FPG12-250 Datasheet



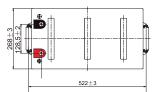


FPG Series are deep cycle batteries specially designed for long duration cyclic applications, ie with use in charge and then intensive discharge. With innovative GEL valve regulated technology and special plate design, the FPG Series ensure higher cyclic performance and higher recovery capability after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

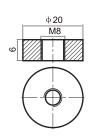
M DIMENSIONS & WEIGHT

Lenght	522±2mm
Width	268±2mm
Total height	226±2mm
Gross weight	73.1kg

-W



A TERMINAL



A SPECIFICATIONS

Nominal voltage	12V (6 cells)
Nominal capacity	250Ah (10hr)
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 2.5mΩ
Terminal	T11
Max. discharge	2500A (5 sec)
current	
Reference capacity	258.0Ah (20hr, 1.80V/cell, 25°C)
	250.0Ah (10hr, 1.80V/cell, 25°C)
	212.5Ah (5hr, 1.75V/cell, 25°C)
	184.5Ah (3hr, 1.80V/cell, 25°C)
	142.4Ah (1hr, 1.75V/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 ~ 15.0V at 25°C
	Temperature compensation:
	-30mV/°C/Cell
Operating temp.	Discharge: -20°C ~ 55°C
range	Charge: 0°C ~ 40°C
	Storage: -20°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-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





FPG12-250 Datasheet



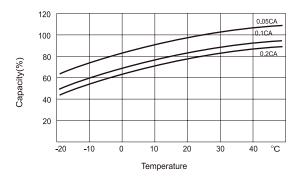
CONSTANT CURRENT DISCHARGE (A) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	316.9	269.5	225.4	178.1	135.3	111.9	71.2	55.3	45.5	38.6	33.6	27.4	23.2	12.5
1.80V/cell	399.0	320.8	262.6	205.0	153.5	124.5	77.3	59.4	48.4	41.5	36.1	29.2	25.0	12.9
1.75V/cell	447.4	357.7	288.3	218.5	162.4	131.7	81.1	61.5	50.0	42.5	37.1	29.7	25.3	13.0
1.70V/cell	493.4	386.4	306.5	230.5	170.5	137.5	85.1	63.6	51.5	43.7	37.9	30.1	25.4	13.3
1.65V/cell	/	406.9	322.5	241.4	175.6	142.4	87.4	66.0	53.0	44.7	38.7	30.6	25.6	13.4
1.60V/cell	/	438.7	346.3	256.5	185.7	149.3	90.6	68.3	54.3	45.5	39.5	30.9	26.1	13.5

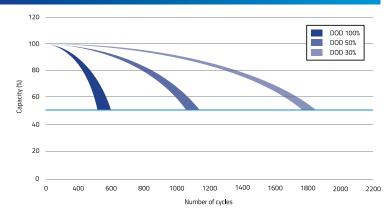
√ CONSTANT POWER DISCHARGE (W/CELL) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	Зh	4h	5h	6h	8h	10h	20h
1.85V/cell	589.8	506.7	428.1	341.3	261.2	216.9	138.6	108.1	89.1	75.9	66.4	54.3	46.1	24.9
1.80V/cell	734.5	595.7	491.8	387.9	294.2	240.0	149.8	115.5	94.4	81.3	70.9	57.7	49.6	25.6
1.75V/cell	809.9	655.4	534.4	410.0	308.5	252.6	156.5	119.3	97.3	83.1	72.7	58.5	50.0	25.8
1.70V/cell	871.5	697.0	563.0	429.4	322.1	262.6	163.6	123.1	100.0	85.0	74.1	59.3	50.2	26.3
1.65V/cell	/	726.9	586.8	445.6	329.2	270.2	167.1	127.2	102.6	86.7	75.5	60.0	50.6	26.5
1.60V/cell	/	770.7	623.2	469.6	345.8	281.7	172.4	131.0	104.6	88.1	76.9	60.7	51.4	26.7

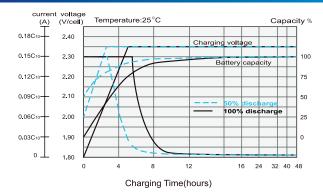
√ TEMPERATURE IN RELATION TO BATTERY CAPACITY



4 CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



A FLOAT CHARGING CHARACTERISTICS



ℳ SELF DISCHARGE CHARACTERISTICS

