







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.

## M DIMENSIONS & WEIGHT

Lenght	255±2mm
Width	170±2mm
Total height	177.5±2mm
Gross weight	18.5kg

#### M TERMINAL





### A SPECIFICATIONS

Nominal voltage	12V (6 cells)							
Nominal capacity	60.0Ah (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 9.80mΩ							
Terminal	Тб							
Max. discharge	600A (5 sec)							
current								
Reference capacity	60.0Ah (20hr, 1.80V/cell, 25°C)							
	55.0Ah (10hr, 1.80V/cell, 25°C)							
	48.7Ah (5hr, 1.75V/cell, 25°C)							
	43.5Ah (3hr, 1.75V/cell, 25°C)							
	34.8Ah (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 ~ 14.8V at 25°C							
	Temperature compensation:							
	-30mV/°C/Cell							
Operating temp.	Discharge: -20°C ~ 55°C							
range	Charge: -20°C ~ 40°C							
	Storage: -15°C ~ 50°C							
Nominal operating	25°C ± 3°C							
temp. range								
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	40°C 103%							
temp.	25°C 100%							
	0°C 86%							
Container material	A.B.S. UL94-HB   UL94-VO optional							

# M APPROVALS

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

#### **APPLICATIONS**









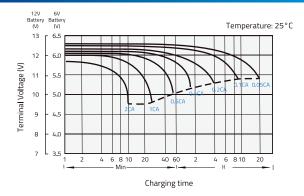
### CONSTANT CURRENT DISCHARGE (A) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	72.4	62.8	49.4	44.6	32.6	25.9	16.0	12.7	10.3	8.97	7.85	6.36	5.39	2.79
1.80V/cell	82.2	71.1	55.8	48.6	34.6	28.6	17.6	13.9	11.2	9.45	8.30	6.63	5.50	3.00
1.75V/cell	89.1	77.0	60.2	49.6	35.8	32.1	18.9	14.5	11.6	9.74	8.5	6.74	5.67	3.03
1.70V/cell	93.2	80.9	63.4	49.9	36.4	33.1	19.2	14.7	11.6	9.85	8.59	6.81	5.67	3.05
1.67V/cell	98.0	84.2	65.6	51.3	37.1	33.7	19.6	14.9	11.8	10.0	8.71	6.86	5.72	3.07
1.60V/cell	101.4	86.8	67.3	52.1	37.6	34.8	20.0	15.1	12.0	10.2	8.85	6.92	5.78	3.11

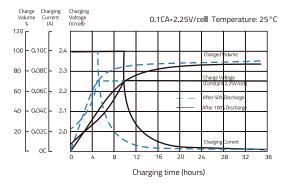
# CONSTANT POWER DISCHARGE (W/CELL) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	136.2	118.8	93.9	85.3	62.8	50.2	31.2	24.9	20.3	17.7	15.5	12.6	10.7	5.54
1.80V/cell	152.3	132.9	105.0	92.1	66.1	55.2	34.2	27.2	21.9	18.5	16.3	13.1	10.9	5.96
1.75V/cell	162.6	141.9	112.1	93.3	68.1	61.5	36.5	28.2	22.6	19.0	16.8	13.3	11.2	6.02
1.70V/cell	167.1	147.1	116.5	93.1	68.6	62.9	37.0	28.5	22.5	19.2	16.8	13.3	11.2	6.04
1.67V/cell	173.7	151.6	119.7	95.1	69.6	63.9	37.6	28.8	22.8	19.5	17.0	13.4	11.3	6.08
1.60V/cell	176.1	153.7	121.4	95.5	69.9	65.3	38.1	29.0	23.1	19.8	17.2	13.5	11.3	6.15

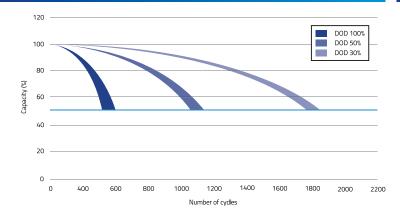
#### M DISCHARGE CHARACTERISTICS



#### **A FLOAT CHARGING CHARACTERISTICS**



#### √ CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



# **M** TEMPERATURE ON LONG TERM FLOAT LIFE

