FPG12-140
Datasheet

FULBAT CYCLIC BATTERY

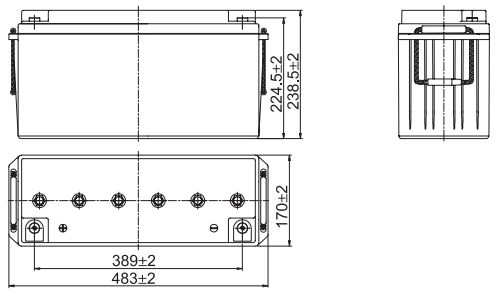
GEL

NON-SPILLABLE

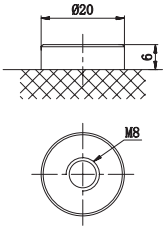
FPG Series are deep cycle batteries specially designed for long duration cyclic applications, ie with use in charge and then intensive discharge. With innovative GEL valve regulated technology and special plate design, the FPG Series ensure higher cyclic performance and higher recovery capability after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

DIMENSIONS & WEIGHT

Lenght	483±2mm
Width	170±2mm
Total height	238.5±2mm
Gross weight	43.8kg



TERMINAL



SPECIFICATIONS

Nominal voltage	12V (6 cells)
Nominal capacity	140Ah (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 5.3mΩ
Terminal	T11
Max. discharge current	1400A (5 sec)
Reference capacity	140.0Ah (20hr, 1.80V/cell, 25°C) 135.0Ah (10hr, 1.80V/cell, 25°C) 119.5Ah (5hr, 1.75V/cell, 25°C) 106.8Ah (3hr, 1.75V/cell, 25°C) 85.4Ah (1hr, 1.60V/cell, 25°C)
Charge voltage	
Standby use voltage	2.23V ~ 2.27V at 25°C Temperature compensation: -3mV/°C/Cell
Cycle use voltage	2.40V ~ 2.50V at 25°C Temperature compensation: -5mV/°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 - Environnmental management System
Approved for transport by Air (IATA)
Designed in accordance with IEC 60896-21/22

APPLICATIONS

Solar Marine Leisure

FPG12-140
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FULBAT® CYCLIC BATTERY

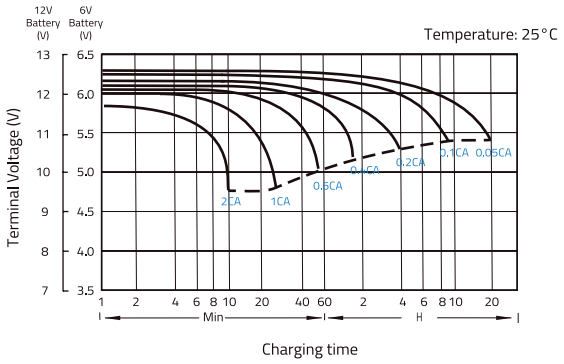
CONSTANT CURRENT DISCHARGE (A) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	177.7	154.0	121.1	109.6	80.1	63.5	39.2	31.1	25.3	22.0	19.3	15.6	13.2	6.84
1.80V/cell	201.7	174.6	136.9	119.3	84.9	70.2	43.2	34.2	27.5	23.2	20.4	16.3	13.5	7.00
1.75V/cell	218.7	189.0	147.8	121.7	88.0	78.7	46.3	35.6	28.4	23.9	21.1	16.6	13.9	7.36
1.70V/cell	228.8	198.5	155.5	122.6	89.3	81.2	47.2	36.2	28.4	24.2	21.1	16.7	13.9	7.47
1.65V/cell	240.6	206.6	161.0	126.0	91.0	82.8	48.2	36.7	28.9	24.6	21.4	16.8	14.0	7.53
1.60V/cell	248.8	213.0	165.2	127.8	92.4	85.4	49.2	37.1	29.4	25.1	21.7	17.0	14.2	7.63

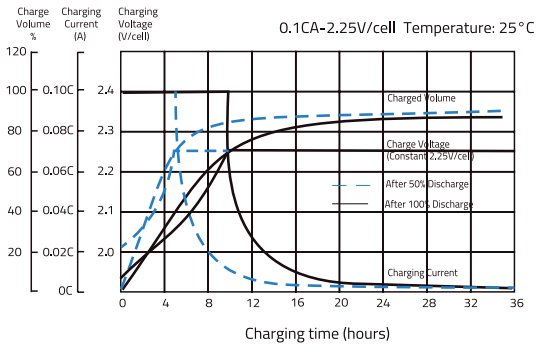
CONSTANT POWER DISCHARGE (W/CELL) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	334.2	291.6	230.4	209.4	154.1	123.3	76.7	61.1	49.7	43.3	38.0	30.8	26.2	13.6
1.80V/cell	373.9	326.2	257.7	226.2	162.2	135.5	84.0	66.8	53.9	45.5	40.0	32.1	26.7	13.9
1.75V/cell	399.0	348.2	275.1	229.0	167.0	150.9	89.6	69.1	55.3	46.8	41.3	32.6	27.4	14.6
1.70V/cell	410.1	360.8	286.0	228.4	168.3	154.3	90.8	70.0	55.2	47.2	41.2	32.8	27.4	14.8
1.65V/cell	426.3	372.0	293.9	233.3	170.7	156.8	92.4	70.8	56.0	47.8	41.7	33.0	27.6	14.9
1.60V/cell	432.3	377.2	298.0	234.3	171.6	160.4	93.6	71.2	56.7	48.7	42.2	33.2	27.8	15.1

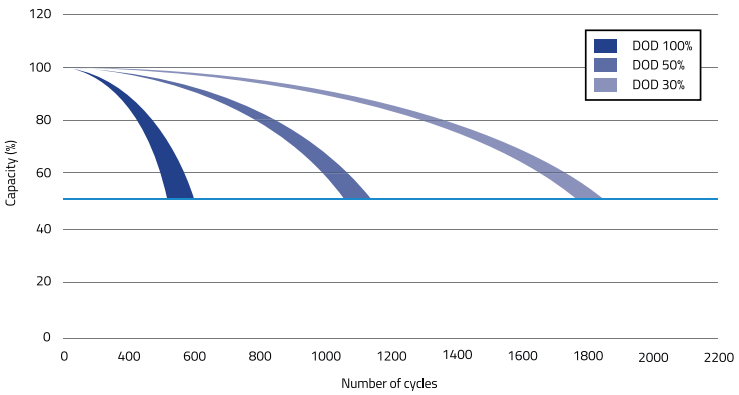
DISCHARGE CHARACTERISTICS



FLOAT CHARGING CHARACTERISTICS



CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



TEMPERATURE ON LONG TERM FLOAT LIFE