

FPC12-26

Datasheet

FULBAT[®]

INDUSTRIAL BATTERY

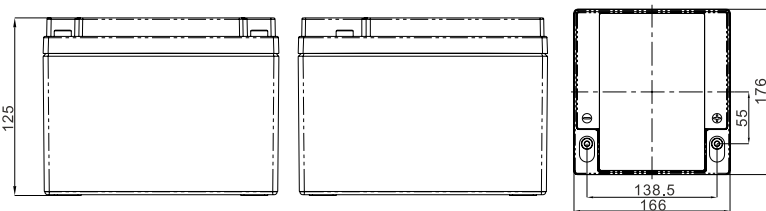


FPC Series are deep cycle batteries specially designed for long duration cyclic applications, ie with use in charge and then intensive discharge. With advanced AGM valve regulated technology and oversized negative plates, the FPC Series ensure very good cyclic performance with greater depth of discharge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

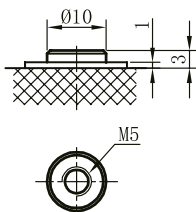
In harsh use conditions (high temperature, higher deep of discharge...), the Gel FPG range is recommended.

DIMENSIONS & WEIGHT

Length	166±2mm
Width	176±2mm
Total height	125±2mm
Gross weight	8.1kg



TERMINAL



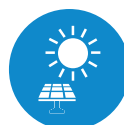
SPECIFICATIONS

Nominal voltage	12V (6 cells)
Nominal capacity	26.0Ah (20hr)
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 11.5mΩ
Terminal	T12
Max. discharge current	260A (5 sec)
Reference capacity	26Ah (20hr, 1.75V/cell, 25°C) 24.8Ah (10hr, 1.75V/cell, 25°C) 22.1Ah (5hr, 1.75V/cell, 25°C) 19.5Ah (3hr, 1.75V/cell, 25°C)
Charge voltage	13.6V ~ 13.8V 25°C
Standby use voltage	Temperature compensation: -3mV/°C/Cell
Cycle use voltage	14.6V ~ 14.8V 25°C
	Temperature compensation: -4mV/°C/Cell
Operating temp. range	Discharge: -20°C ~ 60°C Charge: 0°C ~ 50°C Storage: -20°C ~ 60°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 - Environmental management System
Approved for transport by Air (IATA)
Designed in accordance with IEC 60896-21/22

APPLICATIONS



Renewable energy



Medical



Mobility



Golf caddy



Leisure & Marine

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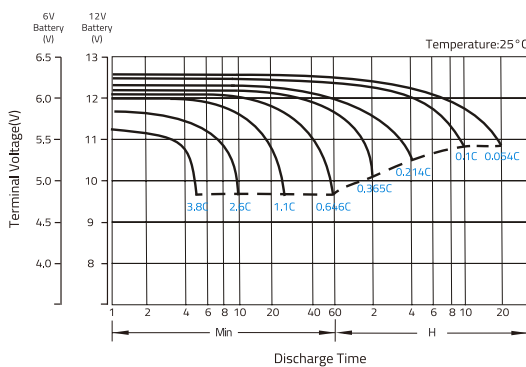
CONSTANT CURRENT DISCHARGE (A) @25°C

F.V/Time	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	63.13	47.99	28.31	15.79	9.404	7.325	5.746	4.888	3.135	2.600	1.347
1.65V/cell	58.15	44.88	26.82	15.25	9.089	7.100	5.574	4.734	3.110	2.575	1.340
1.70V/cell	53.90	42.20	25.43	14.76	8.847	6.800	5.402	4.606	3.061	2.526	1.323
1.75V/cell	49.45	39.53	24.43	14.30	8.507	6.625	5.255	4.478	3.012	2.501	1.300
1.80V/cell	45.00	36.20	23.53	13.66	8.216	6.500	5.132	4.420	2.962	2.476	1.287
1.85V/cell	35.21	29.95	19.95	12.20	7.514	6.050	4.813	4.069	2.789	2.328	1.275

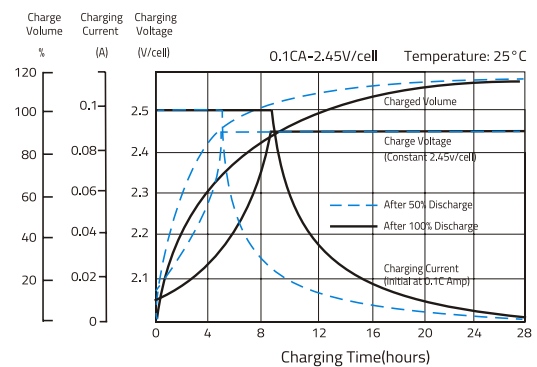
CONSTANT POWER DISCHARGE (W/CELL) @25°C

F.V/Time	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	107.5	83.71	51.45	29.65	17.78	13.91	11.07	9.252	6.109	5.099	2.690
1.65V/cell	103.5	81.39	50.24	29.14	17.30	13.56	10.80	9.002	6.061	5.050	2.666
1.70V/cell	96.61	77.04	47.82	28.28	16.87	13.04	10.46	8.777	5.987	4.952	2.642
1.75V/cell	89.90	72.71	46.15	27.50	16.27	12.72	10.22	8.577	5.890	4.903	2.594
1.80V/cell	82.83	67.22	44.66	26.38	15.90	12.65	10.02	8.461	5.792	4.854	2.570
1.85V/cell	65.70	56.47	38.30	23.69	14.64	11.80	9.429	7.826	5.475	4.584	2.546

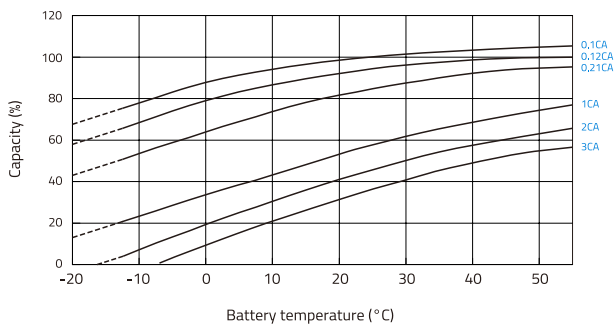
DISCHARGE CHARACTERISTICS



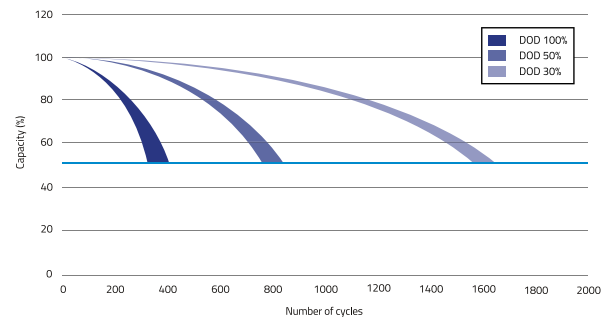
FLOAT CHARGING CHARACTERISTICS



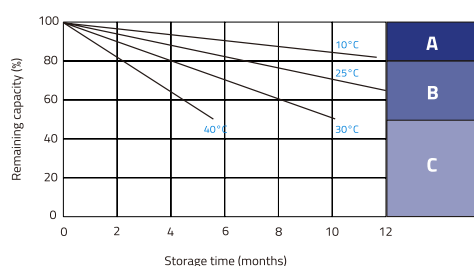
TEMPERATURE IN RELATION TO BATTERY CAPACITY



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.)

Supplementary charge required before use. Optional charging way as below:

- B**
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8~10hours at limited current 0.05CA .

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