

【マンニングの公式による流速・流量表】(PU側溝)

$$\text{流速 } V(\text{m/sec}) = (1/n) \cdot R^{2/3} \cdot I^{1/2}$$

I: 勾配(‰)

流量 $Q (\text{m}^3/\text{sec}) = A \cdot V$

P: 潤辺(m)

R: 径深(m) = A/P

n: 粗度係数 (0.013)

A: 通水断面積(m²)

水深 8割

呼び名	500×500		500×600		500×700		500×800		500×900	
A (m ²)	0.1894		0.2246		0.2586		0.2918		0.3241	
P (m)	1.2216		1.3719		1.5211		1.6711		1.8211	
R (m)	0.1551		0.1638		0.1701		0.1747		0.178	
R ^{2/3}	0.2887		0.2994		0.3070		0.3125		0.3164	
I (%)	V	Q	V	Q	V	Q	V	Q	V	Q
100.0	7.022	1.330	7.282	1.636	7.467	1.931	7.601	2.218	7.696	2.494
75.0	6.081	1.152	6.307	1.417	6.467	1.672	6.583	1.921	6.665	2.160
50.0	4.965	0.940	5.149	1.156	5.280	1.365	5.375	1.568	5.442	1.764
40.0	4.441	0.841	4.606	1.035	4.723	1.221	4.807	1.403	4.867	1.577
35.0	4.154	0.787	4.308	0.968	4.418	1.142	4.497	1.312	4.553	1.476
30.0	3.846	0.728	3.989	0.896	4.090	1.058	4.163	1.215	4.215	1.366
25.0	3.511	0.665	3.641	0.818	3.733	0.965	3.800	1.109	3.848	1.247
20.0	3.140	0.595	3.257	0.732	3.339	0.863	3.399	0.992	3.441	1.115
18.0	2.979	0.564	3.089	0.694	3.168	0.819	3.225	0.941	3.265	1.058
16.0	2.809	0.532	2.913	0.654	2.987	0.772	3.040	0.887	3.078	0.998
14.0	2.627	0.498	2.725	0.612	2.794	0.723	2.844	0.830	2.879	0.933
12.0	2.432	0.461	2.522	0.566	2.586	0.669	2.633	0.768	2.666	0.864
10.0	2.220	0.420	2.303	0.517	2.361	0.611	2.403	0.701	2.433	0.789
9.0	2.106	0.399	2.184	0.491	2.240	0.579	2.280	0.665	2.308	0.748
8.0	1.986	0.376	2.059	0.462	2.112	0.546	2.150	0.627	2.176	0.705
7.0	1.858	0.352	1.926	0.433	1.975	0.511	2.011	0.587	2.036	0.660
6.0	1.720	0.326	1.783	0.400	1.829	0.473	1.862	0.543	1.885	0.611
5.5	1.646	0.312	1.708	0.384	1.751	0.453	1.782	0.520	1.804	0.585
5.0	1.570	0.297	1.628	0.366	1.669	0.432	1.699	0.496	1.720	0.557
4.8	1.538	0.291	1.595	0.358	1.636	0.423	1.665	0.486	1.686	0.546
4.6	1.506	0.285	1.562	0.351	1.601	0.414	1.630	0.476	1.650	0.535
4.5	1.489	0.282	1.544	0.347	1.584	0.410	1.612	0.470	1.632	0.529
4.4	1.473	0.279	1.527	0.343	1.566	0.405	1.594	0.465	1.614	0.523
4.2	1.439	0.273	1.492	0.335	1.530	0.396	1.557	0.454	1.577	0.511
4.0	1.404	0.266	1.456	0.327	1.493	0.386	1.520	0.444	1.539	0.499
3.8	1.368	0.259	1.419	0.319	1.455	0.376	1.481	0.432	1.500	0.486
3.5	1.313	0.249	1.362	0.306	1.397	0.361	1.422	0.415	1.439	0.466
3.4	1.294	0.245	1.342	0.301	1.377	0.356	1.401	0.409	1.419	0.460
3.0	1.216	0.230	1.261	0.283	1.293	0.334	1.316	0.384	1.333	0.432
2.8	1.175	0.223	1.218	0.274	1.249	0.323	1.271	0.371	1.287	0.417
2.6	1.132	0.214	1.174	0.264	1.204	0.311	1.225	0.357	1.241	0.402
2.5	1.110	0.210	1.151	0.259	1.180	0.305	1.201	0.350	1.216	0.394
2.4	1.087	0.206	1.128	0.253	1.156	0.299	1.177	0.343	1.192	0.386
2.2	1.041	0.197	1.080	0.243	1.107	0.286	1.127	0.329	1.141	0.370
2.0	0.993	0.188	1.029	0.231	1.056	0.273	1.075	0.314	1.088	0.353

【マンニングの公式による流速・流量表】(PU側溝)

$$\text{流速 } V(\text{m/sec}) = (1/n) \cdot R^{2/3} \cdot I^{1/2}$$

I: 勾配(‰)

流量 $Q(\text{m}^3/\text{sec}) = A \cdot V$

P: 潤辺(m)

$$R: \text{径深(m)} = A/P$$

n : 粗度係数 (0.013)

A: 通水断面積 (m^2)

水深 8割

[illegible]