

Pipe Flow rates Q - Velocity v- Pressure Drops R



PP-RCT Faser Watertec D101._._.
20°C/2.0 Mpa • 70°C/1.0 Mpa

Temperature: 20 °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	20x2.8	25x3.5	32x3.6	40x4.5	50x5.6	63x7.1	75x8.4	90x10.1	110x12.3	125x14	160x14.6	180x16.4	200x18.2	225x20.5	250x22.7	
SDR	7.4	7.4	9	9	9	9	9	9	9	9	11	11	11	11	11	
Q	ID →	14.4	18	24.8	31.0	38.8	48.8	58.2	69.8	85.4	97.0	130.8	147.2	163.6	184.0	204.6
0.05	v	0.31	0.20													
	R	1.28	0.45													
0.07	v	0.43	0.28	0.14												
	R	2.29	0.80	0.18												
0.09	v	0.55	0.35	0.19												
	R	3.55	1.23	0.27												
0.10	v	0.61	0.39	0.21	0.13	0.08										
	R	4.26	1.48	0.32	0.11	0.04										
0.12	v	0.74	0.47	0.25	0.16	0.10										
	R	5.87	2.03	0.45	0.16	0.05										
0.16	v	0.98	0.63	0.33	0.21	0.14	0.09									
	R	9.74	3.35	0.73	0.26	0.09	0.03									
0.18	v	1.11	0.71	0.37	0.24	0.15	0.10									
	R	12.00	4.12	0.90	0.31	0.11	0.04									
0.20	v	1.23	0.79	0.41	0.27	0.17	0.11									
	R	14.46	4.96	1.08	0.38	0.13	0.04									
0.30	v	1.84	1.18	0.62	0.40	0.25	0.16	0.11								
	R	29.85	10.17	2.20	0.76	0.26	0.09	0.04								
0.40	v	2.46	1.57	0.83	0.53	0.34	0.21	0.15	0.10							
	R	50.14	17.00	3.66	1.26	0.43	0.15	0.06	0.03							
0.50	v	3.07	1.97	1.04	0.66	0.42	0.27	0.19	0.13							
	R	75.20	25.39	5.41	1.85	0.67	0.21	0.09	0.04							
0.60	v	3.69	2.36	1.24	0.80	0.51	0.32	0.23	0.16	0.10						
	R	104.92	35.31	7.53	2.58	0.88	0.30	0.13	0.05	0.02						
0.70	v	4.30	2.75	1.45	0.93	0.59	0.37	0.26	0.18	0.12	0.09					
	R	139.24	46.71	9.92	3.39	1.16	0.39	0.17	0.07	0.03	0.01					
0.80	v	4.91	3.15	1.66	1.06	0.68	0.43	0.30	0.21	0.14	0.11					
	R	178.11	59.58	12.60	4.30	1.46	0.49	0.21	0.09	0.03	0.02					
0.90	v	5.53	3.54	1.86	1.19	0.76	0.48	0.34	0.24	0.16	0.12	0.07				
	R	221.49	73.51	15.58	5.31	1.81	0.60	0.26	0.11	0.04	0.02	0.01				
1.00	v	6.14	3.93	2.07	1.33	0.85	0.53	0.38	0.26	0.17	0.14	0.07	0.06			
	R	269.36	89.67	18.77	6.38	2.27	0.72	0.31	0.13	0.05	0.03	0.01	0.01			
1.20	v	7.37	4.72	2.49	1.59	1.02	0.64	0.45	0.31	0.21	0.16	0.09	0.07	0.06		
	R	378.48	125.48	26.14	8.85	3.15	1.00	0.43	0.18	0.07	0.04	0.01	0.01	0.01		
1.40	v	8.60	5.50	2.90	1.86	1.18	0.75	0.53	0.37	0.24	0.19	0.10	0.08	0.07		
	R	505.32	166.94	34.62	11.70	4.15	1.31	0.56	0.24	0.09	0.05	0.01	0.01	0.01		
1.60	v	9.83	6.29	3.31	2.12	1.35	0.86	0.60	0.42	0.28	0.22	0.12	0.09	0.08	0.06	
	R	649.81	214.00	44.21	14.90	5.28	1.66	0.71	0.30	0.11	0.06	0.01	0.01	0.01	0.01	
1.80	v	11.06	7.08	3.73	2.39	1.52	0.96	0.68	0.47	0.31	0.24	0.13	0.11	0.09	0.07	
	R	811.87	266.62	54.88	18.46	6.53	2.05	0.88	0.37	0.14	0.08	0.02	0.01	0.01	0.01	
2.00	v	12.29	7.86	4.14	2.65	1.69	1.07	0.75	0.52	0.35	0.27	0.15	0.12	0.10	0.08	0.06
	R	991.46	324.79	66.63	22.36	7.90	2.48	1.06	0.44	0.17	0.09	0.02	0.01	0.01	0.01	0.01
2.5	v	15.36	9.83	5.18	3.31	2.12	1.34	0.94	0.65	0.44	0.34	0.19	0.15	0.12	0.09	0.08
	R	1503.86	494.32	100.68	33.65	11.85	3.71	1.59	0.66	0.25	0.14	0.02	0.02	0.01	0.01	0.01
3.00	v	18.43	11.80	6.21	3.98	2.54	1.60	1.13	0.78	0.52	0.41	0.22	0.18	0.14	0.11	0.09
	R	2151.35	698.13	141.35	47.07	16.52	5.16	2.20	0.92	0.35	0.19	0.05	0.03	0.02	0.01	0.01
3.5	v	21.50	13.76	7.25	4.64	2.96	1.87	1.32	0.92	0.61	0.47	0.26	0.21	0.17	0.13	0.11
	R	2863.58	936.08	188.56	62.58	21.91	6.85	2.92	1.22	0.46	0.25	0.06	0.03	0.02	0.01	0.01
4.0	v	24.57	15.73	8.29	5.30	3.38	2.14	1.50	1.05	0.70	0.54	0.30	0.24	0.19	0.15	0.12
	R	3703.38	1208.07	242.29	80.18	28.00	8.70	3.70	1.54	0.58	0.32	0.08	0.04	0.03	0.01	0.01
4.5	v	27.65	17.69	9.32	5.97	3.81	2.41	1.69	1.18	0.79	0.61	0.34	0.26	0.21	0.17	0.14
	R	4649.64	1514.06	302.50	99.85	34.79	10.82	4.60	1.91	0.72	0.39	0.09	0.05	0.03	0.02	0.01
5.0	v		19.66	10.36	6.63	4.23	2.67	1.88	1.31	0.87	0.68	0.37	0.29	0.24	0.19	0.15
	R		1853.99	369.16	121.57	42.28	13.08	5.55	2.30	0.87	0.47	0.11	0.06	0.04	0.02	0.01
5.5	v		21.63	11.39	7.29	4.65	2.94	2.07	1.44	0.96	0.74	0.41	0.32	0.26	0.21	0.17
	R		2227.83	442.26	145.33	50.44	15.62	6.63	2.75	1.04	0.56	0.13	0.08	0.05	0.03	0.02
6.0	v		23.59	12.43	7.95	5.08	3.21	2.26	1.57	1.05	0.81	0.45	0.35	0.29	0.23	0.18
	R		2635.56	521.79	171.13	59.29	18.28	7.74	3.20	1.21	0.65	0.16	0.09	0.05	0.03	0.02
6.5	v		25.56	13.46	8.62	5.50	3.48	2.44	1.70	1.14	0.88	0.48	0.38	0.31	0.24	0.20
	R		2077.16	607.74	198.96	68.82	21.22	8.99	3.72	1.40	0.76	0.18	0.10	0.06	0.04	0.02
7.0	v		27.52	14.50	9.28	5.92	3.74	2.63	1.83	1.22	0.95	0.52	0.41	0.33	0.26	0.21
	R		3552.61	700.09	228.82	79.03	24.32	10.29	4.26	1.60	0.87	0.21	0.12	0.07	0.04	0.02
7.5	v		29.49	15.53	9.94	6.35	4.01	2.82	1.96	1.31	1.02	0.56	0.44	0.36	0.28	0.23
	R		4061.91	798.84	260.69	89.91	27.59	11.65	4.81	1.81	0.98	0.23	0.13	0.08	0.05	0.03
8.0	v		31.46	16.57	10.61	6.77	4.28	3.01	2.09	1.40	1.08	0.60	0.47	0.38	0.30	0.24
	R		4605.05	903.98	294.59	101.46	31.11	13.15	5.43	2.04	1.10	0.26	0.15	0.09	0.05	0.03

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SDR	7.4	7.4	9	9	9	9	9	9	9	9	11	11	11	11	11		
Q	ID →	14.4	18	24.8	31.0	38.8	48.8	58.2	69.8	85.4	97.0	130.8	147.2	163.6	184.0	204.6	
9.0	v			18.64	11.93	7.62	4.81	3.38	2.35	1.57	1.22	0.67	0.53	0.43	0.34	0.27	
	R			1133.43	368.41	126.58	38.69	16.29	6.71	2.52	1.36	0.32	0.18	0.11	0.06	0.04	
10.0	v			20.71	13.26	8.46	5.35	3.76	2.61	1.75	1.35	0.74	0.59	0.48	0.38	0.30	
	R			1388.40	450.27	154.36	47.07	19.79	8.14	3.05	1.65	0.39	0.22	0.13	0.08	0.05	
12.0	v			24.86	15.91	10.15	6.42	4.51	3.14	2.10	1.62	0.89	0.71	0.57	0.45	0.37	
	R			1954.24	633.29	206.00	66.17	27.75	11.38	4.26	2.29	0.54	0.31	0.18	0.10	0.06	
14.0	v			29.00	18.56	11.85	7.49	5.27	3.66	2.45	1.90	1.04	0.82	0.67	0.53	0.43	
	R			2633.16	850.63	275.78	88.37	36.97	15.13	5.65	3.04	0.71	0.40	0.24	0.14	0.08	
16.0	v			33.14	21.21	13.54	8.56	6.02	4.18	2.79	2.17	1.19	0.94	0.76	0.60	0.49	
	R			3412.05	1099.37	355.40	113.64	47.44	19.37	7.22	3.88	0.91	0.51	0.31	0.18	0.11	
18.0	v			37.28	23.86	15.23	9.63	6.77	4.71	3.14	2.44	1.34	1.06	0.86	0.68	0.55	
	R			4290.84	1379.46	444.85	141.97	59.15	24.12	8.97	4.81	1.13	0.64	0.38	0.22	0.13	
20.0	v				26.51	16.92	10.70	7.52	5.23	3.49	2.71	1.49	1.18	0.95	0.75	0.61	
	R				1690.87	544.10	173.36	72.10	29.35	10.89	5.84	1.36	0.77	0.46	0.26	0.16	
25.0	v				33.14	21.16	13.37	9.40	6.54	4.37	3.38	1.86	1.47	1.19	0.94	0.76	
	R				2606.31	835.00	265.12	109.86	44.55	16.47	8.82	2.05	1.16	0.69	0.39	0.24	
30.0	v				39.77	25.39	16.05	11.28	7.84	5.24	4.06	2.23	1.76	1.43	1.13	0.91	
	R				3717.15	1186.89	375.82	155.27	62.77	23.14	12.37	2.87	1.61	0.97	0.55	0.33	
35.0	v					29.62	18.72	13.16	9.15	6.11	4.74	2.61	2.06	1.67	1.32	1.07	
	R					1599.68	505.40	208.28	83.99	30.88	16.47	3.81	2.14	1.28	0.72	0.43	
40.0	v					33.85	21.40	15.04	10.46	6.99	5.42	2.98	2.35	1.90	1.51	1.22	
	R					2073.31	648.34	267.23	107.77	39.62	21.14	4.89	2.75	1.64	0.93	0.56	
45.0	v					38.08	24.07	16.92	11.77	7.86	6.09	3.35	2.65	2.14	1.69	1.37	
	R					2607.74	813.67	334.76	134.74	49.43	26.34	6.07	3.41	2.04	1.15	0.69	
50.0	v					42.31	26.75	18.80	13.07	8.73	6.77	3.72	2.94	2.38	1.88	1.52	
	R					3202.94	997.50	409.72	164.62	60.28	32.09	7.38	4.14	2.48	1.40	0.84	
55.0	v					46.54	29.42	20.69	14.38	9.61	7.45	4.10	3.23	2.62	2.07	1.67	
	R					3858.91	1199.82	492.11	197.42	72.17	38.37	8.81	4.94	2.95	1.66	0.99	
60.0	v					50.77	32.10	22.57	15.69	10.48	8.12	4.47	3.53	2.86	2.26	1.83	
	R					4575.62	1420.61	581.93	233.12	85.08	45.20	10.35	5.80	3.46	1.95	1.17	
65.0	v					34.77	24.45	17.00	11.35	8.80	4.84	3.82	3.09	2.45	1.98		
	R					1659.88	679.17	271.72	99.03	52.56	12.01	6.73	4.02	2.26	1.35		
70.0	v					37.45	26.33	18.30	12.23	9.48	5.21	4.12	3.33	2.63	2.13		
	R					1917.61	783.81	313.22	114.00	60.46	13.79	7.72	4.60	2.59	1.55		
75.0	v					40.12	28.21	19.61	13.10	10.15	5.58	4.41	3.57	2.82	2.28		
	R					2193.80	895.87	357.62	129.99	68.89	15.69	8.78	5.23	2.95	1.76		
80.0	v					42.80	30.09	20.92	13.97	10.83	5.96	4.70	3.81	3.01	2.43		
	R					2488.45	1015.33	404.91	147.01	77.85	17.70	9.90	5.90	3.32	1.98		
85.0	v					45.47	31.97	22.23	14.85	11.51	6.33	5.00	4.05	3.20	2.59		
	R					2801.55	1142.19	455.08	165.05	87.34	19.83	11.09	6.60	3.71	2.21		
90.0	v					48.15	33.85	23.53	15.72	12.19	6.70	5.29	4.28	3.39	2.74		
	R					3133.09	1276.45	508.15	184.11	97.36	22.08	12.33	7.34	4.13	2.46		
95.0	v					50.82	35.73	24.84	16.59	12.86	7.07	5.59	4.52	3.57	2.89		
	R					3483.08	1418.10	564.10	204.19	107.92	24.44	13.64	8.12	4.56	2.72		
100.0	v					53.49	37.61	26.15	17.47	13.54	7.45	5.88	4.76	3.76	3.04		
	R					3851.52	1567.16	622.94	225.29	119.00	26.91	15.02	8.93	5.02	2.99		
105.0	v					56.17	39.49	27.46	18.34	14.22	7.82	6.17	5.00	3.95	3.20		
	R					4238.40	1723.60	684.67	247.41	130.61	29.50	16.46	9.78	5.50	3.27		
110.0	v					58.84	41.37	28.76	19.21	14.89	8.19	6.47	5.24	4.14	3.35		
	R					4643.72	1887.44	749.27	270.54	142.74	32.20	17.96	10.67	5.99	3.56		
115.0	v						43.25	30.07	20.09	15.57	8.56	6.76	5.47	4.33	3.50		
	R						2058.68	816.76	294.69	155.41	35.02	19.52	11.59	6.51	3.87		
120.0	v						45.13	31.38	20.96	16.25	8.94	7.06	5.71	4.52	3.65		
	R						2237.30	887.14	319.86	168.60	37.95	21.14	12.56	7.05	4.19		
125.0	v						47.01	32.68	21.83	16.92	9.31	7.35	5.95	4.70	3.80		
	R						2423.32	960.39	346.04	182.32	40.99	22.83	13.55	7.60	4.52		
130.0	v						48.89	33.99	22.71	17.60	9.68	7.64	6.19	4.89	3.96		
	R						2616.72	1036.52	373.23	196.56	44.15	24.58	14.59	8.18	4.86		
135.0	v						50.77	35.30	23.58	18.28	10.05	7.94	6.43	5.08	4.11		
	R						2817.52	1115.54	401.44	211.33	47.42	26.39	15.66	8.78	5.21		
140.0	v						52.65	36.61	24.45	18.96	10.42	8.23	6.66	5.27	4.26		
	R						3025.70	1197.43	430.67	226.63	50.80	28.26	16.76	9.39	5.58		
145.0	v						54.53	37.91	25.33	19.63	10.80	8.53	6.90	5.46	4.41		
	R						3241.28	1282.20	460.90	242.45	54.30	30.20	17.90	10.03	5.95		
150.0	v						56.41	39.22	26.20	20.31	11.17	8.82	7.14	5.64	4.56		
	R						3464.24	1369.86	492.16	258.80	57.91	32.20	19.08	10.69	6.34		