3-CNFJ-10 6V/10Ah

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

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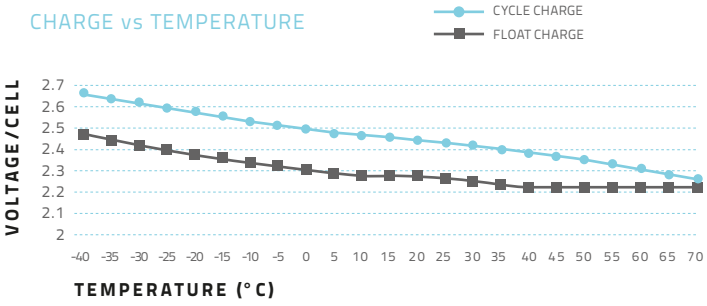
SPECIFICATION

Nominal Voltage		6V	
Rated Capacity (10 hour rate)		10 AH	
Dimension	Total Height (top of terminal)	100 mm	3.94"
	Height	94 mm	3.7"
	Length	151 mm	5.94"
	Width	50 mm	1.97"
Weight		Approximately 1.9 kg / 4.18 lbs	
Capacity 25°C	120 hour rate (90mA)	10.8 AH	
	20 hour rate (600mA)	12 AH	
	10 hour rate (1A)	10 AH	
Internal Resistance	Fully charged Battery (25°C)	8mΩ	
Self-Discharge 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	100A (5S)		
Terminal	Standard	F2	
	Optional		
Charging (Constant Voltage)	Cycle	Initial Charging Current 3A 7.4V/ (25°C)	
	Float	6.8V/ (25°C)	

DISCHARGE CURRENT AND END VOLTAGE

Discharge current (A)	End voltage (V)
0.05C or below or Intermittent discharge	5.70
0.05C of current close to it	5.55
0.1C of current close to it	5.40
0.2C of current close to it	5.25
From 0.2C to 0.5C	5.10
From 0.5C to 1C	4.80
From 1C to 3C	4.50
Current in excess of 3C	3.90

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 (voltage/cell)	2.46	2.44	2.42	2.42	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)

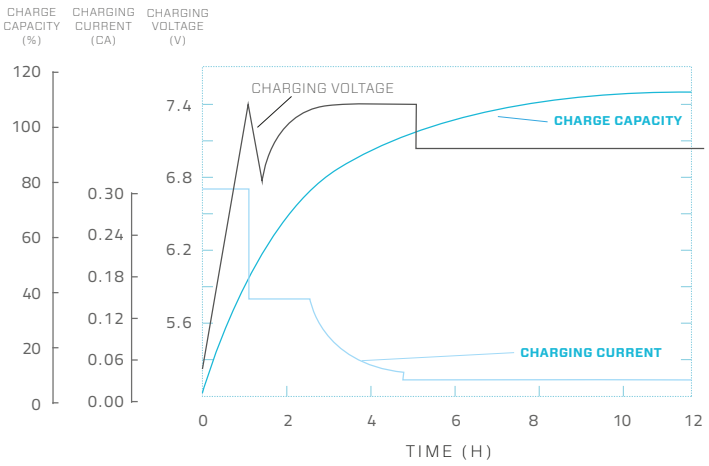
End Voltage per cell	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	36.696	19.420	11.734	8.555	6.890	3.948	2.867	2.249	1.918	1.630	1.243	1.035	0.868	0.565	0.462
1.67V	34.104	18.784	11.560	8.496	6.878	3.931	2.815	2.237	1.890	1.619	1.241	1.023	0.867	0.564	0.460
1.70V	33.756	18.496	11.444	8.381	6.821	3.896	2.798	2.225	1.861	1.601	1.237	1.023	0.864	0.562	0.460
1.75V	30.924	17.916	11.330	8.324	6.705	3.821	2.786	2.197	1.844	1.590	1.231	1.012	0.860	0.560	0.459
1.80V	27.744	16.760	10.866	8.092	6.532	3.763	2.775	2.191	1.821	1.572	1.225	1.000	0.856	0.540	0.458
1.83V	26.520	15.376	10.694	7.804	6.243	3.728	2.665	2.098	1.780	1.514	1.199	0.960	0.821	0.535	0.452
1.85V	24.852	14.912	10.000	7.515	6.069	3.578	2.595	2.069	1.734	1.464	1.185	0.948	0.809	0.529	0.448

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	61.320	34.100	21.962	16.009	12.879	7.456	5.450	4.317	3.647	3.133	2.416	2.000	1.682	1.121	0.919
1.67V	58.373	33.579	21.074	15.894	12.888	7.456	5.381	4.312	3.647	3.127	2.416	1.994	1.682	1.121	0.919
1.70V	58.026	33.348	21.064	15.894	12.772	7.398	5.369	4.296	3.589	3.104	2.399	1.977	1.665	1.115	0.919
1.75V	54.038	32.943	21.088	15.894	12.715	7.340	5.358	4.288	3.578	3.081	2.387	1.963	1.665	1.115	0.913
1.80V	49.589	31.267	20.633	15.605	12.657	7.340	5.352	4.277	3.554	3.081	2.381	1.954	1.665	1.087	0.913
1.83V	47.854	28.724	20.460	15.142	12.137	7.282	5.202	4.132	3.514	2.982	2.381	1.896	1.636	1.075	0.907
1.85V	44.329	28.088	19.015	14.565	11.790	7.109	5.057	4.080	3.416	2.924	2.289	1.878	1.607	1.063	0.902

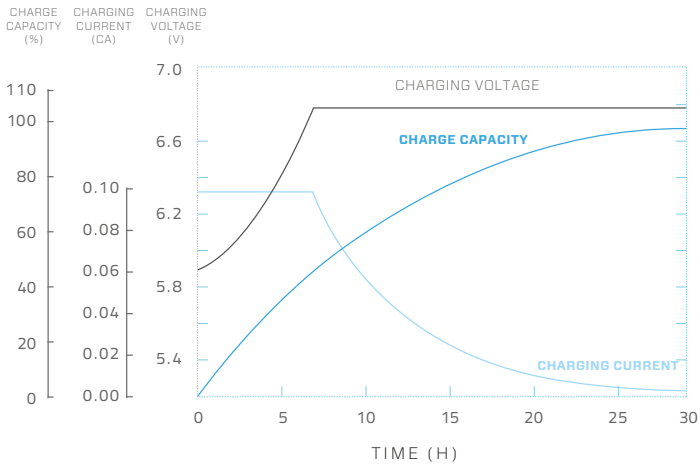
CYCLE CHARGE CHARACTERISTIC (25°C)

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



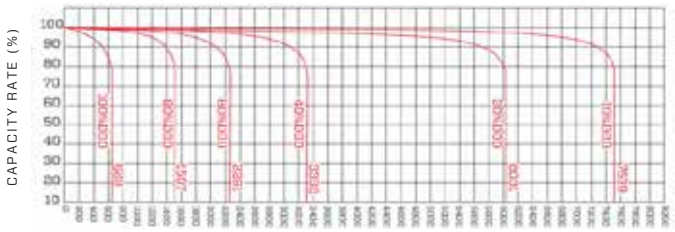
FLOATING CHARGE CHARACTERISTIC (25°C)

FLOATING CHARGE CHARACTERISTICS 77°F (25°C)

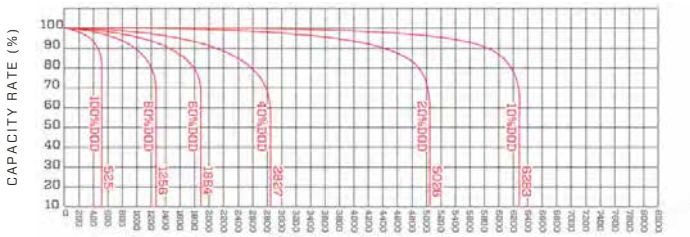


CYCLE LIFE CURVE GRAPH

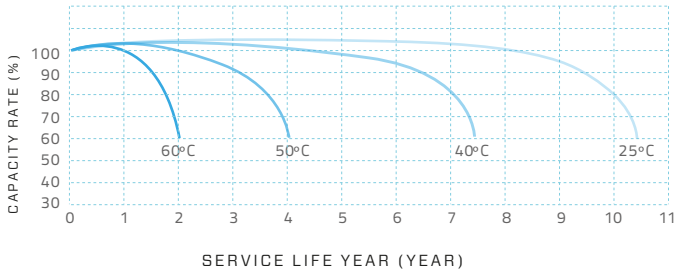
CYCLE LIFE CURVE GRAPH (25°C)



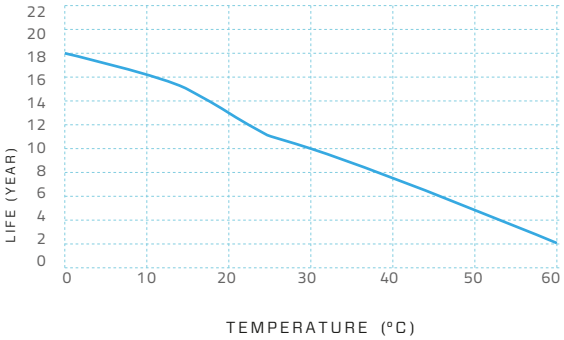
CYCLE LIFE CURVE GRAPH (40°C)



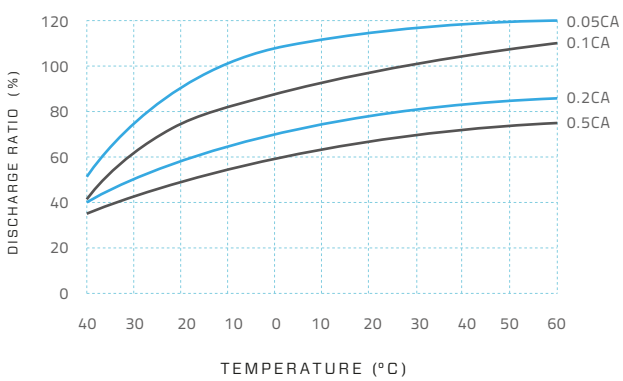
TEMPERATURE & FLOAT SERVICE LIFE



FLOAT SERVICE LIFE CURVE GRAPH



TEMPERATURE & DISCHARGE CAPACITY



3-CNFJ-10 6V/10Ah

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).

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