



PIPES

Dimension and weight of ERW Black & Galvanized Steel Tubes as per IS : 1239 (Part-1) 2004 (Equivalent to B. S. : 1387-1987)

Nominal Bore (NB)		Series	Outside Diameter		Wall Thickness		Plain Ends		Screwed & Socketed	
mm	inch		Min mm	Max mm	mm	SWG	Kg/Mtr	Mtrs/Tonne	Kg/Mtr	Mtrs/Tonne
15	(1/2")	L	21.00	21.40	2.00	14	0.95	1056	0.56	1096
		M	21.00	21.80	2.60	12	1.21	826	1.22	820
		H	21.00	21.80	3.20	10	1.44	694	1.45	690
20	(3/4")	L	26.40	26.90	2.30	13	1.38	725	1.39	719
		M	26.50	27.30	2.60	12	1.56	641	1.57	637
		H	26.50	27.30	3.20	10	1.87	535	1.88	532
25	(1")	L	33.20	33.80	2.60	12	1.98	505	2.00	500
		M	33.30	34.20	3.20	10	2.41	415	2.43	412
		H	33.30	34.20	4.00	8	2.93	341	2.95	339
32	(1 1/4")	L	41.90	42.50	2.60	12	2.54	394	2.57	389
		M	42.00	42.90	3.20	10	3.10	323	3.13	319
		H	42.00	42.90	4.00	8	3.79	264	3.82	262
40	(1 1/2")	L	47.80	48.40	2.90	11	3.23	310	3.27	306
		M	47.90	48.80	3.20	10	3.56	281	3.60	278
		H	47.90	48.80	4.00	8	4.37	229	4.41	227
50	(2")	L	59.60	60.20	2.90	11	4.08	245	4.15	241
		M	59.70	60.80	3.60	9	5.03	199	5.10	196
		H	59.70	60.80	4.50	7	6.19	162	6.26	160
65	(2 1/2")	L	75.20	76.00	3.20	10	5.75	175	5.83	172
		M	75.30	76.60	3.60	9	6.42	156	6.54	153
		H	75.30	76.60	4.50	7	7.93	126	8.05	124
80	(3")	L	87.90	88.70	3.20	10	6.72	149	6.89	145
		M	88.00	89.50	4.00	8	8.36	120	8.53	117
		H	88.00	89.50	4.80	6	9.90	101	10.10	99
100	(4")	L	113.00	113.90	3.60	9	9.75	103	10.00	100
		M	113.10	115.00	4.50	7	12.20	82	12.50	80
		H	113.10	115.00	5.40	5	14.50	69	14.80	68

TOLERANCE: FOR IS: 1239 (Part 1 - 2004)

Thickness	
1. Light Tubes	+ Not Limited - 8%
2. Medium & Heavy Tubes	+ Not Limited -10%
Weight	
1. Single Tube (Light Series)	+ 10%
2. Single Tube (Medium & Heavy Series)	- 8%
3. For Quality per Load of 10 tonnes minimum (Light Series)	+ 7.5%
	- 5%
4. For Quality per Load of 10 tonnes minimum (Medium & Heavy Series)	+ 7.5%
Length	
Unless Otherwise specified	4 to 7 meters

STEEL TUBES FOR STRUCTURAL PURPOSES CONFORMING TO IS : 1161 : 1998							
N.B.	Series	Outside Diameter	Thickness	Nominal Weight Black Tube Plain End		Calculated Nominal Weight Galvanized Tubes Plain End	
		mm	mm	Kg/m	Mtrs/tonne	Kg/m	Mtrs/tonne
15	L	21.30	2.00	0.947	1058	1.00	1003
	M		2.60	1.21	826	1.26	794
	H		3.20	1.44	694	1.49	671
20	L	26.90	2.30	1.38	725	1.43	699
	M		2.60	1.56	641	1.61	221
	H		3.20	1.87	535	1.92	521
25	L	33.70	2.60	1.98	505	2.03	493
	M		3.20	2.41	415	2.46	407
	H		4.00	2.93	341	2.98	336
32	L	42.40	2.60	1.54	394	2.62	382
	M		3.20	3.10	323	3.18	314
	H		4.00	3.79	264	3.87	258
40	L	48.30	2.90	3.23	310	3.34	299
	M		3.20	3.56	281	3.67	272
	H		4.00	4.37	229	4.48	223
50	L	60.30	2.90	4.08	245	4.20	238
	M		3.20	5.03	199	5.15	194
	H		4.00	6.19	162	6.31	158
65	L	76.10	3.20	5.71	175	5.86	171
	M		3.60	6.42	156	6.57	152
	H		4.50	7.93	126	8.10	123
80	L	88.90	3.20	6.72	149	6.90	145
	M		4.00	8.36	120	8.54	117
	H		4.80	9.90	101	10.08	99
90	L	101.60	3.60	8.70	115	8.97	111
	M		4.00	9.63	144	7.20	139
	H		4.80	11.50	87	11.77	85
100	L	114.30	3.60	9.75	103	9.97	100
	M		4.50	12.20	82	12.42	81
	H		5.40	14.50	69	14.72	68
110	L	127.00	4.50	13.60	74	13.90	72
	M		4.80	14.50	69	14.80	68
	H		5.40	16.20	62	14.80	61
125	L	139.70	4.50	15.00	67	15.25	66
	M		4.80	15.90	63	16.15	62
	H		5.40	17.90	56	18.15	55
135	L	152.40	4.50	16.40	61	16.78	60
	M		4.80	17.50	57	17.88	56
	H		5.40	19.60	51	19.98	55
150	L	165.10	4.50	17.80	56	18.20	55
	M		4.80	18.90	52	19.80	51
	H		5.40	21.30	47	21.70	46
150	L	168.30	4.50	18.20	55	18.66	54
	M		4.80	19.40	52	19.88	50
	H1		5.40	21.70	46	22.24	45
	H2		3.30	25.20	40	41.00	24
175	L	193.70	4.80	22.40	45	22.94	44
	M		5.40	25.10	40	25.64	39
	H		5.90	27.30	37	27.84	36
200	L	219.10	4.80	25.40	39	25.95	39
	M		5.60	29.50	34	30.05	33
	H		5.90	31.00	32	31.55	32

TOLERANCE: FOR IS: 1161 (1998)

Outside diameter upto & including 48.3mm	- 0.8mm
Over 48.3mm	- 0.8mm - 1%
Thickness	+ Not Limited
Weldet tubes	- 10%
Weight	
Single Tube (Light Series)	+10% / -8%
Single Tube (Medium & Heavy Series)	- 10%
10 Tones lot (Light Series)	- 5%
10 Tones lot (Medium & Heavy Series)	- 7.5%

TENSILE PROPERTIES:

GRADE	Y.S. (MIN)	T.S. (MIN)	% ELOGNATION
	MPA	MPA	
	(KG/MM2)	(KG/MM2)	
YST-210	210(21.42)	330(33.66)	20
YST-240	240(24.48)	410(41.82)	17

TOLERANCES:

On Outside diameter upto & including 48.3mm	=+0.4mm - 0.8mm
Over 48.3mm	+/- 1%
Thickness	
For All Size	+ Not Limited
Weldet tubes	- 10%
Weight	
Single Tube (Light Class)	+10% / -8%
Single Tube (Medium & Heavy Class)	+/- 10%
10 Tones lot (Light Class)	+/- 5%
10 Tones lot (Medium & Heavy Class)	+/- 7.5%