

Gravity Sewer Line Bypass: Flow and Pump Sizing Chart

Line Size	% Full	Velocity	Flow (MGD)	Flow (GPM)	Pump Size	Godwin Pump
8"	50 %	1' / sec	0.1	80	4"	4" CD103M
8"	50 %	2' / sec	0.2	160	4"	4" CD103M
8"	100 %	1' / sec	0.2	160	4"	4" CD103M
8"	100 %	2' / sec	0.5	320	4"	4" CD103M
12"	50 %	1' / sec	0.25	175	4"	4" CD103M
12"	50 %	2' / sec	0.5	350	4"	4" CD103M
12"	100 %	1' / sec	0.5	350	4"	4" CD103M
12"	100 %	2' / sec	1	700	6"	4" CD103M
14"	50 %	1' / sec	0.35	245	4"	4" CD103M
14"	50 %	2' / sec	0.7	490	6"	4" CD103M
14"	100 %	1' / sec	0.7	490	6"	4" CD103M
14"	100 %	2' / sec	1.4	980	6"	6" CD150M
16"	50 %	1' / sec	0.45	315	4"	4" CD103M
16"	50 %	2' / sec	0.9	630	6"	4" CD103M
16"	100 %	1' / sec	0.9	630	6"	4" CD103M
16"	100 %	2' / sec	1.8	1260	8"	6" CD150M
18"	50 %	1' / sec	0.6	403	6"	4" CD103M
18"	50 %	2' / sec	1.2	805	6"	6" CD150M
18"	100 %	1' / sec	1.2	805	6"	6" CD150M
18"	100 %	2' / sec	2.3	1610	8"	8" CD225M
20"	50 %	1' / sec	0.7	490	6"	4" CD103M
20"	50 %	2' / sec	1.4	980	6"	6" CD150M
20"	100 %	1' / sec	1.4	980	6"	6" CD150M
20"	100 %	2' / sec	2.8	1960	8"	8" CD225M
24"	50 %	1' / sec	1	700	6"	6" CD150M
24"	50 %	2' / sec	2	1400	8"	8" CD225M
24"	100 %	1' / sec	2	1400	8"	8" CD225M
24"	100 %	2' / sec	4	2800	12"	12" DPC300
30"	50 %	1' / sec	1.6	1120	8"	6" CD150M
30"	100 %	1' / sec	3.2	2240	12"	8" CD225M
30"	50 %	2' / sec	3.2	2240	12"	8" CD225M
30"	100 %	2' / sec	6.4	4480	12"	12" DPC300
36"	50 %	1' / sec	2.3	1610	8"	8" CD225M
36"	100 %	1' / sec	4.6	3220	12"	12" DPC300
36"	50 %	2' / sec	4.6	3220	12"	12" DPC300
36"	100 %	2' / sec	9.2	6440	12"	(1) 8" CD225M (1) 12" DPC300
42"	50 %	1' / sec	3.1	2170	12"	8" CD225M
42"	100 %	1' / sec	6.2	4340	12"	12" DPC300
42"	50 %	2' / sec	6.2	4340	12"	12" DPC300
42"	100 %	2' / sec	12.4	8680	12"	(2) 12" DPC300
48"	50 %	1' / sec	4	2800	12"	12" DPC300
48"	100 %	1' / sec	8	5600	12"	(1) 6" CD150M (1) 12" DPC300

48"	50 %	2' / sec	8	5600	12"	(1) 6" CD150M (1) 12" DPC300
48"	100 %	2' / sec	16	11200	12"	(3) 12" DPC300
54"	50 %	1' / sec	5.1	3570	12"	12" DPC300
54"	100 %	1' / sec	10.2	7140	12"	(2) 12" DPC300
54"	50 %	2' / sec	10.2	7140	12"	(2) 12" DPC300
54"	100 %	2' / sec	20.4	14280	12"	(4) 12" DPC300
60"	50 %	1' / sec	6.5	4550	12"	12" DPC300
60"	100 %	1' / sec	13	9100	12"	(2) 12" DPC300
60"	50 %	2' / sec	13	9100	12"	(2) 12" DPC300
60"	100 %	2' / sec	26	18200	12"	(4) 12" DPC300
72"	50 %	1' / sec	9.25	6475	12"	(2) 12" DPC300
72"	100 %	1' / sec	18.5	12950	12"	(3) 12" DPC300
72"	50 %	2' / sec	18.5	12950	12"	(3) 12" DPC300
72"	100 %	2' / sec	37	25900	12"	(5) 12" DPC300