

FPG12-90 (L5)

Datasheet

FULBAT™

CYCLIC BATTERY



GEL

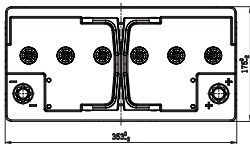
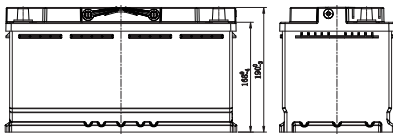


NON-SPILLABLE

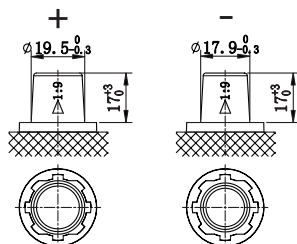
FPG Series are deep cycle batteries specially designed for long duration cyclic applications, ie with use in charge and then intensive discharge. With innovative GEL valve regulated technology and special plate design, the FPG Series ensure higher cyclic performance and higher recovery capability after deep discharge than cyclic AGM batteries. This range is ideal for applications such as mobility, golf, marine & leisure and renewable energies storage.

DIMENSIONS & WEIGHT

Length	353±2mm
Width	175±2mm
Total height	190±2mm
Gross weight	26.2kg



TERMINAL



SPECIFICATIONS

Nominal voltage	12V (6 cells)
Nominal capacity	90.0Ah (20hr)
Cycle life	(50% capacity @20°C) Up to 550 cycles at 100% DOD (50% capacity @20°C) Up to 1100 cycles at 50% DOD
Internal resistance	Approx 4.80mΩ
Terminal	/
Max. discharge current	840A (5 sec)
Reference capacity	90.0Ah (20hr, 1.80V/cell, 25°C) 84.0Ah (10hr, 1.80V/cell, 25°C) 74.5Ah (5hr, 1.75V/cell, 25°C) 65.4Ah (3hr, 1.75V/cell, 25°C) 52.5Ah (1hr, 1.60V/cell, 25°C)
Charge voltage	13.5V ~ 13.8V at 25°C Temperature compensation: -20mV/°C/Cell
Cycle use voltage	14.4V ~ 14.8V at 25°C Temperature compensation: -30mV/°C/Cell
Operating temp. range	Discharge: -15°C ~ 50°C Charge: -20°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 - Environmental management System
Approved for transport by Air (IATA)
Designed in accordance with IEC 60896-21/22

APPLICATIONS



Leisure & Marine

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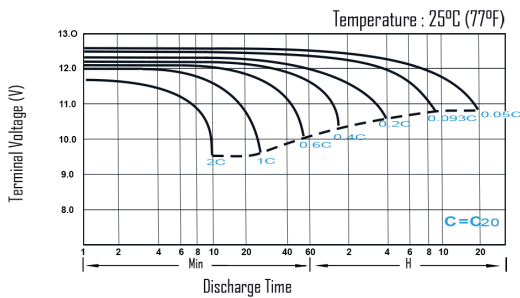
CONSTANT CURRENT DISCHARGE (A) @25°C

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	42.0	26.1	19.7	15.8	14.0	12.1	9.70	8.23	4.43
1.80V/cell	46.2	28.7	21.1	16.9	14.4	12.8	10.1	8.40	4.50
1.75V/cell	48.7	30.2	21.8	17.7	14.9	13.2	10.2	8.65	4.56
1.65V/cell	51.2	31.9	22.3	18.2	15.4	13.4	10.4	8.78	4.65
1.60V/cell	52.5	32.4	22.7	18.5	15.5	13.7	10.6	8.86	4.73

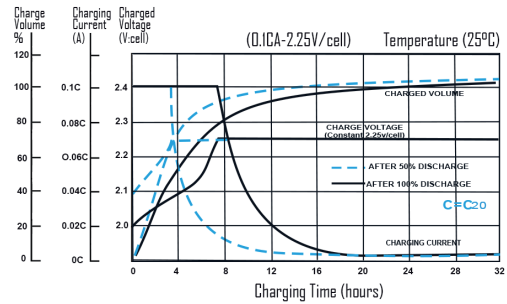
CONSTANT POWER DISCHARGE (W/CELL) @25°C

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	81.6	51.1	38.7	31.1	27.6	23.9	19.2	16.3	8.81
1.80V/cell	89.2	55.7	41.3	33.2	28.3	25.2	19.9	16.6	8.94
1.75V/cell	93.4	58.5	42.5	34.6	29.1	25.9	20.1	17.1	9.05
1.65V/cell	97.1	61.2	43.0	35.2	29.9	26.2	20.3	17.3	9.22
1.60V/cell	98.5	61.7	43.5	35.7	30.1	26.5	20.6	17.4	9.36

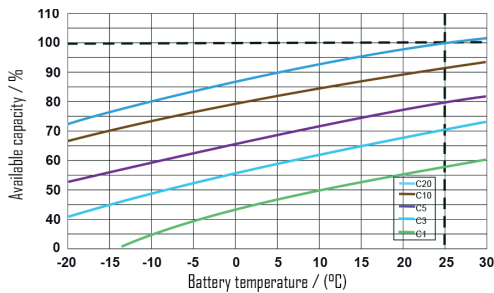
DISCHARGE CHARACTERISTICS



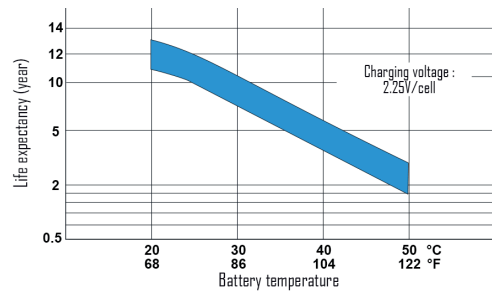
FLOAT CHARGING CHARACTERISTICS



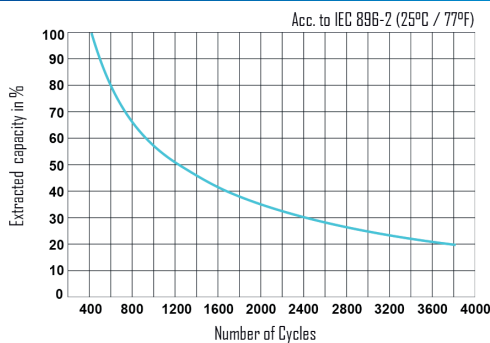
TEMPERATURE IN RELATION TO BATTERY CAPACITY



TEMPERATURE ON LONG TERM FLOAT LIFE



CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



SELF DISCHARGE CHARACTERISTICS

