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ELC12-2.9 (12V 2.9Ah)

Specifications

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	2.9Ah	
Dimension	Length	70±1mm(2.76 inches)
	Width	47±1mm(1.85 inches)
	Containeriner Height	101±1mm(3.98 inches)
	Total Height (With terminal)	107±1mm(4.21 inches)
Approx Weight	Approx 0.8 kgs(1.76 lbs)	
Design life	5 years	
Terminal	F1	
Container Material	ABS	
Rated Capacity	2.90Ah/0.145A	(20hr, 1.75V/Cell, 25 ℃/77℉)
	2.70Ah/0.27A	(10hr, 1.80V/Cell, 25 ℃/77℉)
	2.50Ah/0.50A	(5hr, 1.75V/Cell, 25 ℃/77℉)
	1.81Ah/1.81A	(1hr, 1.60V/Cell, 25 ℃/77℉)
Max. Discharge Current	43.5A(5s)	
Internal Resistance	Appro≤42.0mΩ	
Operating Temp. Range	Discharge: -20 ℃~50 ℃	
	Charge: -20 ℃~50 ℃	
	Storage: -20 ℃~50 ℃	
Nominal Operating Temp. Range	25±3 ℃(77±5℉)	
Cycle Use	Initial Charging Current Less than 0.87A. Voltage 14.4V-14.9V at 25 ℃(77℉) Temp. Coefficient-20mV/C	
Standby Use	No limit on Intital Charging Current Voltage 13.6V-13.8V at 25 ℃(77℉) Temp. Coefficient-20mV/C	
Capacity affected by Temperature	40 ℃(104℉)	103%
	25 ℃(77℉)	100%
	0 ℃(32℉)	86%
Self Discharge	ELC series batteries may be stored for up to 6 months at25 ℃(77℉) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Application

- All purpose
- Uninterruptable Power Supply(UPS)
- Electric Power System(EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Aircraft signal
- Alarm and security system
- Electronic apparatus & equipment
- Communication power supply
- DC power supply
- Auto controlsystem

Constant Current Discharge (Amperes) at 25 ℃ (77F)

F.V/TIME	5 Min	10 Min	15 Min	30 Min	60Min	2 Hr	5 Hr	10 Hr	20 Hr
1.80V/cell	9.26	5.85	4.74	2.75	1.72	0.97	0.48	0.26	0.142
1.75V/cell	9.81	6.19	5.00	2.85	1.77	1.00	0.49	0.27	0.145
1.70V/cell	10.20	6.47	5.18	2.92	1.81	1.02	0.50	0.27	0.146
1.65V/cell	10.70	6.75	5.38	3.01	1.86	1.02	0.50	0.27	0.147
1.60V/cell	11.00	6.96	5.51	3.07	1.89	1.03	0.50	0.27	0.147

Constant Power Discharge (Watts) at 25 ℃ (77F)

F.V/TIME	5 Min	10 Min	15 Min	30 Min	60Min	2 Hr	5 Hr	10 Hr	20 Hr
1.80V/cell	17.17	10.98	9.00	5.25	1.900	1.900	0.952	0.528	0.285
1.75V/cell	18.17	11.65	9.50	5.45	1.950	1.950	0.982	0.540	0.290
1.70V/cell	19.00	12.17	9.83	5.58	1.983	1.983	0.988	0.543	0.292
1.65V/cell	19.83	12.70	10.22	5.75	2.000	2.000	0.995	0.545	0.293
1.60V/cell	20.50	13.08	10.47	5.87	3.633	2.017	1.000	0.547	0.295

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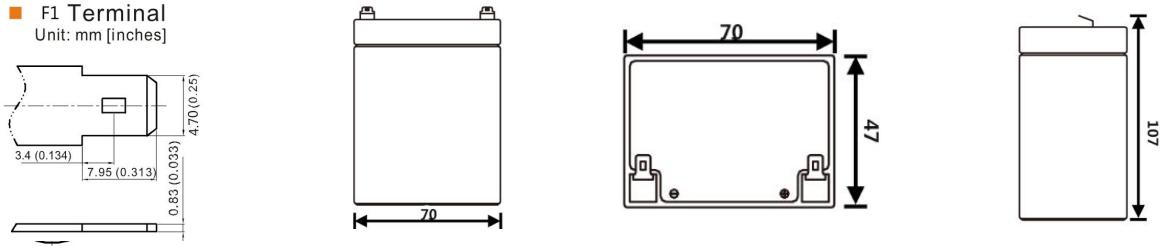
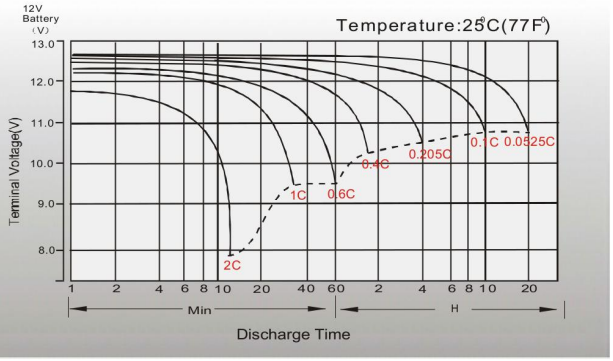
Dimensions

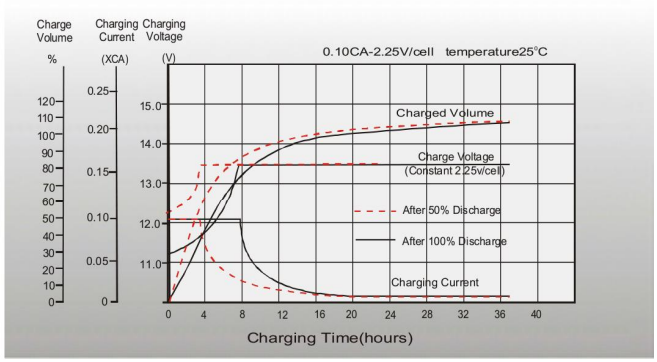
F1 Terminal
Unit: mm [inches]



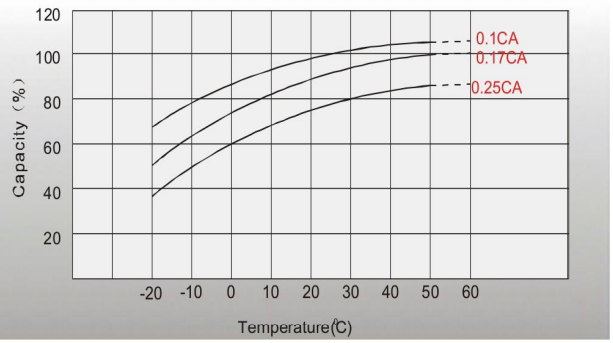
Discharge Characteristics



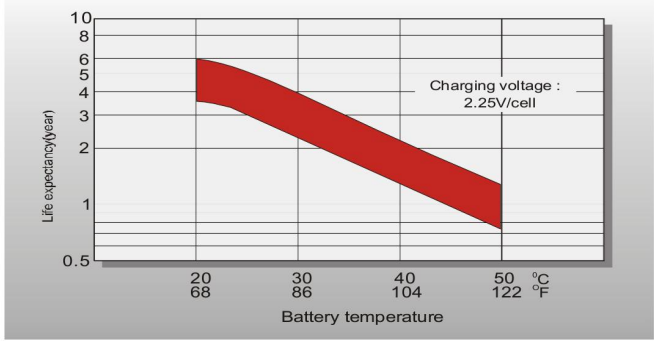
Float Charging Characteristics



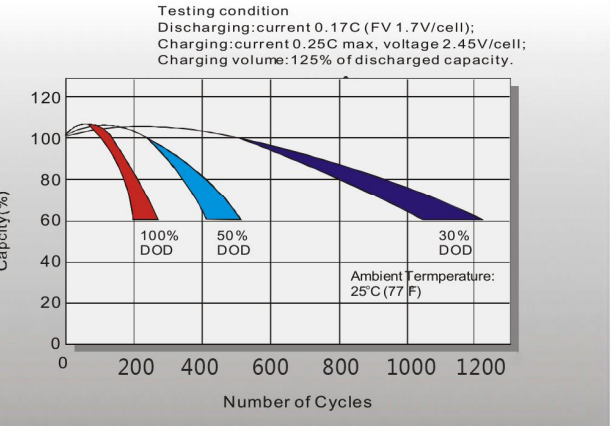
Temperature Effects in Relation to Battery Capacity



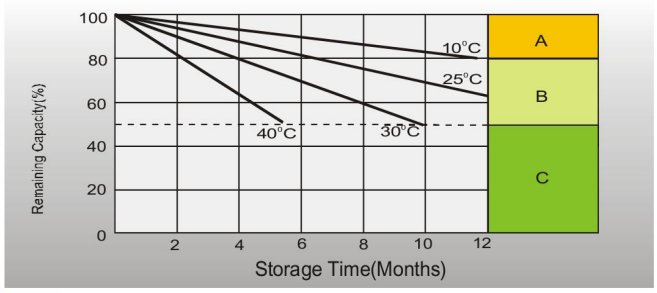
Effect of Temperature on Long Term Float Life



Cycle life in Relation to Depth of Discharge



Self-discharge Characteristics



A — No supplementary charge required.
(Carry out supplementary charge before use if 100% capacity is required.)

B — Supplementary charge required before use. Optional charging way as below:
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
3. Charged for 8~10 hours at limited current 0.05CA.

C — Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

Specifications subject to change without prior notice.