

CLC90-12FT

12V 90AH

Pure Lead Carbon

CANBAT

CLC90-12FT



Physical Specification

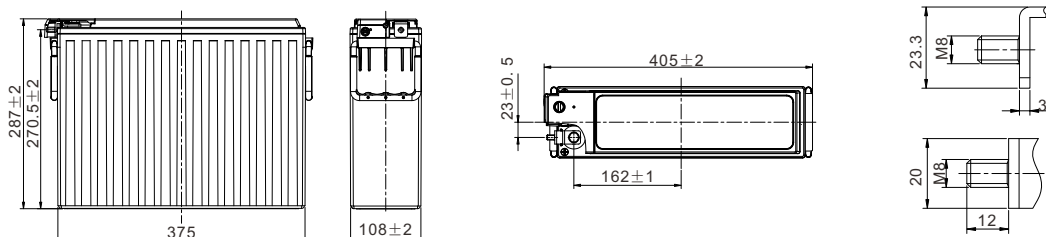
Part Number:	CLC90-12FT
Length:	405 ± 2 mm (15.96 inches)
Width:	108 ± 2 mm (4.25 inches)
Container Height:	287 ± 2 mm (11.30 inches)
Total Height (with terminal):	287 ± 2 mm (11.30 inches)
Approx Weight:	28.7 kg (63.3 lbs)

Specifications

	Nominal Voltage	12V
	Nominal Capacity (10HR)	90AH
Terminal Type	Standard Terminal	M8
	Optional Terminal	M6
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	Non-halogenated, thermally sealed PPOI plastic casing & cover
Rated Capacity(35°)	90.0Ah	(C10 to 1.80VDC @ 25°C)
	90.4Ah	(C8 to 1.75VDC @ 25°C)
	85.0Ah	(C5 to 1.75VDC @ 25°C)
	76.8Ah	(C3 to 1.75VDC @ 25°C)
Max Charge Current (A)	27.0A	
Max Discharge Current	1080A	
Internal Resistance	Approx 4.8mΩ @ 25°C @ 1Khz	
Discharge Characteristics	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%
Design Floating Life at 20°C	20+ Years	
Self Discharge	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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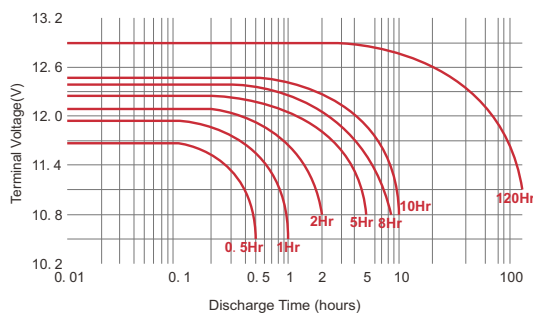
Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	171.8	141.4	121.0	94.8	72.3	58.9	34.5	24.7	20.0	16.4	10.9	8.91	4.78
1.80V/cell	188.7	153.3	129.9	100.3	75.6	61.2	35.2	25.1	20.3	16.7	11.1	9.00	4.89
1.75V/cell	206.3	165.3	138.8	106.0	79.1	63.5	36.2	25.6	20.7	17.0	11.3	9.22	4.99
1.70V/cell	222.0	175.7	146.2	110.6	81.9	65.3	36.9	25.9	21.0	17.3	11.4	9.31	5.06
1.67V/cell	230.3	180.9	149.9	112.8	83.1	66.1	37.2	26.1	21.1	17.3	11.5	9.31	5.09
1.60V/cell	245.6	189.5	155.6	115.9	84.8	67.3	37.6	26.5	21.4	17.5	11.7	9.49	5.13

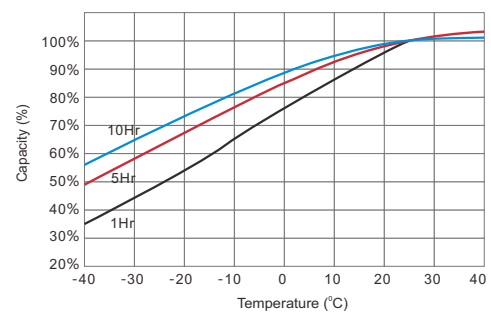
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	325.3	265.3	225.9	178.0	139.5	114.2	67.6	48.7	39.3	32.6	21.6	17.7	9.46
1.80V/cell	361.1	283.2	239.0	187.6	144.0	119.2	69.6	49.2	40.1	33.0	21.8	18.0	9.73
1.75V/cell	377.5	293.6	246.4	192.2	146.8	120.6	71.1	50.0	40.7	33.5	22.1	18.2	9.87
1.70V/cell	393.3	303.6	253.6	196.7	149.5	122.5	71.6	50.7	41.2	33.9	22.4	18.4	9.97
1.67V/cell	410.8	314.9	261.9	202.0	152.9	124.9	72.9	51.0	41.4	34.1	22.5	18.5	10.1
1.60V/cell	423.4	322.6	267.1	205.0	153.7	125.3	73.1	51.4	41.7	34.3	22.7	19.0	10.1

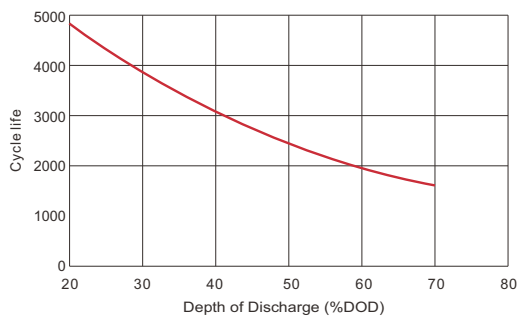
Discharge Characteristics



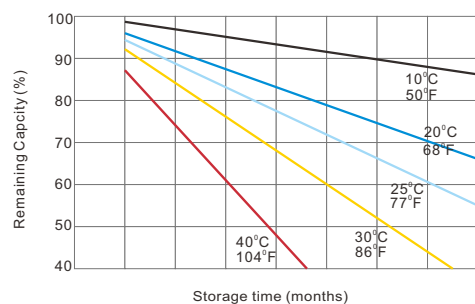
Temperature in Relation to Capacity



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