

# CLC100-12

12V 100AH

Pure Lead Carbon

# CANBAT

## CLC100-12



## Physical Specification

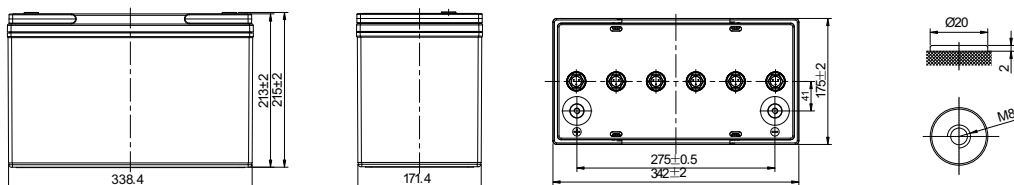
Part Number:	<b>CLC100-12</b>
Length:	<b>342 ± 2 mm ( 13.40 inches)</b>
Width:	<b>175 ± 2 mm ( 6.89 inches)</b>
Container Height:	<b>213 ± 2 mm ( 8.39 inches)</b>
Total Height (with terminal):	<b>215 ± 2 mm ( 8.46 inches)</b>
Approx Weight:	<b>31.2 kg (68.8 lbs)</b>

## Specifications

	Nominal Voltage	12V
	Nominal Capacity (10HR)	100AH
<b>Terminal Type</b>	Standard Terminal	M8
	Optional Terminal	M6
<b>Container Material</b>	Standard Option	ABS
	Flame Retardant Option (FR)	Non-halogenated, thermally sealed PPOI plastic casing & cover
<b>Rated Capacity(35°)</b>	100.0Ah	(C10 to 1.80VDC @ 25°C)
	100.4Ah	(C8 to 1.75VDC @ 25°C)
	95.0Ah	(C5 to 1.75VDC @ 25°C)
	83.1Ah	(C3 to 1.75VDC @ 25°C)
<b>Max Charge Current (A)</b>	30.0A	
<b>Max Discharge Current</b>	1250A	
<b>Internal Resistance</b>	Approx 3.5mΩ @ 25°C @ 1Khz	
<b>Discharge Characteristics</b>	Operating Temp. Range	Discharge: -40 ~ 65°C
		Charge: 0 ~ 40°C
		Storage: -20 ~ 40°C
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Life	Exceptional PSoC cyclic performance 2500+ cycles at 50% Depth of Discharge (DoD)
	Features	Lead carbon added to negative electrodes increases power and reduces sulfation, leak-proof operation
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	79%
<b>Design Floating Life at 20°C</b>	20+ Years	
<b>Self Discharge</b>	Canbat Pure Lead Carbon Batteries may be stored for up to 24 months at 25°C (°77F). For higher temperatures, the time interval will be shorter. A refresh charge is required when the OCV approach 2.10V/cell or when the maximum storage time is reached, whichever occurs first.	

## Dimensions

### M8 Terminal



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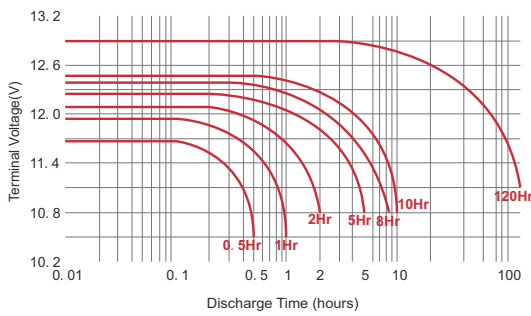
## Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	182.0	145.4	124.4	94.0	72.0	59.0	35.0	26.4	21.8	18.4	12.2	9.93	5.35
1.80V/cell	202.0	159.2	134.9	100.0	76.0	62.0	36.0	27.1	22.3	18.7	12.4	10.0	5.48
1.75V/cell	220.8	171.7	144.1	106.0	80.0	65.0	37.0	27.7	22.5	19.0	12.5	10.3	5.59
1.70V/cell	237.5	182.4	151.9	112.0	82.7	67.0	38.0	28.3	22.8	19.3	12.8	10.5	5.67
1.67V/cell	246.4	187.8	155.7	114.0	85.3	69.0	39.0	29.0	23.0	19.4	12.9	10.5	5.70
1.60V/cell	260.7	195.3	160.3	118.0	89.3	71.0	39.5	29.3	23.3	19.5	13.0	10.7	5.70

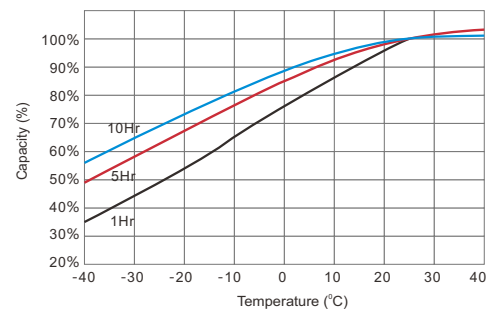
## Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	344.6	278.8	236.1	183.0	143.3	117.5	67.6	52.1	42.3	36.4	24.2	19.8	10.6
1.80V/cell	389.4	306.8	256.3	198.6	152.3	122.9	70.4	53.2	43.8	36.9	24.5	20.0	10.9
1.75V/cell	419.4	326.2	271.3	205.8	158.3	126.2	71.9	54.1	44.2	37.5	24.8	20.3	11.0
1.70V/cell	431.9	337.3	283.6	210.8	161.0	127.7	73.1	54.8	44.6	38.0	25.1	20.5	11.1
1.67V/cell	456.4	349.9	289.5	216.8	165.0	131.2	73.7	55.1	45.2	38.2	25.2	20.6	11.2
1.60V/cell	467.8	358.4	298.2	224.2	167.7	132.5	74.4	55.6	45.3	38.5	25.4	20.9	11.3

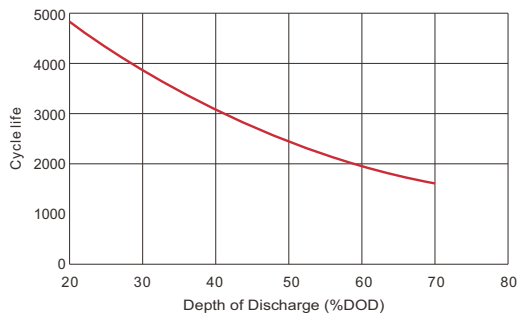
### Discharge Characteristics



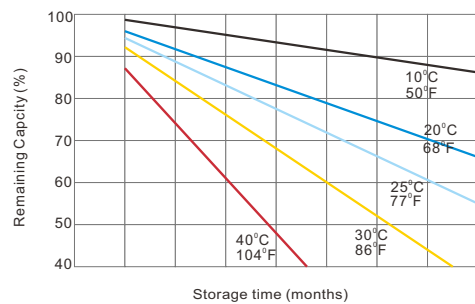
### Temperature in Relation to Capacity



### Cycle Life vs. Depth of Discharge



### Self-discharge Characteristics



### Features of Canbat Carbon Technology

- Exceptional PSoC cyclic performance 2500 cycles @50% DoD with a design life of 12+ years at 20°C (68°F)
- High modulus Polyphenylene Oxide (PPO) plastic, materials designed to withstand extended elevated operating temperatures.
- Flame retardant (UL 94 VO) and LOI of at least 28%
- Lead carbon added to negative electrodes increases power and reduces sulfation
- High potential fuel savings when used with hybrid genset applications
- Operating temperature range -40°C to +65°C (-40°F to 149°F)
- State-of-the-art automated manufacturing ensures consistency and reliability
- Advanced 3 stage terminal design to ensure leak-free operation - brass terminals provide maximum performance
- Non-halogenated thermally sealed plastic casing