

FPG12-40

Datasheet

FULBAT®

CYCLIC BATTERY



GEL

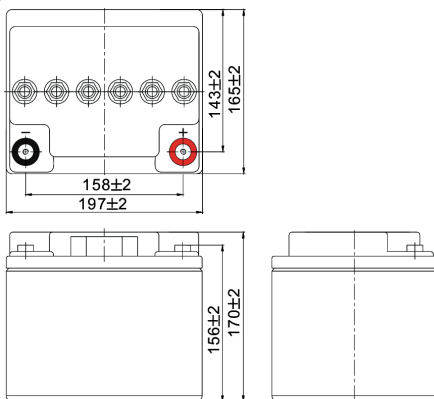


NON-SPILLABLE

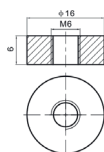
FPG Series are deep cycle batteries specially designed for long duration cyclic applications, ie with use in charge and then intensive discharge. With innovative GEL valve regulated technology and special plate design, the FPG Series ensure higher cyclic performance and higher recovery capability after 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	197±2mm
Width	165±2mm
Total height	170±2mm
Gross weight	12.8kg



TERMINAL



SPECIFICATIONS

Nominal voltage	12V (6 cells)
Nominal capacity	40.0Ah (20hr)
Cycle life	Up to 550 cycles at 100% DOD Up to 1100 cycles at 50% DOD
Internal resistance	Approx 10.5mΩ
Terminal	T6
Max. discharge current	380A (5 sec)
Reference capacity	40.0Ah (20hr, 1.80V/cell, 25°C) 35.0Ah (10hr, 1.80V/cell, 25°C) 30.7Ah (5hr, 1.75V/cell, 25°C) 27.1Ah (3hr, 1.75V/cell, 25°C) 22.5Ah (1hr, 1.60V/cell, 25°C)
Charge voltage	13.5V ~ 13.8V at 25°C Temperature compensation: -3mV/°C/Cell
Cycle use voltage	14.4V ~ 15.0V at 25°C Temperature compensation: -4mV/°C/Cell
Operating temp. range	Discharge: -20°C ~ 55°C Charge: -20°C ~ 40°C Storage: -15°C ~ 50°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



Mobility



Golf caddy



Leisure & Marine

FPG12-40

Datasheet



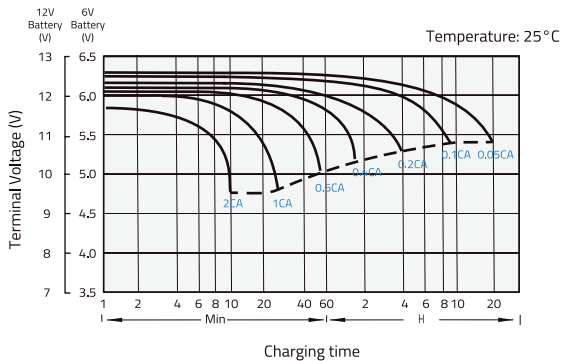
CONSTANT CURRENT DISCHARGE (A) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	42.9	37.2	33.4	26.6	20.2	16.9	10.6	7.99	6.54	5.60	4.86	3.92	3.33	1.85
1.80V/cell	51.5	42.9	38.0	29.6	22.7	18.8	11.5	8.62	7.01	5.95	5.16	4.14	3.50	1.90
1.75V/cell	59.8	48.9	42.2	32.2	24.2	19.9	12.1	9.02	7.29	6.14	5.32	4.24	3.55	1.93
1.70V/cell	66.4	53.2	45.3	34.2	25.3	20.8	12.7	9.33	7.50	6.32	5.47	4.33	3.61	1.96
1.67V/cell	71.1	55.9	47.3	47.3	26.3	21.5	13.0	9.60	7.67	6.47	5.57	4.40	3.67	1.98
1.60V/cell	77.5	59.8	50.6	37.6	27.8	22.5	22.5	9.92	7.90	6.64	5.70	4.46	3.73	2.00

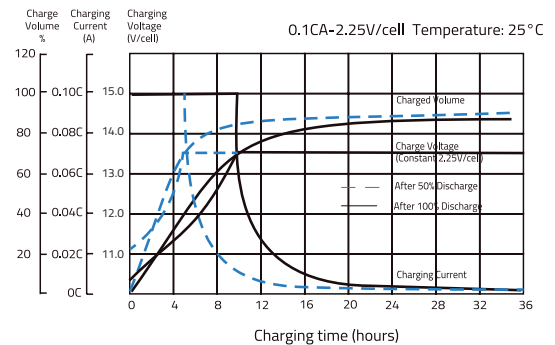
CONSTANT POWER DISCHARGE (W/CELL) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	80.6	70.3	63.8	51.1	39.2	32.8	20.7	15.6	12.8	11.0	9.62	7.79	6.62	3.70
1.80V/cell	95.4	80.1	71.6	56.3	43.7	36.3	22.4	16.8	13.7	11.7	10.2	8.19	6.95	3.79
1.75V/cell	109.0	90.1	78.8	61.0	46.3	38.3	23.4	17.5	14.2	12.0	10.5	8.38	7.05	3.84
1.70V/cell	119.3	97.1	83.8	64.2	48.1	39.8	24.4	18.1	14.6	12.3	10.7	8.55	7.16	3.90
1.67V/cell	126.3	100.9	86.7	66.2	49.7	41.0	25.0	18.6	14.9	12.6	10.9	8.67	7.27	3.94
1.60V/cell	135.2	106.4	91.8	69.4	52.1	42.7	25.8	19.1	15.3	12.9	11.1	8.78	7.37	3.97

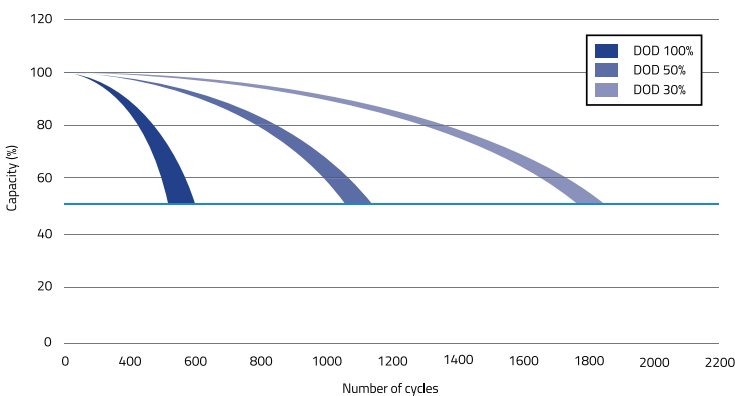
DISCHARGE CHARACTERISTICS



FLOAT CHARGING CHARACTERISTICS



CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



TEMPERATURE ON LONG TERM FLOAT LIFE

