

ASTM A53 ERW Fire Protection Pipes



Certification	UL/ FM
Grade	Gr.A/ B
Out Diameter	1/2" - 14" (DN15 - DN350)
Wall Thickness	2.11 - 11.13 mm
Length	5.8M/ 6M /12M or Customized
Ends	Plain/ Beveled/ Roll groove/ NPT/ BSPT
Usage	Wet, preaction, deluge or dry pipe sprinkler system
Surface	Red/ Black/ Red epoxy or polyester/ Galvanized

Available size for Sch10 pipe

Size			Thickness	Mass	Test pressure	Ref. No.
NPS	DN	OD (mm)	T(mm)	kg/m	MPa	
1/2"	15	21.3	2.11	1.00	4.8	P0101 (ISO)
3/4"	20	26.7	2.11	1.28	4.8	P0102(ISO)
1"	25	33.4	2.77	2.09	4.8	P0103 (ISO)
1-11/4"	32	42.2	2.77	2.69	9.0	P0104(ISO)
1-1/2"	40	48.3	2.77	3.11	9.0	P0105(ISO)
2"	50	60.3	2.77	3.93	13.2	P0106(ISO)
2-1/2"	65	73.0	3.05	5.26	12.0	P0107(ISO)
3"	80	88.9	3.05	6.46	9.9	P0108 (ISO)
4"	100	114.3	3.05	8.37	7.7	P0109(ISO)
5"	125	141.3	3.40	11.56	6.9	P0110 (ISO)
6"	150	168.3	3.40	13.83	5.8	P0111(ISO)
8"	200	219.1	3.76	19.97	4.9	P0112(ISO)
10"	250	273.0	4.19	27.78	4.4	P0113(ISO)
12"	300	323.8	4.57	35.98	4.1	P0114(ISO)
14"	350	355.6	6.35	54.69	5.2	P0115(ISO)
16"	400	406.4	6.35	62.65	4.6	P0116 (ISO)
18"	450	457.0	6.35	70.57	4.0	P0117(ISO)

20"	500	508.0	6.35	78.56	3.6	P0118 (ISO)
24"	600	610.0	6.35	94.53	3.0	P0119 (ISO)

Available size for Sch40 pipe

Size			Thickness	Mass	Test pressure	Ref. No.
NPS	DN	OD (mm)	T (mm)	kg/m	MPa	
1/2"	15	21.3	2.77	1.27	4.8	P0121(UL/FM)
3/4"	20	26.7	2.87	1.69	4.8	P0122(ULFM)
1"	25	33.4	3.38	2.50	4.8	P0123(UL/FM)
1-1/4"	32	42.2	3.56	3.39	9.0	P0124(UL/FM)
1-1/2"	40	48.3	3.68	4.05	9.0	P0125 (UL/FM)
2"	50	60.3	3.91	5.44	17.2	P0126 (UUFM)
2-1/2"	65	73.0	5.16	8.63	17.2	P0127(UL/FM)
3"	80	88.9	5.49	11.29	17.2	P0128(UUFM)
4"	100	114.3	6.02	16.08	15.2	P0129 (UL/FM)
5"	125	141.3	6.55	21.77	13.4	P0130 (UL/FM)
6"	150	168.3	7.11	28.26	12.3	P0131(UUFM)
8"	200	219.1	8.18	42.55	10.8	P0132 (UUFM)
10"	250	273.0	9.27	60.29	9.9	P0133(UL)
12"	300	323.8	10.31	79.71	9.2	P0134(UL)
14"	350	355.6	11.13	94.55	9.0	P0135(ISO)
16"	400	406.4	12.70	123.31	9.0	P0136(ISO)
18"	450	457.0	14.27	155.81	9.0	P0137(ISO)
20"	500	508.0	15.09	183.43	8.6	P0138 (ISO)
24"	600	610.0	17.48	255.43	8.3	P0139(ISO)

Chemical composition (%)

C	Mn	P	S	Cu	Ni	Cr	Mo	V
≤0.30	≤1.20	≤0.05	≤0.045	≤0.40	≤0.40	≤0.40	≤0.15	≤0.08

* For each reduction of 0.01 % below the specified carbon max, an increase of 0.06 manganese will be permitted up to a max of 1.65 %.

*The total composition of five elements for Cu, Ni, Cr, Mo and V(Coploer, Nickel, Chromium, Molybdenum, and Vanadium) shall not exceed 1%.

Mechanical properties

Tensile strength/ psi(MPa)	Yield strength/ psi(MPa)	Longitudinal elongation(%)
≥60000 (415)	≥ 35000 (240)	≥ 19

*The elongation value conforms to TABLE 2 and TABLEX4.1/X4.2, and TPMC refers to normal min value of 19%.