

CENTRIFUGAL PUMPS

SELF-PRIMING FBSE (1/2-3 HP)

FPS

FEATURES

- Volute: Cast iron construction with tapped openings for priming, venting, and draining
- Impeller: Semi-open cast iron; ideal for handling fertilizer, salt water, dirty water, and other liquids; blind-hole tapped so liquid will not corrode the shaft
- Seal: Standard carbon/ceramic faces, FKM elastomers, and 300 series stainless steel components
- Motor: Reliable, industry-standard; range of 1/2-3 hp; higher than NEMA service factor

SPECIFICATIONS

- Capacities to 126 gpm
- Heads to 70 feet
- 75 psi maximum working pressure
- 212 °F maximum temperature
- Clockwise rotation when viewed from motor end
- NPT pipe connections



APPLICATIONS

- Irrigation
- Construction
- Mining
- Commercial
- Municipal
- Light Industrial
- Residential



Franklin Electric

CENTRIFUGAL PUMPS

SELF-PRIMING FBSEF (1½–7½ HP)



FEATURES

- Volute: Rugged cast iron construction with a large chamber for rapid self priming
- Impeller: Semi-open cast iron ideal for handling fertilizer, salt water, dirty water, or other liquids; blind-hole tapped so liquid will not corrode the shaft
- Mechanical Seal: Carbon/ceramic faces; FKM elastomers; 300-series stainless steel components
- Motor: Reliable, industry-standard; totally-enclosed; fan-cooled TEFC enclosure



SPECIFICATIONS

- Capacities to 295 gpm
- Heads to 92 feet
- 75 psi maximum working pressure
- 212 °F maximum temperature
- Clockwise rotation when viewed from motor end
- NPT pipe connections

APPLICATIONS

- Irrigation
- Construction
- Mining
- Commercial
- Municipal
- Light Industrial
- Residential

CENTRIFUGAL PUMPS

CLOSE-COUPLED SELF-PRIMING



SELF-PRIMING FBSE AND FBSEF	4
FBSE Order Information.....	4
FBSEF Order Information.....	5
FBSEFL Order Information	6
FBSE Dimensions.....	7
FBSEF Dimensions.....	8
Replacement Motors.....	9
Repair Parts.....	10
FBSE Repair Parts.....	10
FBSEF Repair Parts	13

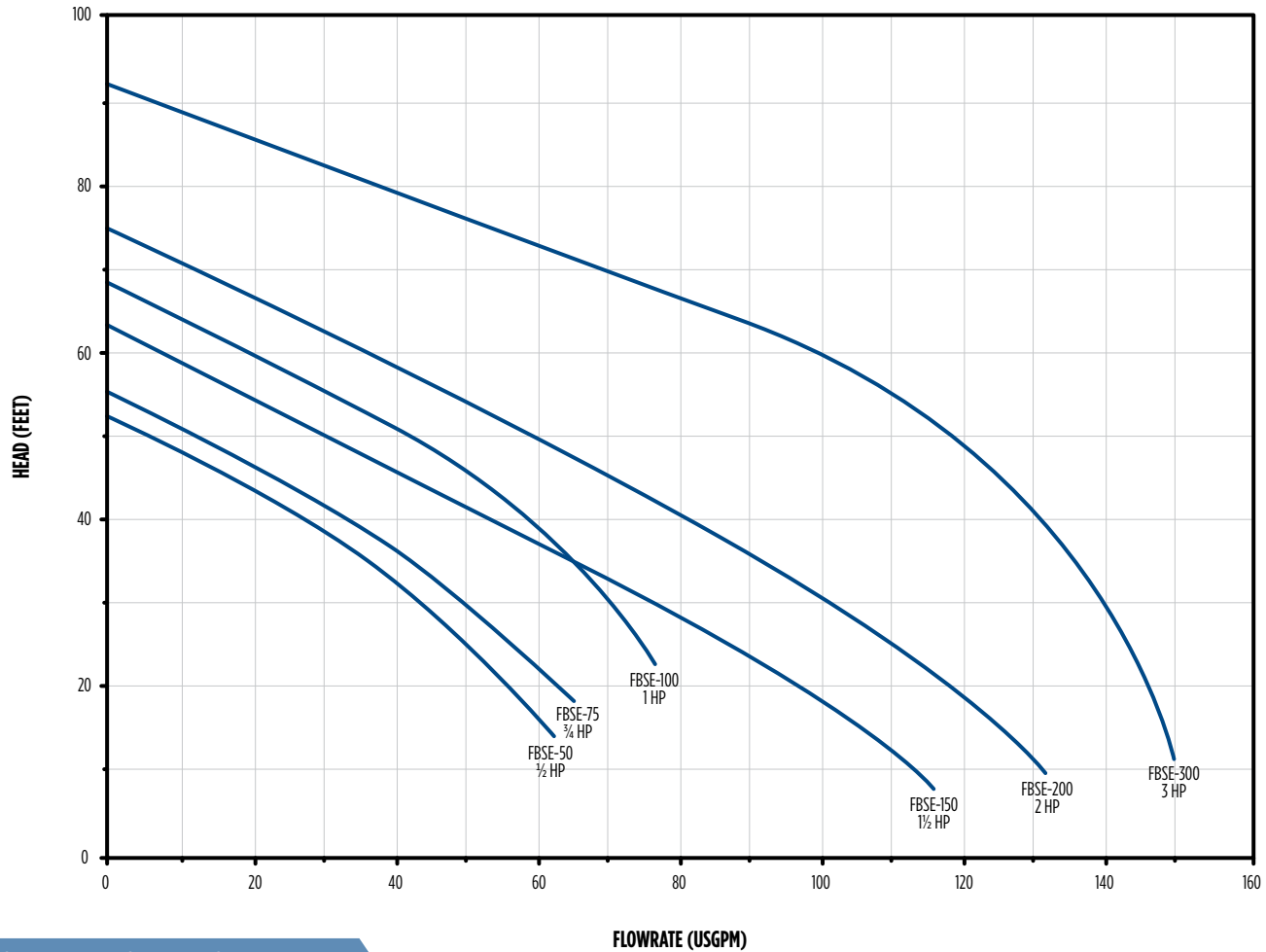
CENTRIFUGAL PUMPS

SELF-PRIMING FBSE (1/2-3 HP)



ORDER INFORMATION

3600 RPM



ORDER INFORMATION

Series	Enclosure	PH	Volts	HP	Max Amps	Motor Frame	Order No.	Model No.	Wt. (lbs)
FBSE	ODP	1	115/230	1/2	12.4/6.2	48Y Sq. Flg.	92931005	FBSE-50-S	41
				3/4	14.8/7.4	48Y Sq. Flg.	92931007	FBSE-75-S	42
				1	19.9/9.5	48Y Sq. Flg.	92931010	FBSE-100-S	46
				1-1/2	24.0/12.0	48Y Sq. Flg.	92931015	FBSE-150-S	52
			230	2	11.2	48Y Sq. Flg.	92931020	FBSE-200-S	60
				3	13.5	56J C-Face	92931030	FBSE-300-S	70
		3	230/460	3	9/4.5	56J C-Face	92933030	FBSE-300-T	60

ORDER INFORMATION PUMP END KITS (LESS MOTOR)

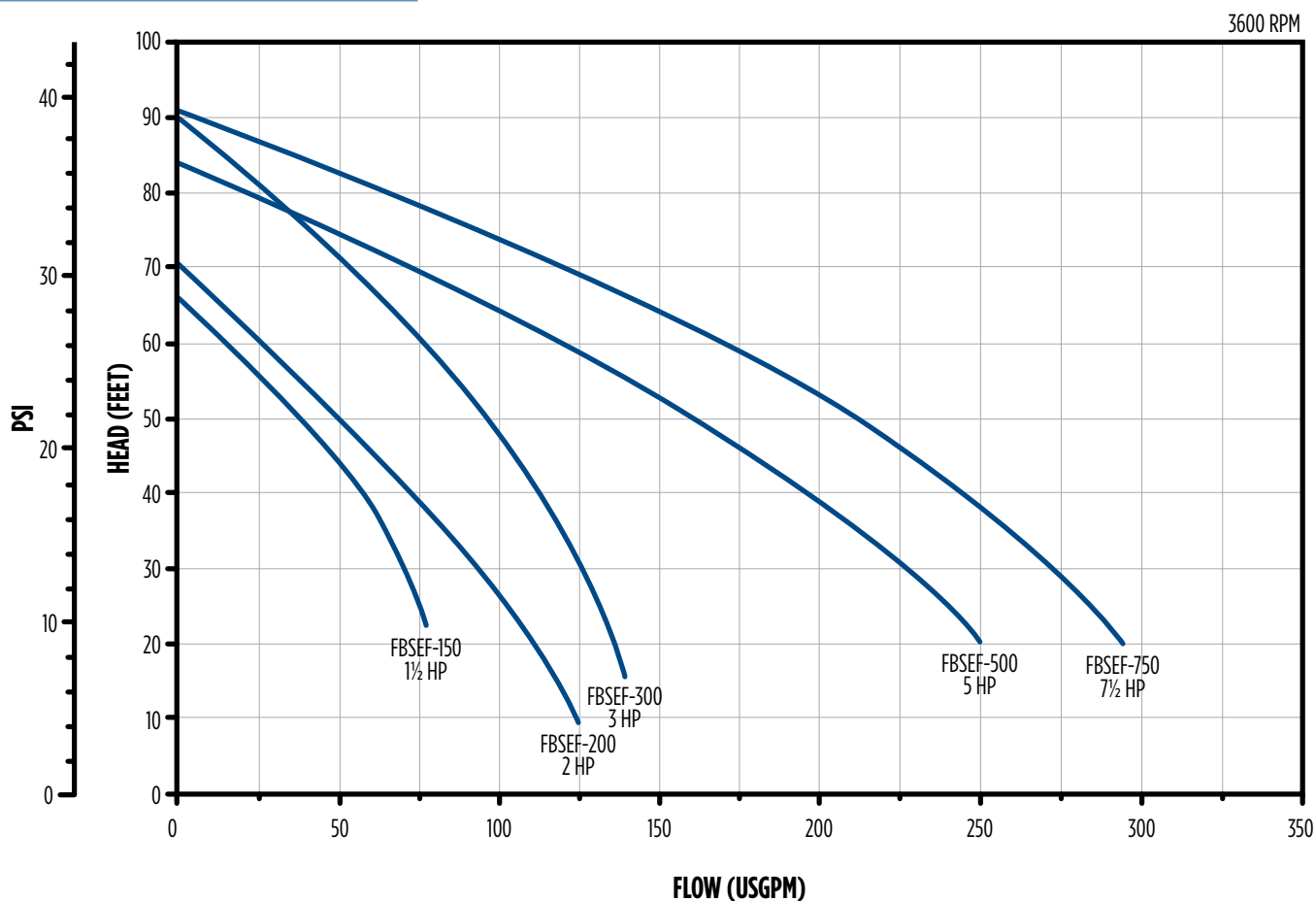
Series	Fits Motor Frame	HP	Order No.	Model No.	Wt. (lbs)
FBSE	56J C-Face	1/2	92925005	FBSE-50-K	18
		3/4	92925007	FBSE-75-K	18
		1	92925010	FBSE-100-K	18
		1-1/2	92925015	FBSE-150-K	18
		2	92925020	FBSE-200-K	22
		3	92925030	FBSE-300-K	25

CENTRIFUGAL PUMPS

SELF-PRIMING FBSEF (1½-7½ HP)



ORDERING INFORMATION



ORDER INFORMATION

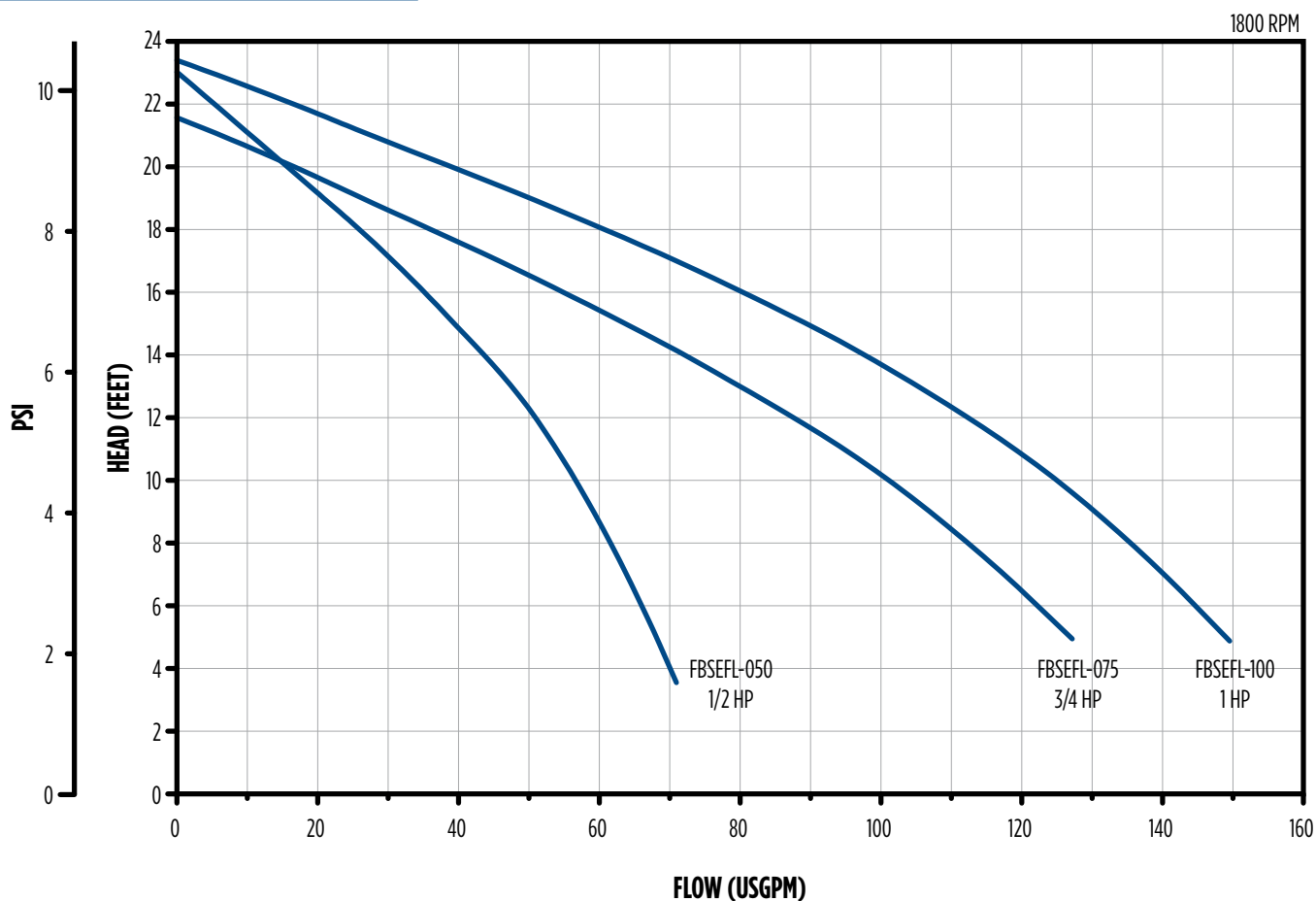
Series	Enclosure	PH	Volts	HP	Max Amps	Motor Frame	Order No.	Model No.	Wt. (lbs)
FBSEF 3600 RPM	TEFC	1	115/230	1.5	16.6/8.3	56J	92932015	FBSEF-150-SE	52
			230	2	9	56J	92932020	FBSEF-200-SE	60
				3	13	56J	92932030	FBSEF-300-SE	71
				5	19.5	184JM	92932050	FBSEF-500-SE	153
		3	230/460	1.5	4.8/2.4	56J	92934015	FBSEF-150-TE	66
				2	5.8/2.9	56J	92934020	FBSEF-200-TE	74
				3	8.2/4.1	56J	92934030	FBSEF-300-TE	83
				5	13.4/6.7	184JM	92934050	FBSEF-500-TE	139
				7.5	19.4/9.7	184JM	92934051	FBSEF-500-TSE	139
			575	5	5.4	184JM	92934075	FBSEF-750-TE	161
				7.5	7.8	184JM	92934076	FBSEF-750-TSE	161

CENTRIFUGAL PUMPS

SELF-PRIMING FBSEF (1½-7½ HP)



ORDER INFORMATION



ORDER INFORMATION

Series	Motor Enclosure	PH	Volts	HP	Max Amps	Motor Frame	Order No.	Model No.	Wt. (lbs)
FBSEFL 1800 RPM	TEFC	1	115/230	1/2	8.2/4.1	56J	92932005	FBSEFL-050-SE	60
		3	230/460	1/2	1.9/96	56J	92934005	FBSEFL-050-TE	64
				1*	3.6/1.8	143JM	92934007	FBSEFL-075-TE	100
				1	3.6/1.8	143JM	92934010	FBSEFL-100-TE	100

*1 HP motor is used on FBSEFL-075-TE

ORDER INFORMATION PUMP END KITS (LESS MOTOR)

Series	Fits Motor Frame	HP	Order No.	Model No.	Wt. (lbs)
FBSEF 3600 RPM	56J C-Face	1.5	92920015	FBSEF-150K	28
		2	92920020	FBSEF-200K	33
		3	92920030	FBSEF-300K	33
	184JM	5	92920050	FBSEF-500K	60
		7.5	92920075	FBSEF-750K	60
FBSEFL 1800 RPM	56J C-Face	1/2	92920030	FBSEF-300K	33
	143JM	3/4	92920050	FBSEF-500K	60
		1	92920075	FBSEF-750K	60

CENTRIFUGAL PUMPS

SELF-PRIMING FBSE (1/2-3 HP)



DIMENSIONS

FIG. 1

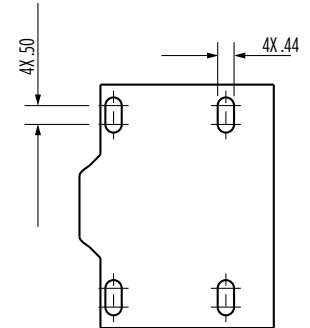
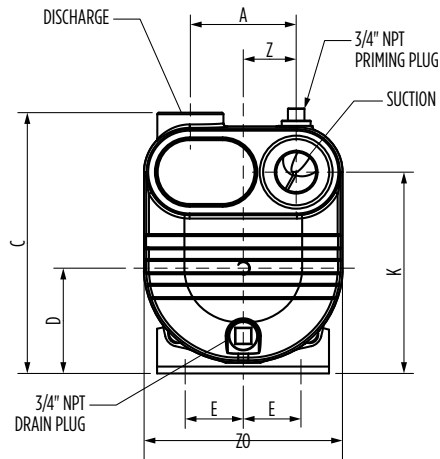
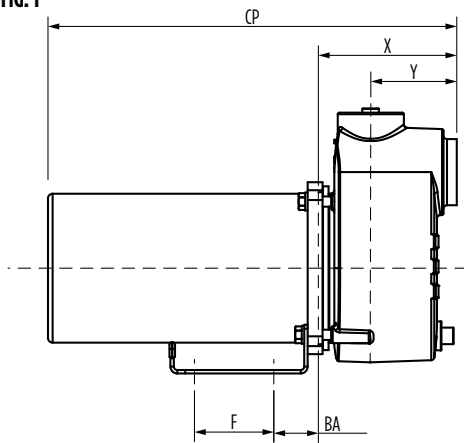
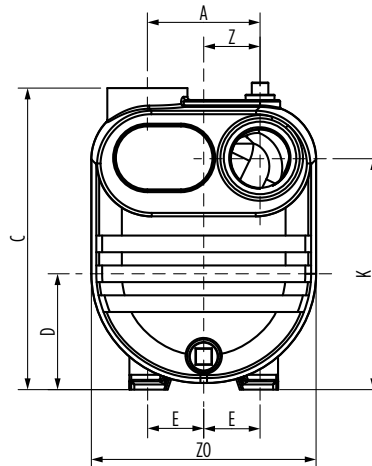
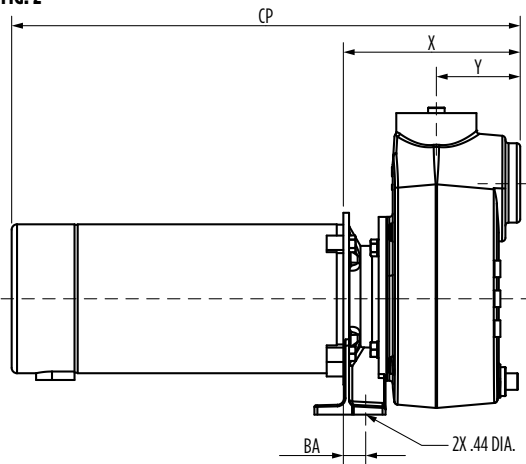


FIG. 2



Model	Fig.	Dis. x Suc. (NPT)	Dimensions (in)											
			CP	A	BA	C	D	E	F	K	X	Y	Z	Z0
FBSE-50-S	1	1-1/4" x 1-1/4"	15.46	4.00	1.69	9.86	3.98	2.20	3.00	7.61	5.23	3.25	2.00	7.50
FBSE-75-S	1	1-1/4" x 1-1/4"	15.96	4.00	1.69	9.86	3.98	2.20	3.00	7.61	5.23	3.25	2.00	7.50
FBSE-100-S	1	1-1/4" x 1-1/4"	16.96	4.00	1.69	9.86	3.98	2.20	3.00	7.61	5.23	3.25	2.00	7.50
FBSE-150-S	1	2" x 2"	17.91	4.26	1.69	11.00	3.98	2.20	3.00	8.36	5.44	3.17	2.13	8.50
FBSE-200-S	1	2" x 2"	19.16	4.26	1.69	11.00	3.98	2.20	3.00	8.36	5.44	3.17	2.13	8.50
FBSE-300-S	2	2" x 2"	19.23	4.26	0.85	11.44	4.38	2.13	N/A	8.37	6.69	3.17	2.13	8.50
FBSE-300-T	2	2" x 2"	20.43	4.26	0.85	11.44	4.38	2.13	N/A	8.37	6.69	3.17	2.13	8.50

NOTE: Dimensions are for estimating purposes only

CENTRIFUGAL PUMPS

SELF-PRIMING FBSEF (1½-7½ HP)



DIMENSIONS

FIGURE 1

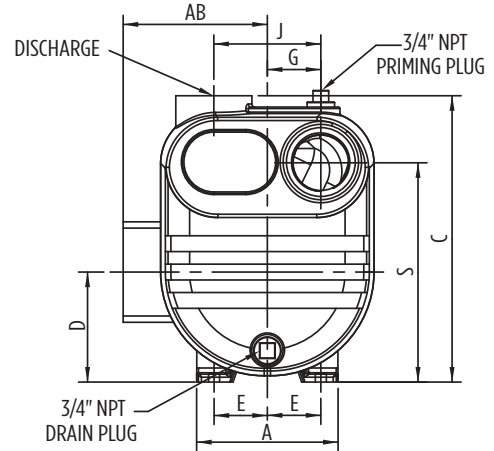
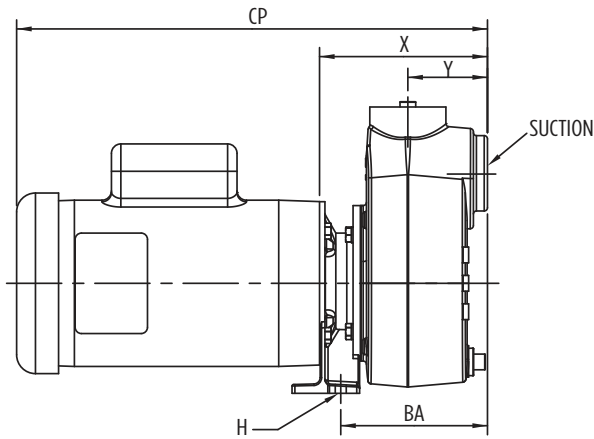


FIGURE 2

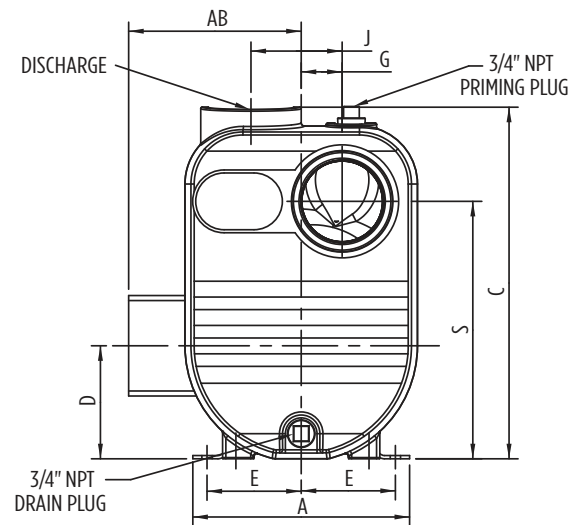
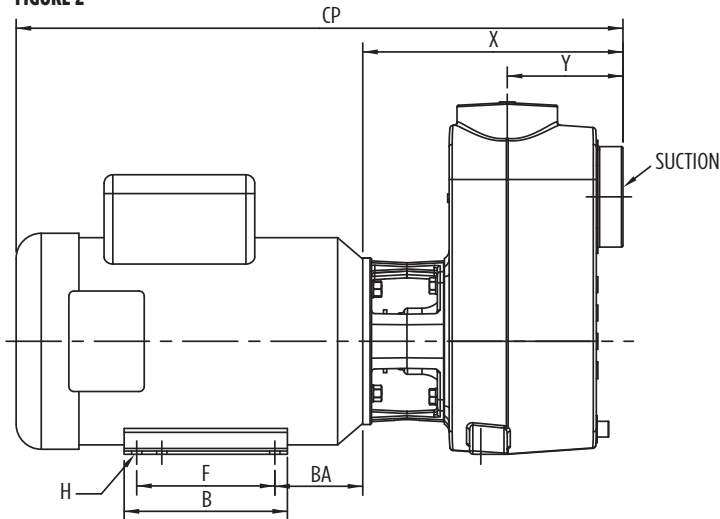


Fig.	Series	Model	Order No.	Pole	Discharge NPT	Suction NPT	A	B	D	E	F	H	AB	BA	CP	C	G	J	S	X	Y
1	FBSEF	FBSEF-150-SE	92932015	2	1-1/4"	1-1/4"	5.63	n/a	3.81	2.12	n/a	0.44	n/a	n/a	17.17	6.69	2.00	4.00	7.44	6.54	3.26
		FBSEF-150-TE	92934015				5.63	n/a	3.81	2.12	n/a	0.44	5.23	n/a	16.85	6.69	2.00	4.00	7.44	6.54	3.26
		FBSEF-200-SE	92932020	2	2"	2"	5.63	n/a	4.38	2.12	n/a	0.44	5.84	n/a	18.75	11.40	2.13	4.26	8.73	6.69	3.17
		FBSEF-200-TE	92934020				5.63	n/a	4.38	2.12	n/a	0.44	5.74	n/a	17.87	11.40	2.13	4.26	8.73	6.69	3.17
		FBSEF-300-SE	92932030				5.63	n/a	4.38	2.12	n/a	0.44	5.74	n/a	19.81	11.40	2.13	4.26	8.73	6.69	3.17
		FBSEF-300-TE	92934030				5.63	n/a	4.38	2.12	n/a	0.44	5.74	n/a	18.75	11.40	2.13	4.26	8.73	6.69	3.17
	FBSEFL	FBSEFL-050-SE	92932005	4	2"	2"	5.63	n/a	4.38	2.12	n/a	0.44	5.18	n/a	16.98	11.40	2.13	4.26	8.73	6.69	3.17
		FBSEFL-050-TE	92934005				5.63	n/a	4.38	2.12	n/a	0.44	5.19	n/a	15.97	11.40	2.13	4.26	8.73	6.69	3.17
2	FBSEF	FBSEF-500-SE	92932050	2	3"	3"	8.63	6.50	4.50	3.75	5.50	0.45	6.87	3.50	25.66	14.00	1.63	3.63	10.25	10.36	4.61
		FBSEF-500-TE	92934050				8.63	6.50	4.50	3.75	5.50	0.41	6.87	3.50	24.17	14.00	1.63	3.63	10.25	10.36	4.61
		FBSEF-500-TSE	92934051				8.63	6.50	4.50	3.75	5.50	0.41	6.87	3.50	24.17	14.00	1.63	3.63	10.25	10.36	4.61
		FBSEF-750-TE	92934075				8.63	6.50	4.50	3.75	5.50	0.41	6.87	3.50	25.67	14.00	1.63	3.63	10.25	10.36	4.61
	FBSEFL	FBSEFL-075-SE	92934007	4	3"	3"	8.63	6.50	4.50	3.75	5.50	0.41	6.87	3.50	25.67	14.00	1.63	3.63	10.25	10.36	4.61
		FBSEFL-075-TE	92934007				6.50	5.94	3.50	2.75	5.00	0.34	5.73	2.88	21.51	14.00	1.63	3.63	10.25	10.36	4.61
		FBSEFL-100-TE	92934010				6.50	5.94	3.50	2.75	5.00	0.34	5.73	2.88	21.54	14.00	1.63	3.63	10.25	10.36	4.61
							6.50	5.94	3.50	2.75	5.00	0.34	5.73	2.88	21.54	14.00	1.63	3.63	10.25	10.36	4.61

NOTE: Dimensions are for estimating purposes only. All dimensions in inches.

CENTRIFUGAL PUMPS

CLOSE-COUPLED SELF-PRIMING



REPLACEMENT MOTORS

3600 RPM ODP

PH	Volts	HP	SFA	Frame	AK	U	Motor Number	Wt.
1	230	3	14.8	56J	4.5	0.625	ASB818	52
3	230/460		8.0/4.0	56J	4.5	0.625	218781	42

REPLACEMENT MOTORS

3600 RPM TEFC

PH	Volts	HP	SFA	Frame	AK	U	Motor Number	Wt.
1	115/230	1.5	16.6/8.3	56J	4.5	0.625	EU09	45
	208-230	2	9.6-9.0	56J	4.5	0.625	EU11	40
		3	13.7-13	56J	4.5	0.625	EU12	47
	230	5	19.5	184JM	4.5	0.625	JML3608T	93
3	230/460	1.5	4.8/2.4	56J	4.5	0.625	EJM3550	38
		2	5.8/2.9	56J	4.5	0.625	EJM3555	41
		3	8.2/4.1	56J	4.5	0.625	EJM3559	50
		5	13.4/6.7	184JM	4.5	0.625	EJMM3613T	79
		7.5	19.4/9.7	184JM	4.5	0.625	EJMM3616T	101
	575	5	5.4	184JM	4.5	0.625	EJMM3613T-5	74
		7.5	7.8	184JM	4.5	0.625	EJMM3616T-5	96

REPLACEMENT MOTORS

1800 RPM TEFC

PH	Volts	HP	SFA	Frame	AK	U	Motor Number	Wt.
1	115/230	1/2	8.2/4.1	56J	4.5	0.625	JL3504A	27
3	230/460	1/2	1.9/96	56J	4.5	0.625	JM3461	23
		1*	3.6/1.8	143JM	4.5	0.625	EJMM3546T	40
		1	3.6/1.8	143JM	4.5	0.625	EJMM3546T	40

*1 hp motor used for 3/4 hp version, motor manufacturer does not offer a 3/4 hp in 143JM

CENTRIFUGAL PUMPS

SELF-PRIMING FBSE



REPAIR PARTS

1/2-2 HP

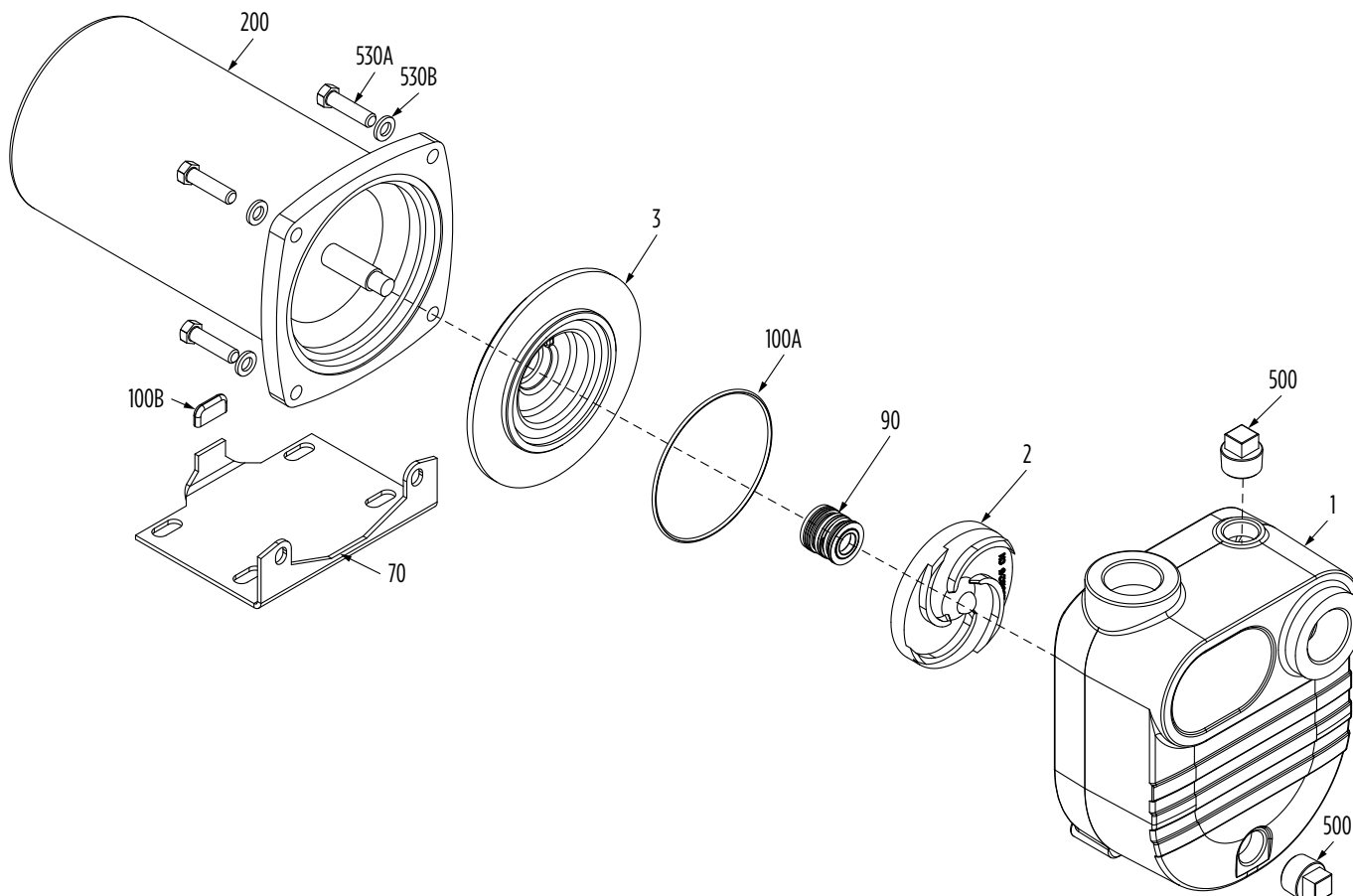


Fig. No.	Part Description	Part No.					Materials of Construction
		FBSE-50	FBSE-75	FBSE-100	FBSE-150	FBSE-200	
1	Pump Case	305461001			305461002		Cast iron, ASTM-A48 CL30
2	Impeller	305461003	305461004	305461005	305461006	305461007	Cast iron, ASTM-A48 CL30
3	Seal Plate	305461008			305461009		Cast iron, ASTM-A48 CL30
70	Motor Base	305461010					CRS
90	Mechanical Shaft Seal	305463029					GL-SiC/GL-SiC x FKM-SS
100A	O-Ring	305463292			305463294		Nitrile
100B	Base Protector	305463134					Vinyl
200	Motor 48Y Sq. Fig., 1 PH*	-					-
500	Pipe Plug 3/4"NPT (2 pack)	305463050					CAD-plated steel
530A	Hex Bolt/Stud - Volute (4 pack)	305463179			305463136		Zinc-plated steel
530B	Bracket Lockwasher (4 pack)	305463137					Zinc-plated steel
530C	Hex Nut (8 pack)	-			305463033		Zinc-plated steel

*Not offered as a replacement part

Pre-May 2019

100A	Case Gasket	305463133			305463124		Vegetable fiber
------	-------------	-----------	--	--	-----------	--	-----------------

CENTRIFUGAL PUMPS

SELF-PRIMING FBSE



REPAIR PARTS

3 HP

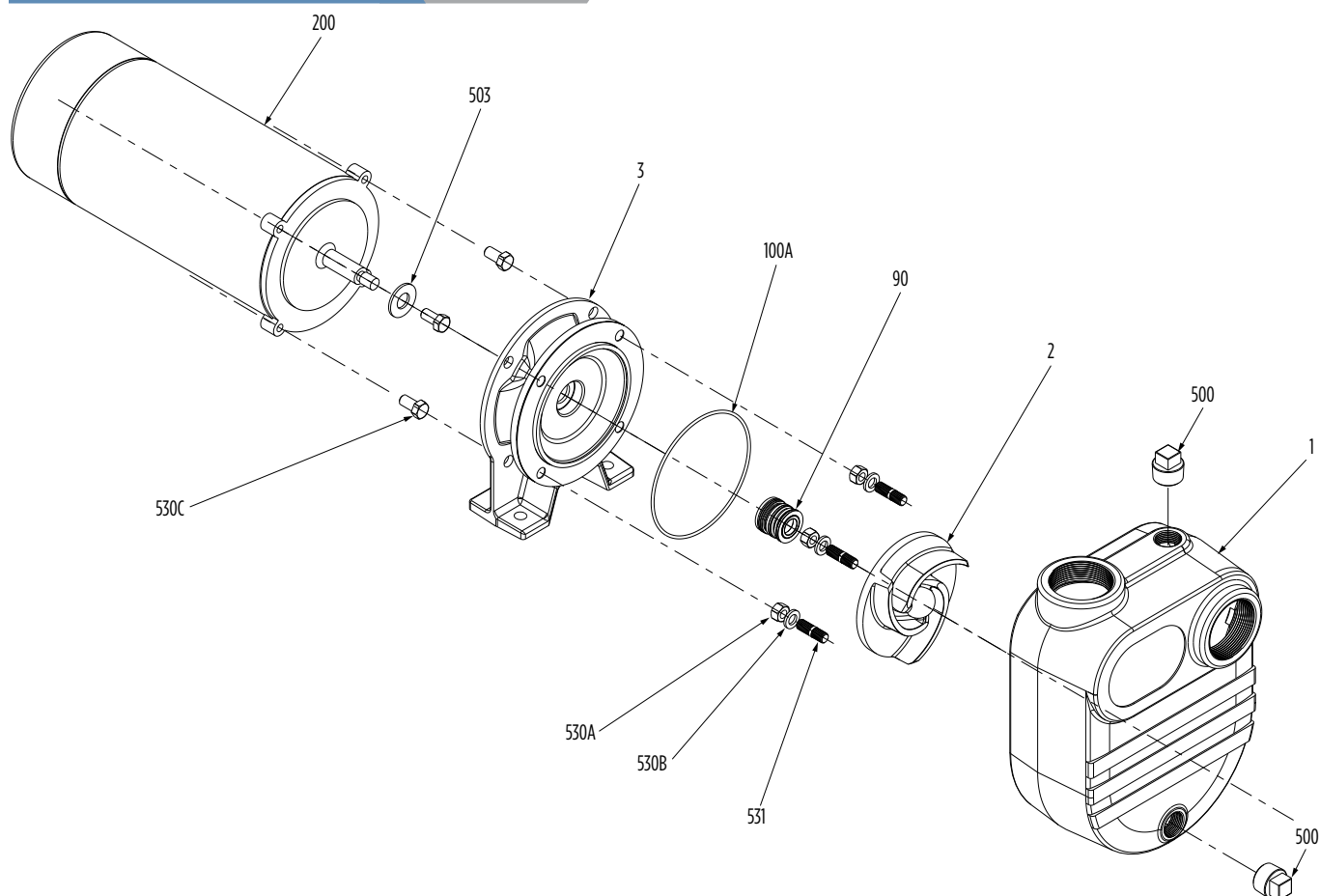


Fig. No.	Part Description	Part No.	Materials of Construction
		FBSE-300	
1	Pump Case includes Studs, Lock Washers, and Nuts	305460033	Cast iron, ASTM-A48 CL30
2	Impeller	305453054	Cast iron, ASTM-A48 CL30
3	Adapter	305715008	Cast iron, ASTM-A48 CL30
90	Mechanical Shaft Seal	305463029	GL-SiC/GL-SiCxVITON-SS
100A	O-ring	305463294	Nitrile
200	Motor 3 hp, 230 V, 1 PH, 56J	ASB818	Misc.
200	Motor 3 hp, 208-230/460 V, 3 PH, 56J	218781	Misc.
500	Pipe Plug 3/4" NPT (3 pack)	305463050	Zinc-plated steel
503	Water Slinger	305453005	Neoprene
530A	Hex Nut, Pump Case (4 pack)	305453236	300 series stainless steel
530B	Lock Washer, Pump Case (4 pack)	305463137	Zinc-plated steel
530C	Hex Bolt - Bracket (4 pack)	305463030	Zinc-plated steel
531	Studs (4 pack)	305463129	Zinc-plated steel

Pre-May 2019

1	Pump Case	305460001	Cast iron, ASTM-A48 CL30
100A	Case Gasket	305463124	Vegetable fiber

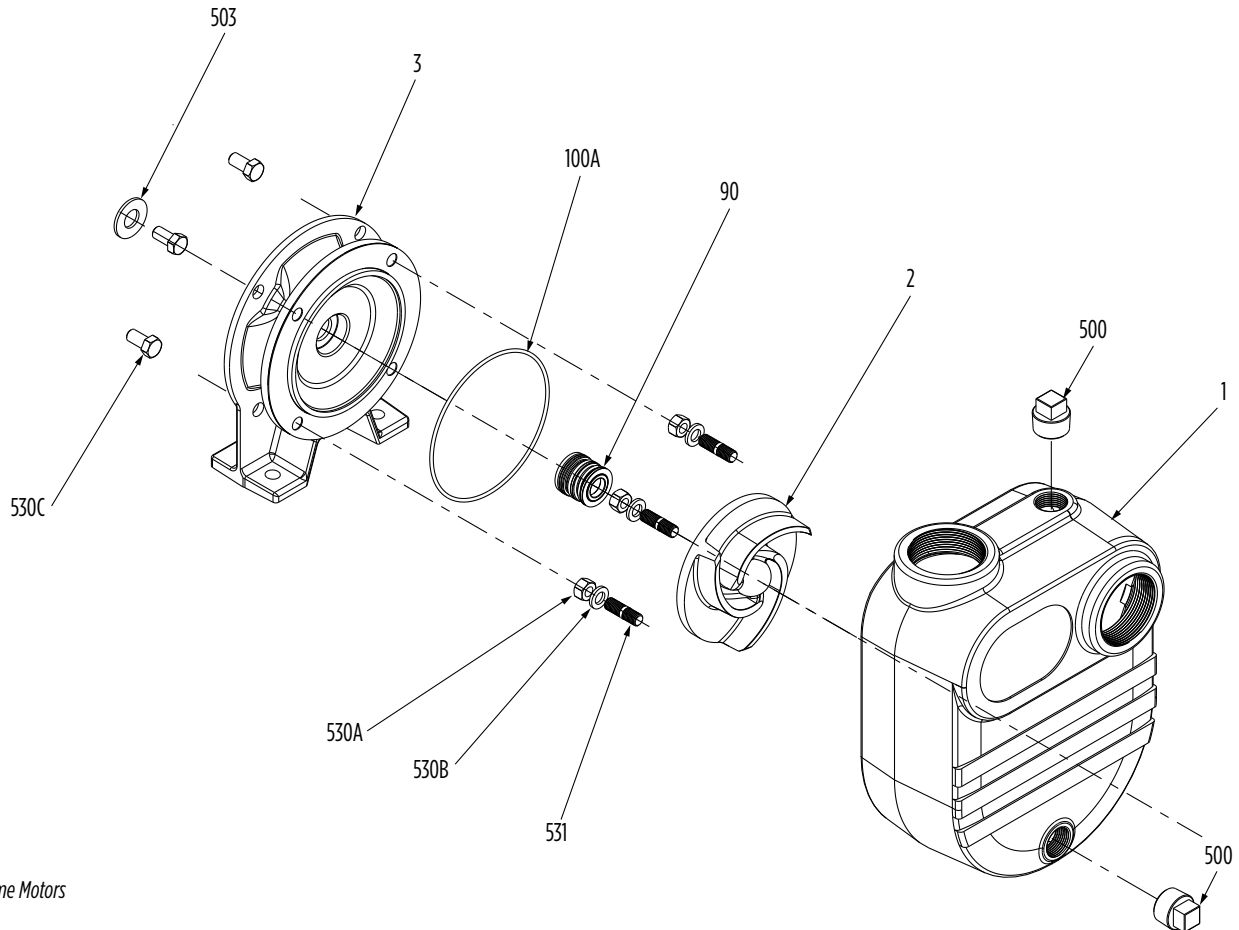
CENTRIFUGAL PUMPS

SELF-PRIMING FBSE (1/2-3 HP)



REPAIR PARTS

PUMP END KIT*



*56J Frame Motors

Fig. No.	Part Description	Part No.						Materials of Construction
		FBSE-50K	FBSE-75K	FBSE-100K	FBSE-150K	FBSE-200K	FBSE-300K	
1	Pump Case	305715001			305460033			Cast iron, ASTM-A48 CL30
2	Impeller	305461024	305453002	305453053	305715003	305715004	305453054	Cast iron, ASTM-A48 CL30
3	Adapter	305715007			305715008			Cast iron, ASTM-A48 CL30
90	Mechanical Shaft Seal	305463029						GL-SiC/GL-SiC\XVITON-SS
100A	O-Ring	305463292			305463294			Nitrile
500	Pipe Plug 3/4" NPT (3 pack)	305463050						Zinc-plated steel
503	Water Singer	305453005						Neoprene
530A	Hex Nut - Volute (4 pack)	305463236						Zinc-plated steel
530B	Volute Lock Washer (4 pack)	305463137						Zinc-plated steel
530C	Hex Bolt - Bracket (4 pack)	305463030						Zinc-plated steel
531	Studs (4 pack)	305463129						Zinc-plated steel

*Not the same as factory assembled 48Y square flange pump & motor assemblies

Pre-May 2019

1	Pump Case	305715001	305460001	Cast iron, ASTM-A48 CL30
100A	Gasket, Case	305463133	305463124	Vegetable fiber

CENTRIFUGAL PUMPS

SELF-PRIMING FBSEF



REPAIR PARTS

56J FRAME

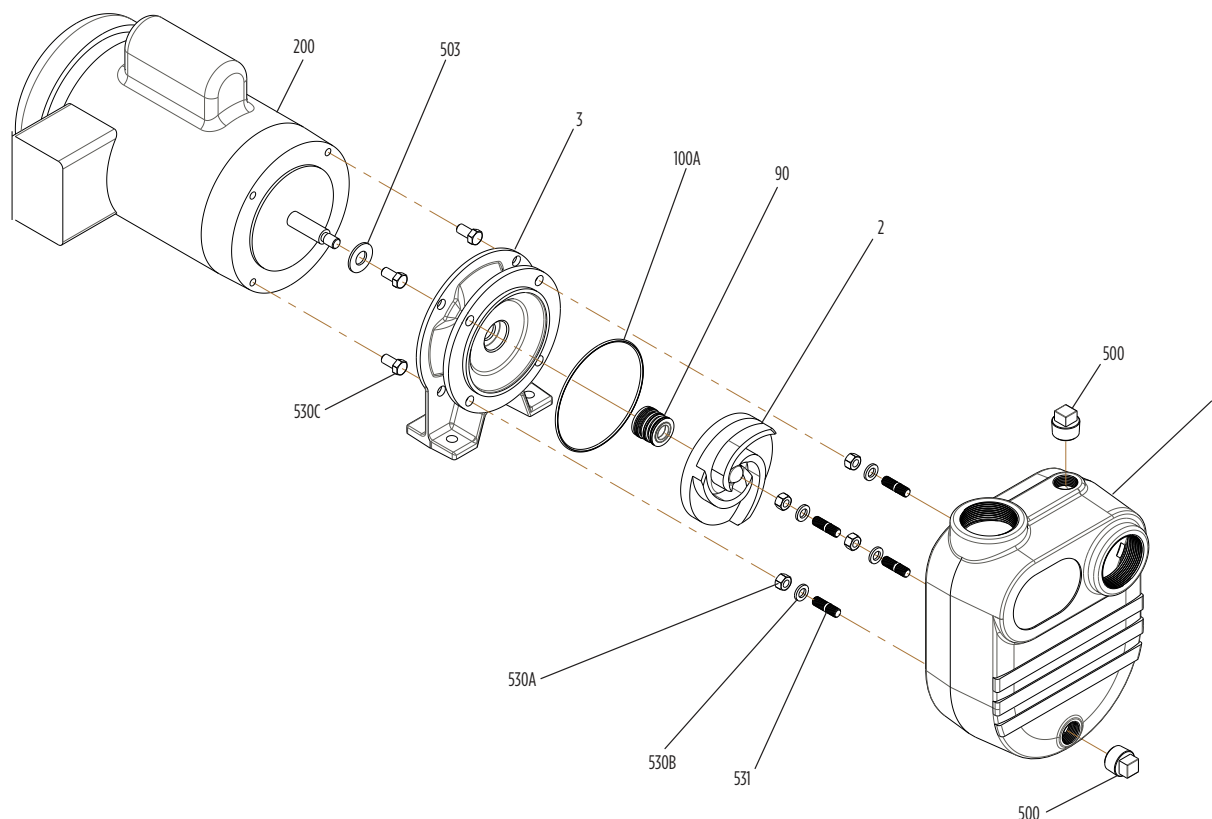


Fig. No.	Part Description	Part No.				Materials of Construction
		FBSEF-150	FBSEF-200	FBSEF-300	FBSEFL-050	
1	Pump Case includes Studs, Lock Washers, and Nuts	305715001	305460033			Cast iron, ASTM-A48 CL30
2	Impeller	305453053	305715003	305715004		Cast iron, ASTM-A48 CL30
3	Motor Adaptor	305715007	305715008			Cast iron, ASTM-A48 CL30
90	Mechanical Shaft Seal	305463029				Carbon/Ceramic x FKM-SS
100A	O-Ring	305463293	305463295			FKM
200	Motor	See Motor Page				
500	Pipe Plug 3/4"NPT (3-Pack)	305463050				Zinc-plated steel
503	Water Slinger	305453005				Neoprene
531	Hex Bolt (4-Pack)	305463253				300 series stainless steel
530A	Hex Nut, Pump Case (4-Pack)	305453236				Zinc-plated steel
530B	Lock Washer, Pump Case (4-Pack)	305463137				Zinc-plated steel
530C	Hex Bolt - Bracket (4-Pack)	305463030				Zinc-plated steel
531	Studs	305463129				Zinc-plated steel

Pre-May 2019

1	Pump Case	305715001	305460001	Cast iron, ASTM-A48 CL30
100A	Gasket, Case	305463133	305463124	Vegetable fiber

CENTRIFUGAL PUMPS

SELF-PRIMING FBSEF



REPAIR PARTS

JM FRAME

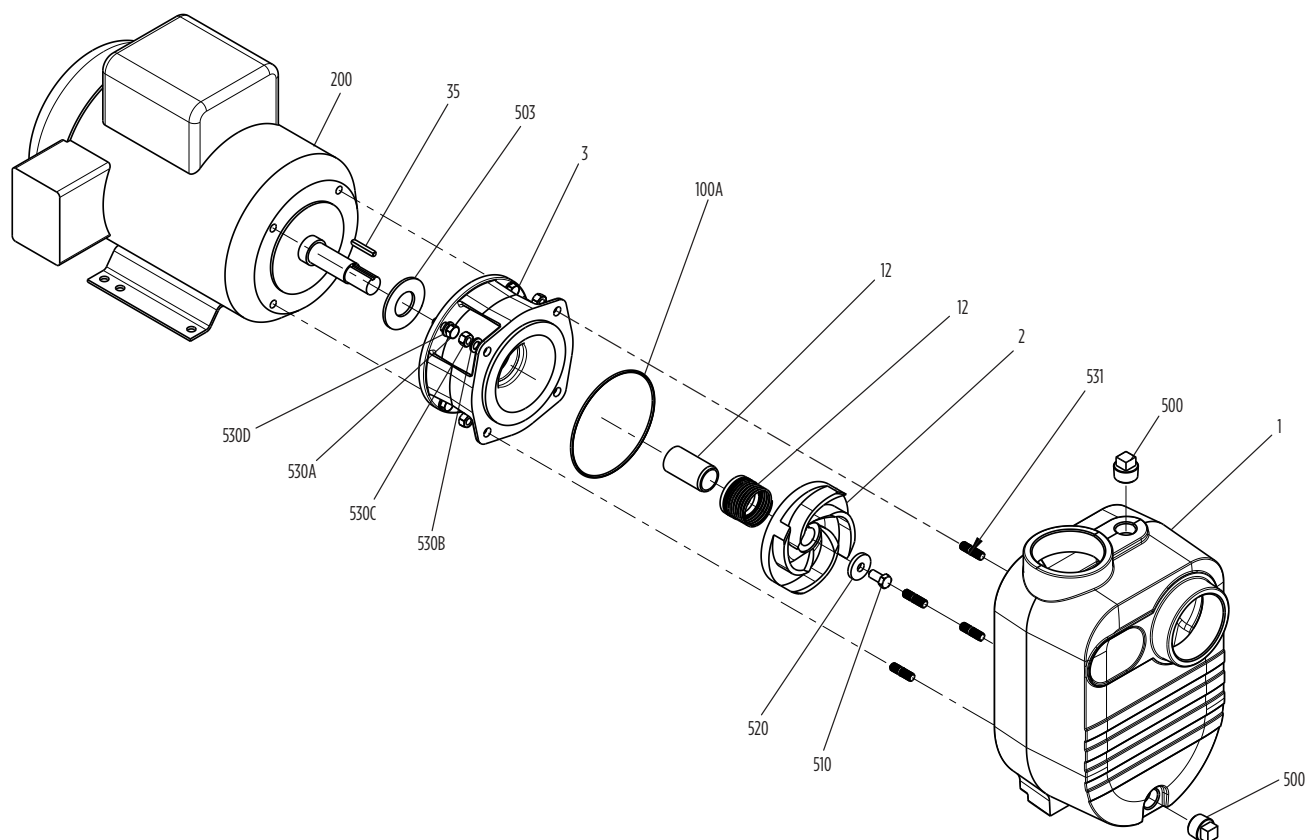


Fig. No.	Part Description	Part No.				Materials of Construction
		FBSEF-500	FBSEFL-075	FBSEF-750	FBSEFL-100	
1	Pump Case includes Studs, Lock Washers, and Nuts	305460002				Cast Iron, ASTM-A48 CL30
2	Impeller	305715005		305715006		Cast Iron, ASTM-A48 CL30
3	Motor Adaptor	305715009				Cast Iron, ASTM-A48 CL30
12	Mech Seal Shaft Sleeve	305458011				416 Stainless Steel
35	Shaft Key	305451003				301 Stainless Steel
90	Mechanical Shaft Seal	305463043				Carbon/Ceramic x FKM-SS
100A	O-Ring	305463296				FKM
200	Replacement Motor JM Frame	(See Motor Page)				Misc.
500	Pipe Plug 3/4"NPT (3-Pack)	305463050				Zinc-plated Steel
503	Water Slinger	305453030				Neoprene
510	Impeller Hex Bolt	305463077				416 Stainless Steel
520	Impeller Washer	305463187				303 Stainless Steel
530A	Hex Cap Screw - Motor (12-Pack)	305463010				Zinc-plated Steel
530B	Lock Washer, Pump Case (4-Pack)	305463135				Zinc-plated Steel
530C	Hex Nut, Pump Case (4-Pack)	305463033				Zinc-plated Steel
530D	Lockwasher - Motor Adaptor (8-Pack)	305463135				Zinc-plated Steel
531	Stud (4-Pack)	305463129				300 series Stainless Steel

Pre-May 2019

1	Pump Case	N/A		Cast Iron, ASTM-A48 CL30
100A	Gasket, Case	305463126		Vegetable Fiber

NOTES

CLOSE-COUPLED SELF-PRIMING





Franklin Electric