

Tech Note 32: Flow Rates, Drainage – Stainless & KG2000

TN.32

Chart KG2000 Drainage – Flow Rates

Polypropylene. Surface Roughness Ks = 0.40mm.

Pipe Fill	Grade		110mm		160mm		200mm		250mm		315mm		400mm		500mm		630mm	
	%	Ratio	l/s	m/s	l/s	m/s	l/s	m/s	l/s	m/s	l/s	m/s	l/s	m/s	l/s	m/s	l/s	m/s
50%	1.65	1:60	4.2	1.0	11.5	1.3	20.8	1.5	37.4	1.8	69.1	2.0	130.2	2.38	233.3	2.7		
	1.25	1:80	3.8	0.9	10.4	1.2	18.7	1.4	33.7	1.6	62.3	1.8	117.3	2.15	210.4	2.5		
	1.00	1:100	3.3	0.8	9.1	1.1	16.4	1.2	29.7	1.4	54.8	1.6	103.2	1.89	185.2	2.2		
	0.65	1:150	(2.7)	(0.7)	(7.2)	(0.8)	(13.1)	(1.0)	24.8	1.1	44.8	1.3	84.5	1.55	151.6	1.8		
	0.40	1:250	(2.1)	(0.5)	(5.7)	(0.7)	(10.3)	(0.8)	(18.6)	(0.9)	34.4	1.0	64.8	1.19	116.4	1.4		
70%	1.65	1:60	7.0	1.2	19.1	1.5	34.5	1.7	62.2	2.0	114.8	2.3	216.4	2.65	387.9	3.0		
	1.25	1:80	6.3	1.0	17.3	1.3	31.1	1.5	56.1	1.8	103.5	2.1	195.0	2.39	349.8	2.7		
	1.00	1:100	5.6	0.9	15.2	1.2	27.3	1.4	49.3	1.6	91.1	1.8	171.6	2.10	307.8	2.4		
	0.65	1:150	(4.5)	(0.7)	(12.3)	(1.0)	(22.3)	(1.1)	40.9	1.3	73.5	1.5	138.6	1.70	248.6	2.0		
	0.40	1:250	(3.5)	(0.6)	(9.5)	(0.7)	(17.1)	(0.9)	(30.9)	(1.0)	34.4	1.0	64.8	1.19	116.4	1.4		
100%	1.65	1:60	8.4	1.0	23.0	1.3	41.5	1.5	74.9	1.8	138.2	2.0	260.3	2.38	466.6	2.7		
	1.25	1:80	7.6	0.9	20.7	1.2	37.3	1.4	67.4	1.6	124.5	1.8	234.7	2.15	420.8	2.5		
	1.00	1:100	6.7	0.8	18.2	1.1	32.8	1.2	59.3	1.4	109.5	1.6	206.5	1.89	370.3	2.2		
	0.65	1:150	(5.4)	(0.7)	(14.8)	(0.9)	(26.8)	(1.0)	49.6	1.1	89.6	1.3	168.9	1.55	303.0	1.8		
	0.40	1:250	(4.2)	(0.5)	(11.4)	(0.7)	(20.6)	(0.8)	(37.2)	(0.9)	68.7	1.0	129.7	1.19	232.7	1.4		

Notes: l/s – litres per second; m/s – metres per second. K=0.4mm based on waters with light debris ie stormwater. (value) = Gradient vs diameter values in brackets are beyond the scope of AS 3500.2 - Sanitary Drainage. Refer to AS 3500.2 for limitations on gradients. Additional values available on request to technical@auspress.com.au

Chart Stainless Drainage – Flow Rates

316 Stainless Steel. Surface Roughness Ks = 1.5mm.

Pipe Fill	Grade		50mm		75mm		110mm		160mm		200mm		250mm		315mm	
	%	Ratio	l/s	m/s	l/s	m/s	l/s	m/s	l/s	m/s	l/s	m/s	l/s	m/s	l/s	m/s
50%	1.65	1:60	0.4	0.5	1.4	0.7	4.0	0.9	11.1	1.1	20.1	1.3	36.7	1.5	67.7	1.8
	1.25	1:80	0.4	0.4	(1.2)	(0.6)	(3.5)	(0.8)	5.0	0.8	17.5	1.1	32.0	1.3	59.0	1.6
	1.00	1:100	(0.4)	(0.4)	(1.1)	(0.5)	(3.2)	(0.7)	8.8	0.9	16.0	1.0	29.2	1.2	53.8	1.4
	0.65	1:150	(0.1)	(0.1)	(0.9)	(0.4)	(2.6)	(0.6)	(7.1)	(0.8)	13.0	0.9	23.6	1.0	43.4	1.2
	0.40	1:250	-	-	-	-	-	-	(5.5)	(0.6)	(10.1)	(0.7)	(18.4)	(0.8)	34.0	0.9
70%	1.65	1:60	0.7	0.5	2.3	0.7	6.8	1.0	18.5	1.2	33.6	1.5	61.3	1.7	113.0	2.0
	1.25	1:80	0.7	0.5	(2.0)	(0.6)	(5.9)	(0.9)	16.1	1.1	29.2	1.3	53.4	1.5	98.4	1.7
	1.00	1:100	(0.6)	(0.4)	(1.9)	(0.6)	(5.3)	(0.8)	14.7	1.0	26.7	1.2	48.7	1.4	89.8	1.6
	0.65	1:150	(0.5)	(0.3)	(1.4)	(0.5)	(4.1)	(0.6)	(11.3)	(0.8)	20.6	0.9	37.7	1.0	69.5	1.2
	0.40	1:250	-	-	-	-	(3.4)	(0.5)	(9.2)	(0.6)	(16.8)	(0.7)	(30.7)	(0.9)	56.6	1.0
100%	1.65	1:60	0.9	0.5	2.9	0.7	8.3	0.9	22.8	1.2	41.4	1.4	75.5	1.6	139.3	1.8
	1.25	1:80	0.8	0.4	(2.5)	(0.6)	(7.2)	(0.8)	19.7	1.0	35.8	1.1	65.3	1.4	120.4	1.6
	1.00	1:100	(0.7)	(0.4)	(2.3)	(0.5)	(6.5)	(0.7)	17.6	0.9	32.2	1.1	58.4	1.2	107.7	1.4

Notes: l/s – litres per second; m/s – metres per second. K=1.5mm based on waters with debris ie sewer and tradewaste. (value) = Gradient vs diameter values in brackets are beyond the scope of AS 3500.2 - Sanitary Drainage. Refer to AS 3500.2 for limitations on gradients. Additional values available on request to technical@auspress.com.au