ROVON POWER

RoveGEL

DG12-40

12V 40Ah

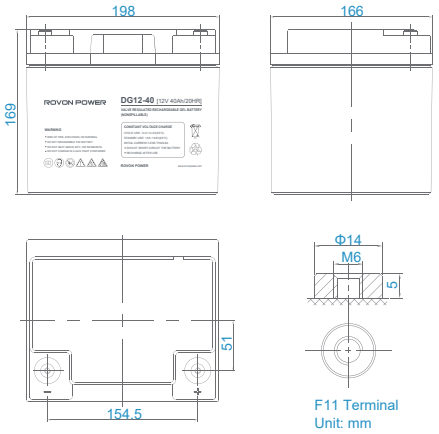
Deep Cycle Gel Valve Regulated Lead Acid Battery

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	40Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 13.2 kg (Tolerance ±3.0%)
Internal Resistance	Approx. 11.0 mΩ
Terminal	F4(M6) / F11(M6)
Max. Discharge Current	400A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	8.0 A
Reference Capacity	C3 27.3Ah C5 31.5Ah C10 35.1Ah C20 40.0Ah
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



F11 Terminal
Unit: mm

Length
198±2mm (7.80 inches)

Width
166±2mm (6.54 inches)

Height
169±2mm (6.65 inches)

Total Height
169±2mm (6.65 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)

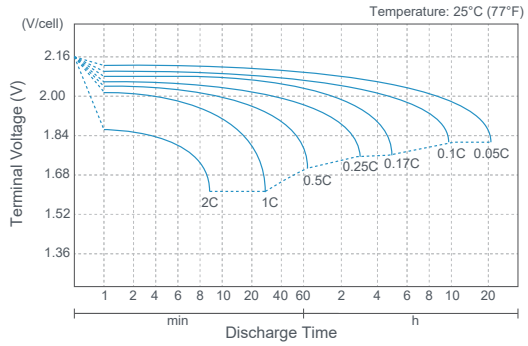
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	74.14	58.02	38.15	22.36	13.37	9.23	7.65	6.44	4.40	3.65	2.20
1.65V	70.54	56.83	37.52	22.26	13.27	9.20	7.61	6.40	4.36	3.61	2.12
1.70V	68.05	55.93	37.19	22.05	13.17	9.13	7.58	6.36	4.33	3.58	2.06
1.75V	63.55	53.88	37.27	21.84	13.07	9.09	7.51	6.29	4.29	3.54	2.00
1.80V	58.63	50.25	36.98	21.33	12.84	8.84	7.33	6.17	4.22	3.51	1.88
1.85V	53.01	45.59	34.96	20.26	12.27	8.46	6.98	5.91	4.04	3.40	1.80

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

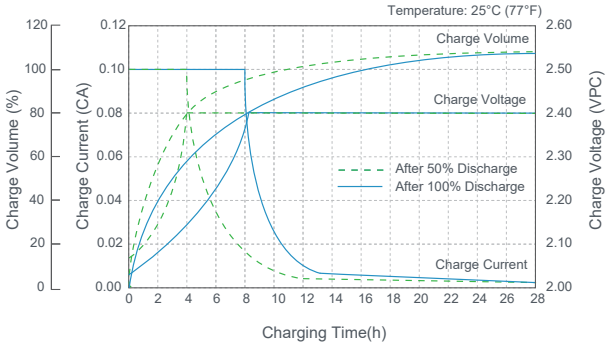
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	132	105	71.3	43.1	26.3	18.3	15.2	12.8	8.75	7.27	3.89
1.65V	128	104	70.5	43.0	26.1	18.3	15.2	12.8	8.71	7.22	3.82
1.70V	124	103	70.7	42.6	26.0	18.2	15.1	12.7	8.65	7.16	3.75
1.75V	117	99	70.9	42.2	25.8	18.2	15.0	12.6	8.58	7.09	3.68
1.80V	109	92.5	70.5	41.5	25.5	17.7	14.7	12.3	8.44	7.02	3.61
1.85V	99.8	84.3	67.0	39.7	24.5	16.9	14.0	11.8	8.08	6.81	3.40

DG12-40 12V 40Ah

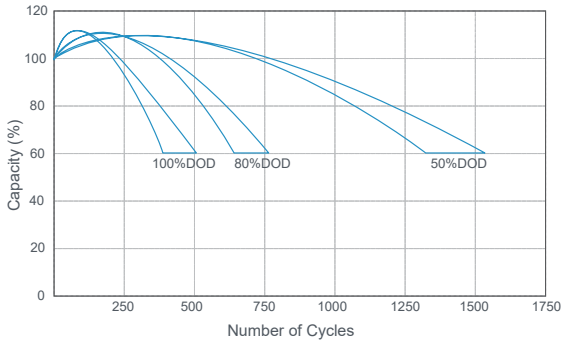
Discharge Characteristics Curve



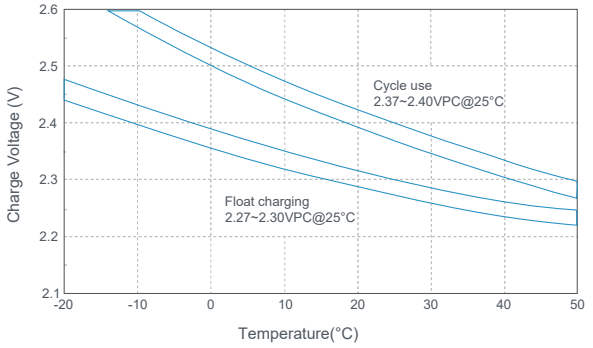
Charge Characteristic Curve for Cycle Use (IU)



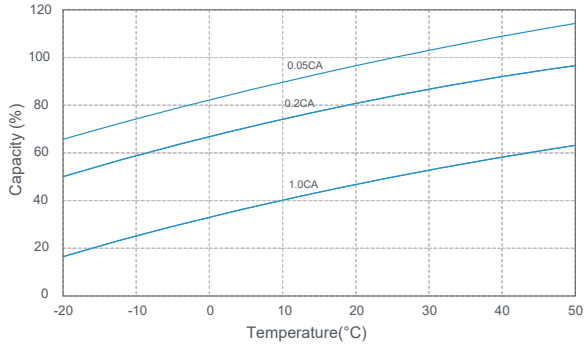
Cycle Life in Relation to Depth of Discharge



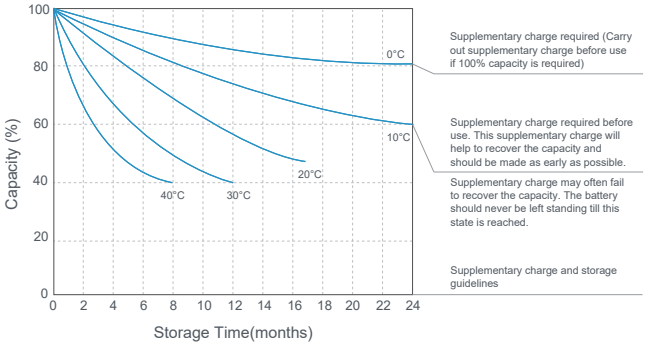
Relationship Between Charging Voltage and Temperature



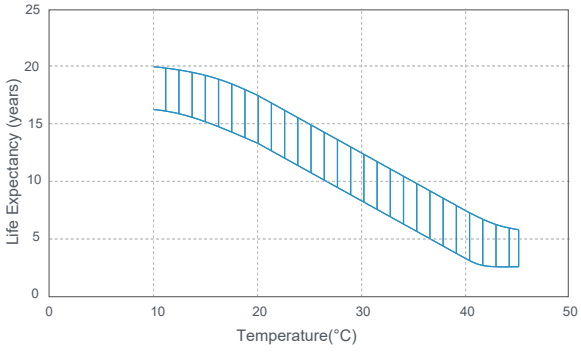
Temperature Effects on Capacity



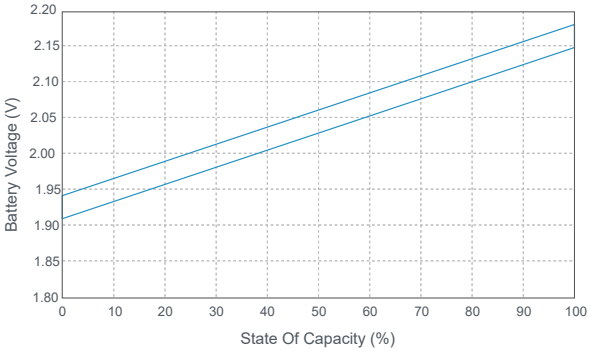
Storage Characteristics



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.