12V 40Ah LEVG40-12

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

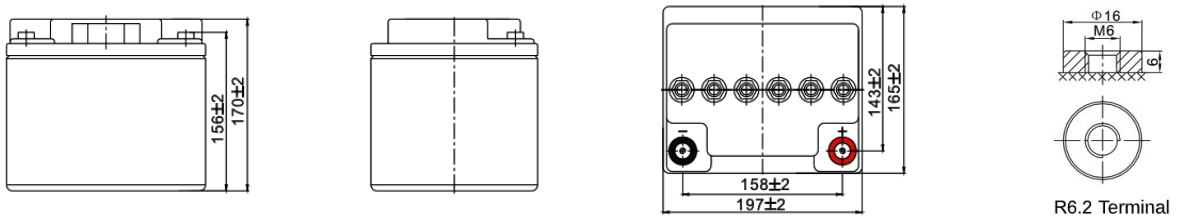
Dimensions:

Length	197±1.5mm (7.76in)
Width	165±1.5mm (6.50in)
Height	170±1.5mm (6.69in)
Total Height	170±1.5mm (6.69in)

Specifications:

Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	40.0Ah @20hour-rate to 1.80V per cell @25°C
Weight	Approx.13.0Kg ±2% (28.66lbs)
Internal Resistance	Approx. 10.5mΩ
Terminal	R6.2
Max. Discharge Current	380A (5sec)
Design Life	12 years floating Eurobat (20ºC): 10-12 years Long Life
Recommended Max. Charging Current	6.0A
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:



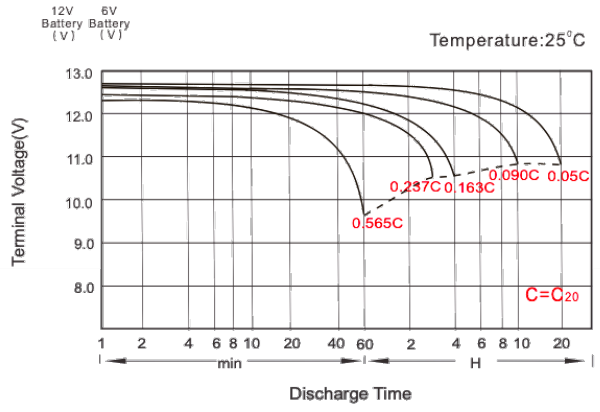
Constant Current Discharge (CC, Unit: A) at 25ºC (77ºF)

F.V. / Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	77.50	59.80	50.60	37.60	27.80	22.20	12.80	9.63	7.61	6.51	5.63	4.40	3.68	2.10
1.67V	71.10	55.90	47.30	35.50	26.30	21.50	12.50	9.51	7.48	6.37	5.54	4.36	3.64	2.08
1.75V	59.80	48.90	42.20	32.20	24.20	20.40	12.00	9.22	7.35	6.20	5.45	4.29	3.61	2.02
1.80V	51.50	42.90	38.00	29.60	22.70	18.20	11.20	8.87	7.13	6.01	5.28	4.22	3.50	2.00
1.85V	42.90	37.20	33.40	26.60	20.20	16.50	10.20	8.08	6.56	5.71	4.99	4.05	3.43	1.94

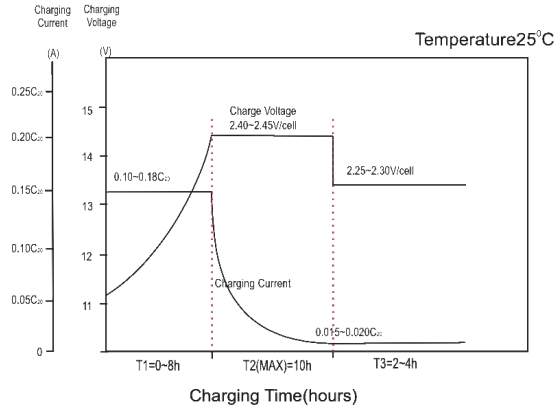
Constant Power Discharge (CP, Unit: W/Battery) at 25ºC (77ºF)

F.V. / Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	811.2	638.4	550.8	416.4	312.6	249.6	145.8	111.0	88.2	75.6	65.4	51.6	43.3	25.0
1.67V	757.8	605.4	520.2	397.2	298.2	244.2	144.0	110.4	87.0	74.4	64.8	51.4	43.0	24.8
1.75V	654.0	540.6	472.8	366.0	277.8	234.6	139.2	107.4	85.8	72.6	64.2	50.6	42.7	24.2
1.80V	572.4	480.6	429.6	337.8	262.2	210.6	130.8	103.8	84.0	70.8	62.4	49.9	41.5	23.8
1.85V	483.6	421.8	382.8	306.6	235.2	192.0	119.4	94.8	77.4	67.2	59.1	48.0	40.7	23.3

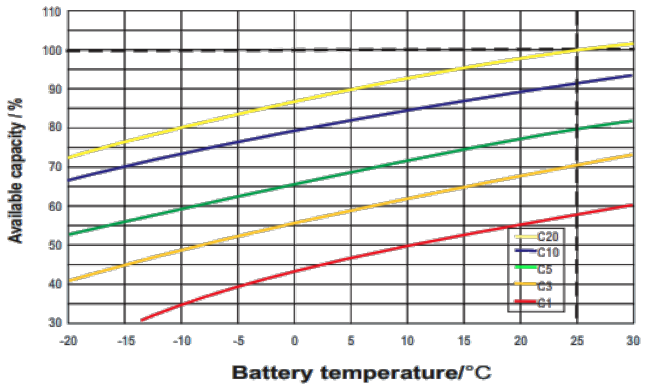
Discharge Characteristics



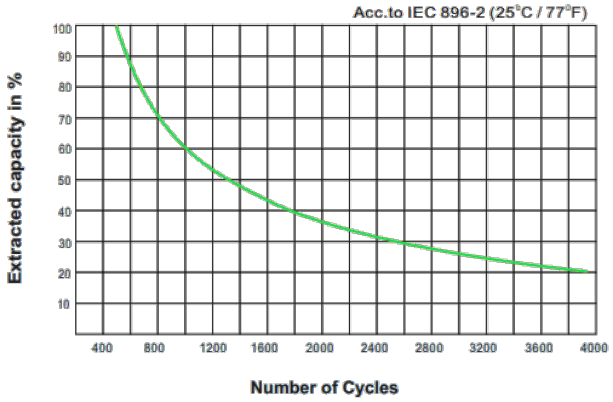
Charging Characteristics



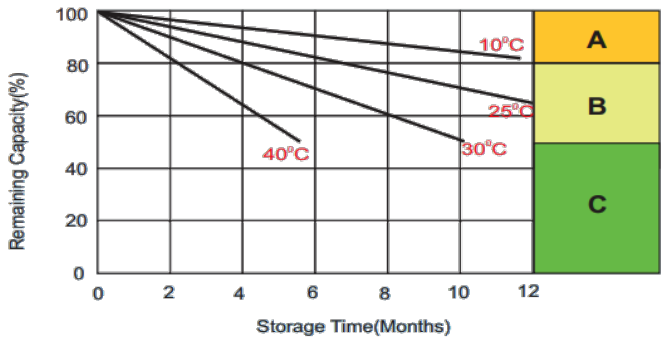
Temperature Effects in Relation to Capacity



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.