

Pipe Flow rates Q - Velocity v- Pressure Drops R



PP-RCT Solid Wall D130...
20°C/1.6 Mpa • 70°C/0.8 Mpa

Temperature: 60 °C
Pipe Friction Factor: 0.007
Pipe Roughness: 0.0070 mm

Q = Flow rate (l/s)		v = Flow Velocity (m/s)					R = Pressure Drop (mbar/Mtr)									
d x s	20x2.3	25x2.8	32x2.9	40x3.7	50x4.6	63x5.8	75x6.8	90x8.2	110x10	125x11.4	160x14.6	180x16.4	200x18.2	225x20.5		
SDR	9	9	11	11	11	11	11	11	11	11	11	11	11	11		
Q	ID →	15.4	19.4	26.2	32.6	40.8	51.4	61.8	73.6	90.0	102.2	130.8	147.2	163.6	184.0	
0.05	v	0.27	0.17	0.09												
	R	0.77	0.26	0.06												
0.07	v	0.38	0.24	0.13												
	R	1.38	0.46	0.11												
0.09	v	0.48	0.30	0.17	0.11											
	R	2.15	0.71	0.17	0.06											
0.10	v	0.54	0.34	0.19	0.12											
	R	2.59	0.86	0.20	0.07											
0.12	v	0.64	0.41	0.22	0.14	0.09										
	R	3.58	1.18	0.28	0.10	0.03										
0.16	v	0.86	0.54	0.30	0.19	0.12										
	R	5.99	1.97	0.47	0.16	0.06										
0.18	v	0.97	0.61	0.33	0.22	0.14	0.09									
	R	7.40	2.43	0.57	0.20	0.07	0.02									
0.20	v	1.07	0.68	0.37	0.24	0.15	0.10									
	R	8.95	2.93	0.69	0.24	0.08	0.03									
0.30	v	1.61	1.02	0.56	0.36	0.23	0.14	0.10								
	R	18.67	6.07	1.42	0.50	0.17	0.06	0.02								
0.40	v	2.15	1.35	0.74	0.48	0.31	0.19	0.13	0.09							
	R	31.62	10.23	2.38	0.83	0.28	0.09	0.04	0.02							
0.50	v	2.69	1.69	0.93	0.60	0.38	0.24	0.17	0.12							
	R	47.73	15.36	3.56	1.24	0.42	0.14	0.06	0.03							
0.60	v	3.22	2.03	1.11	0.72	0.46	0.29	0.20	0.14	0.09						
	R	66.94	21.46	4.95	1.72	0.58	0.19	0.08	0.03	0.01						
0.70	v	3.76	2.37	1.30	0.84	0.54	0.34	0.23	0.16	0.11						
	R	89.25	28.51	6.56	2.27	0.77	0.25	0.10	0.05	0.02						
0.80	v	4.30	2.71	1.48	0.96	0.61	0.39	0.27	0.19	0.13	0.10					
	R	114.62	36.50	8.36	2.89	0.98	0.32	0.13	0.06	0.02	0.01					
0.90	v	4.83	3.05	1.67	1.08	0.69	0.43	0.30	0.21	0.14	0.11					
	R	143.03	45.43	10.38	3.58	1.21	0.40	0.16	0.07	0.03	0.01					
1.00	v	5.37	3.38	1.86	1.20	0.77	0.48	0.33	0.24	0.16	0.12	0.07				
	R	174.49	55.28	12.59	4.33	1.46	0.48	0.20	0.09	0.03	0.02	0.01				
1.20	v	6.45	4.06	2.23	1.44	0.92	0.58	0.40	0.28	0.19	0.15	0.09				
	R	246.50	77.75	17.61	6.04	2.03	0.66	0.27	0.12	0.05	0.02	0.01				
1.40	v	7.52	4.74	2.60	1.68	1.07	0.68	0.47	0.33	0.22	0.17	0.10	0.08			
	R	330.58	103.89	23.43	8.02	2.69	0.88	0.36	0.16	0.06	0.03	0.01	0.01			
1.60	v	8.59	5.42	2.97	1.92	1.22	0.77	0.53	0.38	0.25	0.20	0.12	0.09			
	R	426.72	133.67	30.03	10.25	3.43	1.12	0.46	0.20	0.08	0.04	0.01	0.01			
1.80	v	9.67	6.09	3.34	2.16	1.38	0.87	0.60	0.42	0.28	0.22	0.13	0.11	0.09		
	R	534.88	167.09	37.40	12.74	4.25	1.38	0.57	0.24	0.09	0.05	0.02	0.01	0.01		
2.00	v	10.74	6.77	3.71	2.40	1.53	0.96	0.67	0.47	0.31	0.24	0.15	0.12	0.10		
	R	655.06	204.14	45.55	15.48	5.15	1.68	0.69	0.30	0.11	0.06	0.02	0.01	0.01		
2.5	v	13.43	8.46	4.64	3.00	1.91	1.21	0.83	0.59	0.39	0.30	0.19	0.15	0.12	0.09	
	R	1008.00	312.58	69.27	23.43	7.77	2.52	1.03	0.44	0.17	0.09	0.03	0.02	0.01	0.01	
3.00	v	16.11	10.15	5.57	3.60	2.30	1.45	1.00	0.71	0.47	0.37	0.22	0.18	0.14	0.11	
	R	1435.87	443.58	97.77	32.94	10.89	3.51	1.43	0.61	0.23	0.13	0.04	0.02	0.01	0.01	
3.5	v	18.80	11.85	6.50	4.20	2.68	1.69	1.17	0.82	0.55	0.43	0.26	0.21	0.17	0.13	
	R	1938.60	597.07	131.01	43.99	14.49	4.66	1.90	0.81	0.31	0.17	0.05	0.03	0.02	0.01	
4.0	v	21.49	13.54	7.42	4.79	3.06	1.93	1.33	0.94	0.63	0.49	0.30	0.24	0.19	0.15	
	R	2516.15	773.05	168.98	56.58	18.59	5.97	2.42	1.04	0.39	0.21	0.06	0.04	0.02	0.01	
4.5	v	24.17	15.23	8.35	5.39	3.44	2.17	1.50	1.06	0.71	0.55	0.34	0.26	0.21	0.17	
	R	3168.52	971.50	211.68	70.69	23.16	7.42	3.01	1.29	0.48	0.26	0.08	0.05	0.03	0.02	
5.0	v	26.86	16.92	9.28	5.99	3.83	2.41	1.67	1.18	0.79	0.61	0.37	0.29	0.24	0.19	
	R	3895.67	1192.39	259.09	86.33	28.23	9.02	3.65	1.56	0.59	0.32	0.10	0.05	0.03	0.02	
5.5	v	29.54	18.62	10.21	6.59	4.21	2.65	1.83	1.29	0.87	0.67	0.41	0.32	0.26	0.21	
	R	4697.61	1435.72	311.20	103.49	33.76	10.77	4.36	1.86	0.70	0.38	0.11	0.06	0.04	0.02	
6.0	v		20.31	11.14	7.19	4.59	2.89	2.00	1.41	0.94	0.73	0.45	0.35	0.29	0.23	
	R		1701.49	368.02	122.17	39.78	12.67	5.12	2.18	0.82	0.44	0.13	0.08	0.05	0.03	
6.5	v		22.00	12.06	7.79	4.97	3.13	2.17	1.53	1.02	0.79	0.48	0.38	0.31	0.24	
	R		1989.69	429.53	142.36	46.28	14.71	5.94	2.52	0.95	0.51	0.15	0.09	0.05	0.03	
7.0	v		23.69	12.99	8.39	5.36	3.38	2.33	1.65	1.10	0.85	0.52	0.41	0.33	0.26	
	R		2300.32	495.75	164.06	53.25	16.90	6.81	2.89	1.08	0.58	0.18	0.10	0.06	0.03	
7.5	v		25.39	13.92	8.99	5.74	3.62	2.50	1.76	1.18	0.91	0.56	0.44	0.36	0.28	
	R		2633.38	566.66	187.27	60.69	19.23	7.74	3.28	1.23	0.66	0.20	0.11	0.07	0.04	
8.0	v		27.08	14.85	9.59	6.12	3.86	2.67	1.88	1.26	0.98	0.60	0.47	0.38	0.30	
	R		2988.85	642.26	211.99	68.61	21.71	8.73	3.70	1.38	0.75	0.23	0.13	0.08	0.04	

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Pipe Friction Factor: 0.007
Pipe Roughness: 0.0070 mm

Q = Flow rate (l/s)		v = Flow Velocity (m/s)					R = Pressure Drop (mbar/Mtr)									
d x s	20x2.3	25x2.8	32x2.9	40x3.7	50x4.6	63x5.8	75x6.8	90x8.2	110x10	125x11.4	160x14.6	180x16.4	200x18.2	225x20.5		
SDR	9	9	11	11	11	11	11	11	11	11	11	11	11	11		
Q	ID →	15.4	19.4	26.2	32.6	40.8	51.4	61.8	73.6	90.0	102.2	130.8	147.2	163.6	184.0	
9.0	v		30.46	16.70	10.79	6.89	4.34	3.00	2.12	1.42	1.10	0.67	0.53	0.43	0.34	
	R		3767.07	807.53	265.96	85.86	27.10	10.88	4.60	1.72	0.93	0.28	0.16	0.09	0.05	
10.0	v		33.85	18.56	11.99	7.65	4.82	3.34	2.35	1.57	1.22	0.74	0.59	0.48	0.38	
	R		4634.96	991.56	325.96	105.01	33.06	13.25	5.60	2.09	1.12	0.34	0.19	0.11	0.07	
12.0	v			22.27	14.38	9.18	5.79	4.00	2.82	1.89	1.46	0.89	0.71	0.57	0.45	
	R			1415.87	464.03	148.94	46.71	18.66	7.86	2.93	1.57	0.47	0.27	0.16	0.09	
14.0	v			25.98	16.78	10.71	6.75	4.67	3.29	2.20	1.71	1.04	0.82	0.67	0.53	
	R			1915.16	626.16	200.40	62.65	24.96	10.49	3.89	2.09	0.63	0.35	0.21	0.12	
16.0	v			29.69	19.18	12.24	7.72	5.34	3.76	2.52	1.95	1.19	0.94	0.76	0.60	
	R			2489.40	812.35	259.36	80.85	32.14	13.48	4.99	2.67	0.80	0.45	0.27	0.15	
18.0	v			33.41	21.58	13.78	8.68	6.00	4.23	2.83	2.20	1.34	1.06	0.86	0.68	
	R			3138.59	1022.59	325.83	101.33	40.20	16.83	6.22	3.33	0.99	0.56	0.33	0.19	
20.0	v			37.12	23.97	15.31	9.64	6.67	4.70	3.15	2.44	1.49	1.18	0.95	0.75	
	R			3862.72	1256.86	399.79	124.08	49.14	20.54	7.58	4.05	1.21	0.68	0.41	0.23	
25.0	v				29.97	19.13	12.05	8.34	5.88	3.93	3.05	1.86	1.47	1.19	0.94	
	R				1947.68	617.47	190.84	75.30	31.36	11.52	6.14	1.83	1.02	0.61	0.35	
30.0	v				35.96	22.96	14.47	10.01	7.06	4.72	3.66	2.23	1.76	1.43	1.13	
	R				2788.67	881.94	271.73	106.91	44.40	16.26	8.65	2.56	1.44	0.86	0.48	
35.0	v				41.95	26.79	16.88	11.67	8.23	5.50	4.27	2.61	2.06	1.67	1.32	
	R				3779.81	1193.18	366.72	143.96	59.64	21.78	11.57	3.42	1.91	1.14	0.64	
40.0	v				30.61	19.29	13.34	9.41	6.29	4.88	2.98	2.35	1.90	1.51	1.15	
	R				1551.18	475.81	186.43	77.09	28.09	14.90	4.39	2.45	1.46	0.82	0.48	
45.0	v				34.44	21.70	15.01	10.58	7.08	5.49	3.35	2.65	2.14	1.69	1.24	
	R				1955.93	599.00	234.32	96.73	35.17	18.63	5.47	3.06	1.82	1.02	0.57	
50.0	v				38.26	24.11	16.68	11.76	7.86	6.10	3.72	2.94	2.38	1.88	1.39	
	R				2407.44	736.27	287.63	118.56	43.03	22.76	6.67	3.72	2.21	1.24	0.70	
55.0	v				42.09	26.52	18.35	12.93	8.65	6.71	4.10	3.23	2.62	2.07	1.52	
	R				2905.69	887.63	346.36	142.58	51.66	27.30	7.99	4.45	2.64	1.48	0.83	
60.0	v				45.92	28.93	20.01	14.11	9.44	7.32	4.47	3.53	2.86	2.26	1.71	
	R				3450.69	1053.07	410.50	168.80	61.07	32.25	9.41	5.24	3.11	1.74	1.00	
65.0	v				49.74	31.34	21.68	15.29	10.22	7.93	4.84	3.82	3.09	2.45	1.80	
	R				4042.42	1232.59	480.06	197.20	71.26	37.59	10.96	6.10	3.61	2.03	1.17	
70.0	v				33.75	23.35	16.46	11.01	8.54	5.21	4.12	3.33	2.63	2.03	1.48	
	R				1426.20	555.02	227.79	82.21	43.34	12.61	7.01	4.16	2.33	1.48	0.83	
75.0	v				36.16	25.02	17.64	11.80	9.15	5.58	4.41	3.57	2.82	2.26	1.71	
	R				1633.88	635.40	260.57	93.94	49.48	14.38	7.99	4.73	2.65	1.52	0.87	
80.0	v				38.58	26.68	18.81	12.58	9.76	5.96	4.70	3.81	3.01	2.36	1.81	
	R				1855.65	721.19	295.54	106.44	56.03	16.26	9.03	5.34	2.99	1.71	1.06	
85.0	v				40.99	28.35	19.99	13.37	10.37	6.33	5.00	4.05	3.20	2.50	1.90	
	R				2091.49	812.39	332.69	119.72	62.98	18.25	10.13	5.99	3.35	2.00	1.25	
90.0	v				43.40	30.02	21.17	14.15	10.98	6.70	5.29	4.28	3.39	2.60	1.95	
	R				2341.41	909.00	372.03	133.76	70.32	20.35	11.29	6.68	3.73	2.20	1.45	
95.0	v				45.81	31.69	22.34	14.94	11.59	7.07	5.59	4.52	3.57	2.70	2.05	
	R				2605.41	1011.02	413.56	148.58	78.07	22.57	12.51	7.39	4.13	2.40	1.65	
100.0	v				48.22	33.36	23.52	15.73	12.20	7.45	5.88	4.76	3.76	2.90	2.20	
	R				2883.49	1118.44	457.27	164.17	86.22	24.90	13.79	8.15	4.55	2.60	1.80	
105.0	v				50.63	35.02	24.69	16.51	12.81	7.82	6.17	5.00	3.95	3.00	2.30	
	R				3175.64	1231.28	503.16	180.53	94.76	27.34	15.14	8.94	4.99	3.00	2.30	
110.0	v				53.04	36.69	25.87	17.30	13.42	8.19	6.47	5.24	4.14	3.20	2.50	
	R				3481.87	1349.53	551.24	197.65	103.71	29.89	16.54	9.77	5.45	3.50	2.70	
115.0	v				55.45	38.36	27.05	18.09	14.03	8.56	6.76	5.47	4.33	3.40	2.70	
	R				3802.18	1473.18	601.51	215.55	113.05	32.56	18.01	10.63	5.92	3.80	3.00	
120.0	v				57.86	40.03	28.22	18.87	14.64	8.94	7.06	5.71	4.52	3.60	2.90	
	R				4136.57	1602.24	653.96	234.22	122.80	35.33	19.54	11.52	6.42	4.10	3.00	
125.0	v					41.69	29.40	19.66	15.25	9.31	7.35	5.95	4.70	3.70	3.00	
	R					1736.71	708.59	253.67	132.94	38.22	21.12	12.46	6.94	4.30	3.00	
130.0	v					43.36	30.57	20.45	15.86	9.68	7.64	6.19	4.89	3.80	3.00	
	R					1876.59	765.41	273.88	143.48	41.22	22.77	13.42	7.47	4.70	3.50	
135.0	v					45.03	31.75	21.23	16.47	10.05	7.94	6.43	5.08	4.00	3.00	
	R					2021.87	824.42	294.86	154.42	44.33	24.48	14.43	8.03	4.90	3.50	
140.0	v					46.70	32.92	22.02	17.08	10.42	8.23	6.66	5.27	4.20	3.00	
	R					2172.57	885.61	316.61	165.76	47.56	26.25	15.47	8.60	5.40	3.80	
145.0	v					48.37	34.10	22.81	17.69	10.80	8.53	6.90	5.46	4.40	3.50	
	R					2328.67	948.98	339.13	177.50	50.89	28.08	16.54	9.20	5.60	4.00	
150.0	v					50.03	35.28	23.59	18.30	11.17	8.82	7.14	5.64	4.60	3.80	
	R					2490.18	1014.54	362.42	189.64	54.33	29.98	17.65	9.81	5.80	4.20	