

the power of tomorrow

CLEAN ENERGY DEFINES THE WORLD THAT WE LIVE IN TODAY AND TOMORROW.
LEAD CRYSTAL® TECHNOLOGY CREATES POWER THAT IS CLEAN SAFE AND
HIGH PERFORMING FOR A BETTER FUTURE

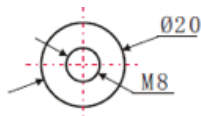
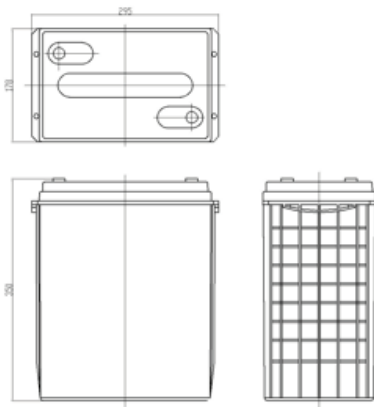
**LEAD
CRYSTAL®**
BATTERIES

POWERED BY
Betta Batteries

LEAD CRYSTAL[®] BATTERIES

POWERED BY

Betta Batteries

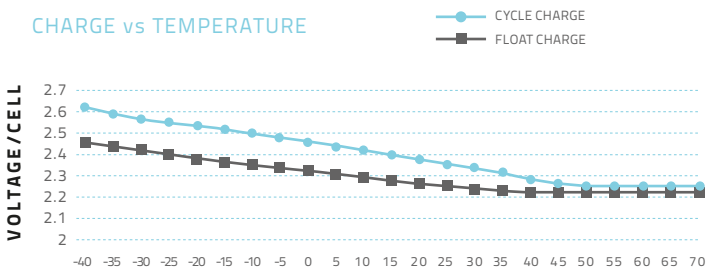


INCH = MM

0.787 20
0.315 8
0.197 5



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	2.61	2.59	2.57	2.55	2.53	2.51	2.49	2.47	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.27	2.25	2.25	2.25	2.25	2.25	2.25
Float Charge	2.45	2.43	2.42	2.40	2.39	2.37	2.36	2.34	2.33	2.31	2.30	2.28	2.27	2.25	2.24	2.22	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21

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	811	517	341	257	177	119	90.0	71.6	60.0	54.8	41.3	31.5	26.6	16.6	13.9
1.67V	698	469	316	243	175	117	88.8	70.1	58.5	52.5	39.8	30.9	26.6	16.6	13.9
1.70V	667	455	306	240	173	116	88.4	68.6	57.8	50.3	38.6	30.6	26.6	16.6	13.9
1.75V	606	425	294	231	172	114	87.3	67.5	56.6	48.4	37.5	30.3	26.3	16.6	13.8
1.80V	536	390	283	222	171	113	84.0	66.3	55.5	48.0	36.6	30.0	25.7	16.5	13.8
1.83V	468	356	261	207	167	111	81.8	63.6	54.4	46.5	35.4	29.1	25.1	16.4	13.4
1.85V	400	323	240	191	162	110	78.8	61.2	53.3	45.0	34.2	28.3	24.3	16.4	13.0

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	1336	900	617	470	327	237	167	135	115	101	76.5	62.4	52.2	32.4	27.2
1.67V	1194	838	575	447	327	230	167	135	111	99.9	75.0	60.9	52.2	32.4	27.2
1.70V	1156	819	560	443	326	224	163	134	109	99.3	74.7	60.3	52.2	32.4	27.2
1.75V	1066	770	541	429	324	216	160	132	106	97.8	73.2	59.7	52.2	32.4	27.1
1.80V	968	707	523	418	323	209	159	129	104	96.3	72.0	59.1	50.7	32.1	27.1
1.83V	853	653	489	391	322	202	158	125	100	93.6	69.6	57.6	49.5	32.1	26.4
1.85V	740	601	455	365	321	194	156	121	96.6	90.9	67.2	56.1	48.3	31.8	25.7

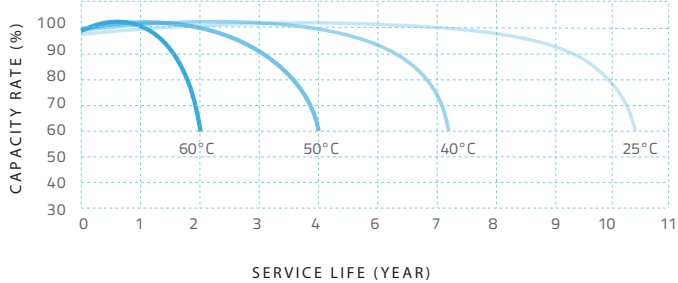
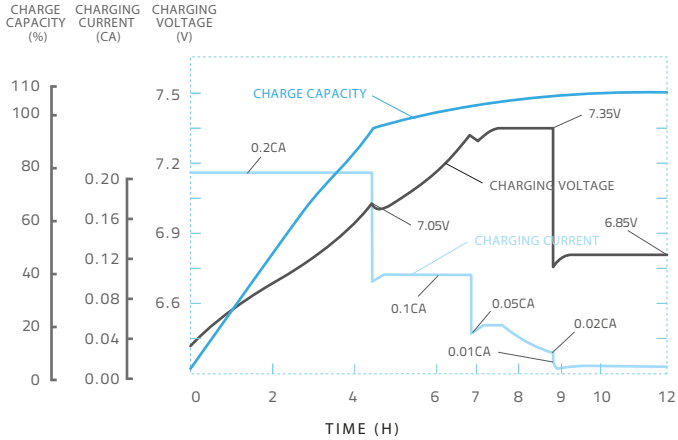
SPECIFICATION

Nominal Voltage	6V		
Rated Capacity (3 hour rate)	265 AH		
Dimension	Total Height (top of terminal)	345 mm	13.58"
	Height	345 mm	13.58"
	Length	295 mm	11.61"
	Width	178 mm	7.01"
Weight	Approximately 46.5 kg / 101.41 lbs		
Capacity 25°C	10 hour rate (30A)	300 AH	
	5 hour rate (57A)	285 AH	
	2 hour rate (116A)	232 AH	
Internal Resistance	Fully charged Battery (25°C)	=<1.0mΩ	
Self-Dis-charge 25°C	Capacity after 3 month storage	95%	
	Capacity after 6 month storage	85%	
	Capacity after 12 month storage	80%	
Max Discharge Current 25°C	2650A (5S)		
Terminal	Standard	F4	
	Optional		
Charging (Constant Voltage)	Cycle	Initial Charging Current 53A or small 7.30V~7.35V (25°C)	
	Float	6.80V~6.85V (25°C)	

CHARGE CHARACTERISTIC 77°F (25°C)

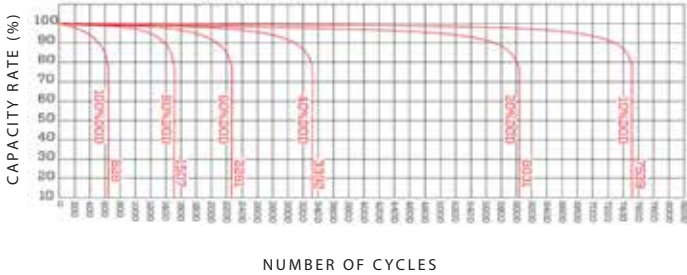
TEMPERATURE AND FLOAT SERVICE LIFE

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

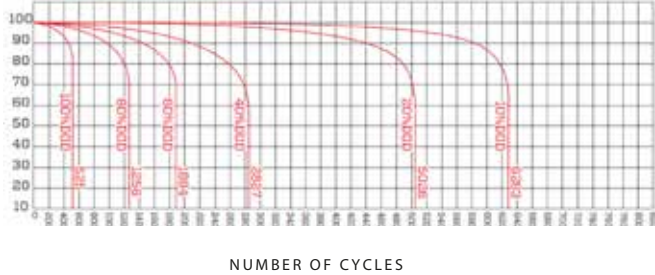


CYCLE LIFE CURVE GRAPH

CYCLE LIFE CURVE GRAPH (25°C)

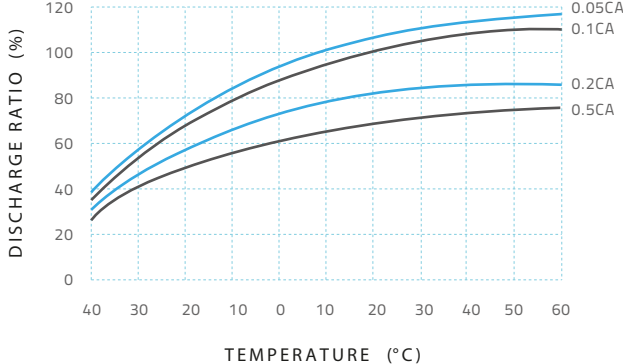
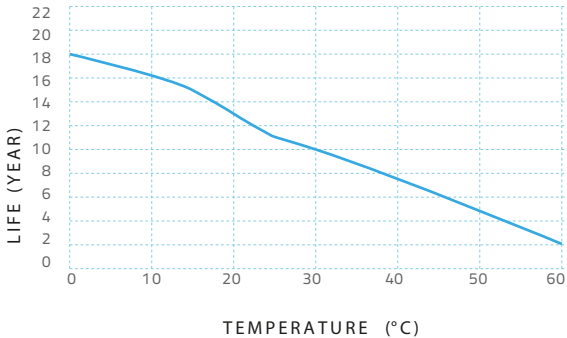


CYCLE LIFE CURVE GRAPH (40°C)



FLOAT SERVICE LIFE CURVE GRAPH

TEMPERATURE & DISCHARGE CAPACITY



LEAD CRYSTAL®: CHANGING THE FUTURE

Performance Robust, resilient, high performing. Lead Crystal® batteries can be discharged deeper, cycled more often (also in extreme temperatures) and have a longer service life. They recover to full rated capacity over and over again.

Technology A unique micro-porous high absorbent mat (AGM), high-purity lead calcium selenium plates, safe SiO₂ electrolyte solution that solidifies into a white crystalline powder when charged/discharged.

Cleaner & safe Less acid, no cadmium, no antimony. Lead Crystal® batteries are up to 99% recyclable and are classified as non-hazardous goods for transport.

Markets Lead Crystal® batteries are being used in telecoms, ups, petrochem/marine, defence, renewable energy, health care, manufacturing, transportation and electric motion (wheelchairs, golf carts & trolleys).

