

PP-R PIPES
COLD AND HOT WATER PIPE

Advantages

- Operational life more than 50 years.
- Suitable for use up to 95°C.
- 100% leakage free joints.
- Corrosion free & low noise system.
- UV Stabilized.
- Lower thermal conductive.
- Food Grade.
- Homogeneous joint best resistant against earthquake.
- Light in weight and easy in installation.
- Best in chemicals processing, water treatment plant and other industrial application.

Suitable operating pressure

Temperature ° C	Service life in years	Nominal pressure			
		PN 10	PN 16	PN 20	
10° C	1	17.6	28.2	35.2	
	5	16.5	26.5	33.1	
	10	16.1	25.8	32.3	
	25	15.6	25.0	31.2	
	50	15.2	24.3	30.4	
	100	14.8	23.7	29.6	
20° C	1	14.9	23.9	29.9	
	5	14.1	22.6	28.3	
	10	13.7	22.0	27.5	
	25	13.3	21.3	26.7	
	50	12.9	20.7	25.9	
	100	12.5	19.5	25.1	
30° C	1	12.8	20.5	25.6	
	5	12.0	19.2	24.0	
	10	11.6	18.6	23.2	
	25	11.2	17.9	22.4	
	50	10.9	17.5	21.9	
	40° C	1	10.8	17.3	21.6
5		10.1	16.2	20.3	
10		9.9	15.8	19.7	
25		9.5	15.2	18.9	
50		9.2	14.7	18.4	
50° C		1	9.1	14.6	18.3
	5	8.5	13.7	17.1	
	10	8.3	13.2	16.5	
	25	8.0	12.8	16.0	
	50	7.7	12.4	15.5	
	60° C	1	7.7	12.4	15.5
5		7.2	11.5	14.4	
10		6.9	11.1	13.9	
25		6.7	10.7	13.3	
50		6.5	10.4	12.9	
70° C		1	6.5	10.5	13.1
	5	6.0	9.6	12.0	
	10	5.8	9.3	11.6	
	25	4.9	7.9	9.9	
	50	4.3	6.8	8.5	
	80° C	1	5.5	8.8	10.9
5		4.8	7.7	9.6	
10		4.0	6.4	8.0	
25		3.2	5.1	6.4	
95° C		1	3.9	6.2	7.7
		5	2.6	4.1	5.2
	10	2.2	3.5	4.3	

* Nominal pressure are given at safety factor 1.5

- Recommended application – Cold water installation
- Recommended application – Hot water installation
- Recommended application – Central heating installation

Pipe specifications (As per DIN 8077/8078)

Outside Diameter & Tolerance (In mm)	SDR 11 (PN 10)		SDR 7.4 (PN 16)		SDR 6 (PN 20)	
	Wall thickness (In mm)		Wall thickness (In mm)		Wall thickness (In mm)	
	Min.	Max.	Min.	Max.	Min.	Max.
20 + 0.3	1.9	2.3	2.8	3.3	3.4	4.0
25 + 0.3	2.3	2.8	3.5	4.1	4.2	4.9
32 + 0.3	3.0	3.5	4.5	5.2	5.4	6.2
40 + 0.4	3.7	4.3	5.6	6.4	6.7	7.6
50 + 0.5	4.6	5.3	6.9	7.8	8.4	9.5
63 + 0.6	5.8	6.6	8.7	9.8	10.5	11.8

Guidelines for welding PP-R pipes & fittings with manual welding machine

Outer diameter for pipes (mm)	Heating up (Second)	Processing (Second)	Cooling period (Minutes)	Depth of welding (mm)
20	5	4	2	14
25	7	4	2	15
32	8	6	4	16
40	12	6	4	18
50	18	6	4	20
63	24	8	6	24

APPLICATIONS

- Water Heater
- Solar Water Heater
- Multi-storied Building