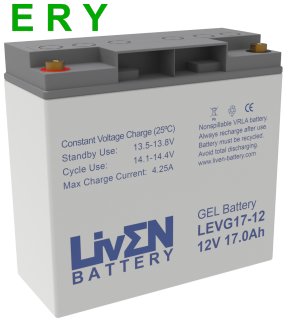
12V 17Ah LEVG17-12

GEL Deep Cycle Battery



LIVEN LEVG Series

LEVG Pure Gel series are manufacturing with special PVC-SI02 separator and patented GEL electrolyte. The LEVG series Valve Regulated Lead Acid (VRLA) is Pure Gel with 12 years floating design life. This battery its ideal for light traction electric vehicles applications (wheelchairs, electric sweepers, golf trolleys…). Maintenance-Free Sealed Lead Acid Battery.

The number of deep discharge cycles its 450 cycles at 100% DOD and 1300 cycles at 50%.

Applications:

- Wheelchairs
- Golf trolleys
- Electric sweepers
- Floor machines
- Electric vehicles
- Lawn mowers
- Portable power
- Medical equipments

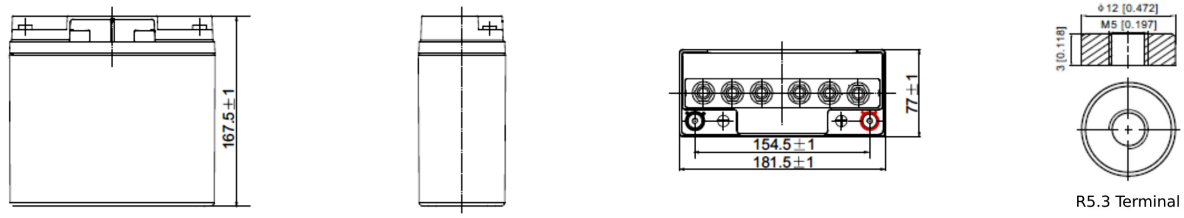
Dimensions:

Length	181.5±1.5mm (7.15in)
Width	77±1.5mm (3.03in)
Height	167.5±1.5mm (6.59in)
Total Height	167.5±1.5mm (6.59in)

Specifications:

Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	17.0Ah @20hour-rate to 1.80V per cell @25°C
Weight	Approx.5.8Kg ±2% (12.79lbs)
Internal Resistance	Approx. 18.0mΩ
Terminal	R5.3
Max. Discharge Current	204A (5sec)
Design Life	12 years floating Eurobat (20ºC): 10-12 years Long Life
Recommended Max. Charging Current	4.25A
Standby Use Voltage	13.5V~13.8V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.1V~14.4V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~55°C Charge: 0°C~40°C Storage: -20°C~50°C
Normal Operating Temperature Range	25°C±5°C
Self Discharge	LIVEN 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 charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Technical Drawings:



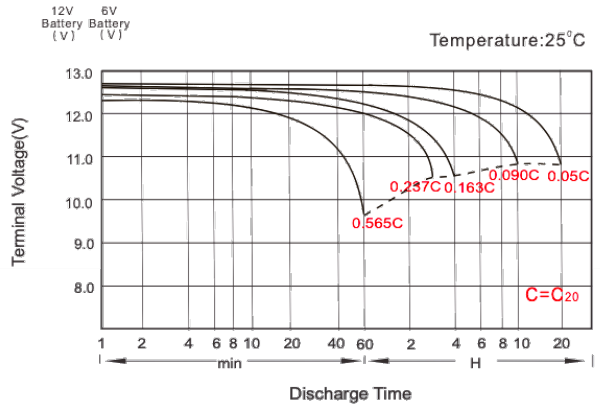
Constant Current Discharge (CC, Unit: A) at 25ºC (77ºF)

F.V. / Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.60V	22.50	16.50	12.10	9.93	5.93	4.41	3.52	2.95	2.52	2.21	1.98	1.81	1.67	0.90
1.67V	20.80	15.40	11.30	9.35	5.70	4.24	3.39	2.86	2.46	2.16	1.94	1.77	1.64	0.89
1.75V	18.50	13.90	10.30	8.52	5.24	3.94	3.20	2.72	2.34	2.06	1.86	1.70	1.58	0.87
1.80V	16.50	12.60	9.50	7.96	4.95	3.73	3.06	2.62	2.26	1.99	1.80	1.65	1.55	0.85
1.85V	14.40	11.30	8.61	7.21	4.57	3.49	2.89	2.49	2.15	1.90	1.72	1.57	1.48	0.82

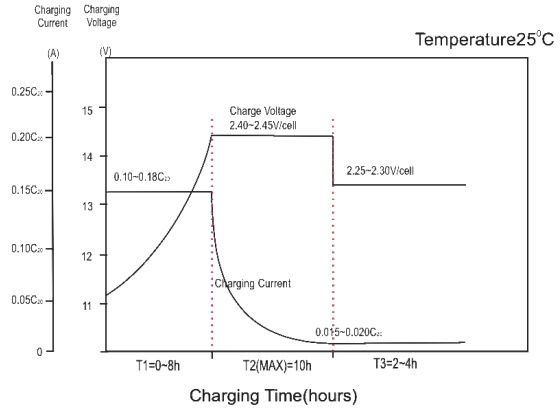
Constant Power Discharge (CP, Unit: W/Battery) at 25ºC (77ºF)

F.V. / Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.60V	243.6	182.4	136.2	112.8	67.8	50.9	40.9	34.4	29.5	26.0	23.3	21.4	19.9	10.7
1.67V	227.4	171.6	127.8	106.8	66.0	49.2	39.5	33.5	28.9	25.5	23.0	21.0	19.5	10.6
1.75V	207.6	157.2	117.6	98.4	61.2	46.1	37.6	32.0	27.6	24.4	22.1	20.2	18.8	10.4
1.80V	186.6	144.6	109.8	92.4	57.8	43.7	35.9	30.9	26.8	23.7	21.4	19.7	18.5	10.1
1.85V	165.0	130.8	100.2	84.0	53.6	41.0	34.1	29.5	25.6	22.7	20.5	18.8	17.8	9.8

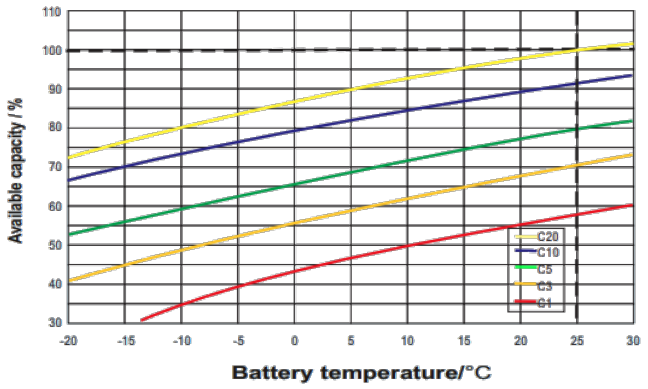
Discharge Characteristics



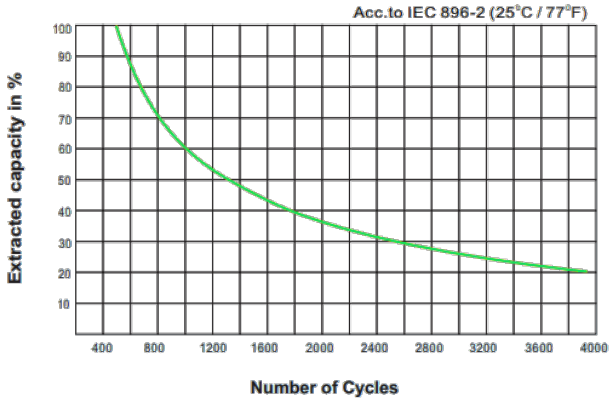
Charging Characteristics



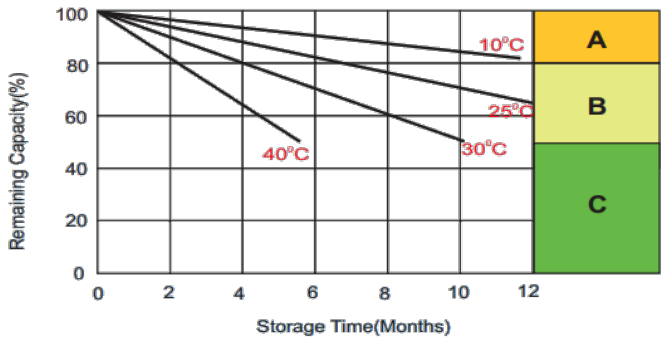
Temperature Effects in Relation to Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required).

B Supplementary charge required before use. Optional charging way as below:
1.Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2.Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
3.Charged for 8~10 hours at limited current 0.05CA.

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.