

ERA PPR PIPES

Projected Service Life

The following table provides more detailed information with regards to the permissible pressure of various pipe pressure rating at various temperatures. These values are derived from the hoop stress chart an formula.

Under normal working pressures and conditions, the average service life of ERA pipes is projected to be 50 years or more.

Examples:

A PN20 hot water pipe, transporting water at a temperature of 70°C can last for more than 25 years under normal conditions with an operating pressure of 4.8bars or 69psi.

Temperature	Service life in years	PN10 (bars)	PN20 (bars)
10°C	1	16.8	33.6
	5	15.6	31.2
	10	15.0	30.0
	25	14.2	28.4
	50	13.8	27.6
20°C	1	13.6	27.2
	5	12.6	25.2
	10	12.4	24.8
	25	11.6	23.6
	50	10.0	20.0
30°C	1	10.8	21.6
	5	10.0	20.0
	10	9.6	19.2
	25	9.2	18.4
	50	9.0	18.0
40°C	1	8.4	16.8
	5	8.0	16.0
	10	7.6	15.2
	25	7.2	14.4
	50	6.6	13.2
50°C	1	7.0	14.0
	5	6.2	12.4
	10	6.0	12.0
	25	5.2	10.4
	50	4.6	9.2
60°C	1	5.6	11.2
	5	5.0	10.0
	10	4.4	8.8
	25	3.6	7.2
	50	3.2	6.4
70°C	1	4.4	8.8
	5	3.4	6.8
	10	3.0	6.0
	25	2.4	4.8
80°C	1	3.4	6.8
	5	2.4	4.8
	10	2.0	4.0
	20	1.8	3.6
95°C	1	2.0	4.0
	5	1.4	2.8
	10	1.2	2.4