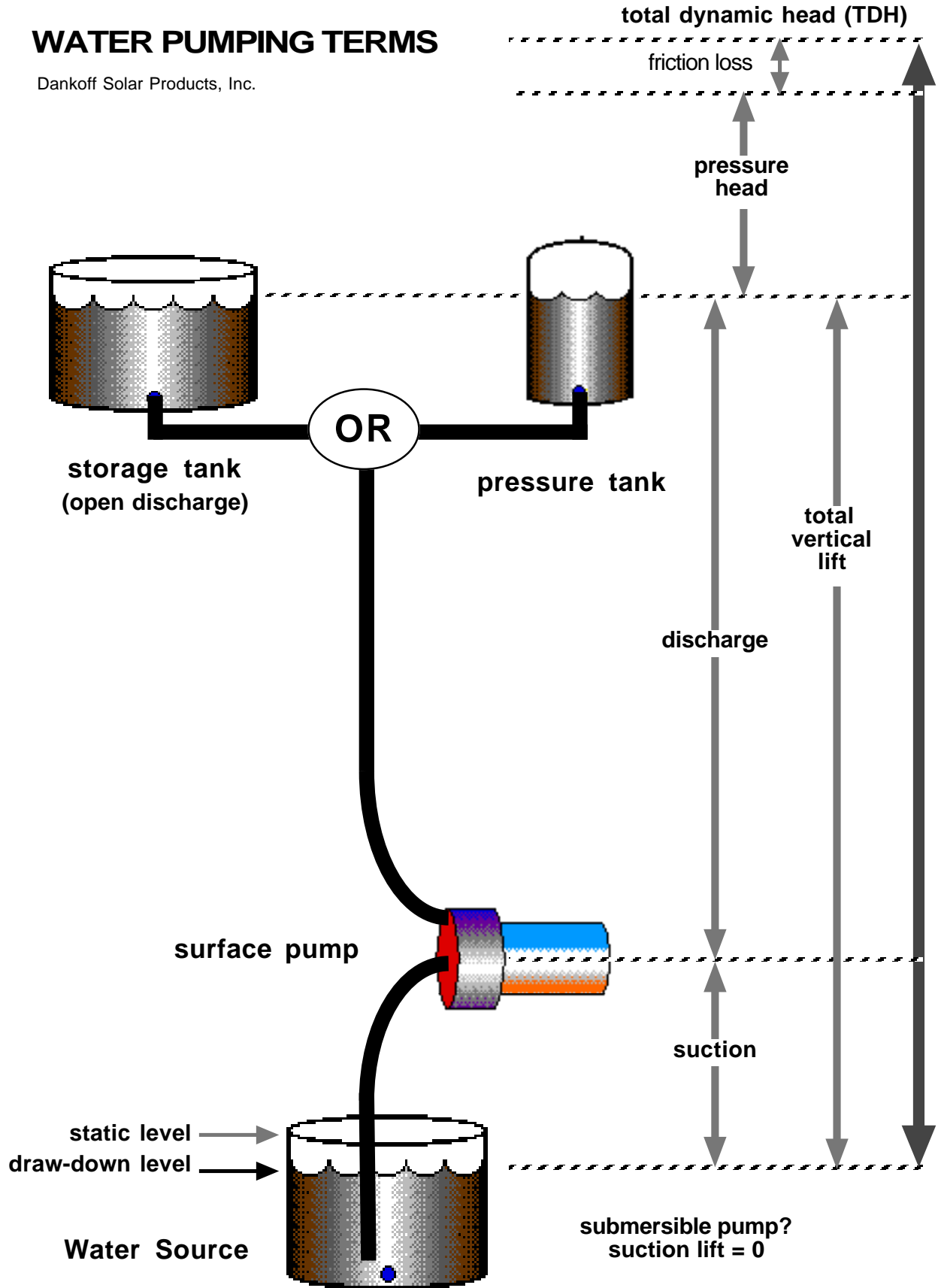


WATER PUMPING TERMS

Dankoff Solar Products, Inc.



Water Pipe Sizing Chart



HEAD LOSS in VERTICAL FEET per HUNDRED FEET of pipe or VERTICAL METERS per HUNDRED METERS of pipe

Friction Loss in Plastic Pipe with Standard Inside Diameter (SIDR)

Chart ONLY applies to: PVC pipe, Schedule 40 (160 PSI) and to
PE (polyethylene) pipe with SIDR designation (most common 100 PSI black pipe)

Nominal Pipe Diameter (Inches)		1/2 *	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6
Actual Inside Diameter (Inches)		.662	.82	1.05	1.38	1.61	2.07	2.47	3.07	4.03	5.05	6.06
FLOW RATE		Head Loss										
GPM	LPM											
1	3.8	1.13	0.14	0.05	0.02	.	.	.	.	.	.	.
2	7.6	4.16	0.35	0.14	0.05	0.02	.	.	.	.	.	.
3	11	8.55	2.19	0.32	0.09	0.05	.	.	.	.	.	.
4	15	14.8	3.70	0.53	0.16	0.09	0.02	.	.	.	.	.
5	19	22.2	5.78	0.81	0.25	0.12	0.04	.	.	.	.	.
6	23	31.0	7.85	1.00	0.35	0.18	0.07	0.02	.	.	.	.
7	27	.	10.6	1.52	0.46	0.23	0.08	0.03	.	.	.	.
8	30	.	13.4	1.94	0.58	0.30	0.09	0.05	.	.	.	.
9	34	.	16.9	2.43	0.72	0.37	0.12	0.06	.	.	.	.
10	38	.	20.3	2.93	0.88	0.46	0.16	0.07	0.02	.	.	.
11	42	.	24.3	3.51	1.04	0.53	0.18	0.08	0.03	.	.	.
12	46	.	28.6	4.11	1.22	0.65	0.21	0.09	0.04	.	.	.
14	53	.	.	5.47	1.64	0.85	0.28	0.12	0.05	.	.	.
16	61	.	.	7.02	2.10	1.09	0.37	0.14	0.06	.	.	.
18	68	.	.	8.73	2.61	1.34	0.46	0.18	0.07	.	.	.
20	76	.	.	10.6	3.16	1.64	0.55	0.21	0.08	0.02	.	.
22	83	.	.	13.3	3.79	1.96	0.67	0.25	0.09	0.03	.	.
24	91	.	.	14.9	4.44	2.31	0.79	0.30	0.11	0.04	.	.
26	99	.	.	.	5.15	2.66	0.90	0.35	0.14	0.05	.	.
28	106	.	.	.	5.91	3.05	1.04	0.42	0.16	0.05	.	.
30	114	.	.	.	6.72	3.46	1.18	0.46	0.18	0.06	.	.
35	133	.	.	.	8.94	4.62	1.57	0.62	0.23	0.07	.	.
40	152	.	.	.	11.0	5.91	1.99	0.79	0.30	0.09	0.02	.
45	171	.	.	.	14.2	7.37	2.49	0.97	0.37	0.12	0.04	.
50	190	.	.	.	17.3	8.96	3.03	1.20	0.46	0.14	0.05	.
55	208	.	.	.	.	10.7	3.60	1.43	0.55	0.16	0.06	.
60	227	.	.	.	.	12.5	4.23	1.66	0.65	0.18	0.07	0.02
65	246	.	.	.	.	14.5	4.90	1.94	0.74	0.22	0.08	0.03
70	265	.	.	.	.	16.7	5.64	2.22	0.85	0.25	0.09	0.04
75	284	.	.	.	.	19.0	6.40	2.52	0.97	0.28	0.10	0.05
80	303	.	.	.	.	.	7.21	2.84	1.09	0.32	0.12	0.06
85	322	.	.	.	.	.	8.06	3.19	1.22	0.37	0.13	0.07
90	341	.	.	.	.	.	8.96	3.53	1.36	0.39	0.14	0.08
95	360	.	.	.	.	.	9.91	3.90	1.50	0.44	0.16	0.09
100	379	.	.	.	.	.	10.9	4.30	1.66	0.49	0.18	0.12
150	569	.	.	.	.	.	23.1	9.10	3.50	1.04	0.37	0.16
200	759	.	.	.	.	.	.	15.5	5.98	1.76	0.62	0.28

NOTE: Shaded values are at velocities over 5 feet per second and should be selected with caution.

NOTE:
1/2" data applies to PE pipe only.
PVC has smaller ID of .612"