

Birco 150																
Channel Type		0/0			5/0			10/0			15/0			20/0		
Gradient		l/s	m/s	m²	l/s	m/s	m²	l/s	m/s	m²	l/s	m/s	m²	l/s	m/s	m²
'1 in'	% Slope															
10	10.00%	79.22	3.96	5704	95.62	4.09	6885	115.54	4.19	8319	133.53	4.27	9614	152.04	4.33	10947
20	5.00%	55.93	2.80	4027	67.52	2.89	4861	81.58	2.96	5874	94.28	3.01	6788	107.36	3.06	7730
30	3.33%	45.61	2.28	3284	55.06	2.35	3965	66.54	2.41	4791	76.90	2.46	5537	87.56	2.49	6304
40	2.50%	39.46	1.97	2841	47.64	2.04	3430	57.57	2.09	4145	66.53	2.13	4790	75.76	2.16	5455
50	2.00%	35.26	1.76	2539	42.57	1.82	3065	51.45	1.86	3704	59.46	1.90	4281	67.71	1.93	4875
75	1.33%	28.74	1.44	2069	34.70	1.48	2498	41.93	1.52	3019	48.47	1.55	3490	55.19	1.57	3974
100	1.00%	24.85	1.24	1789	30.01	1.28	2160	36.26	1.31	2611	41.91	1.34	3018	47.73	1.36	3437
150	0.67%	20.24	1.01	1457	24.44	1.04	1760	29.54	1.07	2127	34.14	1.09	2458	38.88	1.11	2799
200	0.50%	17.49	0.87	1259	21.12	0.90	1521	25.53	0.92	1838	29.51	0.94	2125	33.61	0.96	2420
300	0.33%	14.23	0.71	1025	17.19	0.73	1238	20.78	0.75	1496	24.02	0.77	1729	27.35	0.78	1969
400	0.25%	12.29	0.61	885	14.84	0.63	1069	17.94	0.65	1292	20.74	0.66	1494	23.62	0.67	1701
500	0.20%	10.97	0.55	790	13.24	0.57	954	16.01	0.58	1153	18.51	0.59	1333	21.08	0.60	1518
750	0.13%	8.91	0.45	641	10.76	0.46	775	13.01	0.47	937	15.04	0.48	1083	17.13	0.49	1233
1000	0.10%	7.68	0.38	553	9.28	0.40	668	11.22	0.41	808	12.97	0.41	934	14.78	0.42	1064
1500	0.07%	6.23	0.31	448	7.53	0.32	542	9.10	0.33	655	10.52	0.34	758	11.99	0.34	863
2000	0.05%	5.36	0.27	386	6.48	0.28	467	7.84	0.28	564	9.07	0.29	653	10.33	0.29	744
Equivalent Pipe Dia.		175mm			200mm			225mm			245mm			260mm		
Outfall Capacities																
Outfall Type				Outfall Pipe Diameter				l/s				m/s				
Birco 150 Inline End Outfall				100mm				11				2.42				
Birco 150 Inline Side Outfall				150mm				26				2.42				
Junction Outfall				150mm				39				3.55				
Junction Outfall				225mm				89				3.64				

The hydraulic data in the table comprises of flow capacity, in litres per second (l/s) and full flow velocity in metres per second (m/s). The m2 figures are the maximum areas that can be drained based on a rainfall intensity of 50mm/hr (0.014l/s/m²). If an alternative rainfall intensity is required for example 100mm/hr, the revised maximum drained area will be the area x 50/100. The data has been calculated using the Colebrook-White formulae.

Depending on grating selection and correct installation detail the system can achieve up to F900 loading
 12mm wide slot grates have an inlet capacity of 12.42 l/s/m (litres per second per metre)
 6mm wide slot Heelsure grates have an inlet capacity of 7.40 l/s/m
 Maximum drained distance to any linear drainage channel should typically not exceed 50m
 MicroDrainage Conduit Files available on request