



Count on it.

Friction Loss

Polyethylene Oval Hose - 42 psi

Friction Loss Charts for ID Controlled 42 psi Oval Hose

Losses in psi per 100 feet of hose (psi/100 ft) for hose sizes: 14 mm (0.555") ID through 52 mm (2.052") ID

Part No.		ELD1440		ELD1634 ELD1642		ELD2043		ELD2654		ELD3570		ELD4084		ELD52108	
Nom. ID		0.555"		0.633"		0.813"		1.043"		1.365"		1.595"		2.052"	
Min. ID		0.550"		0.630"		0.810"		1.040"		1.360"		1.590"		2.047"	
Min. Wall		0.043"		0.037"		0.046"		0.057"		0.074"		0.088"		0.112"	
Flow		Velocity		Velocity		Velocity		Velocity		Velocity		Velocity		Velocity	
GPM	GPH	FPS	Psi	FPS	Psi	FPS	Psi	FPS	Psi	FPS	Psi	FPS	Psi	FPS	Psi
1	60	1.35	0.89	1.03	0.46	0.62	0.13	0.38	0.04	0.16	0.01	0.16	0.01	0.10	0.00
2	120	2.70	3.20	2.06	1.65	1.25	0.49	0.76	0.14	0.32	0.02	0.32	0.02	0.19	0.01
3	180	4.05	6.78	3.09	3.50	1.87	1.03	1.13	0.30	0.48	0.04	0.48	0.04	0.29	0.01
4	240	5.40	11.56	4.12	5.96	2.49	1.75	1.51	0.52	0.65	0.07	0.65	0.07	0.39	0.02
5	300	6.75	17.47	5.15	9.02	3.11	2.65	1.89	0.79	0.81	0.10	0.81	0.10	0.49	0.03
6	360	8.10	24.49	6.18	12.64	3.74	3.72	2.27	1.10	0.97	0.14	0.97	0.14	0.58	0.04
7	420	9.45	32.58	7.20	16.82	4.36	4.95	2.64	1.46	1.13	0.19	1.13	0.19	0.68	0.05
8	480	10.80	41.72	8.23	21.53	4.98	6.33	3.02	1.87	1.29	0.24	1.29	0.24	0.78	0.07
9	540	12.15	51.89	9.26	26.78	5.60	7.88	3.40	2.33	1.45	0.30	1.45	0.30	0.88	0.09
10	600	13.50	63.07	10.29	32.55	6.23	9.57	3.78	2.83	1.62	0.36	1.62	0.36	0.97	0.10
11	660			11.32	38.84	6.85	11.42	4.15	3.38	1.78	0.43	1.78	0.43	1.07	0.12
12	720			12.35	45.63	7.47	13.42	4.53	3.97	1.94	0.50	1.94	0.50	1.17	0.15
13	780			13.38	52.92	8.09	15.56	4.91	4.61	2.10	0.58	2.10	0.58	1.27	0.17
14	840					8.72	17.85	5.29	5.29	2.26	0.67	2.26	0.67	1.36	0.20
15	900					9.34	20.29	5.67	6.01	2.42	0.76	2.42	0.76	1.46	0.22
16	960					9.96	22.86	6.04	6.77	2.59	0.86	2.59	0.86	1.56	0.25
17	1,020					10.58	25.58	6.42	7.57	2.75	0.96	2.75	0.96	1.66	0.28
18	1,080					11.21	28.43	6.80	8.42	2.91	1.06	2.91	1.06	1.75	0.31
19	1,140					11.83	31.43	7.18	9.30	3.07	1.18	3.07	1.18	1.85	0.34
20	1,200					12.45	34.56	7.55	10.23	4.42	2.77	3.23	1.29	1.95	0.38
22	1,320					13.70	41.23	8.31	12.21	4.86	3.31	3.55	1.54	2.14	0.45
24	1,440							9.06	14.34	5.30	3.88	3.88	1.81	2.34	0.53
26	1,560							9.82	16.63	5.74	4.50	4.20	2.10	2.53	0.61
28	1,680							10.58	19.08	6.18	5.17	4.52	2.41	2.73	0.71
30	1,800							11.33	21.68	6.63	5.87	4.85	2.74	2.92	0.80
32	1,920							12.09	24.43	7.07	6.62	5.17	3.09	3.12	0.90
34	2,040							12.84	27.34	7.51	7.40	5.49	3.46	3.31	1.01
36	2,160							13.60	30.39	7.95	8.23	5.82	3.84	3.51	1.12
38	2,280							14.35	33.59	8.39	9.10	6.14	4.25	3.70	1.24
40	2,400							15.11	36.94	8.83	10.00	6.46	4.67	3.90	1.37
45	2,700							17.00	45.94	9.94	12.44	7.27	5.81	4.39	1.70
50	3,000									11.04	15.12	8.08	7.06	4.87	2.06
55	3,300									12.15	18.04	8.89	8.43	5.36	2.46
60	3,600									13.25	21.19	9.70	9.90	5.85	2.89
65	3,900									14.36	24.58	10.50	11.48	6.34	3.36
70	4,200									15.46	28.19	11.31	13.17	6.82	3.85
75	4,500									16.56	32.04	12.12	14.97	7.31	4.37
80	4,800									17.67	36.11	12.93	16.87	7.80	4.93
85	5,100									18.77	40.40	13.73	18.87	8.29	5.51
90	5,400									19.88	44.91	14.54	20.98	8.77	6.13
95	5,700											15.35	23.19	9.26	6.78
100	6,000											16.16	25.50	9.75	7.45
125	7,500											20.20	38.55	12.19	11.26
150	9,000													14.62	15.79
175	10,500													17.06	21.01
200	12,000													19.50	26.90
225	13,500													21.94	33.46
250	15,000													24.37	40.67

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