



**SPECIFICATION**

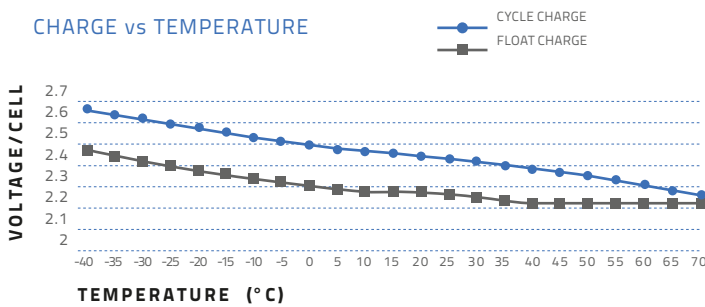
Nominal Voltage	12V		
Rated Capacity (10 hour rate)	180 AH		
Dimension	Total Height (top of terminal)	320 mm	12.60"
	Height	320 mm	12.60"
	Length	546 mm	21.50"
	Width	125 mm	4.92"
Weight	Approximately 51.0 kg / 112.33 lbs		
Capacity 25°C	120 hour rate (1.7A )	204 AH	
	20 hour rate (9.7A)	194 AH	
	10 hour rate (18A)	180 AH	
Internal Resistance	Fully charged Battery (25°C)	≈<6.0mΩ	
Self-Discharge 25°C	Capacity after 3 month storage	95%	
	Capacity after 6 month storage	85%	
	Capacity after 12 month storage	80%	

**DISCHARGE CURRENT AND END VOLTAGE**

Discharge current (A)	End voltage (V)
0.05C or below or Intermittent discharge	11.4
0.05C of current close to it	11.1
0.1C of current close to it	10.8
0.2C of current close to it	10.5
From 0.2C to 0.5C	10.2
From 0.5C to 1C	9.6
From 1C to 3C	9.0
Current in excess of 3C	7.8

Max Discharge Current 25°C	1800A (5S)	
Terminal	Standard	F8
	Optional	
Charging (Constant Voltage)	Cycle	Initial Charging Current 54A or small 14.4V ~14.67 (25°C)
	Float	13.5V ~13.6V (25°C)

**CHARGE vs TEMPERATURE**



**CHARGE vs TEMPERATURE CHART**

temperature	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.27
Float Charge	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23	2.23	2.23	2.23	2.23

**CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES (25°C)**

End voltage per cell	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	661	350	211	154	124	71.1	51.6	40.5	34.5	29.3	22.4	18.6	15.6	10.1	8.31
1.67V	614	338	208	153	124	70.8	50.7	40.3	34.0	29.1	22.3	18.4	15.6	10.1	8.28
1.70V	608	333	206	151	123	70.1	50.4	40.1	33.5	28.8	22.3	18.4	15.6	10.1	8.27
1.75V	557	322	204	150	121	68.8	50.1	39.6	33.2	28.6	22.2	18.2	15.5	10.0	8.26
1.80V	499	302	196	146	118	67.7	49.9	39.4	32.8	28.3	22.1	18.0	15.4	9.73	8.24
1.83V	477	277	192	140	112	67.1	48.0	37.8	32.0	27.3	21.6	17.3	14.8	9.62	8.13
1.85V	447	268	180	135	109	64.4	46.7	37.2	31.2	26.4	21.3	17.1	14.6	9.52	8.06

**DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL (25°C)**

End voltage per cell	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	1104	614	395	288	232	134	98.1	77.7	65.6	56.4	43.5	36.0	30.3	20.2	16.5
1.67V	1051	604	379	286	231	134	96.9	77.6	65.6	56.3	43.5	35.9	30.3	20.2	16.5
1.70V	1044	600	378	286	230	133	96.3	77.3	64.6	55.9	43.2	35.6	30.0	20.1	16.5
1.75V	973	593	377	286	229	132	95.3	77.2	64.4	55.4	43.0	35.3	30.0	20.1	16.4
1.80V	893	563	371	281	228	132	94.0	77.0	64.0	55.4	42.9	35.2	30.0	19.6	16.4
1.83V	861	517	368	273	218	131	92.5	74.4	63.3	53.7	42.9	34.1	29.4	19.4	16.3
1.85V	798	506	342	262	212	128	91.0	73.4	61.5	52.6	41.2	33.8	28.9	19.1	16.2

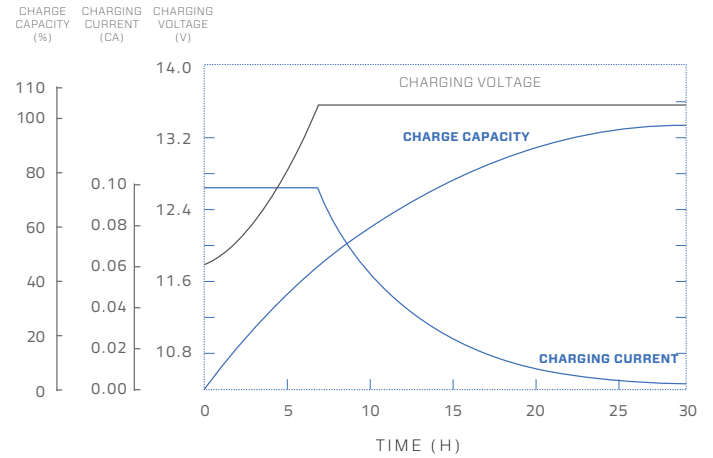
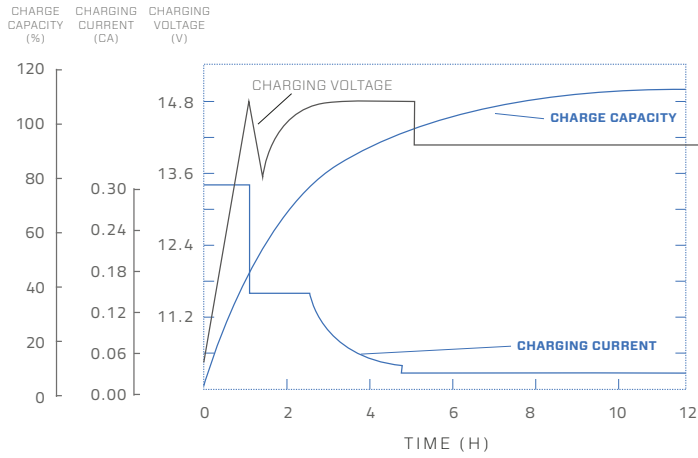


**CYCLE CHARGE CHARACTERISTIC (25°C)**

**FLOATING CHARGE CHARACTERISTIC (25°C)**

REGULAR CYCLE CHARGE CHARACTERISTICS 77°F (25°C)

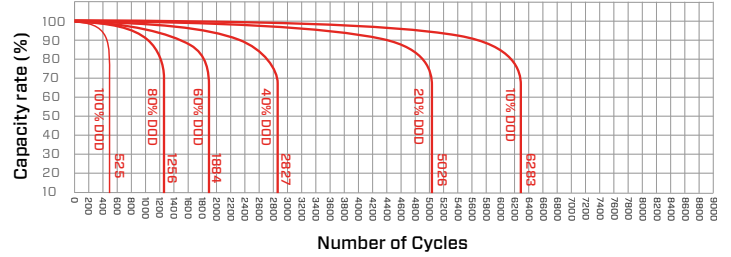
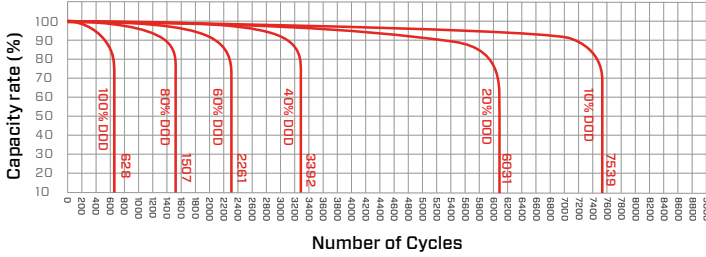
FLOATING CHARGE CHARACTERISTICS 77°F (25°C)



**CYCLE LIFE CURVE GRAPH**

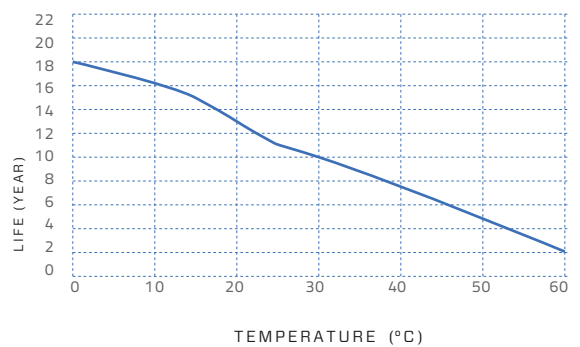
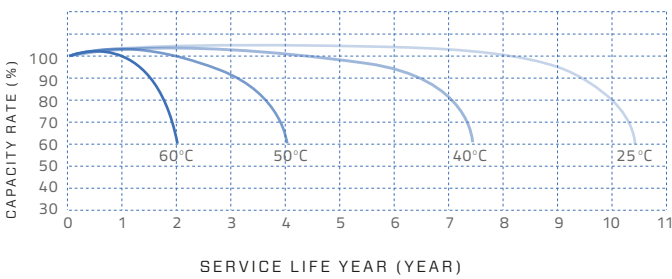
Cycle life curve graph (25°C) 12V

Cycle life curve graph (40°C) 12V

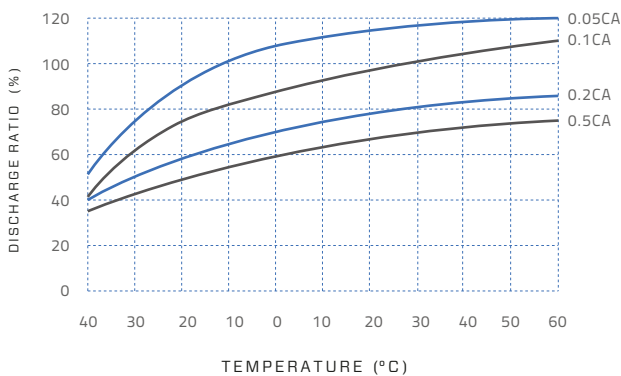


**TEMPERATURE & FLOAT SERVICE LIFE**

**FLOAT SERVICE LIFE CURVE GRAPH**



**TEMPERATURE & DISCHARGE CAPACITY**



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