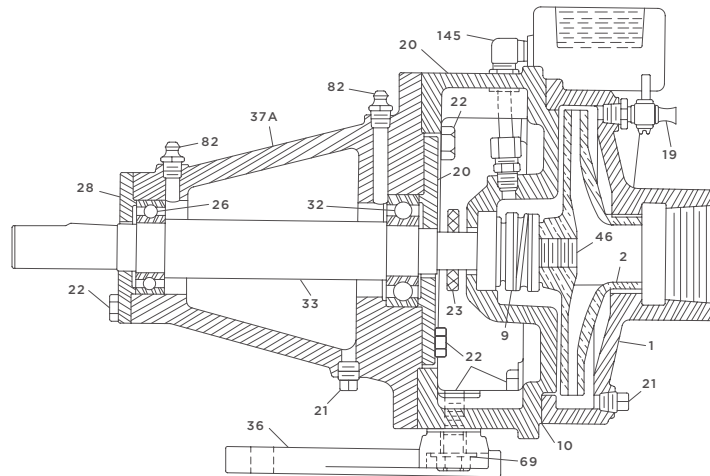


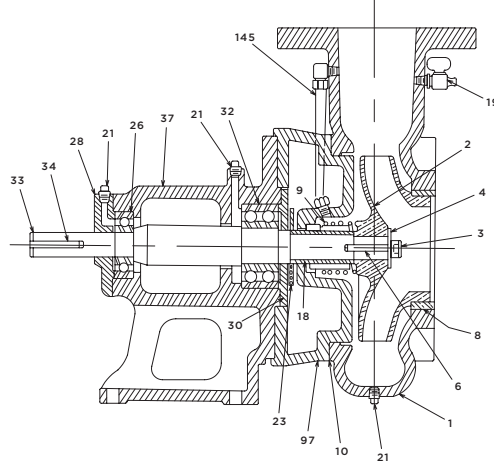
### Parts List & Diagram



PARTS LIST					
NUMBER	NAME	REQUIRED	BRONZE FITTED	ALL IRON	ALL BRONZE
1	PUMP CASING	1	CAST IRON	CAST IRON	BRONZE
2	IMPELLER	1	BRONZE	CAST IRON	BRONZE
9	MECHANICAL SHAFT SEAL	1*	VARIOUS	VARIOUS	VARIOUS
10	CASING GASKET	1*	VELUMOID	VELUMOID	VELUMOID
19	VENT COCK	1	BRASS	STEEL	BRASS
20	PUMP BRACKET	1	CAST IRON	CAST IRON	BRONZE
21	PLUG	4	CAST IRON	CAST IRON	BRASS
22	CAP SCREW	13	STEEL	STEEL	BRASS
23	FLINGER	1*	RUBBER	RUBBER	RUBBER
26	OUTER BALL BAERING	1*	VARIOUS	VARIOUS	VARIOUS
28	OUTER BEARING CAP	1	CAST IRON	CAST IRON	CAST IRON
30	INNER BEARING CAP	1	CAST IRON	CAST IRON	CAST IRON
32	INNER BALL BEARING	1*	VARIOUS	VARIOUS	VARIOUS
33	SHAFT	1*	STEEL	STEEL	ST. ST.
36	MOUNTING LEG	1	CAST IRON	CAST IRON	CAST IRON
37A	BEARING FRAME	1	CAST IRON	CAST IRON	CAST IRON
46	IMPELLER SET SCREW	1*	ST. ST.	ST. ST.	ST. ST.
69	WASHER	2	STEEL	STEEL	STEEL
82	GREASE FITTING	2	STEEL	STEEL	STEEL
145	SEAL BY-PASS ASSEMBLY	1	COPPER-BRASS	PLASTIC-STEEL	COPPER-BRASS

\* Recommended spare parts to be carried in stock.

### Parts List & Diagram

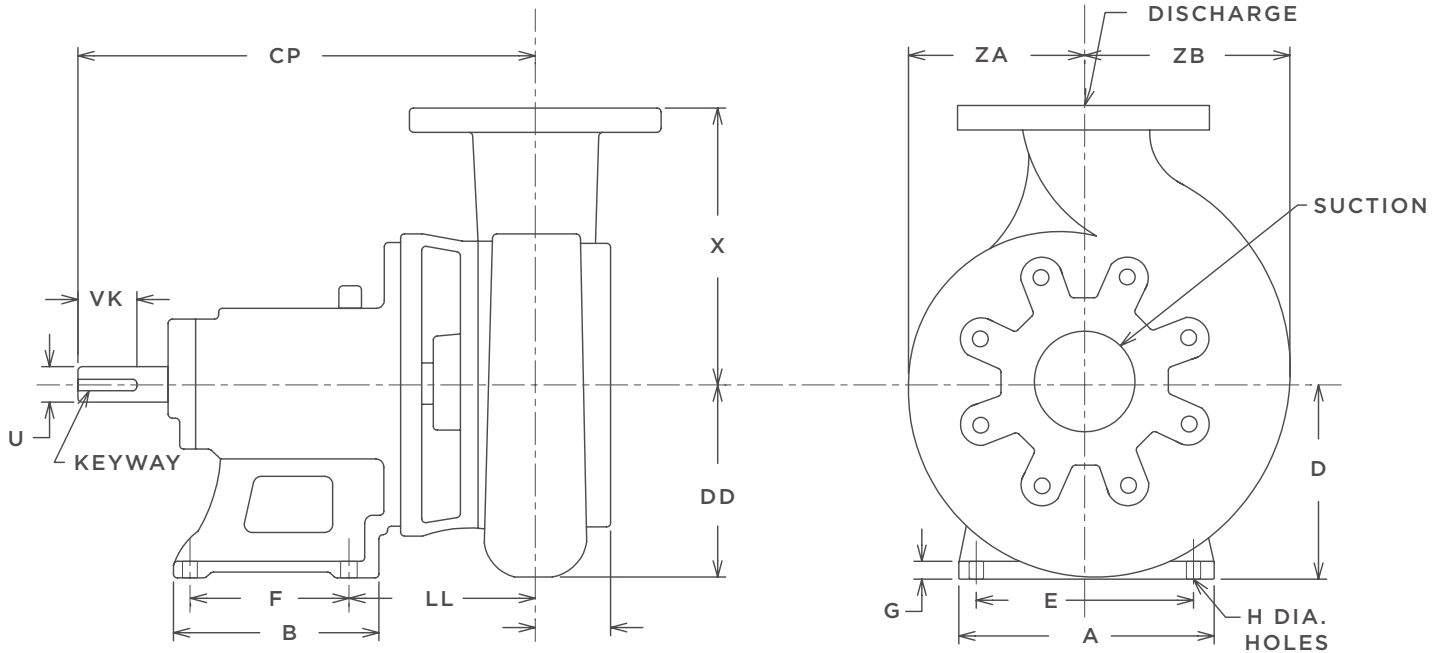


PARTS LIST						
NUMBER	NAME	REQUIRED	STANDARD FITTED	BRONZE FITTED	ALL BRONZE	ALL IRON
1	PUMP CASING	1	CAST IRON	CAST IRON	BRONZE	CAST IRON
2	IMPELLER	1	CAST IRON	BRONZE	BRONZE	CAST IRON
3	IMPELLER LOCK SCREW	1*	ST. ST.	ST. ST.	ST. ST.	ST. ST.
4	IMPELLER WASHER	1*	ST. ST.	ST. ST.	ST. ST.	ST. ST.
6	IMPELLER KEY	1*	STEEL	STEEL	STEEL	STEEL
8	CASING WEARING RING**	1*	BRONZE	BRONZE	BRONZE	CAST IRON
9	MECHANICAL SHAFT SEAL	1*	VARIOUS	VARIOUS	VARIOUS	VARIOUS
10	CASING GASKET	1*	VELUMOID	VELUMOID	VELUMOID	VELUMOID
18	SHAFT SLEEVE	1*	BRONZE	BRONZE	BRONZE	ST. ST.
19	VENT COCK	1	BRASS	BRASS	BRASS	STEEL
21	PLUG	-	STEEL	STEEL	BRONZE	STEEL
22	CAP SCREW	-	STEEL	STEEL	BRONZE	STEEL
23	FLINGER	1*	RUBBER	RUBBER	RUBBER	RUBBER
26	OUTER BALL BEARING	1*	VARIOUS	VARIOUS	VARIOUS	VARIOUS
28	OUTER BEARING CAP	1	CAST IRON	CAST IRON	CAST IRON	CAST IRON
30	INNER BEARING CAP	1	CAST IRON	CAST IRON	CAST IRON	CAST IRON
32	INNER BALL BEARING	1*	VARIOUS	VARIOUS	VARIOUS	VARIOUS
33	SHAFT	1*	STEEL	STEEL	ST. ST.	STEEL
34	SHAFT KEY	1	STEEL	STEEL	STEEL	STEEL
37	BEARING FRAME	1	CAST IRON	CAST IRON	CAST IRON	CAST IRON
97	BACK PLATE	1	CAST IRON	CAST IRON	BRONZE	CAST IRON
145	SEAL BY-PASS ASSEMBLY	1	COPPER	COPPER	COPPER	PLASTIC

\* Recommended spare parts to be carried in stock.  
 \*\* Standard on all CKB pumps and on standard fitted CGB pumps. Optional on all other CGB pumps.  
 \*\*\*Not shown.



### Diagrams



#### DIMENSIONS

PUMP MODEL	DISCHARGE	SUCTION	A	B	CP	D	DD	E	F	G	H	LL	U (SEE NOTE 1)	U (SEE NOTE 2)	KEYWAY	VK	X	Y	ZA	ZB
1CGB	1	1.25	8	8	13.375	7.25	4.75	6.5	6.5	0.5	0.5	5.25	0.938	1.125	.25 X .125	2.75	7	2.5	4.5	4.75
1.5CGB	1.5	2	8	8	13.125	7.25	5	6.5	6.5	0.5	0.5	5	0.938	1.125	.25 X .125	2.75	8	2	4.625	5.125
2CGB	2	2.5	8	8	12.875	7.25	5.5	6.5	6.5	0.5	0.5	4.75	0.938	1.125	.25 X .125	2.75	8	2.25	4.75	5.5
2.5CGB	2.5	3	8	8	13.625	7.25	5.5	6.5	6.5	0.5	0.5	5.25	0.938	1.125	.25 X .125	2.75	8	2.5	5	6
3CGB	3	4	8	8	13.625	7.25	6	6.5	6.5	0.5	0.5	5.25	0.938	1.125	.25 X .125	2.75	9	2.5	5.5	6.5
1.5CKB	1.5	2	8	8	13.5	7.25	6.125	6.5	6.5	0.5	0.5	5.375	0.938	1.125	.25 X .125	2.75	10	2.25	6	6.5
2CKB	2	2.5	8	8	13.625	7.25	7	6.5	6.5	0.5	0.5	5.5	0.938	1.125	.25 X .125	2.75	10	2.25	6.375	7
2CKHB	2	3	8	8	14.125	7.25	7.5	6.5	6.5	0.5	0.5	6	0.938	1.125	.25 X .125	2.75	11.5	1.5	7.75	8.25
2.5CKB	2.5	3	8	8	13.5	7.25	7	6.5	6.5	0.5	0.5	5.375	0.938	1.125	.25 X .125	2.75	10.5	2.25	6.625	7.125
3CKB	3	4	8	8	13.5	7.25	7.25	6.5	6.5	0.5	0.5	5.375	0.938	1.125	.25 X .125	2.75	11	2.75	6.75	7.125
4CKLB	4	5	8	8	14.125	7.25	7.75	6.5	6.5	0.5	0.5	6	0.938	1.125	.25 X .125	2.75	12	2.375	7	8.625
4CKB	4	5	8.5	8.5	21.25	8.75	9	7	6	0.75	0.688	5	-	1.125	.25 X .125	2.625	10	4	18	4.5

- 1: THE U DIMENSION IS .9375 INCHES FOR PUMPS RATED 15 HP 3450 RPM AND SMALLER AND 10 HP 1750 RPM AND SMALLER.
- 2: THE U DIMENSION IS 1.125 INCHES FOR PUMPS RATED 20 HP 3450 RPM AND LARGER AND 15 HP 1750 RPM AND LARGER.
- 3: ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED. DO NOT USE FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED.
- 4: ALL MODELS HAVE STANDARD 125# FLANGED SUCTION AND DISCHARGE CONNECTIONS.
- 5: THE STANDARD DISCHARGE POSITION IS VERTICAL-UP. OTHER DISCHARGE POSITIONS WILL BE FURNISHED ONLY WHEN REQUESTED.
- 6: ALL PUMP MODELS EXCEPT THE 4CKB MODEL HAVE CENTERLINE DISCHARGE AS PICTURED ABOVE. THE 4CKB HAS A VERTICAL-UP DISCHARGE ON THE RIGHT SIDE OF THE VOLUTE.
- 8: REGARDLESS OF THE SHAPE OF THE PUMP SUCTION BOSS (SQUARE, SCALLOPPED, ETC.) THEY ARE ALL DESIGNED TO MATE DIRECTLY TO A ROUND ASA STANDARD 125# MATING FLANGE (250# WHEN SPECIFIED). INSTALL A STANDARD ROUND RING GASKET OR FULL GASKET (FULL GASKET PREFERRED) BETWEEN THE PUMP SUCTION BOSS AND THE STANDARD MATING FLANGE.

## Dimensions

DIMENSIONS														
NEMA	3450	1750	BASE NO.	BASE NO.										
MOTOR FRAME	RPM H.P.	RPM H.P.	CCB	CGB CKB	HA CCB	HA CGB & CKB	HB	HD CCB	HD CGB CKB	HE CCB	HE CGB CKB	HF	HH	HP
56	1 & LESS	.75 AND LESS	1024	1224	10	12	29	7.375	10.25	8	9.5	26.5	0.625	25
143T	1.5	1	1024	1224	10	12	29	7.375	10.25	8	9.5	26.5	0.625	26
145T	2 AND 3	1.5 AND 2	1024	1224	10	12	29	7.375	10.25	8	9.5	26.5	0.625	26
182T	5	3	-	1224	-	12	29	-	10.25	-	9.5	26.5	0.625	28
184T	7.5	5	-	1224	-	12	29	-	10.25	-	9.5	26.5	0.625	28
213T	10	7.5	-	1230	-	12	35	-	10.25	-	9.5	32.5	0.625	32
215T	15	10	-	1230	-	12	35	-	10.25	-	9.5	32.5	0.625	32
254T	20	15	-	1536	-	15	42	-	10.25	-	12	39.5	0.75	40.5
256T	25	20	-	1536	-	15	42	-	10.75	-	12	39.5	0.75	40.5
284TS	30	25	-	1536	-	15	42	-	10.75	-	12	39.5	0.75	41.5
286TS	40	30	-	1536	-	15	42	-	10.75	-	12	39.5	0.75	41.5

**SUCTION FLANGE:**

Regardless of the shape of the pump suction boss (square, scalloped, etc.) They are all designed to mate directly to a round standard 125# mating flange (250# when so specified). Install a standard round ring gasket or full gasket (full gasket preferred) between the pump suction boss and the standard mating flange.

NOTE 6: The 4CKB model does not have a centerline discharge. The 4CKB model has a vertical-up discharge on the right side of the pump casing.

DIMENSIONS										
NEMA MOTOR FRAME	1750 RPM HP	BASE NO.	HA	HB	HD	HE	HF	HH	HP	
213T	7.5	1530	15	36	12.25	12	33.5	0.75	39	
215T	10	1530	15	36	12.25	12	33.5	0.75	40	
254T	15	1536	15	42	12.25	12	39.5	0.75	44	
256T	20	1536	15	42	12.25	12	39.5	0.75	45	
284TS	25	1536	15	42	12.25	12	39.5	0.75	45	
286TS	30	1536	15	42	12.25	12	39.5	0.75	47	
324T	40	1542	15	48	12.25	12	45.5	0.75	49	

1: All dimensions are in inches unless otherwise noted. Do not use for construction purposes unless certified.

2: HP dimensions are approximate and may vary with motor style.

3: All models (except 1.25CCB which has an NPT connection) have standard 125# ASA flanged suction and discharge connections.

4: For pumps with 250# ASA flanged suction and discharge connections, consult the factory.

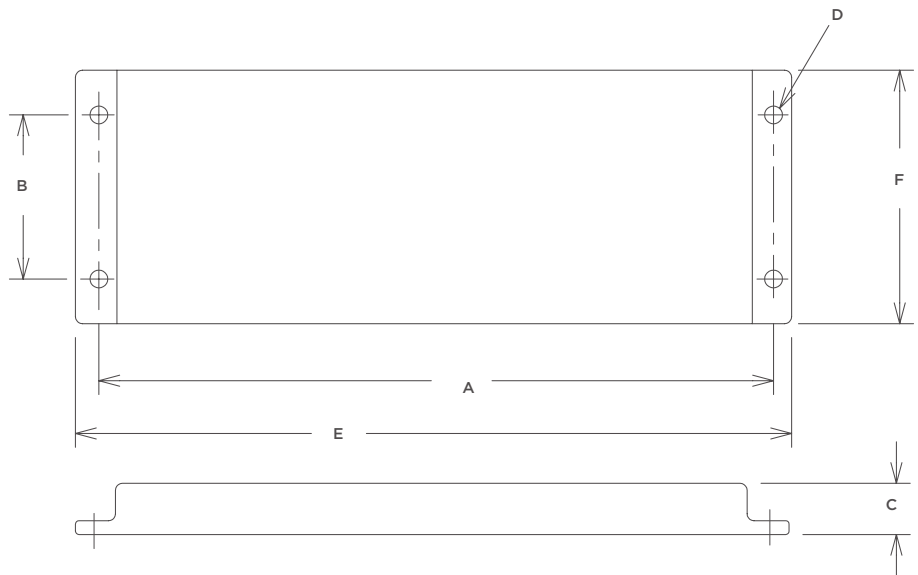
5: For all models, the standard discharge position is vertical-up. Other discharge positions will be furnished only when requested.

6: All pump models (except 1.25CCB and 4CKB) have centerline discharge as shown in the drawings. The 1.25CCB and 4CKB models have vertical-up discharge in the right side of the pump casing.



### Dimensions

DIMENSIONS						
BASE NO.	A	B	C	D	E	F
818	20.5	6	2.5	0.5	22	8
824	26.5	6	2.5	0.5	28	8
830	32.5	6	2.5	0.5	34	8
836	38.5	6	2.5	0.5	40	8
1018	20.5	8	2.5	0.5	22	10
1024	26.5	8	2.5	0.5	28	10
1030	32.5	8	2.5	0.5	34	10
1036	38.5	8	2.5	0.5	40	10
1042	44.5	8	2.5	0.5	46	10
1218	20.5	9.5	3	0.625	23	12
1224	26.5	9.5	3	0.625	29	12
1230	32.5	9.5	3	0.625	35	12
1236	38.5	9.5	3	0.625	41	12
1242	44.5	9.5	3	0.625	47	12
1248	50.5	9.5	3	0.625	53	12
1254	56.5	9.5	3	0.625	59	12
1530	33.5	12	3.5	0.75	36	15
1536	39.5	12	3.5	0.75	42	15
1542	45.5	12	3.5	0.75	48	15
1548	51.5	12	3.5	0.75	54	15
1554	57.5	12	3.5	0.75	60	15
1560	63.5	12	3.5	0.75	66	15
1842	45.5	15	4	0.75	49	18
1848	51.5	15	4	0.75	55	18
1854	57.5	15	4	0.75	61	18
1860	63.5	15	4	0.75	67	18
1866	69.5	15	4	0.75	73	18
1872	75.5	15	4	0.75	79	18
1878	81.5	15	4	0.75	85	18
1884	87.5	15	4	0.75	91	18
1890	93.5	15	4	0.75	97	18
1896	99.5	15	4	0.75	103	18



- 1: All dimensions are in inches unless otherwise noted.
- 2: Do not use for construction purposes unless certified.
- 3: The standard channel steel bases listed above are used with the following Federal Pump Units:

CCB	M	CCH	BFC
CGB	SC	HT	BFT
CKB	SSC	HTCR	



Supplemental # 0210

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