



Force Chart

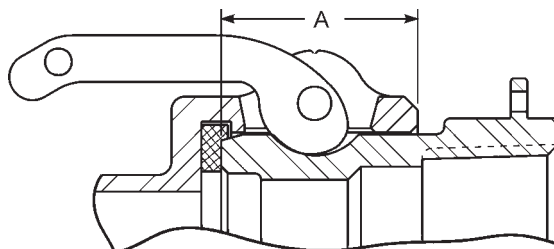
Force (In Pounds)

Hose I.D.	25 PSI	50 PSI	75 PSI	100 PSI	150 PSI	200 PSI	250 PSI	300 PSI	500 PSI	1000 PSI
1/4"	1	2	4	5	7	10	12	15	25	49
3/8"	3	6	8	11	17	22	28	33	55	110
1/2"	5	10	15	20	29	39	49	59	98	196
3/4"	11	22	33	44	66	88	110	133	221	442
1"	20	39	59	79	118	157	196	236	393	785
1-1/4"	31	61	92	123	184	245	307	368	614	1227
1-1/2"	44	88	133	177	265	353	442	530	884	1767
2"	79	157	236	314	471	628	785	942	1571	3142
2-1/2"	123	245	368	491	736	982	1227	1473	2454	4909
3"	177	353	530	707	1060	1414	1767	2121	3534	7069
4"	314	628	942	1257	1885	2513	3142	3770	6283	12566
5"	491	982	1473	1964	2945	3927	4909	5891	9818	19635
6"	707	1414	2121	2827	4241	5655	7069	8482	14137	28274
8"	1257	2513	3770	5027	7540	10053	12566	15080	25133	50266
10"	1964	3927	5891	7854	11781	15708	19635	23562	39270	78540
12"	2827	5655	8482	11310	16965	22620	28274	33929	56549	113098

Note: For hose I.D.'s from 1-1/4" to 12" the force in pounds is greater than the PSI.

- Force is the dynamic power which is exported longitudinally through a hose, towards the ends. To arrive at the number of pounds of force exerted, you merely multiply the area of the I.D. times the working pressure being used.
- Area of a circle: $\pi \times r^2$ (PI [3.1416] times radius squared)
- Force = Area x Pressure

Cam and Groove Nominal Take-Up Lengths



Size	"A"	Size	"A"
1/2"	0.97"	3"	1.78"
3/4"	0.97"	4"	1.84"
1"	1.20"	5"	2.00"
1-1/4"	1.44"	6"	2.13"
1-1/2"	1.50"	8"	2.06" Boss-Lock
2"	1.81"	8"	3.22"
2-1/2"	1.82"		