



Pipes for Ordinary Uses & Pressure Pipes

ASTM A53 (Schedule 5, 10, 40)

Welded Black Steel Pipes for Pressure Purposes

MATERIAL OF GRADE	CHEMICAL COMPOSITION (%)					MECHANICAL PROPERTIES			COLOR CODE
	C Max	Si Max	Mn Max	P Max	S Max	Yield Strength	Tensile Strength	Elongation	Material of Grade
						N/mm2 (min)	N/mm2 (min)	% (min)	
Grade A	0.250	-	0.95	0.050	0.045	205	330	22	-
Grade B	0.300	-	1.20	0.050	0.045	240	415	18	-

NOMINAL SIZE		THICKNESS MM			OUTSIDE DIAMETER MM			WEIGHT (PLAIN END) KG/M	TEST PRESSURE(KPA)		SCHEDULE
in	mm	Std.	Min	Max	Std.	Min	Max	STD	Grade A	Grade B	
3/4"	26.70	1.65	1.44	1.65	26.70	26.30	27.10	1.02	-	-	5
		2.11	1.84	2.11	26.70	26.30	27.10	1.28	-	-	10
		2.87	2.51	2.87	26.70	26.30	27.10	1.69	4800	4800	40
1"	33.40	1.65	1.44	1.65	33.40	33.00	33.80	1.29	-	-	5
		2.77	2.42	2.77	33.40	33.00	33.80	2.08	-	-	10
		3.38	2.96	3.38	33.40	33.00	33.80	2.50	4800	4800	40
1-1/4"	42.20	1.65	1.44	1.65	42.20	41.80	42.60	1.65	-	-	5
		2.77	2.42	2.77	42.20	41.80	42.60	2.96	-	-	10
		3.56	3.12	3.56	42.20	41.80	42.60	3.39	8300	9000	40
1-1/2"	48.30	1.65	1.44	1.65	48.30	47.90	48.70	1.90	-	-	5
		2.77	2.42	2.77	48.30	47.90	48.70	3.11	-	-	10
		3.68	3.22	3.68	48.30	47.90	48.70	4.05	8300	9000	40
2"	60.30	1.65	1.44	1.65	60.30	59.70	60.90	2.35	6735	7885	5
		2.77	2.42	2.77	60.30	59.70	60.90	3.91	11295	13223	10
		3.91	3.42	3.91	60.30	59.70	60.90	5.44	15900	17200	40
2-1/2"	73.00	2.11	1.84	2.11	73.00	72.27	73.73	3.69	7104	8317	5
		3.05	2.67	3.05	73.00	72.27	73.73	5.25	10271	12025	10
		5.16	4.52	5.16	73.00	72.27	73.73	8.63	17200	17200	40

Dimension Tolerances

Outside Diameter ≤ 48.3 mm. : ± 0.4 mm.
 ≥ 60.3 mm. : ± 1 %

Thickness - 12.5%

Weight ± 10 %

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NOMINAL SIZE		THICKNESS MM			OUTSIDE DIAMETER MM			WEIGHT (PLAIN END) KG/M	TEST PRESSURE(KPA)		SCHEDULE
in	mm	Std.	Min	Max	Std.	Min	Max	STD	Grade A	Grade B	
3"	88.90	2.11	1.84	2.11	88.90	88.01	89.79	4.51	5834	6830	5
		3.05	2.67	3.05	88.90	88.01	89.79	6.44	8434	9874	10
		5.49	4.80	5.49	88.90	88.01	89.79	11.29	15300	17200	40
3-1/2"	101.60	2.11	1.84	2.11	101.60	100.58	102.62	5.17	5105	5976	5
		3.05	2.67	3.05	101.60	100.58	102.62	7.40	7380	8640	10
		5.74	5.02	5.74	101.60	100.58	102.62	13.57	14000	16300	40
4"	114.30	2.11	1.84	2.11	114.30	113.16	115.44	5.83	4537	5312	5
		3.05	2.67	3.05	114.30	113.16	115.44	8.35	6560	7680	10
		6.02	5.27	6.02	114.30	113.16	115.44	16.07	13100	15200	40
5"	141.30	2.77	2.42	2.77	141.30	139.89	142.71	9.41	4820	5643	5
		3.40	2.98	3.40	141.30	139.89	142.71	11.60	5926	6937	10
		6.55	5.73	6.55	141.30	139.89	142.71	21.77	11500	13400	40
6"	168.30	2.77	2.42	2.77	168.30	166.62	169.98	11.08	4047	4738	5
		3.40	2.98	3.40	168.30	166.62	169.98	13.80	4975	5824	10
		7.11	6.22	7.11	168.30	166.62	169.98	28.26	10500	12300	40

Dimension Tolerances

Outside Diameter $\leq 48.3 \text{ mm.} : \pm 0.4 \text{ mm.}$
 $\geq 60.3 \text{ mm.} : \pm 1 \%$

Thickness - 12.5%

Weight $\pm 10\%$

