

Hose Pressure Drop*

The chart below shows pressure drop in **PSI** for 10 feet of hose (smooth bore) without fittings. Fluid specification: Specific gravity = .85; Viscosity = ν = 20 centistokes (C.S.), (20 C.S. = 97 S.S.U.); ref MIL - H 5606, +70° F (+21° C).

Flow: US gallons per minute (gpm)

Hose pressure drop in PSI per 10 feet of hose length

Hose Size	-03	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32	-40	-48
Hose I.D. (in)	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3
DN	5	6	8	10	12	16	20	25	32	40	50	63	80
US gallons per minute	.25	10	3.1										
	.50	19	6	2.7									
	1	40	12	5.5	2.4								
	2	95	24	10	4.8								
	3	185	46	17	7	2.2							
	4		78	29	12	3	1.2						
	5		120	44	18	4.5	1.6	0.7					
	8			95	39	10	3.6	1.4					
	10				59	15	5.7	2	0.6				
	12				80	20	7.2	2.6	0.8				
	15					30	10	4.2	1.2	0.4			
	18					40	15	6.3	1.5	0.6			
	20					49	19	8	2	0.7	0.3		
	25					72	26	11	3	1	0.4		
	30						34	14	3.6	1.3	0.5	0.1	
	35						47	19	5	1.7	0.7	0.2	
	40							25	6.5	2.2	0.9	0.2	
	50							36	9	3.3	1.3	0.4	0.2
	60							50	12	4.4	1.8	0.5	0.2
	70								17	6	2.4	0.7	0.3
80								21	7.1	3	0.8	0.3	0.1
90								27	9	3.8	1	0.5	0.1
100								33	12	4.7	1.3	0.6	0.2
150								60	22	8.5	2.2	1	0.3
200									36	15	3.9	1.7	0.6
250									54	22	5.3	2.5	0.8
300										29	7.5	4	1.1
400										51	14	6.5	2.2
500											20	10	3
800												18	5
1000													10

* Pressure drop values listed are typical of many petroleum based hydraulic oils at approximately +100° F (+38° C). Differences in fluids, fluid temperature and viscosity can increase or decrease actual pressure drop compared to the values listed.

Pressure Drop International Chart



Hose Pressure Drop*

Pressure drop in **KPa** (Kilo Pascal) for a 10 meter length of hose (smooth bore) without fittings. Fluid specification: specific gravity = 0.85; Viscosity = 20 centistokes (C.S.); ref MIL – H 5606 at +21° C (+70° F).

Flow: Litres per minute (L/min)

Hose pressure drop in KPa per 10 meters of hose length

Hose size	-03	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32	-40	-48	
DN real	4.8	6.4	8.0	9.5	12.7	15.9	19.0	25.4	31.8	38.1	50.8	63.5	76.2	
DN	5	6	8	10	12	16	20	25	32	40	50	63	80	
Liters per minute	1	242	75											
	2	466	146	66										
	4	996	293	133	59									
	8	2433	613	250	117									
	10	3540	880	335	144	45								
	15		1776	660	273	69	27							
	20		3080	1129	462	116	41	18						
	30			2159	887	228	82	32						
	40				1496	379	141	50	14					
	50					555	192	75	22					
	60					756	263	111	30	10				
	70					970	373	154	37	13				
	80					1250	475	200	49	17	7			
	90					1531	560	237	66	21	9			
	100						653	274	73	24	10	3		
	125						964	393	103	36	15	4		
	150							567	147	50	19	5		
	175								735	186	60	27	7	3
	200								920	228	83	33	9	4
	250									347	124	50	13	6
300									475	162	68	17	8	3
400									832	303	118	32	14	5
500									1159	425	164	43	19	6
600										562	222	57	26	8
700										733	301	78	35	11
800										924	383	98	43	14
900										1144	468	118	53	16
1000											553	140	68	20

* Pressure drop values listed are typical of many petroleum based hydraulic oils at approximately +100° F (+38° C). Differences in fluids, fluid temperature and viscosity can increase or decrease actual pressure drop compared to the values listed.