

E, F, & G SERIES
PERFORMANCE CURVES

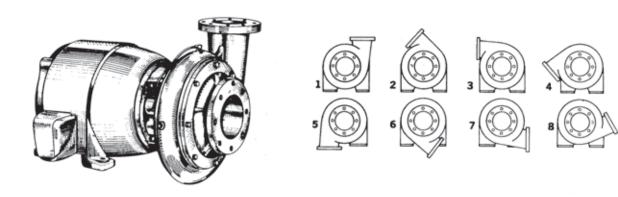
- NOTES -

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CENTRIFUGALS

September 1, 1998

E, F & G SERIES END SUCTION CENTRIFUGALS



FEATURES

CASING – Cast iron construction, tapped for drain, vent cock, and pressure gauge. Suction and discharge connections are standard ASA flanged type for easier installation. These pumps are of the **back pull-out design** to permit removal of the motor and all rotating parts without breaking the suction and discharge connections. Discharge can be field rotated for 45° position changes.

IMPELLER – Single piece enclosed close grain cast bronze, fully balanced with the diameter cut for the specific condition points. Impeller is keyed to the shaft. High head units have back of impeller vented to suction to achieve hydraulic balance, limit thrust load, and reduce pressure in the sealing area. Cast iron impeller available on special order - consult factory.

SHAFT - Shaft is heat treated carbon steel, turned and ground.

SHAFT SLEEVE - Renewable bronze shaft sleeve prevents contact between the shaft and the liquid being pumped. Sleeve is keyed to the motor shaft.

WEARING RING - Renewable bronze wearing ring pressed into the pump casing is standard.

MECHANICAL SHAFT SEALS – Leakless mechanical shaft seals with ceramic and carbon faces, plus stainless steel components eliminate maintenance and adjustment problems. A PVC bypass line on some models helps to prevent dead-ending of abrasives in the seal chamber.

INSTALLATION - Pumps may be mounted horizontally, vertically or in any angular position. If the pump is mounted vertically, it is advisable to place the motor above the pump, and install a drip shield above the motor.

MOTORS – Standard Drip-proof NEMA motors are used. Totally enclosed and explosion proof motors are also available. Motor bearings are factory lubricated and sealed for long life without field lubrication. Standard JM and JP close coupled pump motors are utilized for ease of replacement and to provide short shaft overhang, reducing the effects of axial strain on the motor bearings.

MAXIMUM WORKING PRESSURE

Series E – 150 lb./sq. in. (non-shock) Series F thru 6" – 100 lb./sq. (non-shock) Series 8FH – 60 lb./sq. in (non-shock) Series G – 175 lb./sq. in (non-shock)

Use non-slam check valve on pump discharge when there is a likelihood of shock pressures.

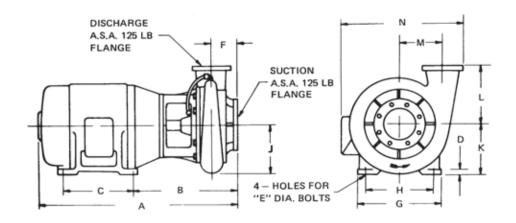
COMPANION FLANGES

Cast iron companion flanges to ASA Class 125 are available in sets as shown below. A set comprises 1 flange for suction connection, 1 flange for discharge connection, complete with ring gaskets, bolts and nuts. See Dimension pages, this section, for required sizes.

Discharge	Ordering
x Suction	Number
2 x 3	9193-0362
3 x 4	9193-0370
4 x 5	9193-0388
5 x 6	9193-0396
6 x 8	9193-0404
8 x 8	9193-0412

CENTRIFUGALS Dimensions

E Series

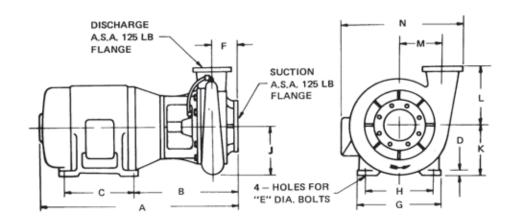


NOTES: 1. Dim. 'N' is overall width including pump and motor. 2. Dim. 'A', 'G', and 'N' may vary depending on make of motor.

PUMP	мот	SE	MOTOR	픙	F					D	IMENSI	ONS IN	INCHE	s				
MODEL	HP	PHA	FRAME	DISCH	SUCT	Α	В	С	D	Е	F	G	н	J	к	L	м	N
R3EM-3-S	3	1	182JM	3	4	213/16	915/16	41/2	3/8	3/8	3%16	9	71/2	8	41/2	81/8	63/4	181/8
R3EM-5-S	5	1	213JM	3	4	231/16	107/16	51/2	5/8	3/8	3%16	101/2	81/2	8	51/4	87/8	63/4	191/4
R3EM-75-S	71/2	1	215JM	3	4	231/16	107/16	7	5/8	3/8	3%16	101/2	81/2	8	51/4	87/8	63/4	191/4
R3EM-3-T	3	3	182JM	3	4	213/16	915/16	41/2	3/8	3/8	3%16	9	71/2	8	41/2	81/8	63/4	181/8
R3EM-5-T	5	3	184JM	3	4	213/16	915/16	41/2	3/8	3/8	39/16	9	71/2	8	41/2	87/8	63/4	181/6
R3EM-75-T	7	3	213JM	3	4	231/16	101/16	51/2	5/8	3/8	3%16	101/2	81/2	8	51/4	87/a	63/4	191/4
R3EM-10-T	10	3	215JM	3	4	231/16	107/16	7	5/8	3/8	39/16	101/2	81/2	8	51/4	87/8	63/4	191/4
R4EM-10-T	10	3	215JM	4	5	2413/16	123/16	7	5/8	3/8	51/16	101/2	81/2	91/2	51/4	111/4	73/4	211/4
R4EM-15-T	15	3	254JM	4	5	297/16	1215/16	81/4	%.	1/2	51/16	12%	10	91/2	61/4	111/4	73/4	223/8
R4EM-20-T	20	3	256JM	4	5	321/2	18%	10	5/8	1/2	51/16	12%	10	91/2	61/4	111/4	73/4	223/8
R5EM-25-T	25	3	284JP	5	6	321/2	18%	91/2	3/4	1/2	5%16	131/8	11	101/8	7	129/16	815/16	241/8
R5EM-30-T	30	3	286JP	5	6	34	18%	11	3/4	1/2	5%16	13%	11	101/8	7	129/16	815/16	247/8
R5EM-40-T	40	3	324JP	5	6	341/2	181/8	101/2	13/16	5/8	5%16	157/8	121/2	101/8	8	12%16	815/16	281/4
R5EM-50-T	50	3	326JP	5	6	36	181/8	12	13/16	5/8	5%16	157/s	121/2	10%	8	129/16	815/16	281/4
R6EM-30-T	30	3	286JP	6	8	36¾	211/8	11	3/4	1/2	8	13%	11	12%	7	141/4	10	27
R6EM-40-T	40	3	324JP	6	8	371/4	21%	101/2	13/16	5/8	8	15%	121/2	12%	8	141/4	10	281/4
R6EM-50-T	50	3	326JP	6	8	38¾	21%	12	13/16	5/8	8	151/8	121/2	123/8	8	141/4	10	281/4
R6EM-60-T	60	3	364JP	6	8	391/4	221/4	111/4	1	5/8	8	173/4	14	12%	9	141/4	10	31%
R6EM-75-T	75	3	365JP	6	8	401/4	221/4	121/4	1	5/8	8	173/4	14	12%	9	141/4	10	31%
R6EM-100-T	100	3	404JP	6	8	41%	23	121/4	11/8	3/4	8	19¾	16	12%	10	141/4	10	34¾

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F Series



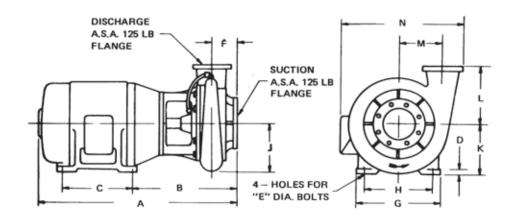
NOTES: 1. Dim. 'N' is overall width including pump and motor. 2. Dim. 'A', 'G', and 'N' may vary depending on make of motor.

PUMP	мот	SE	MOTOR	ᆽ	ŗ					D	IMENSI	ONS IN	INCHE	S		-		
MODEL	HP	PHA	FRAME	DISCH	SUCT	А	В	С	D	Е	F	G	н	J	к	L	M	N
R2FH-2-S	2	1	182JM	2	3	211/8	97/8	41/2	3/8	3/8	3%	9	71/2	6	41/2	61/8	43/4	1411/16
R4FH-3-S	3	1	184JM	4	5	225/16	111/16	41/2	3/8	3/8	41/8	9	71/2	81/8	41/2	73/4	67/16	171/8
R4FH-5-S	5	1	213JM	4	5	243/16	11%16	51/2	5/8	3/8	41/8	101/2	81/2	81/8	51/4	73/4	67/16	193/16
R4FH-75-S	71/2	1	215JM	4	5	255/16	11%16	7	5/8	3/8	41/8	101/2	81/2	81/8	51/4	73/4	67/16	193/16
R4FH-3-T	3	3	182JM	4	5	225/16	111/16	41/2	3/8	3/8	41/8	9	71/2	81/8	41/2	73/4	67/16	171/8
R4FH-5-T	5	3	1.84JM	4	5	225/16	111/16	41/2	3∕8	3/8	41/8	9	71/2	81/8	41/2	73/4	67/16	171/8
R4FH-75-T	71/2	3	213JM	4	5	243/16	11%16	51/2	5/8	3/8	41/8	101/2	81/2	81/8	51/4	73/4	67/16	193/16
R4FH-10-T	10	3	215JM	4	5	255/16	11%16	7	5/a	3/8	41/8	101/2	81/2	81/a	51/4	73/4	67/16	193/16
RL8FH-15-T	15	3	284JP	8	8	3313/16	135/16	91/2	3/4	1/2	51/8	13%	11	141/4	7	125/16	10%	2911/16
RL8FH-20-T	20	3	286JP	8	8	355/16	135/16	11	3/4	1/2	51/8	13%	11	141/4	7	125/16	10%	2911/16
RL8FH-25-T	25	3	324JP	8	8	32%	145/16	101/2	13/16	5/8	51/8	15%	121/2	141/4	8	125/16	101/8	327/16
R8FH-40-T	40	3	324JP	8	8	32%	145/16	101/2	13/16	5/8	51/8	151/8	121/2	141/4	8	125/16	10%	33
R8FH-50-T	50	3	326JP	8	8	33%	145/16	12	13/16	5/8	51/8	151/a	121/2	141/4	8	125/16	10%	33
R8FH-60-T	60	3	364JP	8	8	351/2	1415/16	111/4	1	5/8	51/8	17¾	14	141/4	9	125/16	10%	33
R8FH-75-T	75	3	365JP	8	8	361/2	1415/16	121/4	1	5/8	51/8	173/4	14	141/4	9	125/16	10%	33
R6FL-5-S	5	1	213JM	6	8	271/a	141/2	51/2	5/8	3/8	611/16	101/2	81/2	93/8	51/4	9	71/4	21
R6FL-75-S	71/2	1	215JM	6	8	28%	141/2	7	5/8	3/8	611/16	101/2	81/2	93/8	51/4	9	71/4	21
R6FL-5-T	5	3	184JM	6	8	251/4	14	41/2	3/8	3/8	611/16	9	71/2	93/8	41/2	9	71/4	1911/16
R6FL-75-T	71/2	3	213JP	6	8	271/8	141/2	51/2	5/8	3/8	611/16	101/2	81/2	93/8	51/4	9	71/4	21
R6FL-10-T	10	3	215JP	6	8	28⅓	141/2	7	5/8	3/8	611/16	101/2	81/2	9%	51/4	9	71/4	21
R6FL-15-T	15	3	254JP	6	8	31¾	151/4	81/4	5/8	1/2	611/16	123/8	10	9%	61/4	9	71/4	2211/16
R6FL-20-T	20	3	256JP	6	8	331/2	151/4	10	5/8	1/2	611/16	12%	10	9%	61/4	9	71/4	2211/16

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CENTRIFUGALS Dimensions

F Series

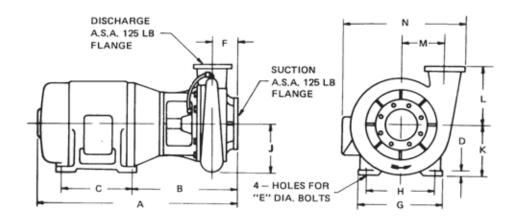


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PUMP	мот	SE		픙	5					D	IMENSI	ONS IN	INCHE	S				
MODEL	HP	PHA	FRAME	DIS	SUCT	Α	В	С	D	E	F	G	н	J	к	L	м	N
R3FM-2-S	2	1	182JM	3	4	217/16	10¾16	41/2	3/8	3/8	35/8	9	71/2	73/8	41/2	81/2	513/16	161/2
R3FM-3-S	3	1	184JM	3	4	217/16	103/16	41/2	3∕8	3/8	3%	9	71/2	73/8	41/2	81/2	513/16	161/2
R3FM-5-S	5	1	213JM	3	4	235/16	1011/16	51/2	5/8	3/8	3%	101/2	81/2	73/8	51/4	81/2	513/16	1713/16
R3FM-3-T	3	3	182JM	3	4	217/16	103/16	41/2	3/8	3/8	3%	9	71/2	7¾s	41/2	81/2	513/16	161/2
R3FM-5-T	5	3	184JM	3	4	217/16	10¾16	41/2	3∕8	3∕8	3%	9	71/2	73/8	41/2	81/2	513/16	161/2
R4FM-2-S	2	1	182JM	4	5	225/16	111/16	41/2	3/8	3∕8	41/8	9	71/2	81/8	41/2	73/4	67/16	17%
R4FM-3-S	3	1	184JM	4	5	225/16	111/16	41/2	3/8	3∕8	41/8	9	71/2	81/8	41/2	73/4	67/16	17%
R4FM-5-S	5	1	213JM	4	5	243/16	11%16	51/2	5/8	3/8	41/8	101/2	81/2	81/8	51/4	73/4	67/16	193/16
R4FM-3-T	3	3	182JM	4	5	225/16	111/16	41/2	3/8	3/8	41/8	9	71/2	81/8	41/2	73/4	67/16	171/8
R4FM-5-T	5	3	184JM	4	5	225/16	111/16	41/2	3/8	3/8	41/8	9	71/2	81/8	41/2	73/4	67/16	171/8
R6FM-10-T	10	3	215JM	6	8	28%	141/2	7	5/8	3/8	611/16	101/2	81/2	9%	51/4	9	71/4	21
R6FM-15-T	15	3	254JM	6	8	31¾	151/4	81/4	5/8	1/2	611/16	12%	10	9%	61/4	9	71/4	2211/16
R6FM-20-T	20	3	256JP	6	8	36%16	185/16	10	5/8	1/2	611/16	12%	10	9%	61/4	9	71/4	2211/16
R6FM-25-T	25	3	284JP	6	8	371/4	16¾	91/2	3/4	1/2	611/16	13%	11	9%	7	9	71/4	23%16

CENTRIFUGALS Dimensions

G Series



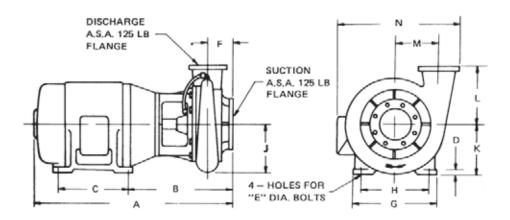
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MODEL	HP	PHA	MOTOR FRAME	DIS	SUCT	А	В	С	D	E	F	G	н	J	к	L	м	N
R2GH-5-S	5	1	184JM	2	3	211/8	97/8	41/2	3/8	3/8	3%	9	71/2	6	41/2	61/8	43/4	1411/16
R2GH-75-S	71/2	1	213JM	2	3	23	103/8	51/2	5/8	3/8	35/8	101/2	81/2	6	51/4	61/8	43/4	16
R2GH-5-T	5	3	182JM	2	3	211/8	97/8	41/2	3/8	3/8	35/8	9	71/2	6	41/2	61/8	43/4	1411/16
R2GH-75-T	71/2	3	184JM	2	3	211/8	97/8	41/2	3/8	3/8	35/8	9	71/2	6	41/2	61/8	43/4	1411/16
R2GH-10-T	10	3	213JM	2	3	23	10%	51/2	5/8	3/8	3%	101/2	81/2	6	51/4	61/8	43/4	16
R2GH-15-T	15	3	215JM	2	3	241/2	10%	7	5/8	3/8	35%	101/2	81/2	6	51/4	61/8	43/4	16
R2GH-20-T	20	3	254JM	2	3	281/2	12	81/4	5/8	1/2	35/8	12%	10	6	61/4	61/8	43/4	1711/16
R4GH-30-T	30	3	284JP	4	5	345/16	1313/16	91/2	3/4	1/2	41/8	131/8	11	81/8	7	73/4	67/16	213/4
R4GH-40-T	40	3	286JP	4	5	3513/16	1313/16	11	3/4	1/2	41/8	137/8	11	81/8	7	73/4	67/16	213/4
R4GH-50-T	50	3	324JP	4	5	32%	1413/16	101/2	13/16	5/8	41/8	157/8	121/2	81/8	8	73/4	67/16	241/2
R4GH-60-T	60	3	326JP	4	5	34%	1413/16	12	13/16	5/8	41/8	157/8	121/2	81/8	8	73/4	67/16	241/2
R4GH-75-T	75	3	364JP	4	5	36	157/16	111/4	1	5/8	41/8	173/4	14	81/8	9	73/4	67/16	26%16
R3GL-5-S	5	1	184JM	3	4	211/16	913/16	41/2	3/8	3/8	3%	9	71/2	73/s	41/2	81/2	513/16	161/2
R3GL-75-S	71/2	1	213JM	3	4	2215/16	105/16	51/2	5/8	3/8	3%	101/2	81/2	73/8	51/4	81/2	513/16	1713/16
R3GL-5-T	5	3	182JM	3	4	211/16	913/16	41/2	3/8	3/8	3%	9	71/2	73/8	41/2	81/2	513/16	161/2
R3GL-75-T	71/2	3	184JM	3	4	211/16	913/16	41/2	3/8	3/8	3⅓	9	71/2	73/8	41/2	81/2	513/16	161/2
R3GL-10-T	10	3	213JM	3	4	2215/16	105/16	51/2	5/8	3/8	3⅓	101/2	81/2	73/8	51/4	81/2	513/16	1713/16
R2GM-5-S	5	1	184JM	2	3	203/4	91/2	41/2	3/8	3/8	3%	9	71/2	57/8	41/2	61/16	413/16	143/4
R2GM-75-S	71/2	1	213JM	2	3	22%	10	51/2	5/8	3/8	3%	101/2	81/2	57/a	51/4	61/16	413/16	16
R2GM-5-T	5	3	182JM	2	3	203/4	91/2	41/2	3/8	3/8	3%	9	71/2	57/s	41/2	61/16	413/16	143/4
R2GM-75-T	71/2	3	184JM	2	3	20¾	91/2	41/2	3/8	3/8	3⅓	9	71/2	57/8	41/2	61/16	413/16	143/4
R2GM-10-T	10	3	213JM	2	3	22%	10	51/2	5∕8	3/8	3⅓	101/2	81/2	5%	51/4	61/16	413/16	16

CENTRIFUGALS Dimensions

Griswold Industrial Pumps

G Series



NOTES: 1. Dim. 'N' is overall width including pump and motor. 2. Dim. 'A', 'G', and 'N' may vary depending on make of motor.

PUMP	мот	SE	MOTOR	픙	ᇈ					D	MENSI	ONS IN	INCHE	S				
MODEL	HP	PHA	FRAME	DIS	SUC	А	В	С	D	E	F	G	н	J	к	L	м	N
R3GM-10-T	10	3	213JM	3	4	235/16	1011/16	51/2	%	3/8	3%	101/2	81/2	73/s	51/4	81/2	513/16	1713/16
R3GM-15-T	15	3	215JM	3	4	2411/16	1011/16	7	5/8	3/8	3%	101/2	81/2	73/8	51/4	81/2	513/16	1713/16
R3GM-20-T	20	3	254JP	3	4	311/16	14%	81/4	5/8	1/2	3%	12%	10	7%	61/4	81/2	513/16	191/2
R3GM-25-T	25	3	256JP	3	4	3213/16	14%16	10	5/8	1/2	35/8	12%	10	73/s	61/4	81/2	513/16	191/2
R3GM-30-T	30	3	284JP	3	4	337/16	1215/16	91/2	3/4	1/2	3%	131/8	11	73/8	7	81/2	513/16	20%
R3GM-40-T	40	3	286JP	3	4	3415/16	1215/16	11	3/4	1/2	3%	13%	11	73/s	7	81/2	513/16	20%
R4GM-15-T	15	3	215JM	4	5	2511/16	11%16	7	5/8	3/8	41/8	101/2	81/2	81/8	51/4	73/4	67/16	193/16
R4GM-20-T	20	3	254JP	4	5	3115/16	151/16	81/4	5/8	1/2	41/8	12%	10	81/8	61/4	73/4	67/16	20%
R4GM-25-T	25	3	256JP	4	5	3311/16	151/16	10	5/8	1/2	41/8	12%	10	81/8	61/4	7%	67/16	20%
R4GM-30-T	30	3	284JP	4	5	345/16	1313/16	91/2	3/4	1/2	41/8	131/8	11	81/8	7	73/4	67/16	213/4
R4GM-40-T	40	3	286JP	4	5	3513/16	1313/16	11	3/4	1/2	41/6	131/8	11	81/s	7	73/4	67/16	213/4
R4GM-50-T	50	3	324JP	4	5	321/8	1413/16	101/2	13/16	5/8	41/s	151/8	121/2	81/8	8	73/4	67/16	241/2

GRISWOLD PUMP COMPANY Page **6**

CENTRIFUGALS Performance

E Series

SINGLE-STAGE CENTRIFUGAL PUMPS

FLANGED CONNECTIONS

1750 RPM

Basic							C	APAC	ITIES	IN U.S	S. GAL	LONS	PER	MINU	ΓE				Shut- Off
Pump	Motor	Disc.	Suct.						TO	DTAL I	HEAD	IN FE	ET						Head
Model	HP	Size	Size	30	35	40	45	50	55	60	70	80	90	100	110	120	130	140	Feet
ВЗЕМЗ	3	3	4	240	230	220	204	185	164	140									70
R3EM5	5	3	4				280	275	265	255	230	190	140						101
R3EM75	71/2	3	4								295	275	250	220	190	140			131
R3EM10	10	3	4										285	262	235	207	170	115	150

Basic																			Shut- Off
Pump	Motor	Disc.	Suct.						TO	DTAL I	HEAD	IN FE	ET						Head
Model	HP	Size	Size	60	65	70	75	80	85	90	95	100	105	110	115	120	130	140	Feet
R4EM10	10	4	5	575	550	525	490	450	410	365	315	256							104
R4EM15	15	4	5					607	585	560	530	495	455	415	370	320			127
R4EM20	20	4	5									630	610	580	550	515	425	315	144

Basic Pump	Motor	Disc.	Suct.						T	OTAL I	HEAD	IN FE	ET						Shut- Off Head
Model	HP	Size	Size	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	Feet
R5EM25	25	5	6						945	885	810	705	560					7	138
R5EM30	30	5	6								965	900	915	700	500				157
R5EM40	40	5	6										975	920	855	760	650		179
R5EM50	50	5	6											980	920	850	740	570	188

Basic																			Shut- Off
Pump	Motor	Disc.	Suct.						TO	DTAL I	HEAD	IN FE	ET						Head
Model	HP	Size	Size	40	50	60	70	80	90	100	120	140	160	180	190	200	210	220	Feet
R6EM30	30	6	8	1600	1540	1460	1390	1300	1190	1060	660								128
R6EM40	40	6	8			1660	1600	1530	1450	1360	1115	760							148
R6EM50	50	6	8				1740	1700	1670	1600	1430	1190	840						169
R6EM60	60	6	8							1780	1660	1480	1260	950	640				194
R6EM75	75	6	8									1790	1650	1450	1320	1200	980	700	224
R6EM100	100	6	8											1800	1750	1680	1590	1450	260

CONSULT PERFORMANCE CURVES FOR MAXIMUM SUCTION LIFTS DETERMINED BY NPSH CHARACTERISTICS. If the operating head remains constant, check performance curves for the possibility of using a smaller motor.

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GRISWOLD PUMP COMPANY Page 7

CENTRIFUGALS Performance

F Series

SINGLE-STAGE CENTRIFUGAL PUMPS

FLANGED CONNECTIONS

1750 RPM

Basic							CAPAC	TITIES	INITIS	C GAL	2MO I	PER M	UNITE	:			Shut- Off
Pump	Motor	Disc.	Suct.				CALA			HEAD			IIIVOTE				Head
Model	HP	Size	Size	10	15	20	25	30	35	40	45	50	55	60	70	80	Feet
R2FH2	2	2	3			183	175	166	156	145	130	114	90	56			64
R3FM2	2	3	4		270	250	230	205	175	125							42
R3FM3	3	3	4				290	270	250	225	195	145					53
R3FM5	5	3	4							325	305	285	265	240	150		72
R4FM2	2	4	5	355	330	300	260	215	150								39
R4FM3	3	4	5	440	420	400	370	340	300	260	200	110					53
R4FM5	5	4	5				500	480	455	430	400	370	330	290	160		75
R4FH3	3	4	5		440	405	360	300	200								38
R4FH5	5	4	5		555	535	510	475	430	375	300	165					50
R4FH75	71/2	4	5			650	625	600	570	545	505	460	400	330			65
R4FH10	10	4	5			750	730	710	685	660	630	600	570	535	440	295	85

Basic Pump	Motor	Disc.	Suct.					т	OTAL	HEAD	IN FFF	т					Shut- Off Head
Model	HP	Size	Size	20	25	30	35	40	45	50	55	60	65	70	75	80	Feet
R6FL5	5	6	8	810	720	600	420	110									41
R6FL75	71/2	6	8	1000	960	905	840	735	580	270							54
R6FL10	10	6	8		1070	1025	960	890	805	680	440	100					61
R6FL15	15	6	8					1165	1120	1065	1000	910	800	630	300		78
R6FL20	20	6	8						1250	1210	1160	1105	1040	950	840	660	89
R6FM10	10	6	8	1200	1150	1070	980	860	700	480							55
R6FM15	15	6	8			1365	1305	1240	1160	1080	960	780	460				68
R6FM20	20	6	8					1445	1385	1320	1250	1170	1080	920	680		80
R6FM25	25	6	8						1525	1480	1420	1345	1260	1155	1020	820	89

CONSULT PERFORMANCE CURVES FOR MAXIMUM SUCTION LIFTS DETERMINED BY NPSH CHARACTERISTICS.

If the operating head remains constant, check performance curves for the possibility of using a smaller motor.

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CENTRIFUGALS Performance

F Series

SINGLE-STAGE CENTRIFUGAL PUMPS

FLANGED CONNECTIONS

NOT FOR BOOSTER SERVICE*

1750 RPM

Pump									TOTAL	HEAD	(FEET	D)					Shut- Off
Model	Motor	Disc.	Suct.	40	45	50	55	60	65	70	75	80	90	100	110	120	Head
No.	HP	Size	Size				CAPA	CITY	IN U.S.	GALL	ONS F	ER M	NUTE				Feet
R8FH40	40	8	8		2790	2680	2550	2400	2200	1900	1470						81
R8FH50	50	8	8				2900	2820	2720	2600	2460	2260	1620				97
R8FH60	60	8	8						2940	2865	2780	2670	2370	1910	800		111
R8FH75	75	8	8							3080	3020	2960	2780	2540	2190	1640	131

1150 RPM

															Shut-
Pump					TOTAL HEAD (FEET)										Off
Model	Motor	Disc.	Suct.	10	15	20	25	30	35	40	45	50	55	60	Head
No.	HP	Size	Size			CAF	PACITY	IN U.S	. GALLO	ONS PE	R MIN	UTE			Feet
RL8FH15	15	8	8		2290	2170	2040	1890	1700	1410	780				46
RL8FH20	20	8	8				2370	2260	2110	1940	1700	1330			54
RL8FH25	25	8	8				2450	2350	2225	2070	1870	1590	1020		57

^{*}Maximum working pressure — 8FH . . . 60 lb./sq. in. (non-shock)

Capacities are based on pump performance at or near sea level.

Pump should be set at such elevation that the total suction lift including pipe friction will not exceed fifteen feet when pump is delivering full capacity.

Capacities shown in tables are approximate; consult performance curves for accurate selection.

When head is reasonably constant, consult curves for possibility of using smaller motor.

The total suction lift should not exceed one half of total head when total head is less than thirty feet.

CENTRIFUGALS Performance

G Series

SINGLE-STAGE CENTRIFUGAL PUMPS FLANGED CONNECTIONS • 3500 RPM

Basic					CAPACITIES IN U.S. GALLONS PER MINUTE												Shut- Off		
Pump	Motor	Disc.	Suct.		TOTAL HEAD IN FEET										Head				
Model	HP	Size	Size	40	50	60	70	80	90	100	120	140	160	180	200	220	240	260	Feet
R2GM5	5	2	3				190	185	175	160	125	55							145
R2GM75	71/2	2	3								195	175	140	90					195
R2GM10	10	2	3									205	195	170	140	95			240
R2GH5	5	2	3	235	225	215	200	180	160	135									118
R2GH75	71/2	2	3		280	270	260	250	235	220	185	130							152
R2GH10	10	2	3			310	300	290	280	270	240	205	160	50					180
R2GH15	15	2	3								310	285	265	235	190	120			232
R2GH20	20	2	3									325	300	280	255	220	175	105	271
R3GL3	5	3	4		275	255	235	210	185	150									122
R3GL75	71/2	3	4				300	280	265	245	195	140							163
R3GL10	10	3	4							300	265	225	180						196

Basic									TO	OTAL I	HEAD	IN FE	ET						Shut- Off
Pump Model	Motor HP	Disc. Size	Suct. Size	50	60	80	100	120	140	160	180	200	220	240	260	280	300	320	Head Feet
R3GM10	10	3	4	430	410	365	315	180											122
R3GM15	15	3	4			485	450	400	340	250									170
R3GM20	20	3	4					480	435	380	300								200
R3GM25	25	3	4							490	445	380	300						240
R3GM30	30	3	4									475	410	330	200				266
R3GM40	40	3	4												480	420	325		320
R4GM15	15	4	5	640	615	550	480	400	280										153
R4GM20	20	4	5		705	665	605	550	470	360	210								188
R4GM25	25	4	5			710	690	630	570	490	400	280							210
R4GM30	30	4	5					705	655	590	510	430	310						237
R4GM40	40	4	5							710	685	630	550	470	360				280
R4GM50	50	4	5										715	680	600	520	410	150	325
R4GH30	30	4	5		935	890	825	740	620	390									164
R4GH40	40	4	5				960	920	860	770	630	400							196
R4GH50	50	4	5						970	940	880	780	650	400					238
R4GH60	60	4	5								970	950	890	790	600				267
R4GH75	75	4	5										975	960	920	830	680	460	324

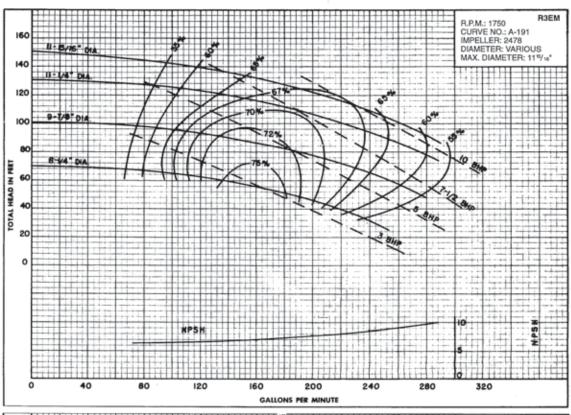
CONSULT PERFORMANCE CURVES FOR MAXIMUM SUCTION LIFTS DETERMINED BY NPSH CHARACTERISTICS.

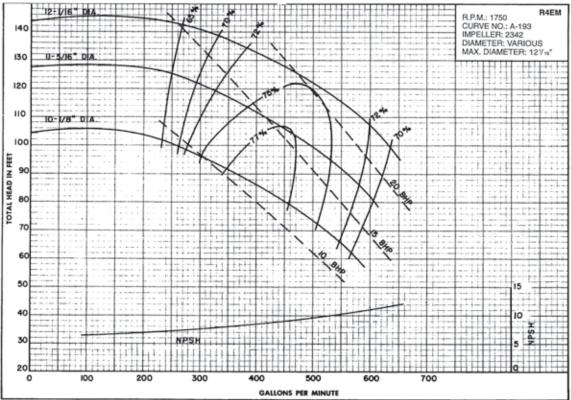
If the operating head remains constant, check performance curves for the possibility of using a smaller motor.

While the capacities quoted are based on tests of typical pumps, and are given in good faith, they do NOT represent GUARANTEED PERFORMANCES. Please refer to factory if Certified Performance Curve is required.

CENTRIFUGALS Performance Curve

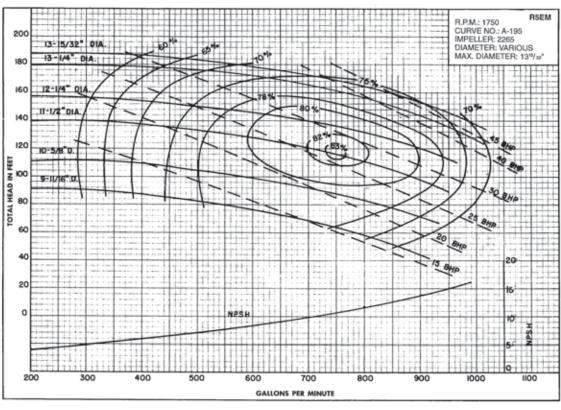
R3EM and R4EM

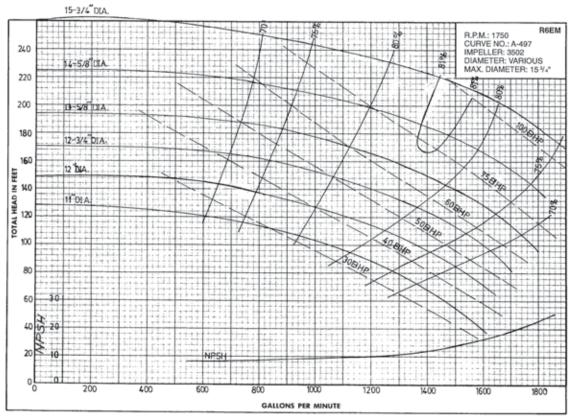




CENTRIFUGALSPerformance Curve

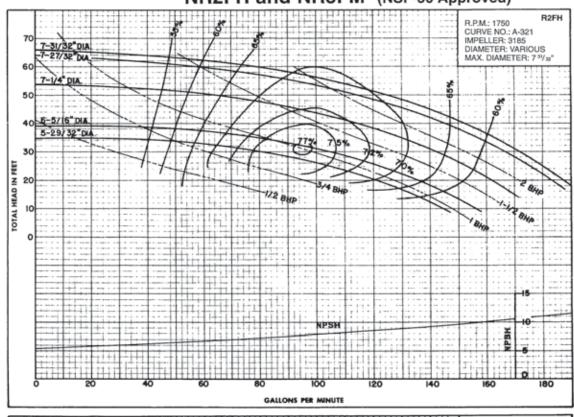
R5EM and R6EM

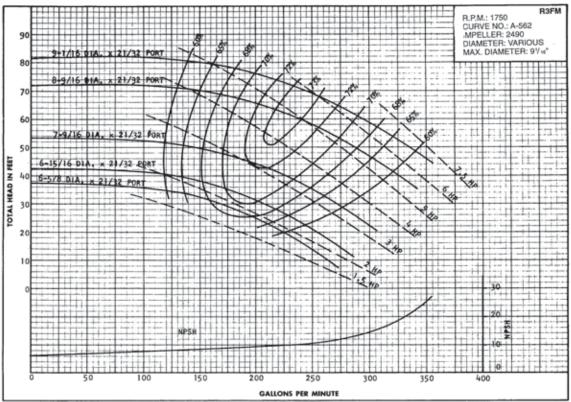




CENTRIFUGALS Performance Curve

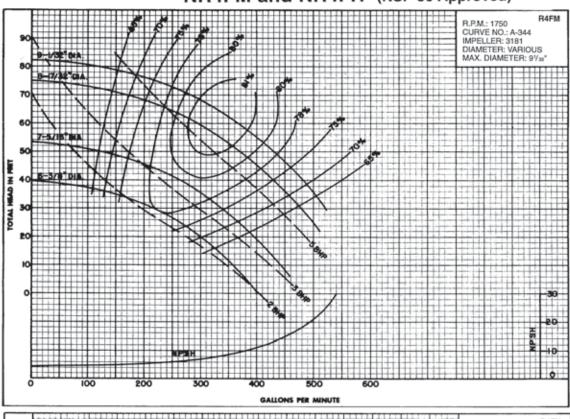


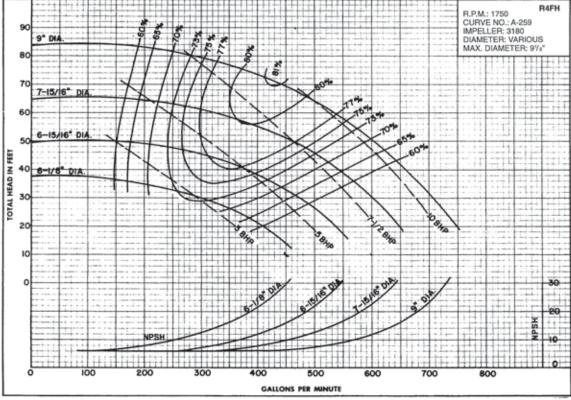




CENTRIFUGALSPerformance Curve

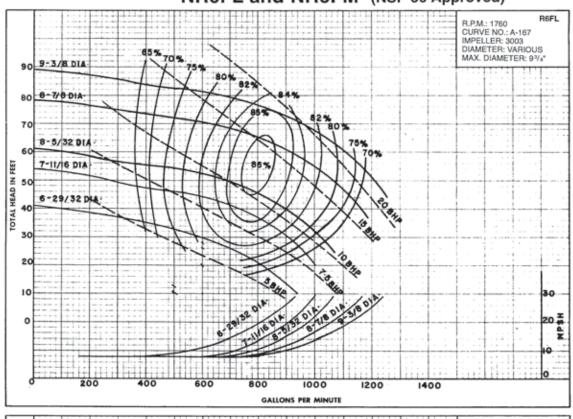
R4FM and R4FH (NSF-50 Approved)

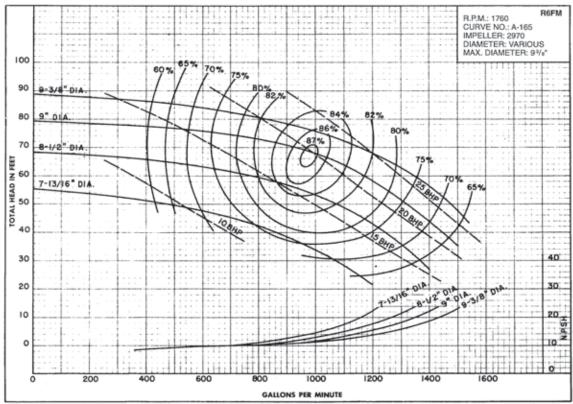




CENTRIFUGALS Performance Curve

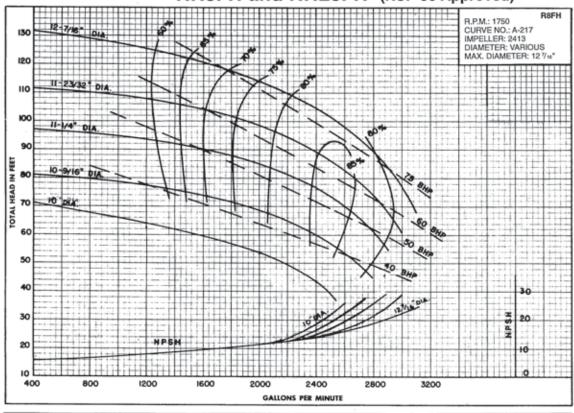


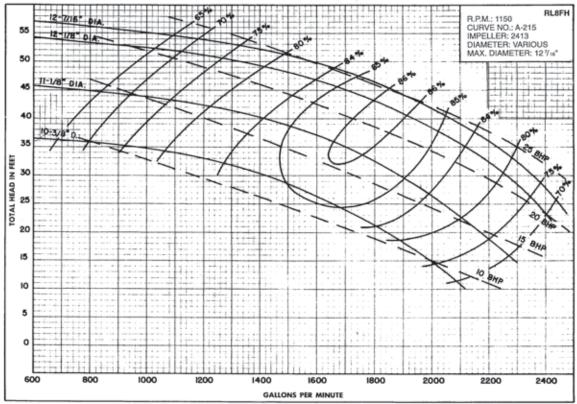




CENTRIFUGALS Performance Curve

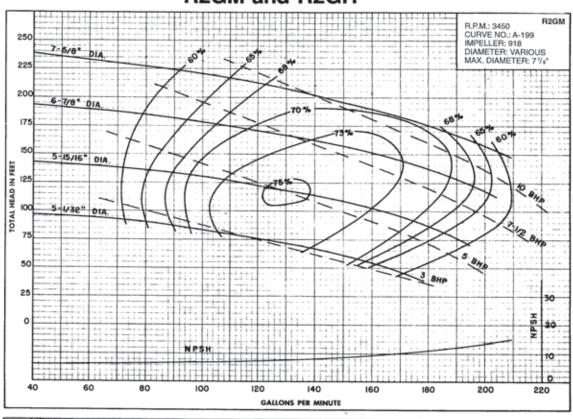
R8FH and RL8FH (NSF-50 Approved)

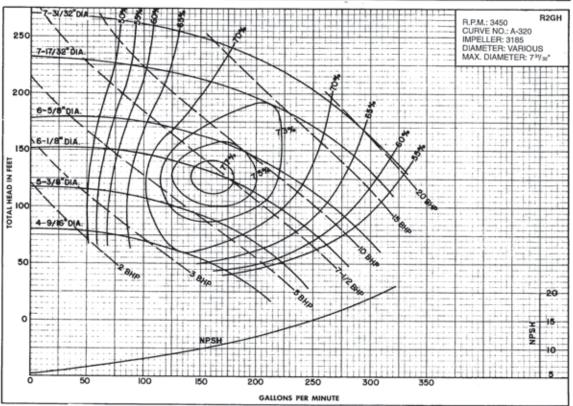




CENTRIFUGALSPerformance Curve

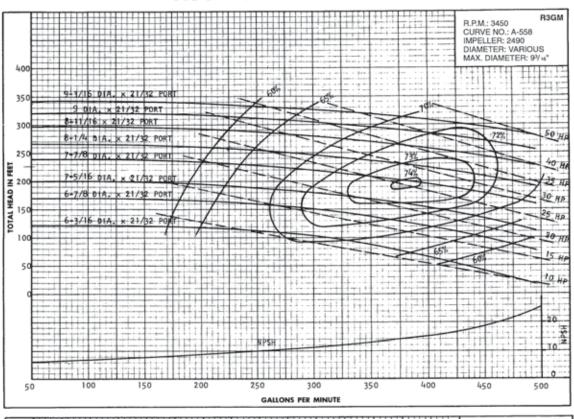
R2GM and R2GH

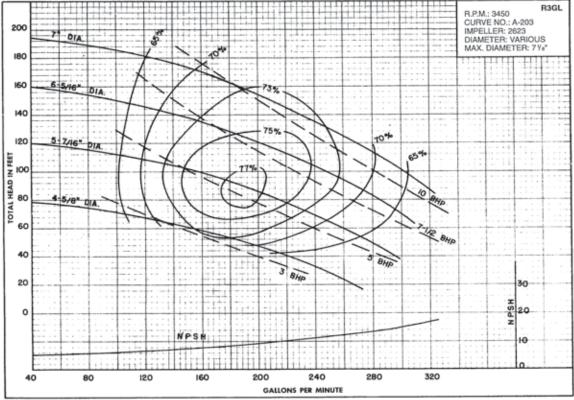




CENTRIFUGALSPerformance Curve

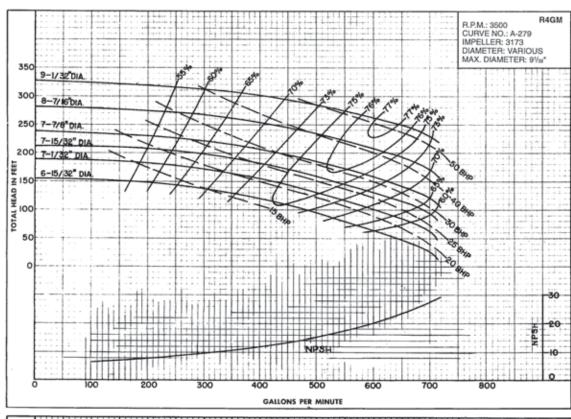
R3GM and R3GL

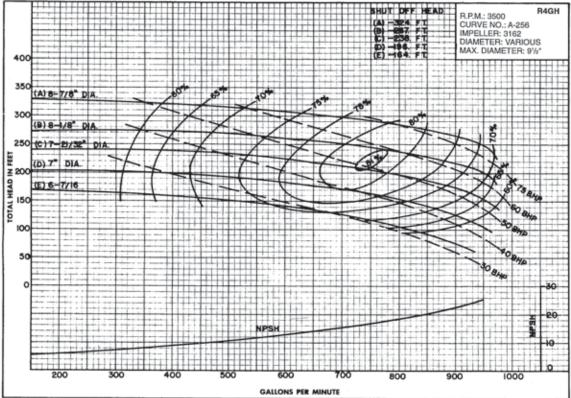




CENTRIFUGALS Performance Curve

R4GM and R4GH





CENTRIFUGALS Submittal Page

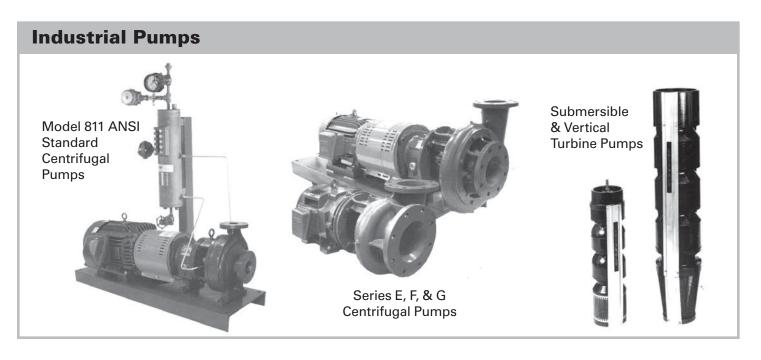
For horizontal and vertical close coupled electric, single stage, end suction centrifugal water pumps.

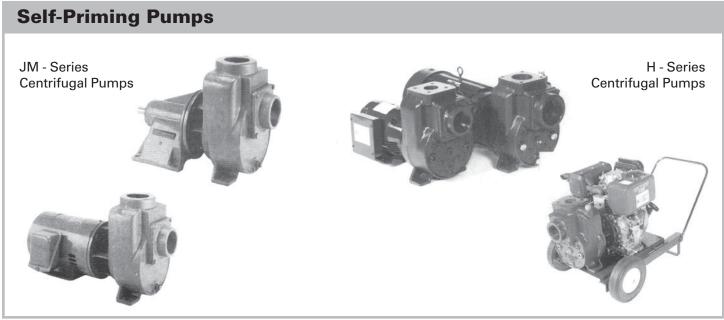
pumps.
GENERAL REQUIREMENTS: Furnish and install the (horizontal) (vertical) close coupled, centrifugal pump(s), of (standard bronze fitted) (cast iron) construction as manufactured by Griswold Pump Company described for the following conditions: Design Capacity GPM Minimum Efficiency% Design Total Head Ft. Head @ shut-off, (min)Ft. Maximum RPM
CONSTRUCTION: The pump casing shall be ASTM 48, class 30, cast iron capable of hydrostatic test @ 150% of maximum discharge pressure and have replaceable suction (and hub) wear ring(s). All mating parts shall have register fit to ensure alignment.
The impeller shall be enclosed, single piece cast (bronze) (iron) casting, completely machined on all outside surfaces and statically balanced at time of pump assembly. The impeller shall be keyed to the shaft and securely fastened with a vibration resistant lock screw and washer.
The mechanical shaft seal shall have (carbon/ceramic) (other) mating faces for leakless operation, with (stainless steel) (other) internal parts.
The motor shall be of United States manufacture, close coupled type with rodent screens on all ventilating passages. It shall be not less than Hp atRPM, (open dripproof) (TEFC) and non-overloading at any point on the pump head-capacity curve. Motor power supply isvolt Hertz phase. The motor bearing shall be selected to withstand thrust loads and have a minimum life of 100,000 average B-10 hours.
The motor shall be heat treated carbon steel, turned and ground, protected by a bronze sleeve secured to the shaft to prevent rotation. The maximum allowable no-load shaft run-out shall be .002.
The impeller shall not contact the suction (or hub) wear ring under any operating load condition.
The pump and motor shall be connected by an ASTM 48, Class 30, cast iron bracket incorpo-

The pump and motor shall be connected by an ASTM 48, Class 30, cast iron bracket incorporating a full isolating shield with a slinger to prevent moisture from entering the front motor bearing, pump shall be of the back pull-out design to permit removal of the motor and all rotating parts without breaking the suction and discharge connections. Discharge can be rotated for 45° position changes.

- NOTES -

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website: www.griswoldpump.com



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