EV & MOBILITY · EVFJ SERIES

6-EVFJ-60



12V 60 Ah lead crystal battery

Built for electric scooters, mobility vehicles, and robotics.

- 6,000+ cycles at 20% DoD
- 70Ah at the 10-hour rate
- Compact 12V form factor
- Operates from -40°C to +65°C
- 99% recyclable, non-hazardous

NOMINAL VOLTAGE	RATED CAPACITY	DIMENSIONS	WEIGHT
12 V	60 Ah	260 × 170 × 215 mm	22.5 kg
6 cells	3 h rate	L × W × total H	approximately

TERMINAL	MAX DISCHARGE	INTERNAL RESISTANCE	CHARGE VOLTAGE
F3	600 A	≤ 8.5 mΩ	13.6 to 13.7 V
standard	for 5 seconds	fully charged, 25 °C	float · cycle 14.6 to 14.7V

01 Specification

Manufacturer's data at 25 °C unless stated

ELECTRICAL

Nominal voltage	**12V** 6 × 2V cells
Rated capacity	**60 Ah** 3 hour rate
Chemistry	**Lead crystal** SiO_2 electrolyte, valve regulated
Internal resistance	**≤ 8.5 mΩ** fully charged, 25 °C
Max discharge current	**600 A (5 s)** 25 °C

CAPACITY AT 25 °C

10 h rate	**70 Ah** at 7.0 A
5 h rate	**66 Ah** at 13.2 A
2 h rate	**54 Ah** at 27 A

DIMENSIONS AND WEIGHT

Length	**260 mm** 10.24 in
Width	**170 mm** 6.69 in
Height	**215 mm** 8.46 in
Total height	**215 mm** top of terminal · 8.46 in
Weight	**22.5 kg** approx. 49.6 lb
Terminal	**F3** standard

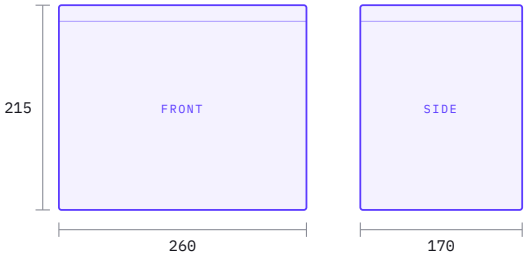
SELF-DISCHARGE AT 25 °C

After 3 months	**95%** capacity remaining
After 6 months	**85%** capacity remaining
After 12 months	**80%** capacity remaining

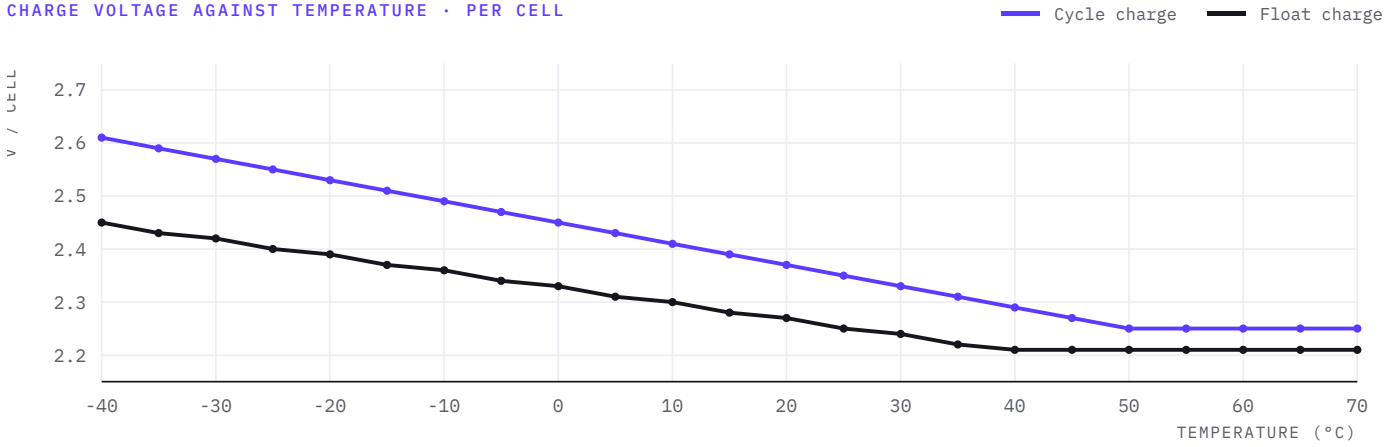
CHARGING · CONSTANT VOLTAGE

Cycle use	**14.6 to 14.7V** at 25 °C, initial current up to 12 A
Float / standby	**13.6 to 13.7V** at 25 °C

CASE, TO SCALE · MM



CHARGE VOLTAGE AGAINST TEMPERATURE · PER CELL



°C	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Cycle	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
Float	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

Volts per cell. Multiply by 6 for the 12V battery (at 25 °C: 14.10 V cycle, 13.50 V float).

02 Discharge performance

Manufacturer's data at 25 °C

Constant current discharge

AMPERES · BY END VOLTAGE PER CELL AND DURATION

END V PER CELL	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	189	120	79.5	59.8	41.3	27.6	21.0	16.7	14.0	12.7	9.63	7.35	6.20	3.87	3.24
1.67V	162	109	73.7	56.7	40.7	27.3	20.4	16.3	13.6	12.2	9.28	7.21	6.20	3.87	3.24
1.70V	155	106	71.4	56.0	40.4	26.9	20.3	16.0	13.4	11.7	9.01	7.14	6.20	3.86	3.23
1.75V	141	99.2	68.6	53.8	40.0	26.6	20.1	15.7	13.2	11.2	8.75	7.07	6.14	3.86	3.23
1.80V	125	90.9	66.0	51.8	39.9	26.2	19.6	15.4	12.9	11.2	8.54	7.00	6.01	3.85	3.21
1.83V	109	83.0	60.9	48.2	38.8	25.9	19.0	14.8	12.6	10.8	8.26	6.79	5.85	3.84	3.12
1.85V	93.3	75.2	56.0	44.59	37.8	25.5	18.3	14.2	12.4	10.5	7.98	6.60	5.68	3.83	3.03

Constant power discharge

WATTS PER CELL · BY END VOLTAGE PER CELL AND DURATION

END V PER CELL	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	312	210	144	109	76.4	55.4	39.0	31.6	26.9	23.6	17.8	14.5	12.2	7.56	6.34
1.67V	279	196	134	104	76.2	53.6	38.9	31.4	26.0	23.3	17.5	14.2	12.2	7.56	6.34
1.70V	270	191	131	103	76.0	52.3	37.9	31.2	25.5	23.2	17.4	14.1	12.2	7.56	6.34
1.75V	249	180	126	100	75.7	50.5	37.4	30.7	24.9	22.8	17.1	13.9	12.2	7.56	6.33
1.80V	226	165	122	97.5	75.5	48.8	37.1	30.2	24.3	22.5	16.8	13.8	11.8	7.49	6.31
1.83V	199	152	114	91.3	75.2	47.1	36.8	29.2	23.4	21.8	16.2	13.4	11.5	7.49	6.15
1.85V	173	140	106	85.1	74.9	45.2	36.5	28.1	22.5	21.2	15.7	13.1	11.3	7.42	6.00

WHY LEAD CRYSTAL

Performance

Discharges deeper and cycles more often, in extreme heat and cold too, and recovers to full rated capacity again and again for a longer service life.

Technology

Micro-porous absorbent glass mat, high-purity lead calcium selenium plates and an SiO_2 electrolyte that sets into a white crystalline powder.

Cleaner and safer

Less acid, no cadmium and no antimony. Up to 99% recyclable and classed as non-hazardous goods for transport.

Where it works

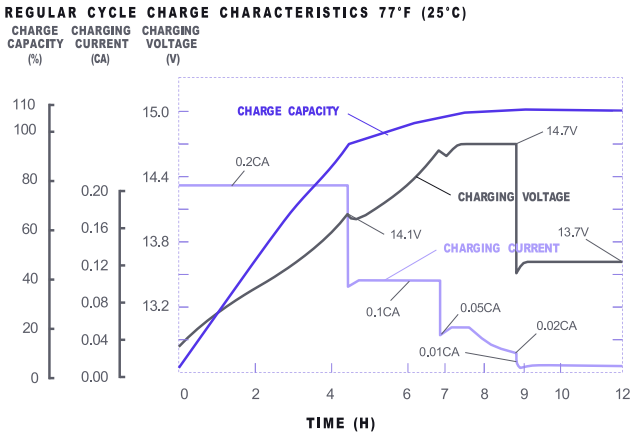
Telecoms, UPS, petrochemical and marine, defence, renewable energy, health care, manufacturing, transport and electric mobility.

ISO 9001 | ISO 14001 | CE | UL | IEC | 99% recyclable

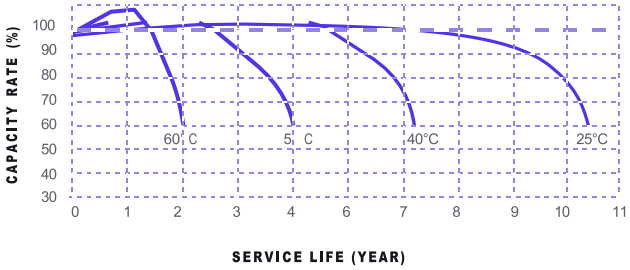
03 Performance curves

Manufacturer's test curves

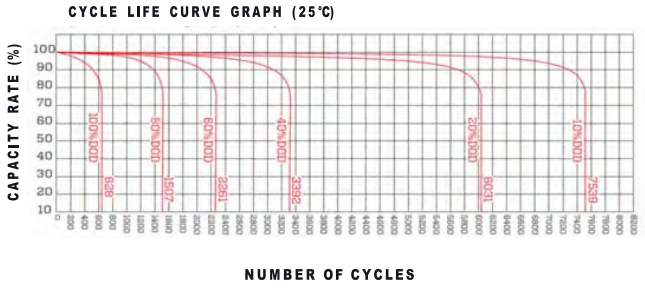
CHARGE CHARACTERISTIC 77°F (25°C)

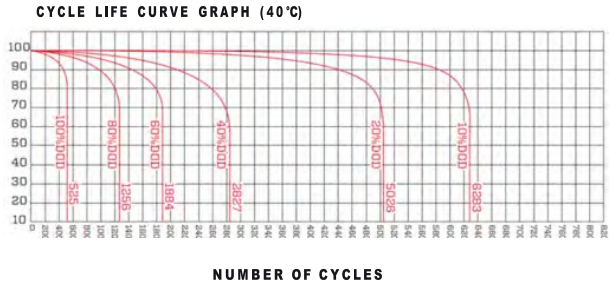


TEMPERATURE AND FLOAT SERVICE LIFE

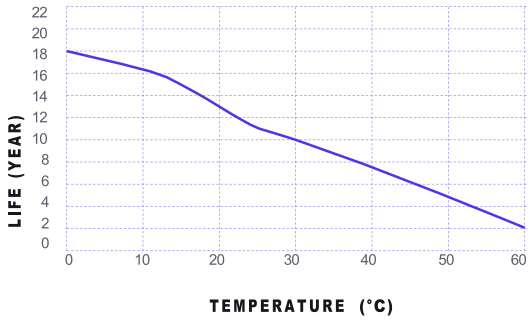


CYCLE LIFE CURVE GRAPH

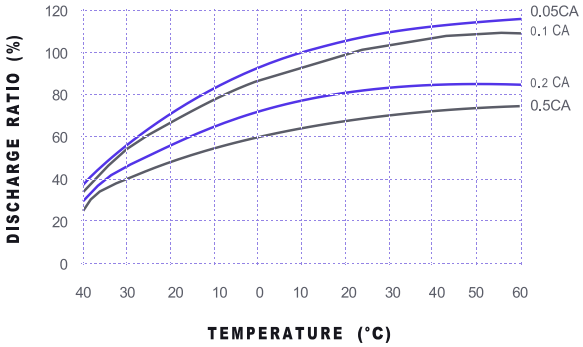




FLOAT SERVICE LIFE CURVE GRAPH



TEMPERATURE & DISCHARGE CAPACITY



Leadcrystal

SALES AND QUOTES info@leadcrystal.co
TENDERS bidteam@leadcrystal.co
WEB leadcrystal.co

Figures are the manufacturer's test data and may change without notice. Confirm critical values with Leadcrystal before you order. Lead Crystal Technologies, in partnership with Bin Othaimeen Group in the Middle East and North Africa.