

【マンニングの公式による流速・流量表】(PU側溝)

流速 $V(m/sec) = (1/n) \cdot R^{2/3} \cdot I^{1/2}$ I : 勾配(‰)
 流量 $Q(m^3/sec) = A \cdot V$ 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 × 1000		500 × 1100		500 × 1200					
	A (m ²)	P (m)	R (m)	R ^{2/3}	V	Q	V	Q	V	Q
A (m ²)	0.3554		0.3858		0.4157					
P (m)	1.9711		2.1211		2.2735					
R (m)	0.1804		0.1819		0.1829					
R ^{2/3}	0.3193		0.3210		0.3222					
I (‰)	V	Q	V	Q	V	Q	V	Q	V	Q
100.0	7.767	2.760	7.808	3.012	7.837	3.258				
75.0	6.726	2.390	6.762	2.609	6.787	2.821				
50.0	5.492	1.952	5.521	2.130	5.542	2.304				
40.0	4.912	1.746	4.938	1.905	4.956	2.060				
35.0	4.595	1.633	4.619	1.782	4.636	1.927				
30.0	4.254	1.512	4.276	1.650	4.292	1.784				
25.0	3.883	1.380	3.904	1.506	3.918	1.629				
20.0	3.473	1.234	3.492	1.347	3.505	1.457				
18.0	3.295	1.171	3.312	1.278	3.325	1.382				
16.0	3.106	1.104	3.123	1.205	3.135	1.303				
14.0	2.906	1.033	2.921	1.127	2.932	1.219				
12.0	2.690	0.956	2.704	1.043	2.715	1.129				
10.0	2.456	0.873	2.469	0.953	2.478	1.030				
9.0	2.330	0.828	2.342	0.904	2.351	0.977				
8.0	2.196	0.780	2.208	0.852	2.216	0.921				
7.0	2.054	0.730	2.065	0.797	2.073	0.862				
6.0	1.902	0.676	1.912	0.738	1.919	0.798				
5.5	1.821	0.647	1.831	0.706	1.838	0.764				
5.0	1.736	0.617	1.746	0.674	1.752	0.728				
4.8	1.701	0.605	1.710	0.660	1.717	0.714				
4.6	1.665	0.592	1.674	0.646	1.680	0.698				
4.5	1.647	0.585	1.656	0.639	1.662	0.691				
4.4	1.629	0.579	1.637	0.632	1.644	0.683				
4.2	1.591	0.565	1.600	0.617	1.606	0.668				
4.0	1.553	0.552	1.561	0.602	1.567	0.651				
3.8	1.514	0.538	1.522	0.587	1.527	0.635				
3.5	1.453	0.516	1.460	0.563	1.466	0.609				
3.4	1.432	0.509	1.439	0.555	1.445	0.601				
3.0	1.345	0.478	1.352	0.522	1.357	0.564				
2.8	1.299	0.462	1.306	0.504	1.311	0.545				
2.6	1.252	0.445	1.259	0.486	1.263	0.525				
2.5	1.228	0.436	1.234	0.476	1.239	0.515				
2.4	1.203	0.428	1.209	0.466	1.214	0.505				
2.2	1.152	0.409	1.158	0.447	1.162	0.483				
2.0	1.098	0.390	1.104	0.426	1.108	0.461				