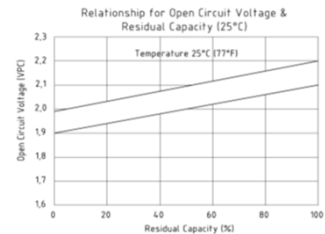
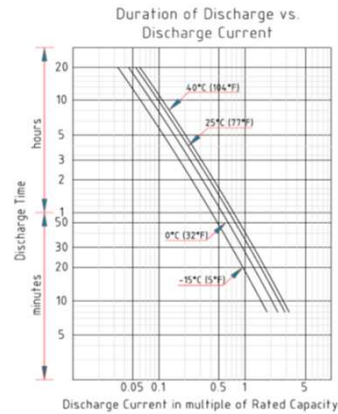
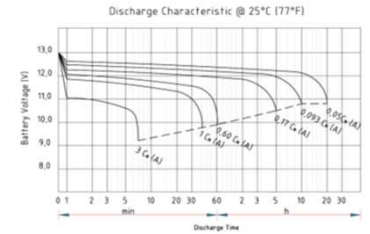
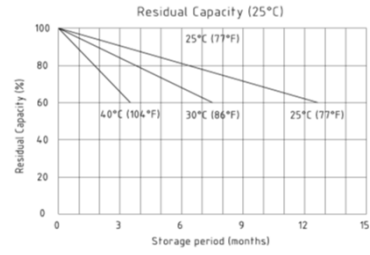
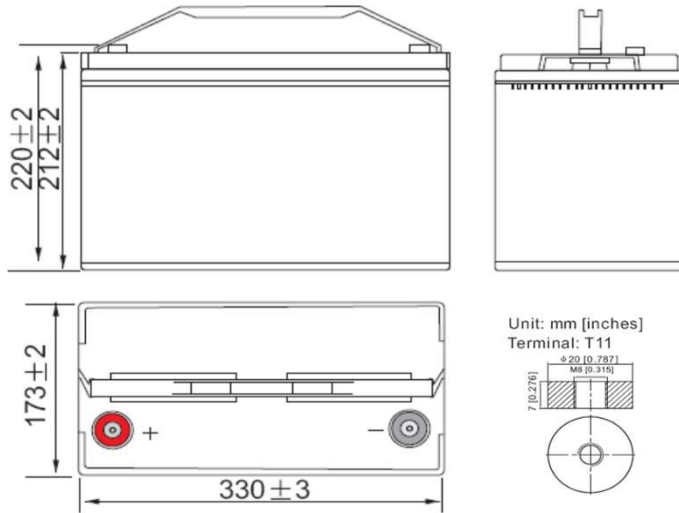


**GENERAL PURPOSE BATTERIES**



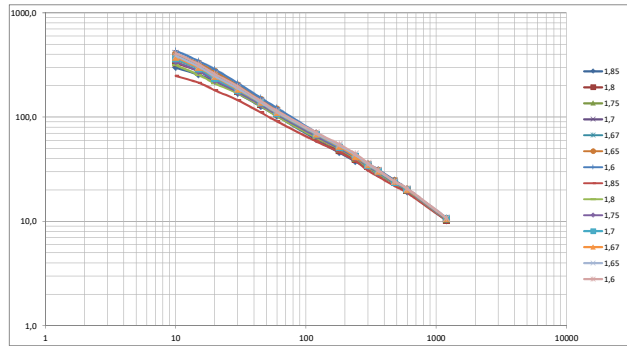
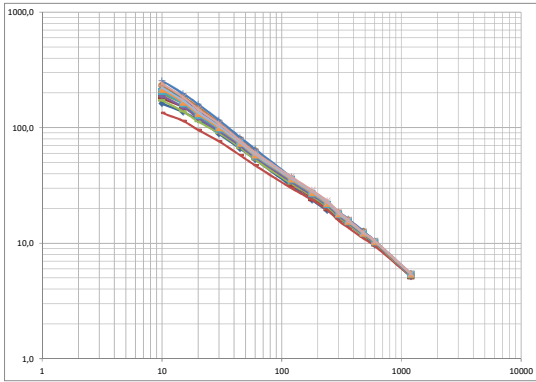
Specification	
Nominal Voltage	12 V
Nominal Capacity (20 Hr)	100Ah
Dimension	Length 330±3 mm (12,99 inches)
	Width 173±2 mm (6,81 inches)
	Container Height 212±2 mm (8,35 inches)
	Total Height (with terminal) 220±2 mm (8,66 inches)
Approx Weight	Approx 29,6 kg (65,25 lbs)
Terminal	T11
Container Material	ABS
Rated Capacity	104 Ah / 5,2A (20 hr, 1,80 V/cell, 25°C/77°F)
	100 Ah / 10A (10 hr, 1,80 V/cell, 25°C/77°F)
	88 Ah / 17,6A (5 hr, 1,75 V/cell, 25°C/77°F)
	76,2 Ah / 25,4A (3 hr, 1,75 V/cell, 25°C/77°F)
	65,1 Ah / 65,1A (1 hr, 1,60 V/cell, 25°C/77°F)
Max Discharge Current	1.200,0 A (5 s)
Internal Resistance	Approx 4,9 mΩ
Operating Temperat. Range	Discharge : -15÷50°C (5÷122°F)
	Charge : 0÷40°C (32÷104°F)
	Storage : -15÷40°C (5÷104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)
Cycle Use	Initial Charging Current less than 20 A Voltage 14,4÷15,0V at 25°C (77°F) Temperature Coefficient -30mV/°C
Standby Use	No limit on Initial Charging Current Voltage 13,5÷13,8 V at 25°C (77°F) Temperature Coefficient - 20mV/°C
Capacity affected by Temperature	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%
Self Discharge	batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required.
	For higher temperatures the time interval will be shorter.

Constant Current Discharge (Amperes) at 25°C (77°F)														
F.V / Time	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1,85V / cell	161,4	136,4	117,0	88,4	65,7	53,0	31,3	23,5	19,2	16,4	14,4	11,6	9,65	5,13
1,80V / cell	180,0	150,8	126,6	94,2	69,6	55,9	33,1	24,6	20,2	17,2	15,0	12,0	10,00	5,20
1,75V / cell	197,4	162,0	134,7	99,0	72,7	58,0	34,4	25,4	20,7	17,6	15,3	12,2	10,10	5,29
1,70V / cell	214,8	174,4	143,4	104,6	76,0	60,4	35,3	26,0	21,2	17,9	15,6	12,4	10,20	5,34
1,67V / cell	223,5	180,0	147,5	107,3	77,6	61,7	35,8	26,4	21,5	18,1	15,8	12,5	10,25	5,37
1,65V / cell	232,2	185,6	151,5	110,0	79,2	63,0	36,3	26,7	21,7	18,3	15,9	12,6	10,30	5,40
1,60V / cell	254,4	197,2	159,9	115,8	82,4	65,1	37,5	27,6	22,2	18,6	16,2	12,7	10,50	5,45

Constant Power Discharge (Watts) at 25°C (77°F)														
F.V / Time	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1,85V / cell	321,05	272,32	234,50	178,10	132,59	106,54	62,44	46,52	37,95	32,46	28,34	22,96	19,13	10,15
1,80V / cell	360,31	301,85	253,74	189,20	140,73	112,88	66,10	48,89	39,87	34,00	29,64	23,81	19,86	10,29
1,75V / cell	396,62	325,53	271,34	199,68	147,19	117,78	68,84	50,67	40,98	34,85	30,21	24,17	19,99	10,45
1,70V / cell	430,46	351,32	291,12	212,38	154,87	123,34	70,88	51,90	42,07	35,46	30,80	24,28	20,22	10,55
1,67V / cell	451,70	364,30	294,90	218,90	158,50	126,00	72,10	52,80	42,40	35,80	30,90	24,40	20,40	10,60
1,65V / cell	469,33	377,09	309,36	223,91	161,29	128,63	72,97	53,35	43,03	36,06	31,27	24,85	20,45	10,65
1,60V / cell	507,21	397,56	325,58	235,27	167,58	132,68	75,22	54,97	43,96	36,76	31,87	25,11	20,68	10,74

Constant Current Discharge (Amperes) at 25°C (77°F)														
	10	15	20	30	45	60	120	180	240	300	360	480	600	1200
1.85	161.4	136.4	117.0	88.4	65.7	53.0	31.3	23.5	19.2	16.4	14.4	11.6	9.65	5.13
1.8	180.0	150.8	126.6	94.2	69.6	55.9	33.1	24.6	20.2	17.2	15.0	12.0	10.00	5.20
1.75	197.4	162.0	134.7	99.0	72.7	58.0	34.4	25.4	20.7	17.6	15.3	12.2	10.10	5.29
1.7	214.8	174.4	143.4	104.6	76.0	60.4	35.3	26.0	21.2	17.9	15.6	12.4	10.20	5.34
1.67	223.5	180.0	147.5	107.3	77.6	61.7	35.8	26.4	21.5	18.1	15.8	12.5	10.25	5.37
1.65	232.2	185.6	151.5	110.0	79.2	63.0	36.3	26.7	21.7	18.3	15.9	12.6	10.30	5.40
1.6	254.4	197.2	159.9	115.8	82.4	65.1	37.5	27.6	22.2	18.6	16.2	12.7	10.50	5.45
1.85	134.6	114.4	95.7	76.1	57.6	47.1	30.0	23.7	19.4	15.6	13.6	11.0	9.44	5.15
1.8	171.9	138.3	113.1	89.8	67.0	52.8	32.8	25.6	20.7	16.8	14.6	11.7	10.00	5.20
1.75	188.9	151.0	121.7	93.2	69.5	55.3	34.0	26.0	21.2	17.2	15.0	11.9	10.10	5.25
1.7	205.9	161.2	127.9	97.0	72.3	57.0	35.3	26.8	21.7	17.7	15.3	12.1	10.20	5.35
1.67	214.1	166.3	131.9	99.7	73.2	58.0	35.8	27.4	22.1	17.9	15.5	12.2	10.30	5.39
1.65	222.2	171.4	135.9	102.3	74.1	58.9	36.3	27.9	22.5	18.1	15.6	12.3	10.40	5.42
1.6	241.3	183.4	144.8	108.0	77.2	61.0	37.6	28.7	23.2	18.7	16.0	12.4	10.50	5.45

Constant Power Discharge (Watts) at 25°C (77°F)														
	10	15	20	30	45	60	120	180	240	300	360	480	600	1200
1.85	298.1	254.5	220.5	168.5	126.4	102.2	60.8	45.7	37.5	32.2	28.2	22.9	19.1	10.15
1.8	328.6	277.6	235.1	176.8	132.7	107.2	63.8	47.7	39.2	33.6	29.4	23.7	19.8	10.29
1.75	354.6	294.6	247.8	184.3	137.3	110.8	66.0	49.1	40.1	34.3	29.9	24.0	19.9	10.45
1.7	377.1	312.7	261.8	193.6	143.0	115.0	67.6	50.1	41.0	34.8	30.4	24.3	20.1	10.54
1.67	390.5	321.5	268.2	197.8	145.4	117.1	68.4	50.7	41.4	35.05	30.6	24.45	20.2	10.59
1.65	403.9	330.2	274.5	201.9	147.7	119.1	69.2	51.3	41.8	35.3	30.8	24.6	20.3	10.64
1.6	432.4	345.1	286.6	211.1	152.9	122.4	71.1	52.7	42.6	35.9	31.3	24.8	20.5	10.73
1.85	246.6	213.5	180.4	145.0	110.7	90.9	58.3	46.3	37.9	30.6	26.8	21.8	18.7	10.2
1.8	313.9	254.5	210.1	168.5	127.7	101.3	63.2	49.5	40.3	32.8	28.6	23.1	19.8	10.3
1.75	339.3	274.6	223.9	173.5	131.3	105.5	65.3	50.2	41.0	33.5	29.3	23.4	19.9	10.4
1.7	361.5	289.1	233.5	179.5	136.0	108.5	67.8	51.5	42.0	34.3	29.8	23.7	20.1	10.6
1.67	375.1	298.1	244.2	184.4	138.1	110.3	68.8	52.5	41.7	34.9	30.2	24.1	20.3	10.6
1.65	386.5	305.0	246.2	187.8	138.1	111.3	69.3	53.5	43.3	35.1	30.4	24.0	20.5	10.7
1.6	410.1	320.8	259.4	196.9	143.2	114.7	71.2	54.9	44.5	36.2	31.0	24.2	20.7	10.8



Constant Power Discharge (Watts) at 25°C (77°F)															
	5	10	15	20	30	45	60	120	180	240	300	360	480	600	1200
1.85	474	381.80	298.10	254.50	220.50	168.50	126.40	102.20	60.80	45.70	37.50	32.20	28.20	22.90	10.15
1.8	552	445.00	328.60	277.60	235.10	176.80	132.70	107.20	63.80	47.70	39.20	33.60	29.40	23.70	10.29
1.75	612	492.90	354.60	294.60	247.80	184.30	137.30	110.80	66.00	49.10	40.10	34.30	29.90	24.00	10.45
1.7	679	547.40	377.10	312.70	261.80	193.60	143.00	115.00	67.60	50.10	41.00	34.80	30.40	24.30	10.54
1.65	750	604.80	403.90	330.20	274.50	201.90	147.70	119.10	69.20	51.30	41.80	35.30	30.80	24.60	10.64
1.6	834	672.40	432.40	345.10	286.60	211.10	152.90	122.40	71.10	52.70	42.60	35.90	31.30	24.80	10.73

Constant Current Discharge (Amperes) at 25°C (77°F)

10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
26.90	34.10	39.00	44.20	49.28	53.00	62.60	70.50	76.80	82.00	86.40	92.80	96.50	102.60
30.00	37.70	42.20	47.10	52.20	55.90	66.20	73.80	80.80	86.00	90.00	96.00	100.00	104.00
32.90	40.50	44.90	49.50	54.53	58.00	68.80	76.20	82.80	88.00	91.80	97.60	101.00	105.80
35.80	43.60	47.80	52.30	57.00	60.40	70.60	78.00	84.80	89.50	93.60	99.20	102.00	106.80
37.25	45.00	49.15	53.65	58.20	61.70	71.60	79.00	85.80	90.50	94.50	100.00	102.50	107.40
38.70	46.40	50.50	55.00	59.40	63.00	72.60	80.10	86.80	91.50	95.40	100.80	103.00	108.00
42.40	49.30	53.30	57.90	61.80	65.10	75.00	82.80	88.80	93.00	97.20	101.60	105.00	109.00

Constant Current Discharge (Amperes) at 25°C (77°F)

10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
28%	35%	40%	46%	51%	55%	65%	73%	80%	85%	90%	96%	100%	106%
30%	38%	42%	47%	52%	56%	66%	74%	81%	86%	90%	96%	100%	104%
33%	40%	44%	49%	54%	57%	68%	75%	82%	87%	91%	97%	100%	105%
35%	43%	47%	51%	56%	59%	69%	76%	83%	88%	92%	97%	100%	105%
36%	44%	48%	52%	57%	60%	70%	77%	84%	88%	92%	98%	100%	105%
38%	45%	49%	53%	58%	61%	70%	78%	84%	89%	93%	98%	100%	105%
40%	47%	51%	55%	59%	62%	71%	79%	85%	89%	93%	97%	100%	104%

Constant Power Discharge (Watts) at 25°C (77°F)

10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
53.51	68.08	78.17	89.05	99.44	106.54	124.88	139.56	151.80	162.30	170.04	183.68	191.30	203.00
60.05	75.46	84.58	94.60	105.55	112.88	132.20	146.67	159.48	170.00	177.84	190.48	198.60	205.80
66.10	81.38	90.45	99.84	110.39	117.78	137.68	152.01	163.92	174.25	181.26	193.36	199.90	209.00
71.74	87.83	97.04	106.19	116.15	123.34	141.76	155.70	168.28	177.30	184.80	194.24	202.20	211.00
75.28	91.08	98.30	109.45	118.88	126.00	144.20	158.40	169.60	179.00	185.40	195.20	204.00	212.00
78.22	94.27	103.12	111.96	120.97	128.63	145.94	160.05	172.12	180.30	187.62	198.80	204.50	213.00
84.54	99.39	108.53	117.64	125.69	132.68	150.44	164.91	175.84	183.80	191.22	200.88	206.80	214.80

Constant Power Discharge (Watts) at 25°C (77°F)

10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
28%	36%	41%	47%	52%	56%	65%	73%	79%	85%	89%	96%	100%	106%
30%	38%	43%	48%	53%	57%	67%	74%	80%	86%	90%	96%	100%	104%
33%	41%	45%	50%	55%	59%	69%	76%	82%	87%	91%	97%	100%	105%
35%	43%	48%	53%	57%	61%	70%	77%	83%	88%	91%	96%	100%	104%
37%	45%	48%	54%	58%	62%	71%	78%	83%	88%	91%	96%	100%	104%
38%	46%	50%	55%	59%	63%	71%	78%	84%	88%	92%	97%	100%	104%
41%	48%	52%	57%	61%	64%	73%	80%	85%	89%	92%	97%	100%	104%

Constant Current Discharge (Amperes) at 25°C (77°F)													
10	15	20	30	45	60	120	180	240	300	360	480	1200	
26.90	34.10	39.00	44.20	49.28	53.00	62.60	70.50	76.80	82.00	86.40	92.80	96.50	102.60
30.00	37.70	42.20	47.10	52.20	55.90	66.20	73.80	80.80	86.00	90.00	96.00	100.00	104.00
32.90	40.60	44.80	49.50	54.53	58.00	68.80	76.20	82.80	88.00	91.80	97.60	101.00	105.80
35.80	43.60	47.80	52.30	57.00	60.40	70.60	78.00	84.80	89.50	93.60	99.20	102.00	106.80
37.25	45.00	49.15	53.65	58.20	61.70	71.60	79.05	85.80	90.50	94.50	100.00	102.50	107.40
38.70	46.40	50.50	55.00	59.40	63.00	72.60	80.10	86.80	91.50	95.40	100.80	103.00	108.00
42.40	49.30	53.30	57.90	61.80	65.10	75.00	82.80	88.80	93.00	97.20	101.60	105.00	109.00
22.43	28.60	31.90	38.05	43.20	47.10	60.00	71.10	77.60	78.00	81.60	88.00	94.40	103.00
28.65	34.58	37.70	44.90	50.25	52.80	65.60	76.80	82.80	84.00	87.60	93.60	100.00	104.00
31.48	37.75	40.57	46.60	52.13	55.30	68.00	78.00	84.80	86.00	90.00	95.20	101.00	105.00
34.32	40.30	42.63	48.50	54.23	57.00	70.60	80.40	86.80	88.50	91.80	96.80	102.00	107.00
35.68	41.58	43.97	49.83	54.90	57.95	71.60	82.05	88.40	89.50	92.70	97.60	103.00	107.70
37.03	42.85	45.30	51.15	55.58	58.90	72.60	83.70	90.00	90.50	93.60	98.40	104.00	108.40
40.22	45.85	48.27	54.00	57.90	61.00	75.20	86.10	92.80	93.50	96.00	99.20	105.00	109.00

Constant Current Discharge (Amperes) at 25°C (77°F)													
10	15	20	30	45	60	120	180	240	300	360	480	600	1200
28%	35%	40%	46%	51%	55%	65%	73%	80%	85%	90%	96%	100%	106%
30%	38%	42%	47%	52%	56%	66%	74%	81%	86%	90%	96%	100%	104%
33%	40%	44%	49%	54%	57%	68%	75%	82%	87%	91%	97%	100%	105%
35%	43%	47%	51%	56%	59%	69%	76%	83%	88%	92%	97%	100%	105%
36%	44%	48%	52%	57%	60%	70%	77%	84%	88%	92%	98%	100%	105%
38%	45%	49%	53%	58%	61%	70%	78%	84%	89%	93%	98%	100%	105%
40%	47%	51%	55%	59%	62%	71%	79%	85%	89%	93%	97%	100%	104%
24%	30%	34%	40%	46%	50%	64%	75%	82%	83%	86%	93%	100%	109%
29%	35%	38%	45%	50%	53%	66%	77%	83%	84%	88%	94%	100%	104%
31%	37%	40%	46%	52%	55%	67%	77%	84%	85%	89%	94%	100%	104%
34%	40%	42%	48%	53%	56%	69%	79%	85%	87%	90%	95%	100%	105%
35%	40%	43%	48%	53%	56%	70%	80%	86%	87%	90%	95%	100%	105%
36%	41%	44%	49%	53%	57%	70%	80%	87%	87%	90%	95%	100%	104%
38%	44%	46%	51%	55%	58%	72%	82%	88%	89%	91%	94%	100%	104%

Constant Power Discharge (Watts) at 25°C (77°F)													
10	15	20	30	45	60	120	180	240	300	360	480	600	1200
49.68	63.63	73.50	84.25	94.80	102.20	121.60	137.10	150.00	161.00	169.20	183.20	191.00	203.00
54.77	69.40	78.37	88.40	98.53	107.20	127.60	143.10	156.80	168.00	176.40	189.60	198.00	205.80
59.10	73.65	82.60	92.15	102.98	110.80	132.00	147.30	160.40	171.50	179.40	192.00	199.00	209.00
62.85	78.18	87.27	96.80	107.25	115.00	135.20	150.30	164.00	174.00	182.40	194.40	201.00	210.80
65.08	80.36	89.38	98.88	109.01	117.05	136.80	152.10	165.60	175.25	183.60	195.60	202.00	211.80
67.32	82.55	91.50	100.95	110.78	119.10	138.40	153.90	167.20	176.50	184.80	196.80	203.00	212.80
72.07	86.28	95.53	105.55	114.68	122.40	142.20	158.10	170.40	179.50	187.80	198.40	205.00	214.60
41.43	53.38	60.13	72.50	83.03	90.90	116.60	138.90	151.60	153.00	160.80	174.40	187.00	204.00
52.32	63.63	70.03	84.25	95.78	101.30	126.40	148.50	161.20	164.00	171.60	184.80	198.00	206.00
56.55	68.65	74.63	86.75	98.48	105.50	130.60	150.60	164.00	167.50	175.60	187.20	199.00	208.00
60.25	72.28	77.83	89.75	102.00	108.50	135.60	154.50	168.00	171.50	178.80	189.60	201.00	212.00
62.52	74.52	81.41	92.22	103.56	110.29	137.56	157.44	166.70	174.25	181.52	193.07	202.70	212.36
64.42	76.25	82.07	93.90	103.58	111.30	138.60	160.50	173.20	175.50	182.40	192.00	205.00	214.00
68.35	80.20	86.47	98.45	107.40	114.70	142.40	164.70	178.00	181.00	186.00	193.60	207.00	216.00

Constant Power Discharge (Watts) at 25°C (77°F)													
10	15	20	30	45	60	120	180	240	300	360	480	600	1200
26%	33%	38%	44%	50%	54%	64%	72%	79%	84%	89%	96%	100%	106%
28%	35%	40%	45%	50%	54%	64%	72%	79%	85%	89%	96%	100%	104%
30%	37%	42%	46%	52%	56%	66%	74%	81%	86%	90%	96%	100%	105%
31%	39%	43%	48%	53%	57%	67%	75%	82%	87%	91%	97%	100%	105%
32%	40%	44%	49%	54%	58%	68%	76%	83%	87%	91%	97%	100%	105%
33%	41%	45%	50%	55%	59%	69%	76%	83%	87%	91%	97%	100%	105%
35%	42%	47%	51%	56%	60%	69%	77%	83%	88%	92%	97%	100%	105%
22%	29%	32%	39%	44%	49%	62%	74%	81%	82%	86%	93%	100%	109%
26%	32%	35%	43%	48%	51%	64%	75%	81%	83%	87%	93%	100%	104%
28%	34%	38%	44%	49%	53%	66%	76%	82%	84%	88%	94%	100%	105%
30%	36%	39%	45%	51%	54%	67%	77%	84%	85%	89%	94%	100%	105%
31%	37%	40%	45%	51%	54%	68%	78%	85%	86%	89%	95%	100%	105%
31%	37%	40%	46%	51%	54%	68%	78%	84%	86%	89%	94%	100%	104%
33%	39%	42%	48%	52%	55%	69%	80%	86%	87%	90%	94%	100%	104%