



PL100D12EV (12V100Ah)

epcom[®]
POWER ⚡ LINE

Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	100Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 29.0 Kg (Tolerance ±5%)
Internal Resistance	≤5.5 mΩ (Full Charge Condition @25°C)
Terminal	Default F22(M8)
Max. Discharge Current	1000A (5 sec)
Cold Cranking Ampere(CCA)	620A
Maxi. Charging Current	30.0A
Reference Capacity	C ₃ 75.0Ah
	C ₅ 85.0Ah
	C ₁₀ 95.0Ah
	C ₂₀ 100.0Ah
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries 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. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



EV (Electric Vehicle) series is specially designed for frequent discharge deep cycle application. By using the specially designed active material, strong grids and thick plate construction, the EV series battery offers reliable performance in high load situations and could provide competitive cycle performance. It is suitable for Electric Vehicle and Golf cart, Floor Machines, Forklifts, Aerial lifts, Robotics, Marine, RV, Mobility and Medical Equipment, and most outdoor application.



ISO 9001

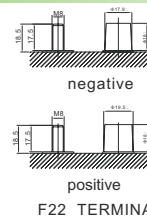
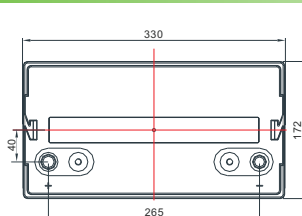
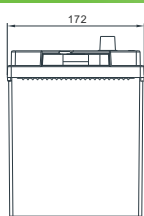
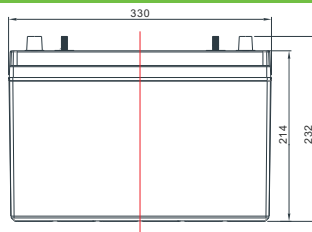


ISO 14001



ISO 45001

Dimensions



Length	330±2mm (13.0 inches)
Width	172±2mm (6.77 inches)
Height	214±2mm (8.43 inches)
Total Height	232±2mm (9.13 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

If F22 terminal is selected, terminal torque : AP is 5.6~7.9 N*m / M8 Stud is 6.6~8.5 N*m

Constant Current Discharge Characteristics : A(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	253.8	191.0	111.7	61.1	36.2	28.2	22.2	18.9	12.4	10.0	5.21
1.65V	239.9	182.6	107.2	59.0	35.1	27.3	21.6	18.4	12.3	9.90	5.12
1.70V	220.8	171.0	102.5	57.1	33.9	26.6	21.0	17.9	12.1	9.75	5.06
1.75V	202.1	159.1	98.0	55.0	32.7	25.8	20.4	17.4	11.9	9.62	5.00
1.80V	183.0	146.9	93.6	52.9	31.6	25.0	19.9	17.0	11.7	9.50	4.95
1.85V	149.5	121.9	80.6	47.4	28.9	23.1	18.5	15.8	11.0	8.94	4.70

Constant Power Discharge Characteristics : W/Cell(25°C)

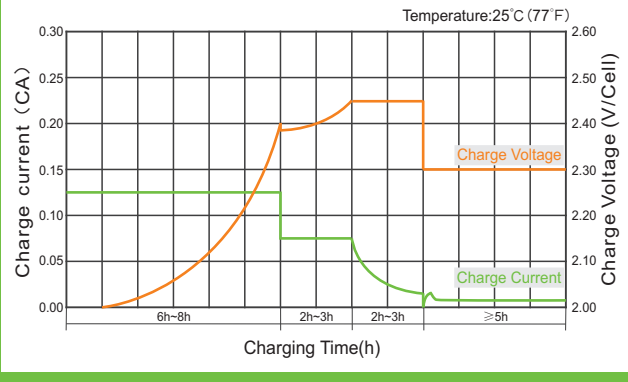
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	431.5	333.8	202.9	114.8	68.7	53.9	42.6	36.4	24.2	19.7	10.3
1.65V	415.6	323.9	196.8	111.5	66.8	52.4	41.6	35.5	24.0	19.5	10.1
1.70V	389.6	307.9	190.0	108.6	65.0	51.2	40.6	34.7	23.7	19.2	9.99
1.75V	363.1	290.7	183.5	105.2	63.0	49.9	39.7	34.0	23.4	19.0	9.88
1.80V	334.4	272.2	177.1	101.8	61.0	48.5	38.7	33.2	23.0	18.8	9.80
1.85V	278.1	229.1	154.1	91.9	56.2	45.1	36.1	31.1	21.7	17.7	9.32

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

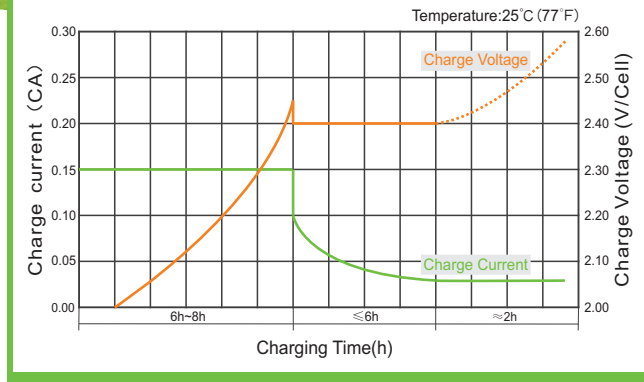
The battery must be fully charged before the capacity test. The C₂₀ should reach 95% after the first cycle and 100% after the third cycle.

If F22 terminal is selected and the discharge current is more than 0.25C, the threaded terminal of terminal F22 shall not be used in connection, but the lead pole shall be connected.

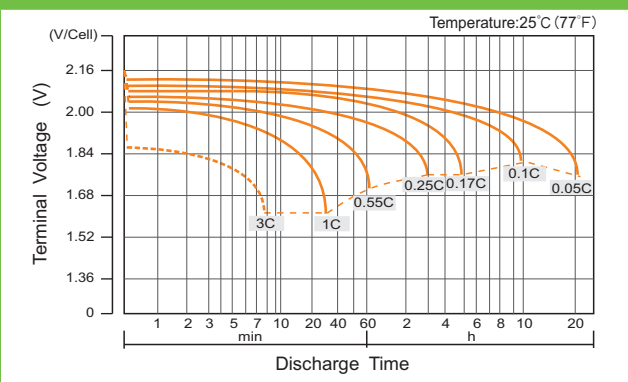
Charge Characteristic Curve for Cycle Use(IUUU)



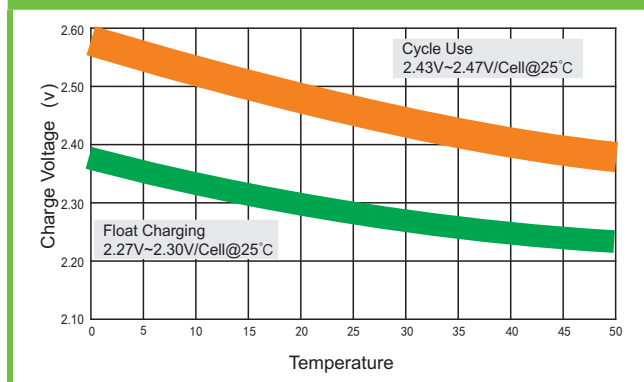
Charge Characteristic Curve For Cycle Use(IUI)



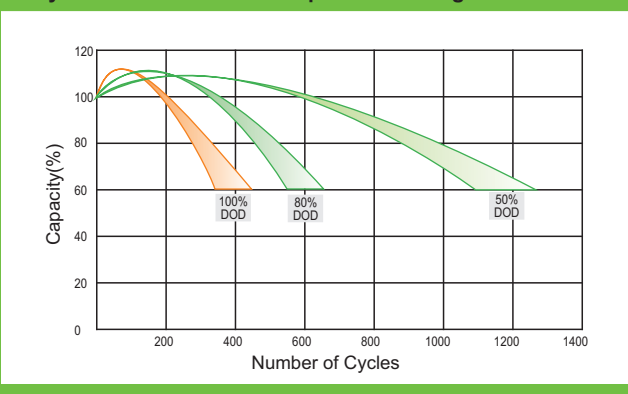
Discharge Characteristics Curve



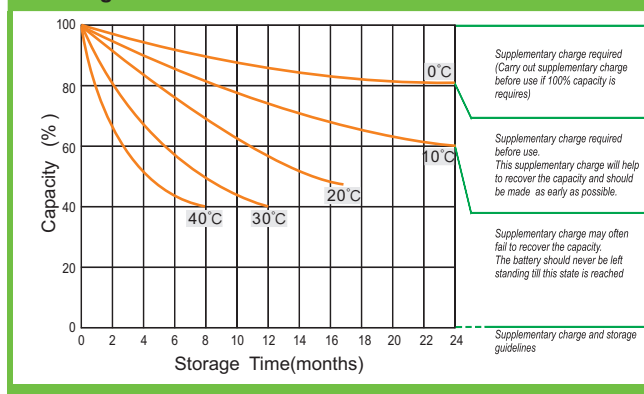
Relationship Between Charging Voltage and Temperature



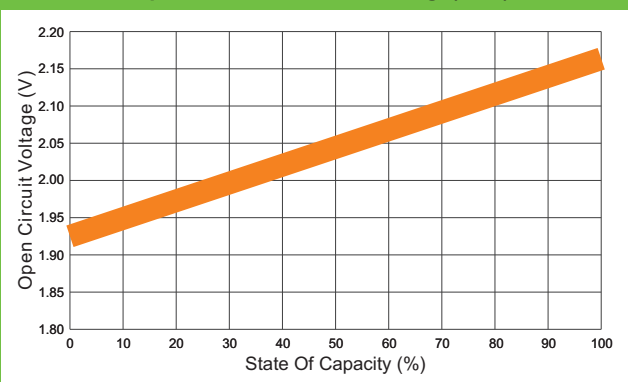
Cycle Life in Relation to Depth of Discharge



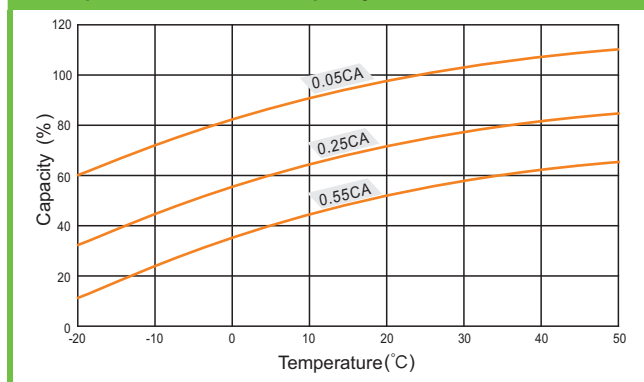
Storage Characteristics



Relationship of OCV And State of Charge(20°C)



Temperature Effects on Capacity



(Note) All above information shall be changed without prior notice, reserves the right to explain and update the latest information.