

PRINCE MUMBAI INDIA

Agriculture

Irrigation Systems

Water Distribution Systems

Industrial Water Circulation Systems

Air Ducting

Aqua Culture

IS : 4985/2000



Class 1/2/3/5



Pressure & Non-Pressure pipes - are manufactured in accordance with IS:4985 covering a complete range from 20mm to 315mm. They are available in pressure ratings of 2.5, 4, 6, & 10kgf/sq.cm as defined in IS:4985. The pipes are provided with plain socket and suitable for solvent cement jointing.

Their main application is in agriculture, for water supply, drip irrigation & sprinkler lines, etc. as well as for drinking water distribution. However, these can also be used in cable ducting, ventilation pipe lines, slurry lines, etc.

These are available in light grey colour with nominal length of 6mtrs.

Dimensions (As per IS : 4985 - 2000)

(All dimensions are in mm)

Nominal Outside Diameter (Nominal Size)	Mean Outside Diameter		Outside Diameter at Any point		Wall Thickness												Mean Socket Internal Diameter of Main Point of Socket Length	
					Class 1 0.25 MPa 2.5 Kg/cm ²		Class 2 0.40 MPa 4.0 Kg/cm ²		Class 3 0.60 MPa 6.0 Kg/cm ²		Class 4 0.80 MPa 8.0 Kg/cm ²		Class 5 1.00 MPa 10.0 Kg/cm ²		Class 6 1.25 MPa 12.5 Kg/cm ²			
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		
20	20.0	20.3	19.5	20.5	-	-	-	-	-	-	-	-	1.1	1.5	1.4	1.8	20.1	20.3
25	25.0	25.0	24.5	25.5	-	-	-	-	-	-	1.2	1.6	1.4	1.8	1.7	2.1	25.1	25.3
32	32.0	32.3	31.5	32.5	-	-	-	-	-	-	1.5	1.9	1.8	2.2	2.2	2.7	32.1	32.3
40	40.0	40.3	39.5	40.5	-	-	-	-	1.4	1.8	1.8	2.2	2.2	2.7	2.8	3.3	40.1	40.3
50	50.0	50.3	49.4	50.6	-	-	-	-	1.7	2.1	2.3	2.8	2.8	3.3	3.4	4.0	50.1	50.3
63	63.0	63.3	62.2	63.8	-	-	1.5	1.9	2.2	2.7	2.8	3.3	3.5	4.1	4.3	5.0	63.1	63.3
75	75.0	75.3	74.1	75.9	-	-	1.8	2.2	2.6	3.1	3.4	4.0	4.2	4.9	5.1	5.9	75.1	75.3
90	90.0	90.3	88.9	91.1	1.3	1.7	2.1	2.6	3.1	3.7	4.0	4.6	5.0	5.7	6.1	7.1	90.1	90.3
110	110.0	110.4	108.6	111.4	1.6	2.0	2.5	3.0	3.7	4.3	4.9	5.6	6.1	7.1	7.5	8.7	110.1	110.4
125	125.0	125.4	123.5	126.5	1.8	2.2	2.9	3.4	4.3	5.0	5.6	6.4	6.9	8.0	8.5	9.8	125.1	125.4
140	140.0	140.5	138.3	141.7	2.0	2.4	3.2	3.8	4.8	5.5	6.3	7.3	7.7	8.9	9.5	11.0	140.2	140.5
160	160.0	160.5	158.0	162.0	2.3	2.8	3.7	4.3	5.4	6.2	7.2	8.3	8.8	10.2	10.9	12.6	160.2	160.5
180	180.0	180.6	177.8	182.2	2.6	3.1	4.2	4.9	6.1	7.1	8.0	9.2	9.9	11.4	12.2	14.1	180.2	180.5
200	200.0	200.6	197.6	202.4	2.9	3.4	4.6	5.3	6.8	7.9	8.9	10.3	11.0	12.7	13.6	15.7	200.3	200.6
225	225.0	225.7	222.3	227.7	3.3	3.9	5.2	6.0	7.6	8.8	10.0	11.5	12.4	14.3	15.3	17.6	225.4	225.7
250	250.0	250.8	247.0	253.0	3.6	4.2	5.7	6.5	8.5	9.8	11.2	12.9	13.8	15.9	17.0	19.6	250.4	250.8
280	280.0	280.9	276.6	283.4	4.1	4.8	6.4	7.4	9.5	11.0	12.5	14.4	15.4	17.8	19.0	21.9	280.4	280.9
315	315.0	316.0	311.2	318.8	4.6	5.3	7.2	8.3	10.7	12.4	14.0	16.1	17.3	19.9	21.4	24.7	315.4	316.0

Properties of PVC

Mechanical

Tensile Strength	: 415-525 kg/cm ²
Compression Strength	: 550-910 kg/cm ²
Flexural Strength	: 680 - 1100 kg/cm ²
Izod Impact Strength	: 4 - 5 kg-cm/cm ²
Shore Hardness	: D65 - 85

Thermal

Coefficient of Linear Expansion	: 0.08 mm/M°C
Vicat Softening Point	: >78°C
Max. Operating Temperature	: 60°C

Physical

Specific Gravity	: 1.40 - 1.45
Water Absorption	: < 4mg/cm ²

Standards, Quality Control & Testing

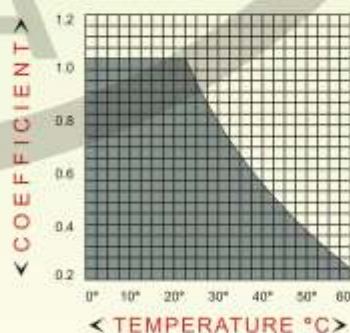
The Manufacturing and testing is done for

- 1) Pipes - In accordance with IS : 4985 - 2000
- 2) Threads - (a) 1/2" and 3/4" - 14 TPI (b) 1" and above - 11 TPI

All the above pipes, except Non-pressure pipes are tested for potable water supplies in accordance with their relevant standards and as per the test methods given in IS : 12235.

Hazen - William's Flow Co-efficient Comparison

Pipe Material	PVC	A.C.	GI	C.I.
Flow Coefficient	150	130	110	100



UPVC - Pressure & Non-Pressure Pipes & Fittings, Plumbing Pipes & Fittings, Roof Water Systems, Borewell Systems, PP-R Plumbing Systems, Valves, Taps

PRINCE PIPES & FITTINGS PVT. LTD.

Admn. Office : Ruby House, 4th Floor, B - Wing J. K. Sawant Marg, Dadar (W), Mumbai - 400 028.
Phone : 022 - 2438 2555 • Fax : 022 - 2438 2220 • e-mail : ppf@vsnl.com, Website : www.princepipes.com