

**Saint-Gobain Performance Plastics  
Pressure Guidelines and Flow Rates**

**90° Tri-Clamp Elbows**

MINI					MAXI/LADISH				
FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	RESIST. COEF (K)	PRESS. DROP (PSI)	FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	RESIST. COEF (K)	PRESS DROP (PSI)
0.50	0.560	0.65	0.392	0.0011	1.00	0.856	0.56	0.330	0.0007
1.00	0.560	1.30	0.392	0.0045	2.00	0.856	1.11	0.330	0.0028
1.50	0.560	1.95	0.392	0.0101	3.00	0.856	1.67	0.330	0.0062
2.00	0.560	2.61	0.392	0.0179	4.00	0.856	2.23	0.330	0.0110
2.50	0.560	3.26	0.392	0.0280	5.00	0.856	2.79	0.330	0.0173
3.00	0.560	3.91	0.392	0.0403	6.00	0.856	3.34	0.330	0.0249
3.50	0.560	4.56	0.392	0.0549	7.00	0.856	3.90	0.330	0.0338
4.00	0.560	5.21	0.392	0.0717	8.00	0.856	4.46	0.330	0.0442
4.50	0.560	5.86	0.392	0.0908	9.00	0.856	5.02	0.330	0.0559
5.00	0.560	6.51	0.392	0.1120	10.00	0.856	5.57	0.330	0.0690
5.50	0.560	7.16	0.392	0.1356	11.00	0.856	6.13	0.330	0.0835
6.00	0.560	7.82	0.392	0.1613	12.00	0.856	6.69	0.330	0.0994
6.50	0.560	8.47	0.392	0.1893	13.00	0.856	7.25	0.330	0.1167
7.00	0.560	9.12	0.392	0.2196	14.00	0.856	7.80	0.330	0.1353
7.50	0.560	9.77	0.392	0.2521	15.00	0.856	8.36	0.330	0.1553
8.00	0.560	10.42	0.392	0.2868	16.00	0.856	8.92	0.330	0.1767
8.50	0.560	11.07	0.392	0.3238	17.00	0.856	9.48	0.330	0.1995
9.00	0.560	11.72	0.392	0.3630	18.00	0.856	10.03	0.330	0.2237
9.50	0.560	12.37	0.392	0.4045	19.00	0.856	10.59	0.330	0.2492
10.00	0.560	13.03	0.392	0.4482	20.00	0.856	11.15	0.330	0.2761
11.00	0.560	14.33	0.392	0.5423	22.00	0.856	12.26	0.330	0.3341
12.00	0.560	15.63	0.392	0.6454	24.00	0.856	13.38	0.330	0.3976

1 1/2"					2"				
FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	RESIST. COEF (K)	PRESS. DROP (PSI)	FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	RESIST. COEF. (K)	PRESS DROP (PSI)
4.00	1.356	0.89	0.260	0.0014	5.00	1.856	0.59	0.240	0.0006
8.00	1.356	1.78	0.260	0.0055	10.00	1.856	1.19	0.240	0.0023
12.00	1.356	2.67	0.260	0.0125	15.00	1.856	1.78	0.240	0.0051
16.00	1.356	3.55	0.260	0.0221	20.00	1.856	2.37	0.240	0.0091
20.00	1.356	4.44	0.260	0.0346	30.00	1.856	3.56	0.240	0.0205
24.00	1.356	5.33	0.260	0.0498	35.00	1.856	4.15	0.240	0.0279
28.00	1.356	6.22	0.260	0.0678	40.00	1.856	4.74	0.240	0.0364
32.00	1.356	7.11	0.260	0.0886	45.00	1.856	5.34	0.240	0.0461
36.00	1.356	8.00	0.260	0.1121	50.00	1.856	5.93	0.240	0.0569
40.00	1.356	8.89	0.260	0.1384	55.00	1.856	6.52	0.240	0.0688
44.00	1.356	9.78	0.260	0.1675	60.00	1.856	7.12	0.240	0.0819
48.00	1.356	10.66	0.260	0.1993	65.00	1.856	7.71	0.240	0.0962
52.00	1.356	11.55	0.260	0.2339	70.00	1.856	8.30	0.240	0.1115
56.00	1.356	12.44	0.260	0.2713	75.00	1.856	8.89	0.240	0.1280
60.00	1.356	13.33	0.260	0.3114	80.00	1.856	9.49	0.240	0.1457
64.00	1.356	14.22	0.260	0.3543	85.00	1.856	10.08	0.240	0.1644
68.00	1.356	15.11	0.260	0.4000	90.00	1.856	10.67	0.240	0.1843
72.00	1.356	16.00	0.260	0.4485	100.00	1.856	11.86	0.240	0.2276
76.00	1.356	16.88	0.260	0.4997	120.00	1.856	14.23	0.240	0.3277
80.00	1.356	17.77	0.260	0.5537	130.00	1.856	15.42	0.240	0.3846

2 1/2"					3"				
FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	RESIST. COEF (K)	PRESS. DROP (PSI)	FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	RESIST. COEF (K)	PRESS DROP (PSI)
10.00	2.356	0.74	0.232	0.0008	10.00	2.856	0.50	0.231	0.0004
20.00	2.356	1.47	0.232	0.0034	20.00	2.856	1.00	0.231	0.0016
30.00	2.356	2.21	0.232	0.0076	30.00	2.856	1.50	0.231	0.0035
40.00	2.356	2.94	0.232	0.0136	40.00	2.856	2.00	0.231	0.0062
50.00	2.356	3.68	0.232	0.0212	50.00	2.856	2.50	0.231	0.0098
60.00	2.356	4.42	0.232	0.0305	60.00	2.856	3.00	0.231	0.0141
70.00	2.356	5.15	0.232	0.0415	70.00	2.856	3.51	0.231	0.0191
80.00	2.356	5.89	0.232	0.0542	80.00	2.856	4.01	0.231	0.0250
90.00	2.356	6.62	0.232	0.0686	90.00	2.856	4.51	0.231	0.0316
100.00	2.356	7.36	0.232	0.0847	100.00	2.856	5.01	0.231	0.0391
110.00	2.356	8.10	0.232	0.1025	120.00	2.856	6.01	0.231	0.0562
120.00	2.356	8.83	0.232	0.1220	140.00	2.856	7.01	0.231	0.0766
130.00	2.356	9.57	0.232	0.1432	160.00	2.856	8.01	0.231	0.1000
140.00	2.356	10.30	0.232	0.1660	180.00	2.856	9.01	0.231	0.1265
150.00	2.356	11.04	0.232	0.1906	200.00	2.856	10.02	0.231	0.1562
160.00	2.356	11.78	0.232	0.2169	220.00	2.856	11.02	0.231	0.1890
170.00	2.356	12.51	0.232	0.2448	240.00	2.856	12.02	0.231	0.2250
180.00	2.356	13.25	0.232	0.2745	260.00	2.856	13.02	0.231	0.2640
190.00	2.356	13.98	0.232	0.3058	280.00	2.856	14.02	0.231	0.3062
200.00	2.356	14.72	0.232	0.3388	300.00	2.856	15.02	0.231	0.3515
210.00	2.356	15.45	0.232	0.3736	320.00	2.856	16.03	0.231	0.3999