

G GULF COAST PUMP & SUPPLY



428 Martin St. Houston, Tx. 77018

(713) 692-6233

(713) 692-6014 fax

www.gcpumpinc.com

GULF COAST

PUMP & SUPPLY

Single Phase		75 Deg C						
MOTOR RATING		75 deg C INSULATION - AWG COPPER WIRE SIZE						
VOLTS	HP	14	12	10	8	6	4	2
115V	1/2	100	160	250	390	620	960	1460
230V	1/2	400	650	1020	1610	2510	3880	5880
	3/4	300	480	760	1200	1870	2890	4370
	1	250	400	630	990	1540	2380	3610
	1 1/2	190	310	480	770	1200	1870	2850
	2	150	250	390	620	970	1530	2360
	3	120	190	300	470	750	1190	1850
	5	0	110	180	280	450	710	1110
	7 1/2	0	0	120	200	310	490	750
	10	0	0	0	160	250	390	600
	15	0	0	0	0	170	270	430

3 phase		75 Deg C						
MOTOR RATING		75 deg C INSULATION - AWG COPPER WIRE SIZE						
VOLTS	HP	14	12	10	8	6	4	2
230V 3 phase	2	400	650	1020	1610	2510	3880	5880
	3	300	480	760	1200	1870	2890	4370
	5	250	400	630	990	1540	2380	3610
	7 1/2	190	310	480	770	1200	1870	2850
	10	150	250	390	620	970	1530	2360
	15	120	190	300	470	750	1190	1850
	20	0	110	180	280	450	710	1110
	25	0	0	120	200	310	490	750
	30	0	0	0	160	250	390	600
	460V 3 phase	5	590	950	1500	2360	3700	5750
7 1/2		420	680	1070	1690	2640	4100	6260
10		310	500	790	1250	1960	3050	4680
15			340	540	850	1340	2090	3200
20				410	650	1030	1610	2470
25				330	530	830	1300	1990
30				270	430	680	1070	1640
40					320	500	790	1210
50						410	640	980

SCH. 40 PVC PIPE: FRICTION LOSS (IN FEET OF HEAD) PER 100 FT.

GPM	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
1	1.38	.36	.11	.07					
2	4.83	1.21	.38	.10					
3	9.66	2.51	.77	.21	.10				
5	25.76	6.33	1.92	.51	.24				
10	97.52	25.98	6.88	1.78	.83	.25	.11		
15		49.68	14.63	3.75	1.74	.52	.22		
20		86.94	25.07	6.39	2.94	.86	.36	.13	
25			38.41	9.71	4.44	1.29	.54	.19	
30				13.62	6.26	1.81	.75	.26	
35				18.17	8.37	2.42	1	.35	.09
40				23.55	10.7	3.11	1.28	.44	.12
50					16.45	4.67	1.93	.66	.17
60					23.48	6.6	2.71	.93	.25
70						8.83	3.66	1.24	.33
80						11.43	4.67	1.58	.41
100						21.66	5.28	2.42	.63
125							7.11	3.8	.95
150							10.83	5.15	1.33
175								6.9	1.78
200								8.9	2.27
250								16.05	3.36
300									4.85

"Estimating Motor Current Draw"

- At 115 volts, a 1 phase motor draws 10 amps per horsepower
- At 230 volts, a 1 phase motor draws 5 amps per horsepower
- At 230 volts, a 3 phase motor draws 2.5 amps per horsepower
- At 460 volts, a 3 phase motor draws 1.27 amps per horsepower

USEFUL INFORMATION

1 PSI = 2.31 Feet Water

1 Ft. Water = .433 PSI

(Volts x Amps = watts) 1 ph

(Volts x Amps X 1.732 = watts) 3 ph

1 Acre = 43,560 Sq. Feet

Cubic Foot Water = 7.48 gallons

1" water per acre land = 27,154 gallons

1 foot water per acre land = 325,851 gallons

1) Liter = .2642 Gallons

Mile = 5,280 feet

1 HP = 745.7 Watts

Vertical Cyl. Tank Volume = 3.14 x R x R x L x 7.48

Rectangle Tank Volume = L x W x H x 7.48

Hole Dia. x Hole Dia. / 24.5 = Gallons per foot

GPM x TDH / 3960 x eff. = BHP required

gpm x ppm / 8.34 x 1440 = gpd feed rate

Deg. C = (deg. F - 32) x .555

Deg. F = (deg. C x 1.8) + 32

