FPC12-200
Datasheet

FULBAT® CYCLIC BATTERY

AGM

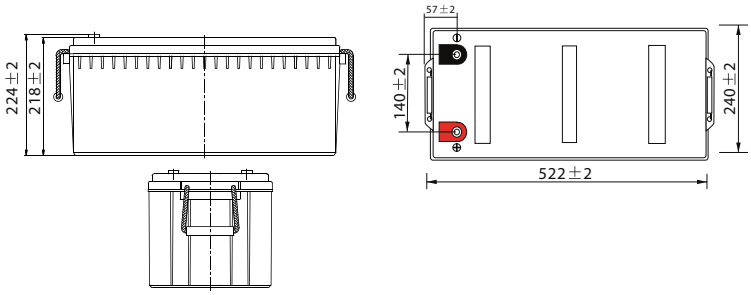
CYCLE LIFE UP TO 800

NON-SPILLABLE

FPC Series are deep cycle batteries specially designed for long duration cyclic applications, ie with use in charge and then intensive discharge. With advanced AGM valve regulated technology and oversized negative plates, the FPC Series ensure very good cyclic performance with greater depth of discharge for mobility-type applications such as medical, golf and also renewable energies storage.
In harsh use conditions (high temperature, higher deep of discharge...), the Gel FPG range is recommended.

DIMENSIONS & WEIGHT

Lenght	522±2mm
Width	240±2mm
Total height	224±2mm
Gross weight	37.3kg



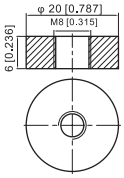
SPECIFICATIONS

Nominal voltage	12V (6 cells)
Nominal capacity	200.0Ah (10hr)
Cycle life	
(50% capacity @20°C)	Up to 350 cycles at 100% DOD
(50% capacity @20°C)	Up to 800 cycles at 50% DOD
Internal resistance	Approx 2.7mΩ
Terminal	T11
Max. discharge current	2000A (5 sec)
Reference capacity	214.4Ah (200hr, 1.80V/cell, 25°C) 200.0Ah (10hr, 1.80V/cell, 25°C) 175.4Ah (5hr, 1.75V/cell, 25°C) 159.0Ah (3hr, 1.75V/cell, 25°C) 129.2Ah (1hr, 1.60V/cell, 25°C)
Charge voltage	
Standby use voltage	13.5V ~ 13.8V at 25°C Temperature compensation: -20mV/°C/Cell
Cycle use voltage	14.4V ~ 15.0V at 25°C Temperature compensation: -30mV/°C/Cell
Operating temp. range	Discharge: -15°C ~ 50°C Charge: 0°C ~ 40°C Storage: -15°C ~ 40°C
Nominal operating temp. range	25°C ± 3°C
Self discharge	Can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly self-discharge ratio is less than 3% at 25°C
Capacity affected by temp.	40°C 103% 25°C 100% 0°C 86%
Container material	A.B.S. UL94-HB | UL94-V0 optional

APPROVALS

ISO9001 - Quality management system
ISO14001 - Environnmental management System
Approved for transport by Air (IATA)
Designed in accordance with IEC 60896-21/22

TERMINAL



APPLICATIONS

Renewable energy

Leisure & marine

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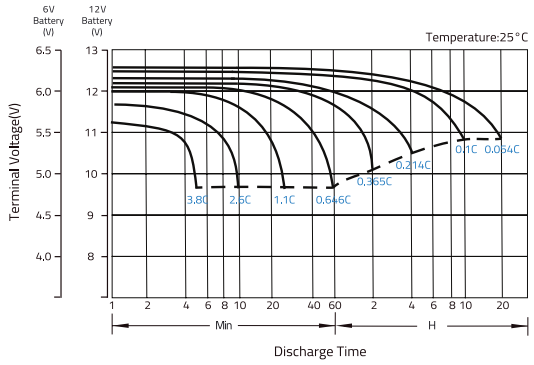
CONSTANT CURRENT DISCHARGE (A) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	292.8	246.4	215.3	154.9	123.0	99.9	62.0	48.4	39.2	31.8	27.8	22.7	18.9	10.62
1.80V/cell	374.2	297.7	254.5	182.8	143.1	111.9	67.7	52.0	41.8	34.2	29.8	24.0	20.0	10.72
1.75V/cell	411.1	325.2	273.8	189.8	148.5	117.0	70.2	53.0	42.8	35.1	30.6	24.5	20.2	10.82
1.70V/cell	448.1	347.2	287.7	197.5	154.4	120.7	73.0	54.5	43.9	36.0	31.2	24.8	20.4	11.02
1.65V/cell	483.6	369.2	305.7	208.4	158.3	124.8	75.0	56.8	45.4	37.0	31.9	25.2	20.8	11.16
1.60V/cell	-	394.8	325.6	220.0	165.0	129.2	77.6	58.5	46.8	38.2	32.6	25.4	21.0	11.22

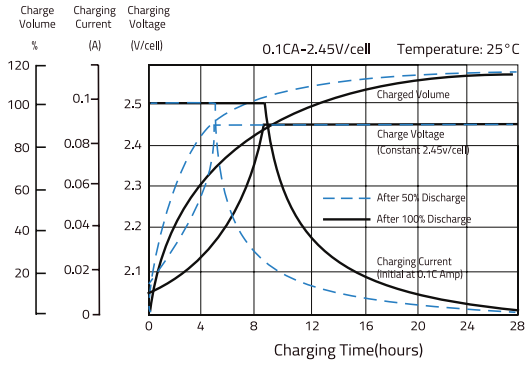
CONSTANT POWER DISCHARGE (W/CELL) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	546.3	464.5	410.3	297.7	238.1	193.8	120.9	94.5	76.7	62.5	54.9	44.8	37.4	21.3
1.80V/cell	688.8	552.9	477.6	347.1	274.6	215.8	131.1	101.2	81.5	66.9	58.6	47.5	39.6	21.4
1.75V/cell	747.5	598.1	509.6	358.5	283.6	224.9	135.6	102.8	83.2	68.6	60.1	48.3	40.0	21.6
1.70V/cell	803.4	633.9	532.5	371.7	294.1	231.5	140.7	105.4	85.2	70.1	61.3	48.9	40.3	22.0
1.65V/cell	860.8	669.7	563.0	390.3	300.3	238.5	144.2	109.6	87.9	72.0	62.6	49.6	41.1	22.2
1.60V/cell	-	707.6	593.6	408.1	310.2	244.9	148.1	112.4	90.3	74.0	63.8	50.0	41.5	22.3

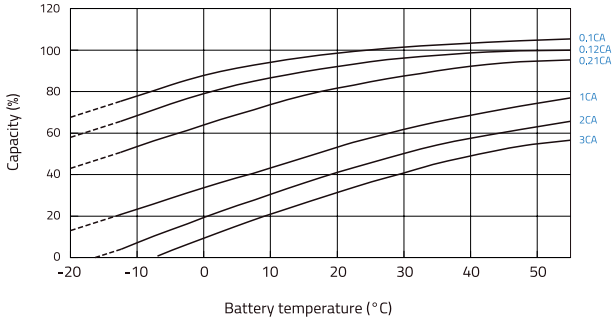
DISCHARGE CHARACTERISTICS



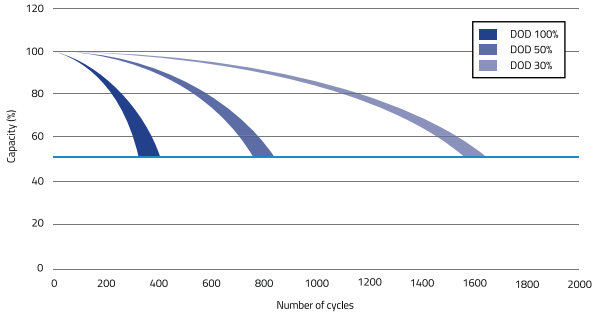
FLOAT CHARGING CHARACTERISTICS



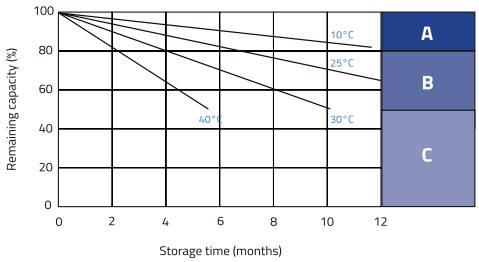
TEMPERATURE IN RELATION TO BATTERY CAPACITY



CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



SELF DISCHARGE CHARACTERISTICS



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1. Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2. Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3. Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.