TORO. Count on it.

Friction Loss

Polyethylene Oval Hose - 21 psi

Friction Loss Charts for ID Controlled 21 psi Oval Hose

Losses in psi per 100 feet of hose (psi/100 ft) for hose sizes: 26 mm (1.043") ID through 151 mm (5.955") ID

Part No.		EID2626		ELD3534 ELD3550		ELD4040		ELD5251		ELD7776		ELD101100			
Nom. ID Min. ID Min. Wall		1.043" 1.040" 0.029"		1.365" 1.360" 0.038"		1.595" 1.590" 0.044"		2.052" 2.047" 0.055"		3.043" 3.038" 0.080"		3.996" 3.991" 0.106"		5.955" 5.950" 0.110"	
Flow		Velocity	Loss	Velocity	Loss	Velocity	Loss	Velocity	Loss	Velocity	Loss	Velocity	Loss	Velocity	Loss
GPM	GPH	FPS	Psi	FPS	Psi	FPS	Psi	FPS	Psi	FPS	Psi	FPS	Psi	FPS	Psi
1	60	0.38	0.04	0.22	0.01	0.16	0.01	0.10	0.00	0.03	0.00	0.03	0.00	0.01	0.00
2	120	0.76	0.14	0.44	0.04	0.32	0.02	0.19	0.01	0.05	0.00	0.05	0.00	0.02	0.00
3	180	1.13	0.30	0.66	0.08	0.48	0.04	0.29	0.01	0.08	0.00	0.08	0.00	0.03	0.00
4	240	1.51	0.52	0.88	0.14	0.65	0.07	0.39	0.02	0.10	0.00	0.10	0.00	0.05	0.00
5	300	1.89	0.79	1.10	0.21	0.81	0.10	0.49	0.03	0.13	0.00	0.13	0.00	0.06	0.00
6	360	2.27	1.10	1.33	0.30	0.97	0.14	0.58	0.04	0.15	0.00	0.15	0.00	0.07	0.00
7	420	2.64	1.46	1.55	0.40	1.13	0.19	0.68	0.05	0.18	0.00	0.18	0.00	0.08	0.00
8	480	3.02	1.87	1.77	0.51	1.29	0.24	0.78	0.07	0.21	0.00	0.21	0.00	0.09	0.00
9	540	3.40	2.33	1.99	0.63	1.45	0.30	0.88	0.09	0.23	0.00	0.23	0.00	0.10	0.00
10	600	3.78	2.83	2.21	0.77	1.62	0.36	0.97	0.10	0.26	0.00	0.26	0.00	0.12	0.00
12	720	4.53	3.97	2.65	1.08	1.94	0.50	1.17	0.15	0.31	0.01	0.31	0.01	0.14	0.00
14	840	5.29	5.29	3.09	1.43	2.26	0.67	1.36	0.20	0.36	0.01	0.36	0.01	0.16	0.00
16	960	6.04	6.77	3.53	1.83	2.59	0.86	1.56	0.25	0.41	0.01	0.41	0.01	0.18	0.00
18	1,080	6.80	8.42	3.98	2.28	2.91	1.06	1.75	0.31	0.46	0.01	0.46	0.01	0.21	0.00
20	1,200	7.55	10.23	4.42	2.77	3.23	1.29	1.95	0.38	0.51	0.01	0.51	0.01	0.23	0.00
25	1,500	9.44	15.47	5.52	4.19	4.04	1.96	2.44	0.57	0.64	0.02	0.64	0.02	0.29	0.00
30	1,800	11.33	21.68	6.63	5.87	4.85	2.74	2.92	0.80	0.77	0.03	0.77	0.03	0.35	0.00
35	2,100	13.22	28.84	7.73	7.81	5.66	3.65	3.41	1.07	0.90	0.04	0.90	0.04	0.40	0.01
40	2,400	15.11	36.94	8.83	10.00	6.46	4.67	3.90	1.37	1.03	0.05	1.03	0.05	0.46	0.01
45	2,700	17.00	45.94	9.94	12.44	7.27	5.81	4.39	1.70	1.99	0.25	1.15	0.07	0.52	0.01
50	3,000			11.04	15.12	8.08	7.06	4.87	2.06	2.21	0.30	1.28	0.08	0.58	0.01
55	3,300			12.15	18.04	8.89	8.43	5.36	2.46	2.43	0.36	1.41	0.10	0.63	0.01
60	3,600			13.25	21.19	9.70	9.90	5.85	2.89	2.66	0.42	1.54	0.11	0.69	0.02
65	3,900			14.36	24.58	10.50	11.48	6.34	3.36	2.88	0.49	1.67	0.13	0.75	0.02
70	4,200			15.46	28.19	11.31	13.17	6.82	3.85	3.10	0.56	1.80	0.15	0.81	0.02
75	4,500					12.12	14.97	7.31	4.37	3.32	0.64	1.92	0.17	0.87	0.02
80	4,800					12.93	16.87	7.80	4.93	3.54	0.72	2.05	0.19	0.92	0.03
85	5,100					13.73	18.87	8.29	5.51	3.76	0.81	2.18	0.21	0.98	0.03
90	5,400					14.54	20.98	8.77	6.13	3.98	0.90	2.31	0.24	1.04	0.03
100	6,000							9.75	7.45	4.43	1.09	2.56	0.29	1.15	0.04
110	6,600							10.72	8.89	4.87	1.30	2.82	0.34	1.27	0.05
120	7,200							11.70	10.44	5.31	1.53	3.08	0.40	1.38	0.06
130	7,800							12.67	12.11	5.75	1.77	3.33	0.47	1.50	0.07
140	8,400							13.65	13.90	6.20	2.03	3.59	0.54	1.62	0.08
150	9,000							14.62	15.79	6.64	2.31	3.85	0.61	1.73	0.09
160	9,600							15.60	17.79	7.08	2.60	4.10	0.69	1.85	0.10
170	10,200							16.57	19.91	7.52	2.91	4.36	0.77	1.96	0.11
180	10,800							17.55	22.13	7.97	3.24	4.62	0.86	2.08	0.12
190	11,400									8.41	3.58	4.87	0.95	2.19	0.14
200	12,000									8.85	3.93	5.13	1.04	2.31	0.15
250	15,000									11.07	5.95	6.41	1.57	2.88	0.23
300	18,000									13.28	8.33	7.69	2.21	3.46	0.32
350	21,000									15.49	11.09	8.98	2.94	4.04	0.42
400	24,000									17.70	14.20	10.26	3.76	4.62	0.54
450	27,000									19.92	17.66	11.54	4.68	5.19	0.67
500	30,000									22.13	21.46	12.82	5.68	5.77	0.81
600	36,000											15.39	7.97	6.92	1.14
700	42,000											17.95	10.60	8.08	1.52
800	48,000											20.52	13.57	9.23	1.94
900	54,000											23.08	16.88	10.38	2.41
1,000	60,000											25.65	20.52	11.54	2.93
1,200	72,000													13.85	4.11
1,300	78,000													15.00	4.77
1,400	84,000													16.15	5.47
1,500	90,000													17.31	6.22
1,600	96,000													18.46	7.01
1,700	102,000													19.62	7.84
1,800	108,000													20.77	8.71
1,900	114,000													21.92	9.63
2,000	120,000													23.08	10.59
2,100	126,000													24.23	11.59
2,200	132,000													25.39	12.64
2,300	138,000													26.54	13.72
2,400	144,000													27.69	14.85
2,500	150,000													28.85	16.01

Friction losses are calculated using Hazen-Williams equation (C = 140) and minimum inside diameters.