

CBG50-12

12V 50AH

Deep Cycle Gel Battery



CBG50-12



Physical Specification

Part Number:	CBG50-12
Length:	229 ± 2 mm (9.02 inches)
Width: Container	138 ± 2 mm (5.43 inches)
Height:	205 ± 2 mm (8.07 inches)
Total Height (with terminal):	211 ± 2 mm (8.31 inches)
Approx Weight:	16.6 kg (36.60lbs)

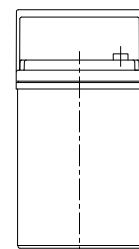
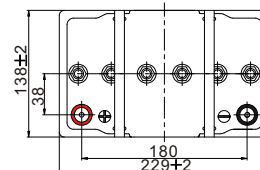
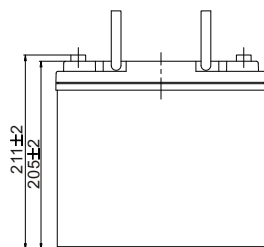
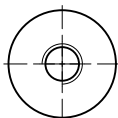
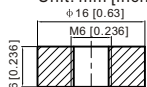
Specifications

	Nominal Voltage	12V
	(C10, 1.80V/cell)	50AH
Terminal Option	T6	
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	(20hr, 2.50A, 1.80V/cell)	50.0 Ah
	(10hr, 4.65A, 1.75V/cell)	46.5 Ah
	(5hr, 8.00A, 1.75V/cell)	40.0 Ah
	(3hr, 11.6A, 1.75V/cell)	34.8 Ah
	(1hr, 27.5A, 1.67V/cell)	27.5 Ah
Max Discharge Current (5s)	500 A	
Internal Resistance	Approx. 9.0mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -20°C~55°C (-4°F~131°F) Charge: 0°C~40°C (32°F~104°F) Storage: -20°C~50°C (5°F~122°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 12.5A. Voltage 14.4V~15.0V at 25°C (77°F) Temp.Coefficient -30mV°C
Capacity affected by Temperature	Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C (77°F)Temp. Coefficient -20mV°C
	Capacity affected by Temperature	40°C (104°F) 103%
		25°C (77°F) 100%
		0°C (32°F) 86%
Design Floating Life at 20°C	20 Years	
Self Discharge	Canbat Deep Cycle Gel batteries may be stored for up to 9 months at 25°C (77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter. Self-discharge is less than 2%	

Dimensions

T6 Terminal

Unit: mm [inches]



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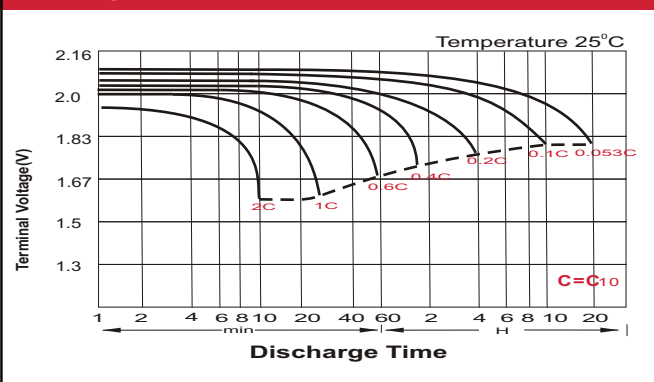
Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	42.3	33.2	25.3	21.2	13.5	10.3	8.49	7.33	6.33	5.60	5.05	4.62	4.37	2.40
1.80V/cell	48.5	37.1	27.9	23.4	14.6	11.0	9.00	7.70	6.64	5.86	5.29	4.86	4.56	2.50
1.75V/cell	54.5	40.8	30.2	25.1	15.4	11.6	9.43	8.00	6.88	6.07	5.46	5.00	4.65	2.55
1.70V/cell	58.7	43.7	32.1	26.5	16.4	12.1	9.74	8.25	7.12	6.27	5.63	5.13	4.76	2.58
1.67V/cell	61.1	45.4	33.2	27.5	16.8	12.5	10.0	8.42	7.23	6.36	5.71	5.20	4.82	2.61
1.60V/cell	66.2	48.6	35.7	29.2	17.5	13.0	10.4	8.68	7.41	6.50	5.81	5.31	4.91	2.65

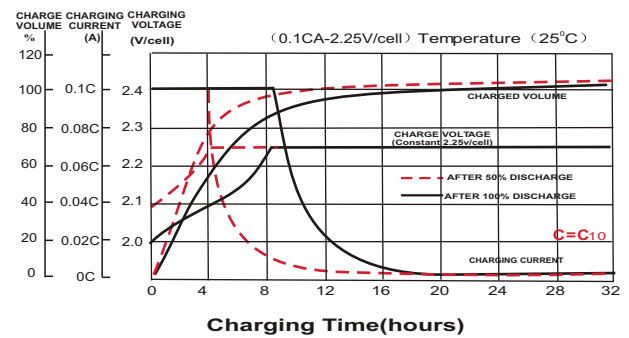
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	81.0	64.0	49.1	41.3	26.3	20.1	16.7	14.5	12.5	11.1	10.0	9.20	8.70	4.79
1.80V/cell	91.5	70.8	53.8	45.3	28.3	21.4	17.6	15.1	13.1	11.6	10.5	9.65	9.07	4.98
1.75V/cell	101.7	77.2	57.7	48.3	29.9	22.6	18.4	15.7	13.5	12.0	10.8	9.93	9.24	5.08
1.70V/cell	108.4	81.9	60.8	50.8	31.6	23.5	19.0	16.1	14.0	12.4	11.1	10.2	9.45	5.14
1.67V/cell	111.5	84.2	62.6	52.4	32.2	24.1	19.4	16.4	14.2	12.5	11.3	10.3	9.55	5.18
1.60V/cell	119.5	89.3	66.7	55.3	33.3	25.0	20.0	16.9	14.5	12.7	11.4	10.5	9.72	5.25

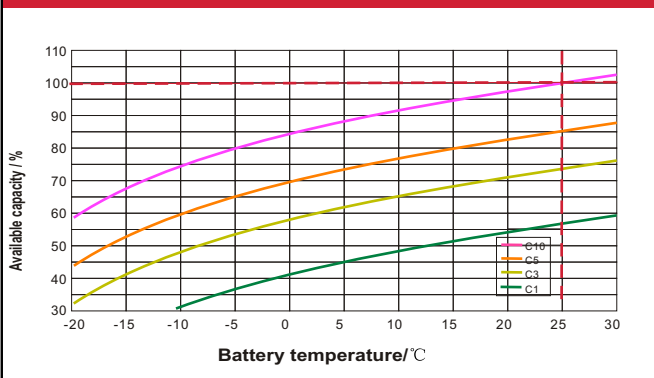
Discharge Characteristics



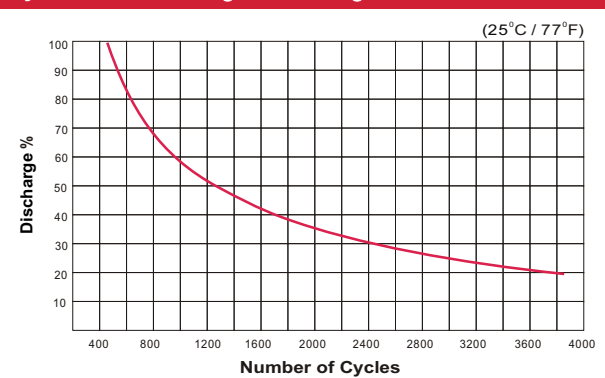
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Cycle Life / Discharge Percentage



Deep Cycle Gel Battery Features

- Ability to deeply discharge
- Maintenance-free
- Spill-free / Spill-proof
- Oxygen recombination technology
- Low self-discharge rate
- Excellent cycle life
- High power and volume ratio
- Unrivalled energy density
- Valve regulated
- Extremely safe operations
- VRLA Gel technology
- High reliability
- Rechargeable lead acid batteries
- Optimum quality
- Developed in Canada

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