



NON-SPILLABLE

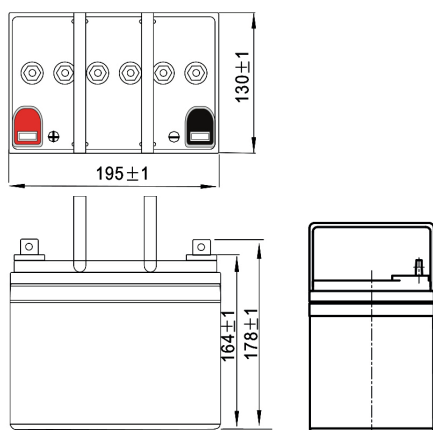
CYCLE LIFE
UP TO 800

GEL

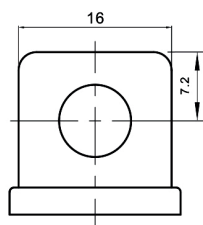
FPG Series are deep cycle batteries specially designed for long duration cyclic applications, ie with use in charge and then intensive discharge. With innovative GEL valve regulated technology and special plate design, the FPG Series ensure higher cyclic performance and higher recovery capability after 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	195±2mm
WIDTH	130±2mm
TOTAL HEIGHT	178±2mm
WEIGHT	10.2kg (tolerance ± 3%)



TERMINAL (MM)



SPECIFICATION

Nominal voltage	12V (6 cells)
Nominal capacity	31Ah (20hr)
Cycle life	Up to 1600 cycles at 100% DOD*(80% capacity - 20°C) Up to 3200 cycles at 80% DOD* (80% capacity - 20°C)
Internal resistance	Approx 14.6mΩ
Terminal	T5
Max. discharge current	300A (5 sec)
Reference capacity	31.00Ah (20hr, 1.80V/cell, 25°C/77°F) 27.60Ah (10hr, 1.80V/cell, 25°C/77°F) 24.25Ah (5hr, 1.75V/cell, 25°C/77°F) 21.36Ah (3hr, 1.75V/cell, 25°C/77°F) 17.80Ah (1hr, 1.60V/cell, 25°C/77°F)

Charge voltage	13.5V ~ 13.8V 25°C/77°F
Standby use voltage	Temperature compensation: -20mV/°C/Cell
Cycle use voltage	14.4V ~ 15.0V 25°C/77°F Temperature compensation: -30mV/°C/Cell
Operating temp. range	Discharge: -20°C ~ 55°C Charge: 0°C ~ 40°C Storage: -20°C ~ 50°C

Nominal operating temp. range	25°C ± 3°C / 77°F ± 5°F
Self discharge	Can be stored for up to 9 months at 25°C/77°F and then recharging is recommended. Monthly self-discharge ratio is less than 2% at 25°C/77°F

Capacity affected by temp.	40°C/104°F	103%
	25°C/77°F	100%
	0°C/32°F	86%

Container material	A.B.S. UL94-HB
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*DOD = Depth of discharge

APPLICATIONS



Mobility



Golf Caddy



Solar



Leisure



Marine



Wind

APPROVALS

ISO9001 - Quality management system
ISO14001 - Environmental management System
Approved for transport by Air (IATA)

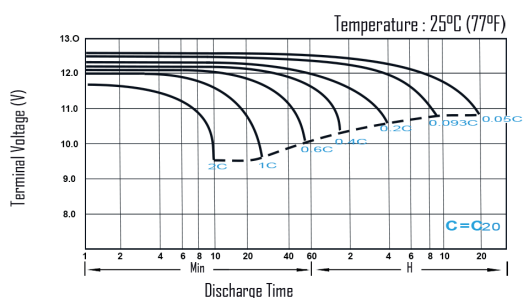
CONSTANT CURRENT DISCHARGE (AMPERES) AT 25°C/77°F

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	36.5	31.0	27.0	21.0	16.0	13.3	8.36	6.30	5.16	4.42	3.84	3.10	2.63	1.46
1.80V/cell	44.9	36.8	31.7	23.9	17.9	14.8	9.09	6.80	5.53	4.69	4.07	3.26	2.76	1.50
1.75V/cell	50.5	41.0	34.7	25.8	19.1	15.7	9.53	7.12	5.75	4.85	4.20	3.34	2.80	1.52
1.70V/cell	56.3	44.6	37.0	27.1	20.0	16.4	10.0	7.36	5.91	4.98	4.31	3.42	2.85	1.54
1.67V/cell	60.3	47.0	38.9	28.4	20.7	17.0	10.3	7.58	6.05	5.10	4.40	3.47	2.90	1.56
1.60V/cell	65.8	50.4	41.6	30.0	21.9	17.8	10.6	7.82	6.23	5.24	4.50	3.52	2.94	1.58

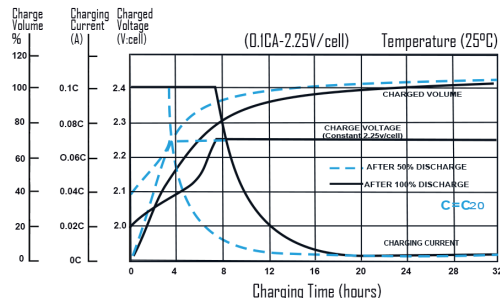
CONSTANT POWER DISCHARGE (WATTS/CELL) AT 25°C/77°F

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	68.6	58.6	51.6	40.3	30.9	25.9	16.3	12.3	10.1	8.70	7.58	6.14	5.22	2.92
1.80V/cell	83.1	68.6	59.6	45.5	34.4	28.7	17.6	13.2	10.8	9.21	8.02	6.46	5.48	2.99
1.75V/cell	92.0	75.5	64.6	48.8	36.5	30.2	18.4	13.8	11.2	9.49	8.26	6.61	5.56	3.03
1.70V/cell	101.1	81.3	68.4	51.0	38.0	31.4	19.3	14.3	11.5	9.73	8.47	6.75	5.65	3.07
1.67V/cell	107.1	84.8	71.3	52.9	39.2	32.3	19.7	14.6	11.7	9.95	8.61	6.84	5.73	3.10
1.60V/cell	114.8	89.7	75.5	55.5	41.1	33.7	20.3	15.0	12.0	10.2	8.79	6.92	5.81	3.13

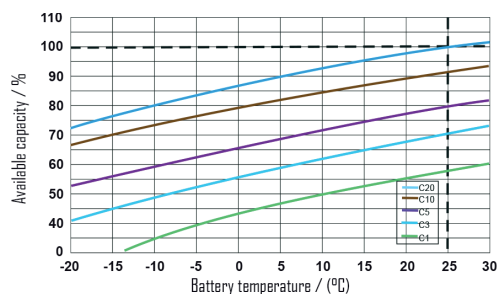
DISCHARGE CHARACTERISTICS



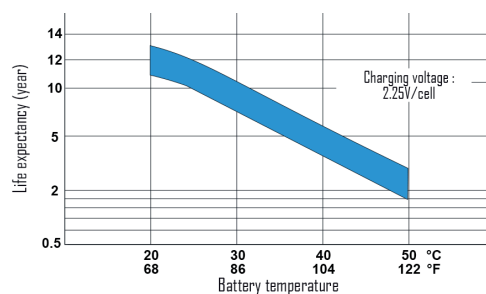
FLOAT CHARGING CHARACTERISTICS



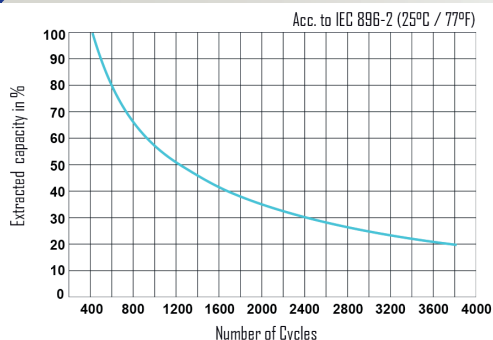
TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY



EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE



CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



SELF DISCHARGE CHARACTERISTICS

