

DIMENSIONAL CHART OF uPVC PIPES AS PER ASTM D 1785

PIPES SUITABLE FOR SOLVENT CEMENT WELD AND CAM LOCK JOINT

PRESSURE RATINGS CALCULATED ON THE BASIS OF ISO EQUATION

Nominal Sizes in "inches"	Mean Outside Diameter in mm		Schedule 40			Schedule 80			Schedule 120		
			Working Pressure in kg / cm ²	Wall Thickness in mm		Working Pressure in kg / cm ²	Wall Thickness in mm		Working Pressure in kg / cm ²	Wall Thickness in mm	
	Min	Max		Min	Max		Min	Max		Min	Max
1/2	21.2	21.4	43.5	2.8	3.3	60.4	3.7	4.2	72.7	4.3	4.9
3/4	26.6	26.8	34.9	2.9	3.4	49.1	3.9	4.4	55.1	4.3	4.9
1	33.3	33.5	32.5	3.4	3.9	45.8	4.6	5.1	51.7	5.1	5.7
1 1/4	42.0	42.3	26.8	3.6	4.1	37.7	4.9	5.4	43.0	5.5	6.1
1 1/2	48.1	48.4	23.8	3.7	4.2	33.9	5.1	5.7	38.4	5.7	6.4
2	60.2	60.5	19.8	3.9	4.4	28.7	5.5	6.2	34.0	6.4	7.1
2 1/2	72.8	73.2	22.0	5.2	5.8	30.4	7.0	7.9	33.3	7.6	8.5
3	88.7	89.1	18.9	5.5	6.2	26.8	7.6	8.5	31.9	8.9	10.0
4	114.1	114.5	15.9	6.0	6.7	23.3	8.6	9.6	30.8	11.1	12.4
5	141.1	141.6	14.0	6.6	7.3	20.6	9.5	10.7	28.2	12.7	14.2
6	168.0	168.6	12.6	7.1	8.0	20.0	11.0	12.3	26.6	14.3	16.0
8	218.7	219.5	11.1	8.2	9.2	17.6	12.7	14.2	25.9	18.2	20.4
10	272.7	273.4	10.1	9.3	10.4	16.7	15.1	16.9	24.3	21.4	24.0
12	323.5	324.2	9.4	10.3	11.6	16.3	17.5	20.5	24.3	25.4	28.5
14	355.2	356.0	9.2	11.1	12.5	16.2	19.1	21.3			
16	405.9	406.9	9.2	12.7	14.2	15.9	21.4	24.0			
18	456.7	457.7	9.2	14.3	16.0	15.7	23.8	26.6			
20	507.4	508.6	8.8	15.1	16.9	15.6	26.2	29.3			
24	608.8	610.4	8.5	17.5	19.5	15.3	30.9	34.7			

TEMPERATURE CORRECTION OR DERATING FACTORS

Operating Temperature	°F	70	80	90	100	110	115	120	125	130	140
		°C	21	27	32	38	43	46	49	52	54
PVC 1120		1.00	0.88	0.75	0.62	0.50	0.45	0.40	0.35	0.30	0.22

Note:

- 1) PVC 1120 is the recommended grade of uPVC material in ASTM D 1784 & 1785 having a Hydrostatic Design Stress of 14 Mpa (or 2000 psi)
- 2) To obtain working pressure at a different operating temperature, the above mentioned working pressure should be multiplied by the respective correction or derating factor. For example, the working pressure for 2" x Schedule 80 pipes at 110° F or 43° C should be 28.0 x 0.5 or 14.0 kg/cm
- 3) For Threaded joints the working pressures mentioned above should be halved