ROVON POWER

RoveGEL

DG12-70

12V 70Ah

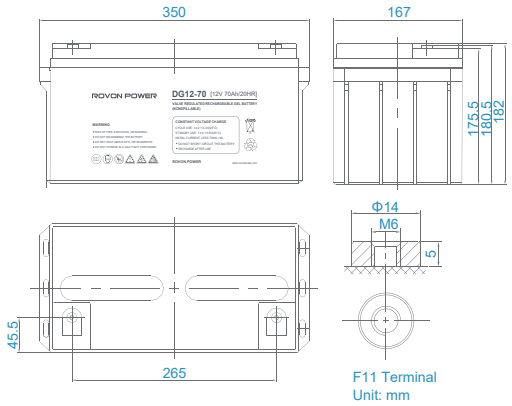
Deep Cycle Gel Valve Regulated Lead Acid Battery

RoveGEL (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life, it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented Gel electrolyte, the RoveGEL series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and can deliver 450 cycles at 100% DOD.



Specification	
Cells Per Unit	6
Voltage Per Unit	12
Capacity	70Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 22.5 kg (Tolerance ±3.0%)
Internal Resistance	Approx. 8.0 mΩ
Terminal	F5(M8) / F11(M6)
Max. Discharge Current	700A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	14.0 A
Reference Capacity	C3 47.7Ah C5 55.0Ah C10 61.4Ah C20 70.0Ah
Float Charging Voltage	13.6V~13.8V @25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2V~14.4V @25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -40°C~60°C Charge: -20°C~50°C Storage: -40°C~60°C
Normal Operating Temperature Range	25°C ± 5°C
Self Discharge	ROVON 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

Dimensions



Length
350±2mm (13.8 inches)

Width
167±2mm (6.57 inches)

Height
182±2mm (7.17 inches)

Total Height
182±2mm (7.17 inches)

Terminal M5 Value
6-7 N*m

Terminal M6 Value
8-10 N*m

Terminal M8 Value
10-12 N*m

Constant Current Discharge Characteristics: A (25°C)

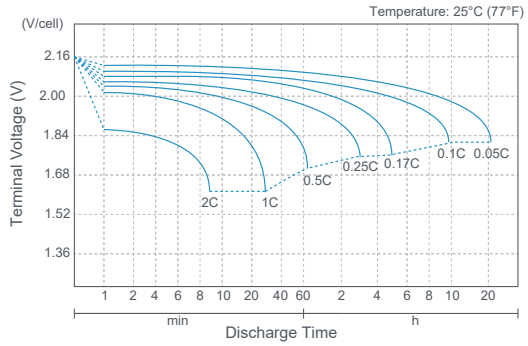
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	129.7	101.5	66.8	39.1	23.4	16.2	13.4	11.3	7.70	6.39	3.85
1.65V	123.5	99.4	65.7	38.9	23.2	16.1	13.3	11.2	7.64	6.32	3.71
1.70V	119.1	97.9	65.1	38.6	23.0	16.0	13.3	11.1	7.57	6.26	3.61
1.75V	111.2	94.3	65.2	38.2	22.9	15.9	13.1	11.0	7.51	6.20	3.50
1.80V	102.6	87.9	64.7	37.3	22.5	15.5	12.8	10.8	7.39	6.14	3.29
1.85V	92.8	79.8	61.2	35.5	21.5	14.8	12.2	10.3	7.07	5.96	3.15

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

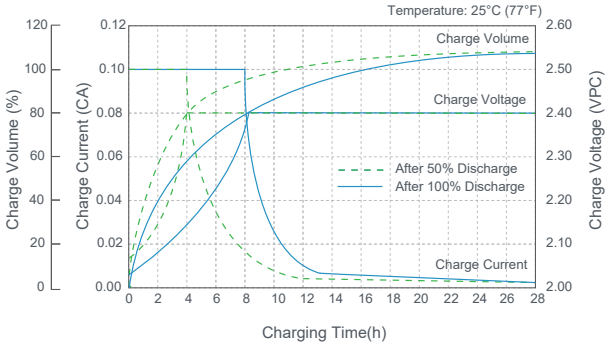
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	310.1	230	125	75.4	46.0	32.0	26.6	22.4	15.3	12.7	6.81
1.65V	298.6	223	123	75.2	45.7	32.1	26.6	22.4	15.2	12.6	6.69
1.70V	278.7	217	124	74.6	45.4	31.9	26.5	22.3	15.1	12.5	6.57
1.75V	259.3	205	124	73.9	45.1	31.8	26.3	22.0	15.0	12.4	6.44
1.80V	239.0	191	123	72.6	44.5	30.9	25.7	21.6	14.8	12.3	6.32
1.85V	189.6	175	117	69.5	42.9	29.6	24.4	20.7	14.1	11.9	5.95

DG12-70 12V 70Ah

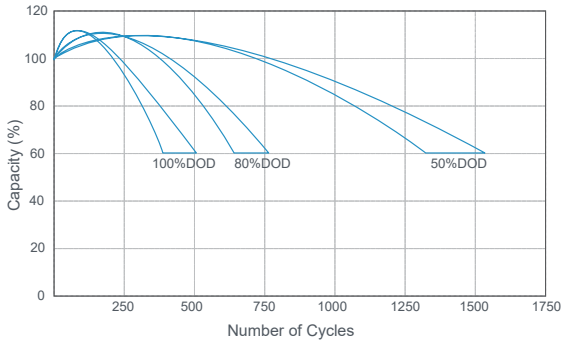
Discharge Characteristics Curve



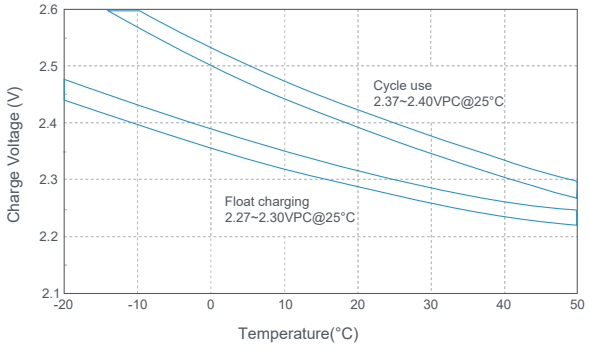
Charge Characteristic Curve for Cycle Use (IU)



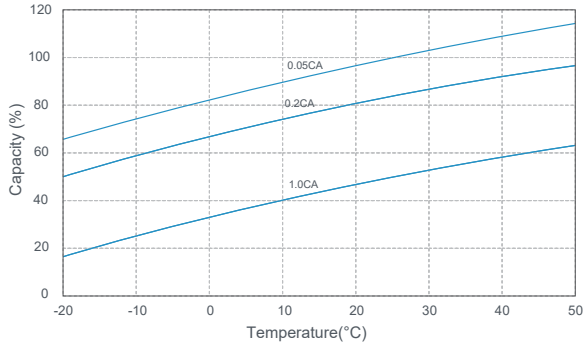
Cycle Life in Relation to Depth of Discharge



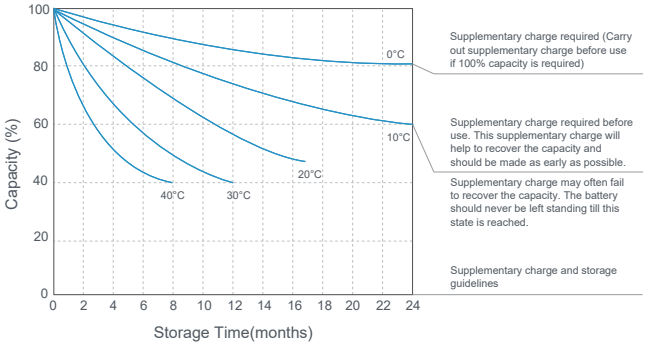
Relationship Between Charging Voltage and Temperature



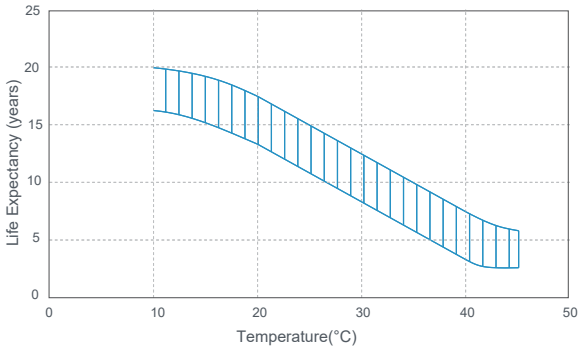
Temperature Effects on Capacity



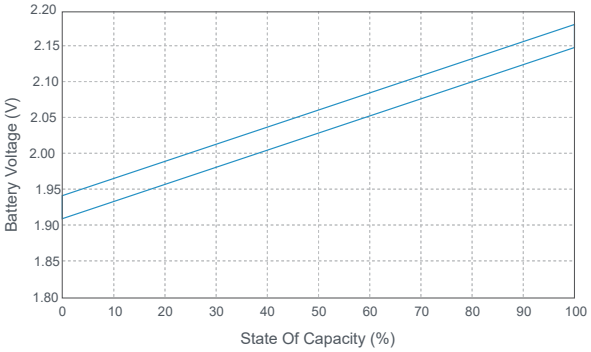
Storage Characteristics



Effect of Temperature on Long Term Life



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



Specifications are subject to change without prior notice. ROVON reserves the right to interpret and update this information.