

CBL50-12

12V 50AH

General Purpose Sealed Lead Acid Battery

CANBAT

CBL50-12



Physical Specification

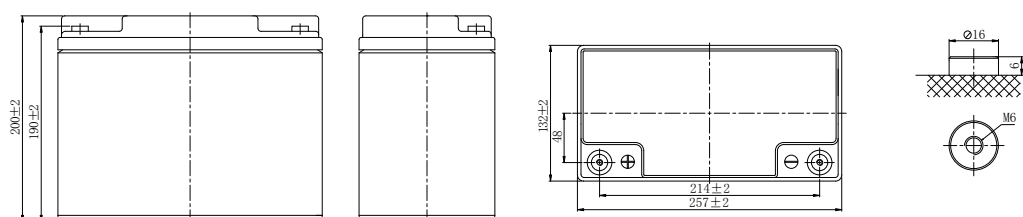
Part Number:	CBL50-12
Length:	257 ± 2 mm (10.1 inches)
Width:	132 ± 2 mm (5.19 inches)
Container Height:	200 ± 2 mm (7.87 inches)
Total Height (with terminal):	200 ± 2 mm (7.87 inches)
Approx Weight:	15.7 Kg (34.6 lbs)

Specifications

	Nominal Voltage	12V
	(C20 ,1.75V/cell)	50AH
Terminal Option	M6	
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	(20hr,2.63A,1.80V/cell)	52.6 Ah
	(10hr,5.00A,1.80V/cell)	50.0 Ah
	(5hr,9.10A,1.75V/cell)	45.5 Ah
	(3hr,13.8A,1.75V/cell)	41.4 Ah
	(1hr,31.9A,1.60V/cell)	31.9 Ah
Max Discharge Current (5s)	500A	
Internal Resistance	Approx. 9.0mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -15°C~50°C (5°F~122°F)
		Charge: -20~40°C (-4~104°F)
		Storage: -15°C~40°C (5°F~104°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 15.0A. Voltage 14.4V~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C
	Self Discharge	Initial Charging Current less than 15.0A. 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 Lead Acid AGM batteries may be stored for up to 6 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

M6 Terminal



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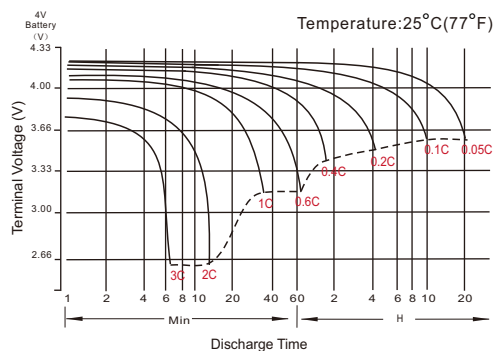
Constant Current Discharge (Amperes) at 25 °C (77 °F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	102.0	72.5	64.1	50.4	45.1	33.0	27.9	20.2	17.0	12.5	9.79	8.50	7.49	5.76	4.78	2.53
1.80V/cell	115.9	82.3	72.7	57.0	49.1	34.9	28.9	20.9	17.6	13.6	10.5	8.94	8.05	6.06	5.00	2.63
1.75V/cell	125.9	89.2	78.7	61.6	50.1	36.2	30.4	22.0	18.5	13.8	10.7	9.10	8.11	6.09	5.05	2.65
1.70V/cell	134.6	95.1	83.6	65.3	51.1	36.9	31.0	22.4	18.9	14.1	10.8	9.25	8.15	6.19	5.10	2.68
1.67V/cell	139.3	98.2	86.0	67.1	51.9	37.5	31.4	22.8	19.1	14.2	11.0	9.44	8.19	6.28	5.17	2.71
1.60V/cell	144.3	101.5	88.7	68.8	52.6	38.0	31.9	23.1	19.4	14.3	11.1	9.57	8.25	6.36	5.23	2.74

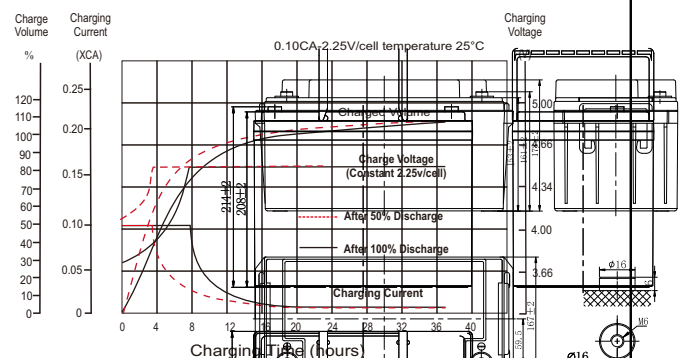
Constant Power Discharge (Watts/cell) at 25 °C (77 °F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	184.6	132.2	119.0	94.0	84.4	62.1	52.9	38.5	32.4	23.9	18.8	16.4	14.5	11.2	9.31	4.94
1.80V/cell	206.5	147.9	133.1	105.2	91.2	65.4	54.5	39.6	33.3	25.8	20.0	17.2	15.5	11.8	9.73	5.11
1.75V/cell	220.4	157.8	142.1	112.2	92.4	67.4	57.0	41.4	35.0	26.3	20.3	17.4	15.6	11.8	9.82	5.16
1.70V/cell	231.7	165.9	149.4	118.0	93.4	68.2	57.8	42.1	35.5	26.7	20.6	17.7	15.7	12.0	9.91	5.21
1.67V/cell	235.4	168.6	151.8	119.9	94.1	68.8	58.3	42.5	35.9	26.8	20.9	18.0	15.7	12.1	10.0	5.27
1.60V/cell	238.7	171.0	153.9	121.6	94.5	69.2	58.8	42.8	36.2	26.9	21.0	18.1	15.7	12.2	10.1	5.32

Discharge Characteristics



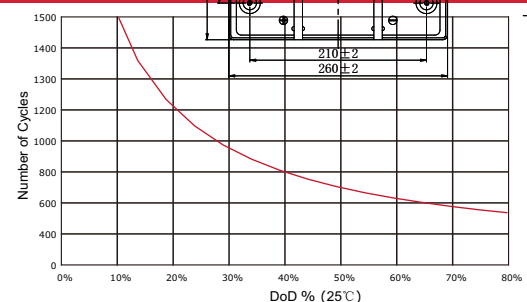
Float Charging Characteristics



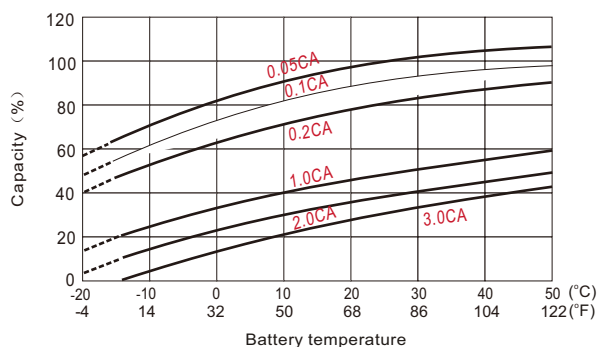
Valve-Regulated Sealed Lead Acid Batteries

Sealed lead acid batteries are engineered to provide reliable power in a compact design. They are spill-proof and require zero maintenance, as adding water is never necessary. The acid in the battery is suspended in a glass mat separator, which makes the cells leak-proof during normal battery operation. Our batteries are proudly designed in Canada with quality and performance in mind, offering one of the highest cycle life among other sealed lead acid battery brands. Canbat AGM batteries are manufactured with pure lead to ensure a low self-discharge rate of less than 2%, meaning stored batteries are only required a recharge once every six months. The series also features an outer container made from ABS material.

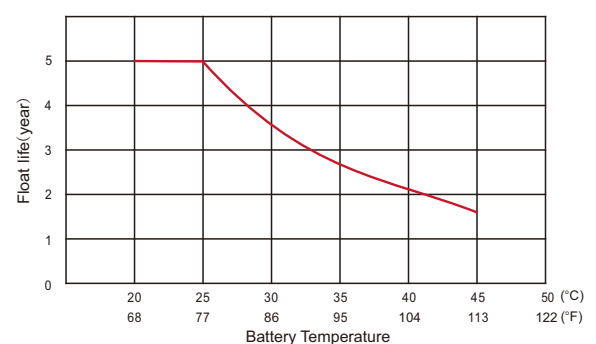
Cycle Life Relation o Depth of Discharge



Temperature Effects in Relation to Battery Capacity



Float Service Life



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