HYDRAULIC PROPERTIES - CIRCULAR PIPES

Pipe Diam. (Inch)	A Pipe Area (sq. ft.)	R Hydraulic Radius (feet)	Value of K = 1.486/n x A x $R^{2/3}$ (n = 0.012)	Value of K = 1.486/n x A x $R^{2/3}$ (n = 0.024)
8	0.349	0.167	13.1	6.5
10	0.545	0.208	23.7	11.9
12	0.785	0.250	38.6	19.3
15	1.227	0.313	70.0	35.0
18	1.767	0.375	113.8	56.9
21	2.405	0.438	171.7	85.8
24	3.142	0.500	245.1	122.5
27	3.976	0.563	335.5	167.8
30	4.909	0.625	444.4	222.2
33	5.940	0.688	572.9	286.5
36	7.069	0.750	722.6	361.3
42	9.621	0.875	1090	545.0
48	12.566	1.000	1556	778.1
54	15.904	1.125	2130	1065
60	19.635	1.250	2821	1411
66	23.758	1.375	3638	1819
72	28.274	1.500	4588	2294
78	33.183	1.625	5680	2840
84	38.485	1.750	6921	3460
90	44.179	1.875	8319	4159
96	50.265	2.000	9881	4940
102	56.745	2.125	11615	5807
108	63.617	2.250	13527	6763
114	70.882	2.375	15625	7812
120	78.540	2.500	17915	8958
126	86.590	2.625	20404	10202
132	95.033	2.750	23099	11550
138	103.869	2.875	26006	13003
144	113.097	3.000	29132	14566