

# Flow Capacity Charts & More

LAYFLAT						
FRICTION LOSS PER 100' PSI						
GPM	1 1/2"	2"	2 1/2"	3"	4"	6"
20	1.2					
30	2.4					
40	5.1	1.1				
50	6.0					
60		2.4	1.4			
80		4.1	1.9	1.0		
90	17					
100		6.0	2.8	1.2		
120				1.8		
140				2.2		
160				2.6	0.6	
180				3.3	0.7	
200		22	7		0.8	
220					1.0	
250				5		
280					1.4	0.2
300					1.6	0.2
350			22			
380						0.4
420						0.5
460					4	0.6
500						0.7
580				22		0.9
620						1.0

Oval Hose Friction Loss and Velocity													
Size ID	1" Oval		1-1/4" Oval		1-1/2" Oval		2" Oval		3" Oval		4" Oval		
	Friction Loss	Velocity	Friction Loss	Velocity	Friction Loss	Velocity	Friction Loss	Velocity	Friction Loss	Velocity	Friction Loss	Velocity	
	1.04		1.37		1.6		2.05		3.03		3.99		
	psi/100	fps	psi/100	fps	psi/100	fps	psi/100	fps	psi/100	fps	psi/100	fps	
2	0.16	0.75	0.04	0.43	0.02	0.32	0.01	0.19	0.00	0.09	0.00	0.05	
4	0.53	1.51	0.14	0.87	0.07	0.64	0.02	0.39	0.00	0.18	0.00	0.10	
6	1.08	2.26	0.29	1.30	0.14	0.96	0.04	0.58	0.01	0.27	0.00	0.15	
8	1.78	3.02	0.48	1.74	0.23	1.28	0.07	0.78	0.01	0.36	0.00	0.21	
10	2.64	3.77	0.71	2.17	0.34	1.59	0.11	0.97	0.02	0.44	0.00	0.26	
12	3.63	4.53	0.98	2.61	0.47	1.91	0.14	1.17	0.02	0.53	0.01	0.31	
14	4.75	5.28	1.28	3.04	0.61	2.23	0.19	1.36	0.03	0.62	0.01	0.36	
16	6.00	6.04	1.62	3.48	0.78	2.55	0.24	1.55	0.04	0.71	0.01	0.41	
18	7.38	6.79	1.99	3.91	0.95	2.87	0.29	1.75	0.05	0.80	0.01	0.46	
20	8.87	7.54	2.40	4.35	1.15	3.19	0.35	1.94	0.06	0.89	0.01	0.51	
25	13.11	9.43	3.54	5.43	1.69	3.98	0.52	2.43	0.08	1.11	0.02	0.64	
30	18.04	11.32	4.87	6.52	2.33	4.78	0.72	2.91	0.11	1.33	0.03	0.77	
35			6.38	7.61	3.05	5.58	0.94	3.40	0.15	1.56	0.04	0.90	
40			8.06	8.70	3.86	6.38	1.19	3.88	0.19	1.78	0.05	1.03	
45			9.90	9.78	4.74	7.17	1.46	4.37	0.23	2.00	0.06	1.15	
50			11.91	10.87	5.70	7.97	1.76	4.85	0.27	2.22	0.07	1.28	
60					7.84	9.56	2.42	5.83	0.38	2.67	0.10	1.54	
70					10.27	11.16	3.16	6.80	0.49	3.11	0.13	1.79	
80								4.00	0.77	0.62	0.35	0.17	2.05
90								4.91	0.74	0.77	0.40	0.21	2.31
100								5.91	0.91	0.92	0.44	0.25	2.56
110								6.98	1.08	1.09	0.48	0.30	2.82
120									1.27	0.53	0.34	0.30	
130									1.46	0.57	0.40	0.33	
140									1.66	0.62	0.45	0.35	
150									1.88	0.67	0.51	0.38	
175									2.46	0.78	0.66	0.48	
200									3.10	0.89	0.84	0.53	
225									3.82	1.00	1.03	0.57	
250									4.59	1.11	1.24	0.61	
300												1.71	0.69
350												2.24	0.97
400												2.83	1.25

Grey boxes: Velocity above 5 fps is not recommended.

SDR 26														
FRICTION LOSS PSI/100' / FLOW VELOCITY FT/SECOND														
GPM	2"	3"	4"	5"	6"	8"	10"							
25	.38	2.16	.06	.99	.02	.60								
30	.53	2.59	.08	1.19	.02	.72	.01	.47						
35	.71	3.03	.11	1.39	.03	.84	.01	.55						
40	.90	3.46	.14	1.58	.04	.96	.01	.63						
45	1.13	3.89	.17	1.78	.05	1.08	.02	.70						
50	1.37	4.32	.20	1.98	.06	1.19	.02	.78						
60	1.92	5.19	.29	2.38	.08	1.43	.03	.94	.01	.66				
70	2.55	6.05	.38	2.77	.11	1.67	.04	1.10	.02	.77				
80	3.27	6.92	.49	3.17	.14	1.91	.05	1.25	.02	.88				
90	4.06	7.78	.61	3.57	.18	2.15	.06	1.41	.03	.99				
100	4.94	8.65	.74	3.96	.22	2.39	.08	1.56	.03	1.10	.01	.65		
125	7.47	10.81	1.12	4.95	.33	2.99	.12	1.96	.05	1.38	.01	.81		
150			1.57	5.94	.46	3.58	.16	2.35	.07	1.65	.02	.98		
175			2.09	6.93	.61	4.18	.22	2.74	.09	1.93	.03	1.14		
200			2.67	7.92	.78	4.78	.28	3.13	.12	2.21	.03	1.30	.01	.84
250			4.04	9.91	1.18	5.97	.42	3.91	.18	2.76	.05	1.63	.02	1.05
300			5.66	11.89	1.65	7.17	.59	4.69	.25	3.31	.07	1.95	.02	1.26
350					2.20	8.36	.79	5.48	.34	3.86	.09	2.28	.03	1.47
400					2.82	9.56	1.01	6.26	.43	4.41	.12	2.60	.04	1.68
450					3.50	10.75	1.25	7.04	.53	4.96	.15	2.93	.05	1.88
500							1.52	7.82	.65	5.52	.18	3.25	.06	2.09
750									1.38	8.27	.38	4.88	.13	3.14
1000									2.34	11.03	.65	6.51	.22	4.19
1250											.98	8.13	.34	5.23

SDR 21														
FRICTION LOSS PSI/100' / FLOW VELOCITY FT/SECOND														
GPM	1 1/2"	2"	3"	4"	5"	6"	8"							
25	1.25	3.53	.42	2.25	.06	1.03	.02	.62						
30	1.75	4.24	.59	2.70	.09	1.24	.03	.75	.01	.49				
35	2.33	4.94	.78	3.15	.12	1.44	.03	.87	.01	.57				
40	2.99	5.65	1.00	3.60	.15	1.65	.04	1.00	.02	.65				
45	3.72	6.36	1.24	4.05	.19	1.86	.05	1.12	.02	.73				
50	4.52	7.06	1.51	4.50	.23	2.06	.07	1.25	.02	.82	.01	.58		
60	6.33	8.48	2.12	5.41	.32	2.48	.09	1.5	.03	.98	.01	.69		
70	8.42	9.89	2.82	6.31	.42	2.89	.12	1.75	.04	1.14	.02	.81		
80			3.61	7.21	.54	3.30	.16	2.00	.06	1.31	.02	.92		
90			4.49	8.11	.67	3.71	.20	2.24	.07	1.47	.03	1.04		
100			5.46	9.01	.82	4.13	.24	2.49	.09	1.63	.04	1.15	.01	.68
125					1.23	5.16	.36	3.12	.13	2.04	.06	1.44	.02	.85
150					1.73	6.19	.51	3.74	.18	2.45	.08	1.73	.02	1.02
175					2.30	7.22	.68	4.36	.24	2.86	.10	2.01	.03	1.19
200					2.95	8.25	.87	4.99	.31	3.26	.13	2.30	.04	1.36
250					4.45	10.31	1.31	6.24	.47	4.08	.20	2.88	.06	1.70
300							1.84	7.48	.65	4.90	.28	3.45	.08	2.04
350							2.44	8.73	.87	5.71	.37	4.03	.10	2.38
400							3.13	9.98	1.12	6.53	.48	4.61	.13	2.71
450							3.89	11.22	1.39	7.35	.59	5.18	.16	3.05
500									1.69	8.16	.72	5.76	.20	3.39
750											1.53	8.64	.42	5.09
1000												.72	6.79	
1250													1.09	8.48



## DRIPTAPE; G.P.M. PER ACRE @ 8 P.S.I.

ROW SPACING (INCHES)	FEET OF HOSE PER ACRE	FLOW							
		8"	8"	12"	12"	16"	16"	24"	
		.67	.34	.45	.22	.34	.17	.28	
30	17,424	117	59	78	38	59	30	49	
32	16,335	109	56	74	36	56	28	46	
34	15,374	103	52	69	34	52	26	43	
36	14,520	97	49	65	32	49	25	41	
38	13,756	92	47	62	30	47	23	39	
40	13,068	88	44	59	29	44	22	37	
42	12,446	83	42	56	27	42	21	35	
44	11,880	80	40	53	26	40	20	33	
46	11,363	76	39	51	25	39	19	32	
48	10,890	73	37	49	24	37	19	30	
50	10,454	70	36	47	23	36	18	29	
52	10,052	67	34	45	22	34	17	28	
54	9,680	65	33	44	21	33	16	27	
56	9,334	63	32	42	21	32	16	26	
58	9,012	60	31	41	20	31	15	25	
60	8,712	58	30	39	19	30	15	24	
62	8,431	56	29	38	19	29	14	24	
64	8,168	55	28	37	18	28	14	23	
66	7,920	53	27	36	17	27	13	22	
68	7,687	52	26	35	17	26	13	22	
70	7,467	50	25	34	16	25	13	21	
72	7,260	49	25	33	16	25	12	20	
74	7,064	47	24	32	16	24	12	20	
76	6,878	46	23	31	15	23	12	19	</