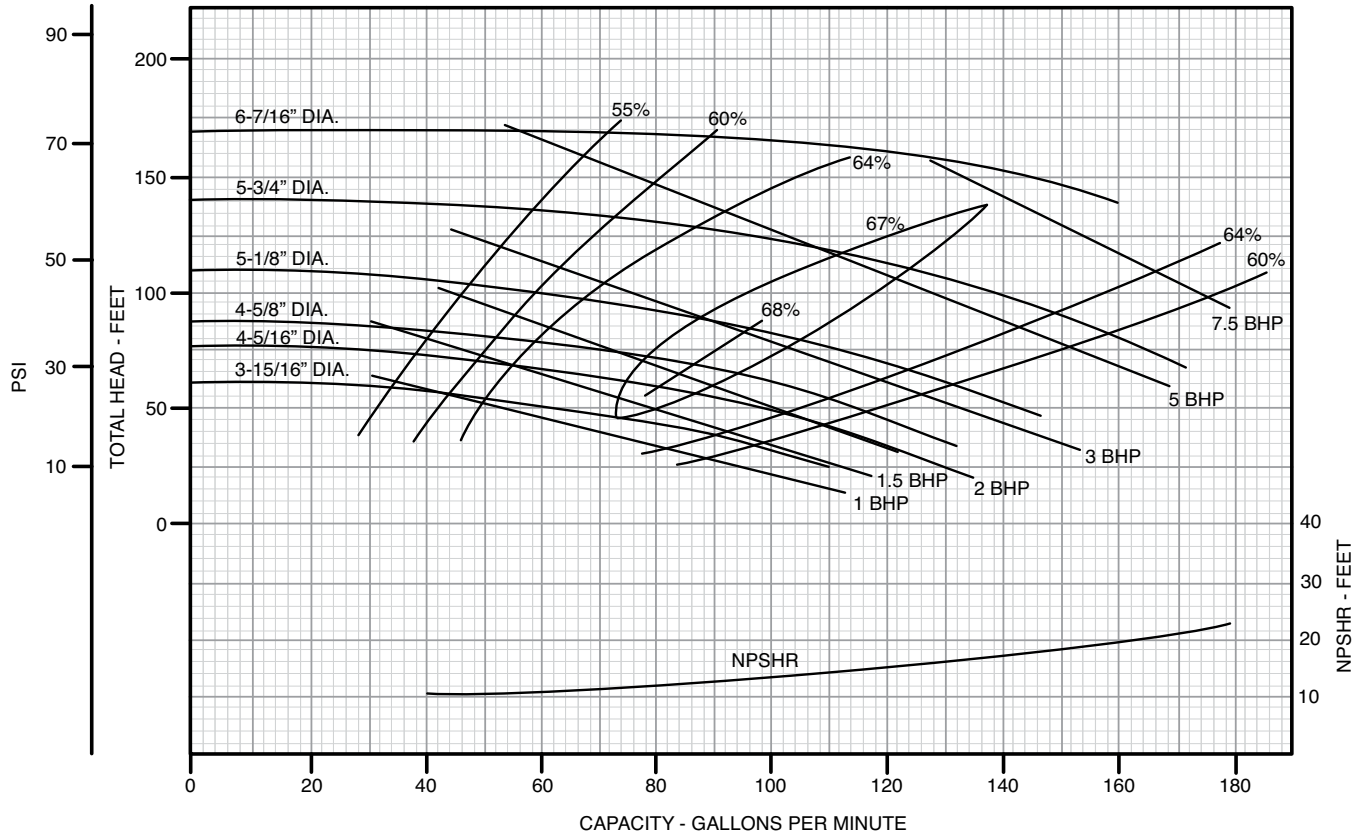


### Model DB1 Performance: 1" Discharge x 1-1/2" Suction (1800 RPM)

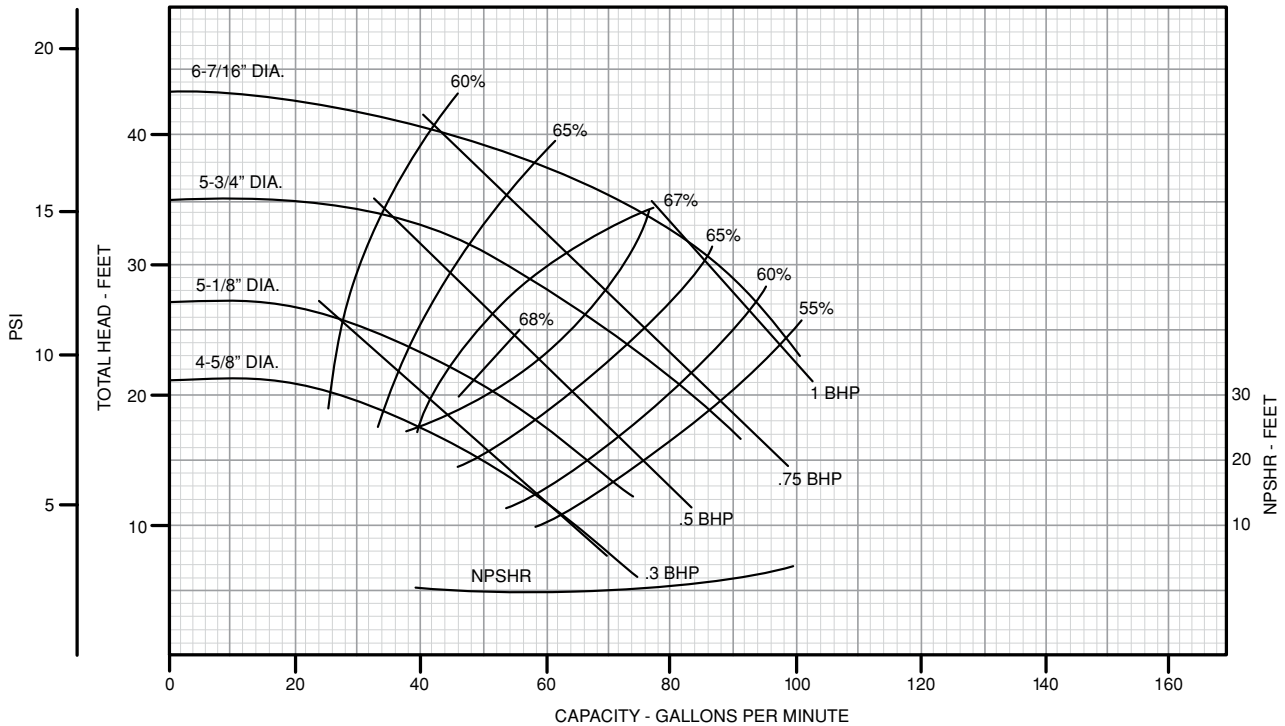


## Close-Coupled D-Series

### Model DB1-1/2 Performance: 1-1/2" Discharge x 2" Suction (3600 RPM)

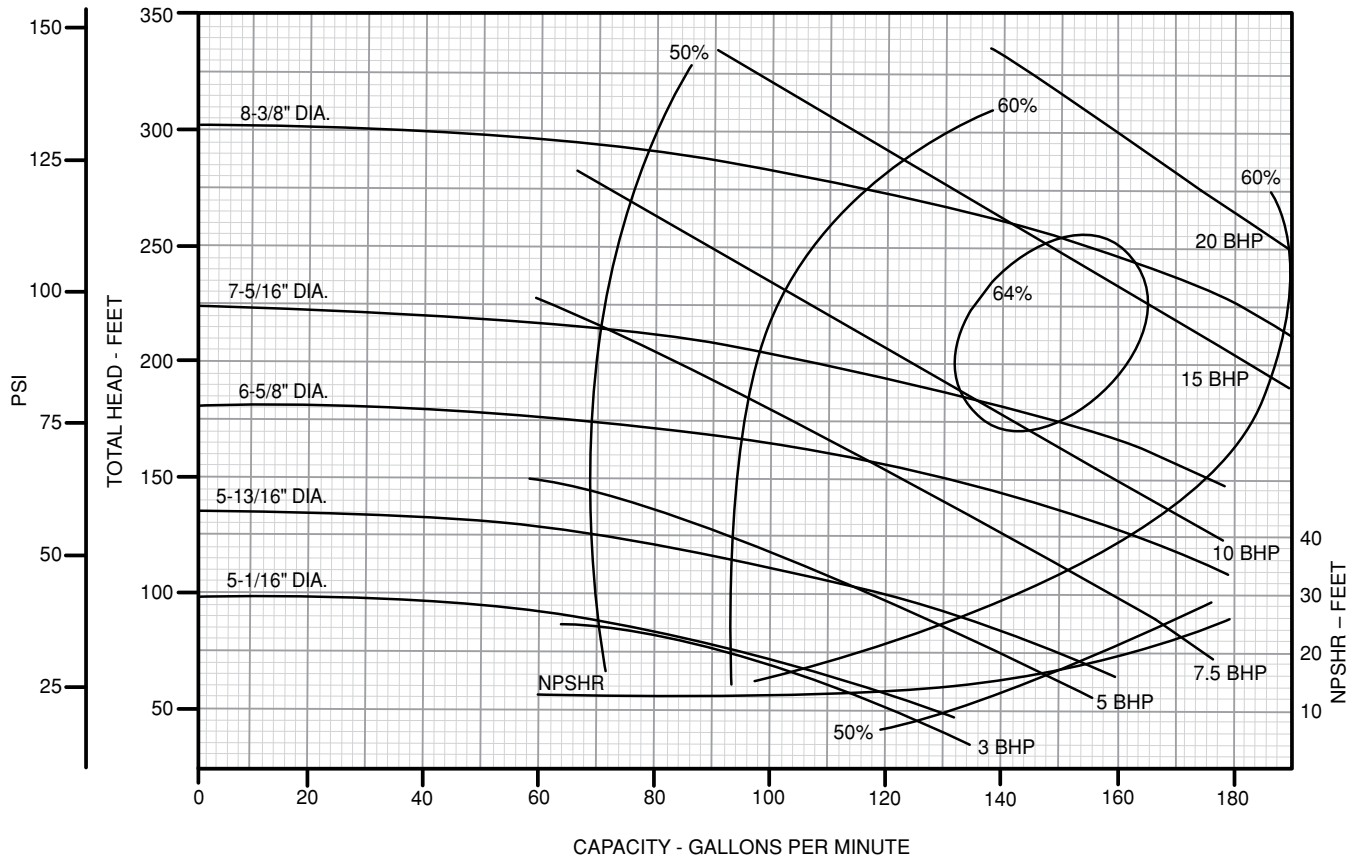


### Model DB1-1/2 Performance: 1-1/2" Discharge x 2" Suction (1800 RPM)



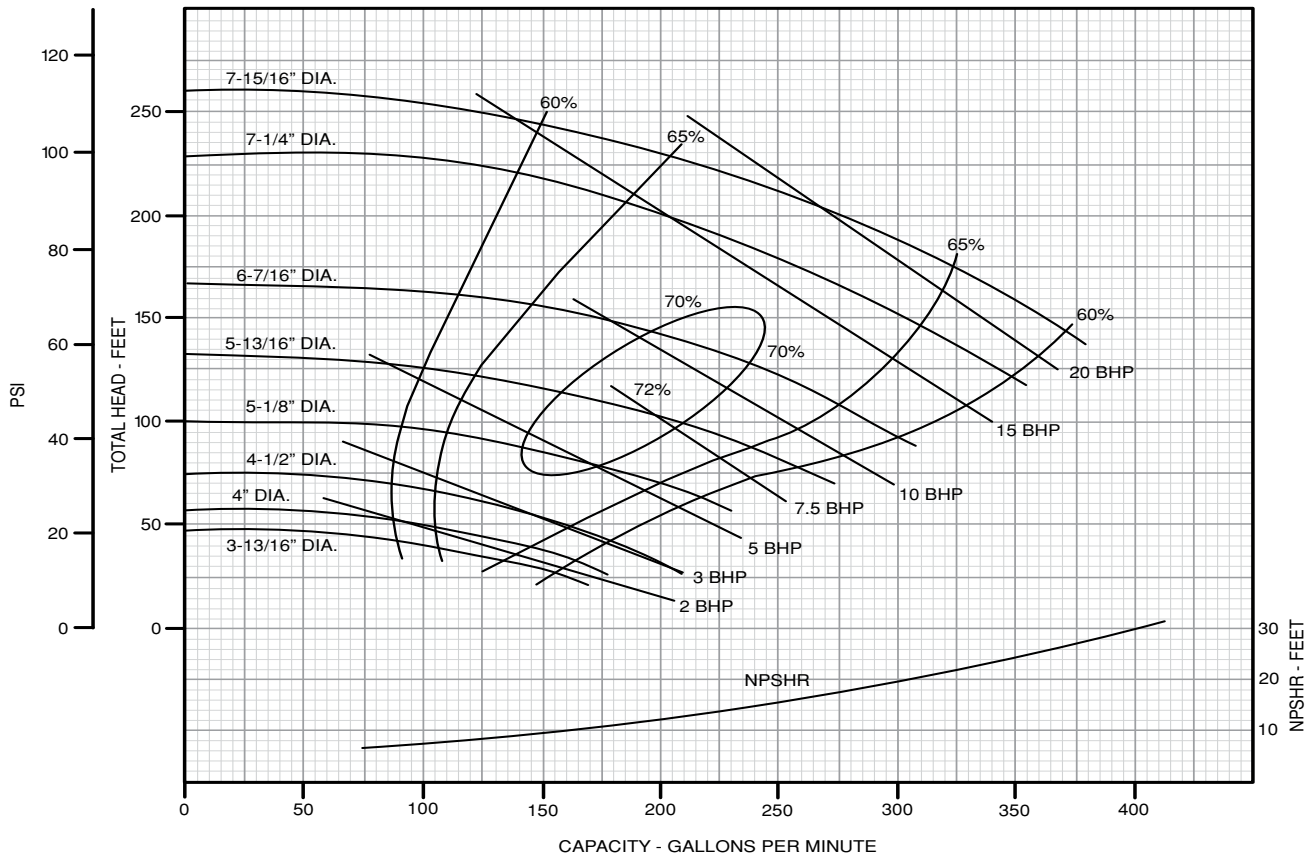
## Close-Coupled D-Series

**Model DC1-1/2 Performance:** 1-1/2" Discharge x 2" Suction (3600 RPM)

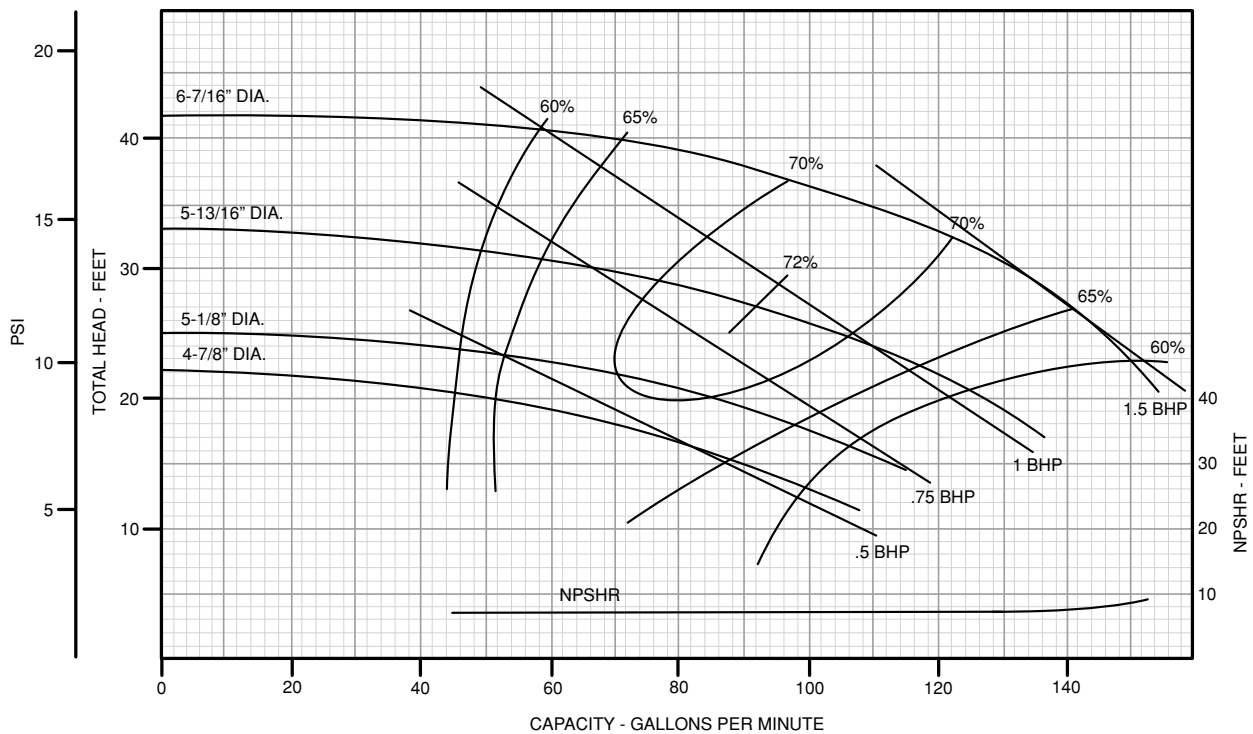


## Close-Coupled D-Series

### Model DB2 Performance: 2" Discharge x 3" Suction (3600 RPM)

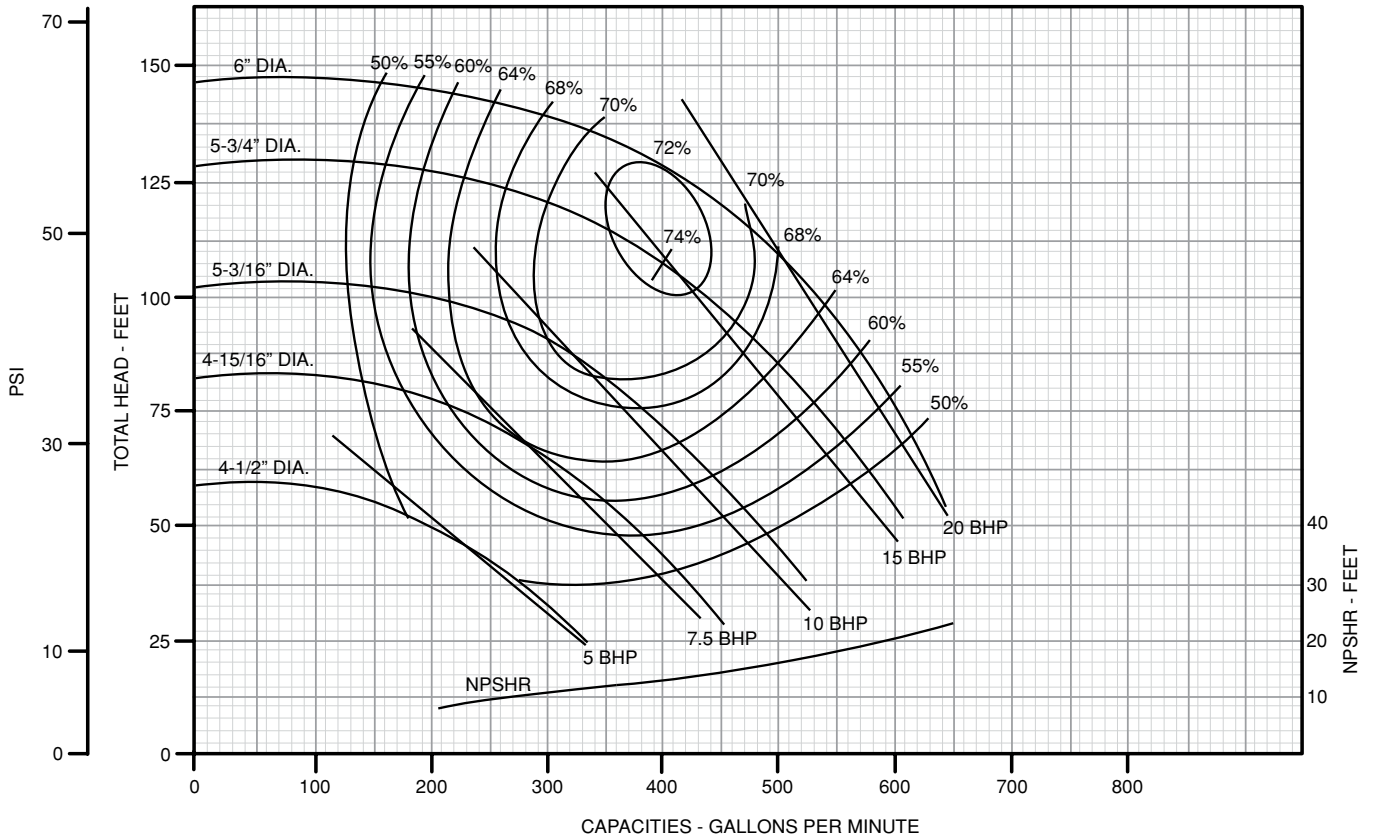


### Model DB2 Performance: 2" Discharge x 3" Suction (1800 RPM)



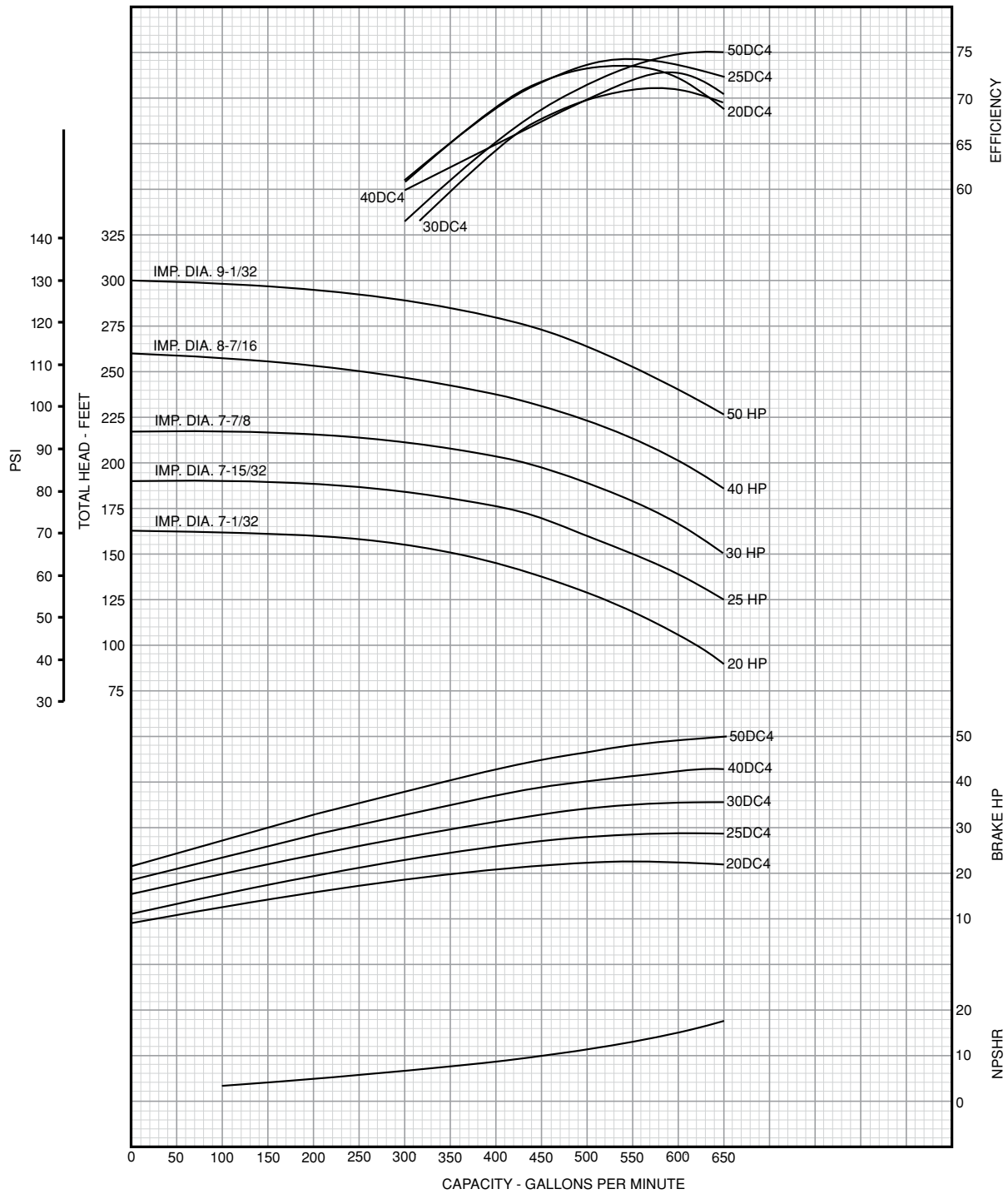
## Close-Coupled D-Series

**Model DB3 Performance: 3" Discharge x 4" Suction (3500 RPM)**



## Close-Coupled D-Series

### Model DC4 Performance: (3500 RPM)





**Franklin Electric**

400 East Spring Street, Bluffton, Indiana 46714  
Tel: 260.824.2900 Fax: 260.824.2909  
[www.franklin-electric.com](http://www.franklin-electric.com)