

MAXIMUM ALLOWABLE WORKING PRESSURE FOR TUBES

(in kg/sq.cm.)

FOR TOLERANCES OF UNTOLERANCED
DIMENSIONS DURING MANUFACTURE
REFER PLANT STD.NO TP 023 0299

SL.NO.	MATL CODE	SPECIFICATION	OUTER DIAMETER mm	THICKNESS mm	TEMPERATURE IN DEG C						
					300	325	350	375	400	425	450
1	15-045-001	SA179	21.30	2.11	206.07	203.39	196.88	189.03	164.38	143.29	126.03
2	15-484-102	SA192	51.00	3.20	125.47	123.84	119.87	115.09	100.08	87.24	76.73
3	15-184-104	SA192	51.00	4.00	159.51	157.43	152.39	146.31	127.23	110.91	97.55
4	15-484-105	SA192	51.00	4.50	181.37	179.01	173.28	166.37	144.68	126.12	110.92
5	15-484-111	SA192	63.50	3.20	99.46	98.17	95.02	91.23	79.34	69.16	60.83
6	15-184-112	SA192	63.50	4.00	126.00	124.36	120.38	115.58	100.50	87.61	77.06
7	15-484-114	SA192	63.50	4.80	153.26	151.26	146.42	140.58	122.25	106.56	93.73
8	15-184-125	SA192	76.10	4.00	103.98	102.62	99.34	95.38	82.94	72.30	63.59
9	15-484-128	SA192	76.10	4.50	117.79	116.26	112.54	108.05	93.96	81.91	72.04
10	15-484-130	SA192	76.10	5.60	148.87	146.93	142.23	136.56	118.75	103.52	91.05
11	15-185-061	SA209T1	38.00	5.60	380.70	380.70	380.70	380.70	373.64	363.07	356.01
12	15-485-113	SA209T1	38.10	6.60	461.50	461.50	461.50	461.50	452.95	440.13	431.58
13	15-185-069	SA209T1	44.50	4.50	247.79	247.79	247.79	247.79	243.20	236.32	231.73
14	15-185-095	SA209T1	54.00	4.50	200.24	200.24	200.24	200.24	196.53	190.96	187.25
15	15-485-102	SA209T1	57.00	8.00	359.61	359.61	359.61	359.61	352.95	342.96	336.29
16	15-185-111	SA209T1	63.50	5.60	213.03	213.03	213.03	213.03	209.09	203.17	199.22
17	15-186-005	SA210GRA1	14.00	2.00	401.10	401.10	397.70	356.90	302.17	255.93	213.13
18	15-186-023	SA210GRA1	31.80	2.90	241.49	241.49	239.45	214.88	181.93	154.09	128.32
19	15-486-025	SA210GRA1	31.80	3.60	307.23	307.23	304.62	273.37	231.45	196.03	163.25
20	15-486-028	SA210GRA1	31.80	4.50	396.69	396.69	393.33	352.98	298.85	253.12	210.79
21	15-186-029	SA210GRA1	31.80	5.00	448.99	448.99	445.19	399.51	338.25	286.49	238.58
22	15-486-244	SA210GRA1	32.00	5.00	445.67	445.67	441.89	396.56	335.74	284.37	236.81
23	15-786-091	SA210GRA1	38.10	3.00	205.69	205.69	203.95	183.03	154.96	131.25	109.30
24	15-186-041	SA210GRA1	38.10	3.20	220.66	220.66	218.79	196.35	166.23	140.80	117.25
25	15-186-043	SA210GRA1	38.10	3.25	224.43	224.43	222.53	199.70	169.07	143.21	119.26
26	15-186-045	SA210GRA1	38.10	3.60	251.12	251.12	248.99	223.45	189.18	160.24	133.44
27	15-486-234	SA210GRA1	38.10	4.00	282.30	282.30	279.91	251.19	212.67	180.13	150.01
28	15-486-053	SA210GRA1	38.10	4.50	322.31	322.31	319.58	286.79	242.81	205.66	171.27
29	15-486-242	SA210GRA1	38.10	5.30	388.87	388.87	385.58	346.02	292.95	248.13	206.64
30	15-486-231	SA210GRA1	38.10	5.60	414.68	414.68	411.16	368.98	312.39	264.60	220.35
31	15-486-233	SA210GRA1	38.10	6.00	449.83	449.83	446.02	400.26	338.88	287.03	239.03
32	15-186-061	SA210GRA1	44.50	3.20	186.47	186.47	184.89	165.92	140.47	118.98	99.08
33	15-486-062	SA210GRA1	44.50	4.00	237.69	237.69	235.67	211.50	179.06	151.66	126.30
34	15-486-063	SA210GRA1	44.50	4.50	270.74	270.74	268.45	240.91	203.96	172.76	143.87
35	15-486-071	SA210GRA1	44.50	5.00	304.63	304.63	302.05	271.06	229.49	194.38	161.87
36	15-486-066	SA210GRA1	44.50	6.30	396.90	396.90	393.54	353.16	299.00	253.25	210.90
37	15-486-125	SA210GRA1	44.50	7.21	465.31	465.31	461.37	414.04	350.54	296.91	247.26
38	15-486-067	SA210GRA1	44.50	8.00	527.47	527.47	523.00	469.35	397.37	336.57	280.28
39	15-786-192	SA210GRA1	51.00	3.00	150.41	150.41	149.14	133.84	113.31	95.98	79.93
40	15-186-241	SA210GRA1	51.00	3.20	161.11	161.11	159.75	143.36	121.37	102.80	85.61
41	15-786-302	SA210GRA1	51.00	3.25	163.80	163.80	162.41	145.75	123.40	104.52	87.04
42	15-186-243	SA210GRA1	51.00	3.60	182.78	182.78	181.23	162.64	137.70	116.63	97.12
43	15-186-082	SA210GRA1	51.00	4.00	204.82	204.82	203.08	182.25	154.30	130.69	108.83
44	15-786-058	SA210GRA1	51.00	4.20	215.98	215.98	214.15	192.18	162.71	137.81	114.76
45	15-486-083	SA210GRA1	51.00	4.50	232.90	232.90	230.92	207.23	175.45	148.61	123.75
46	15-486-095	SA210GRA1	51.00	5.00	261.59	261.59	259.37	232.76	197.07	166.91	139.00
47	15-486-084	SA210GRA1	51.00	7.10	389.22	389.22	385.92	346.33	293.22	248.35	206.82
48	15-486-110	SA210GRA1	57.00	8.00	392.91	392.91	389.58	349.62	296.00	250.71	208.78
49	15-186-223	SA210GRA1	60.30	6.00	265.92	265.92	263.67	236.62	200.33	169.68	141.30
50	15-486-123	SA210GRA1	63.50	5.20	214.65	214.65	212.83	191.00	161.71	136.97	114.06
51	15-186-116	SA210GRA1	63.50	5.60	232.76	232.76	230.79	207.11	175.35	148.52	123.68
52	15-486-119	SA210GRA1	63.50	8.80	387.17	387.17	383.89	344.50	291.67	247.04	205.73
53	15-186-124	SA210GRA1	76.10	7.10	247.64	247.64	245.54	220.35	186.56	158.01	131.59

SL.NO.	MATL CODE	SPECIFICATION	OUTER DIAMETER mm	THICKNESS mm	TEMPERATURE IN DEG C						
					300	325	350	375	400	425	450
54	15-182-001	SA106GRB	21.30	2.77	359.76	359.76	356.71	320.11	271.02	229.55	191.16
55	15-082-002	SA106GRB	21.30	3.73	510.91	510.91	506.58	454.61	384.89	326.00	271.48
56	15-182-003	SA106GRB	21.30	4.78	696.34	696.34	690.44	619.61	524.58	444.32	370.02
57	15-182-004	SA106GRB	21.30	7.47	1299.88	1299.88	1288.86	1156.63	979.26	829.42	690.72
58	15-182-007	SA106GRB	26.70	3.91	412.89	412.89	409.39	367.39	311.05	263.46	219.40
59	15-182-008	SA106GRB	26.70	5.56	632.96	632.96	627.59	563.21	476.83	403.88	336.34
60	15-182-009	SA106GRB	26.70	7.82	996.80	996.80	988.35	886.96	750.94	636.04	529.67
61	15-182-010	SA106GRB	33.40	3.38	270.96	270.96	268.67	241.10	204.13	172.90	143.98
62	15-182-011	SA106GRB	33.40	4.55	379.55	379.55	376.33	337.73	285.93	242.18	201.68
63	15-182-012	SA106GRB	33.40	6.35	564.95	564.95	560.16	502.69	425.60	360.48	300.20
64	15-182-013	SA106GRB	33.40	9.09	899.88	899.88	892.25	800.71	677.92	574.19	478.17
65	15-182-020	SA106GRB	48.30	3.68	198.48	198.48	196.80	176.61	149.53	126.65	105.47
66	15-182-021	SA106GRB	48.30	5.08	282.87	282.87	280.47	251.70	213.10	180.49	150.31
67	15-182-022	SA106GRB	48.30	7.14	417.47	417.47	413.93	371.47	314.50	266.38	221.83
68	15-182-023	SA106GRB	48.30	10.16	641.09	641.09	635.65	570.44	482.96	409.06	340.66
69	15-182-030	SA106GRB	60.30	3.91	166.87	166.87	165.46	148.48	125.71	106.48	88.67
70	15-182-032	SA106GRB	60.30	5.54	243.47	243.47	241.41	216.64	183.42	155.35	129.37
71	15-182-031	SA106GRB	60.30	8.74	407.95	407.95	404.49	362.99	307.32	260.30	216.77
72	15-182-033	SA106GRB	60.30	11.07	541.16	541.16	536.57	481.52	407.68	345.30	287.55
73	15-182-034	SA106GRB	60.30	12.50	629.34	629.34	624.01	559.99	474.11	401.57	334.41
74	15-182-042	SA106GRB	73.00	5.16	183.05	183.05	181.50	162.88	137.90	116.80	97.27
75	15-182-040	SA106GRB	73.00	7.01	255.65	255.65	253.48	227.48	192.59	163.12	135.84
76	15-182-041	SA106GRB	73.00	9.53	361.35	361.35	358.29	321.53	272.22	230.57	192.01
77	15-182-045	SA106GRB	73.00	14.02	572.07	572.07	567.22	509.03	430.96	365.02	303.98
78	15-082-140	SA106GRB	88.90	6.30	183.55	183.55	182.00	163.33	138.28	117.12	97.54
79	15-183-006	SA106GRC	21.30	3.73	597.48	597.48	584.49	532.56	437.28	362.81	290.08
80	15-183-001	SA106GRC	21.30	4.78	814.34	814.34	796.63	725.85	596.00	494.49	395.36
81	15-183-026	SA106GRC	26.70	7.82	1165.71	1165.71	1140.36	1039.05	853.16	707.86	565.96
82	15-983-418	SA106GRC	33.40	4.55	443.87	443.87	434.21	395.64	324.86	269.53	215.50
83	15-983-236	SA106GRC	33.40	6.35	660.68	660.68	646.31	588.90	483.54	401.19	320.76
84	15-583-375	SA106GRC	33.40	9.09	1052.36	1052.36	1029.48	938.02	770.20	639.03	510.92
85	15-183-027	SA106GRC	42.20	4.85	365.46	365.46	357.51	325.75	267.47	221.92	177.43
86	15-183-003	SA106GRC	48.30	3.68	232.12	232.12	227.07	206.89	169.88	140.95	112.69
87	15-983-421	SA106GRC	48.30	5.08	330.80	330.80	323.61	294.86	242.11	200.87	160.60
88	15-983-414	SA106GRC	48.30	10.15	748.79	748.79	732.50	667.43	548.02	454.69	363.54
89	15-183-005	SA106GRC	60.30	5.54	284.73	284.73	278.54	253.79	208.39	172.90	138.24
90	15-183-002	SA106GRC	60.30	8.74	477.07	477.07	466.70	425.24	349.16	289.69	231.62
91	15-183-004	SA106GRC	60.30	11.07	632.85	632.85	619.09	564.09	463.17	384.29	307.25
92	15-983-206	SA106GRC	60.30	12.50	735.98	735.98	719.98	656.01	538.65	446.91	357.32
93	15-183-023	SA106GRC	73.00	5.16	214.07	214.07	209.41	190.81	156.67	129.99	103.93
94	15-183-021	SA106GRC	73.00	7.01	298.97	298.97	292.47	266.48	218.81	181.54	145.15
95	15-183-022	SA106GRC	73.00	9.53	422.58	422.58	413.39	376.67	309.28	256.61	205.16