

ELC12-1.3 (12V 1.3Ah)

Specifications	
Nominal Voltage	12V
Nominal Capacity(20 Hr)	1.3Ah
Dimension	Length 97±1mm(3.82 inches)
	Width 43±1mm(1.69 inches)
	Containeriner Height 52±1mm(2.05 inches)
	Total Height (With terminal) 58±1mm(2.28 inches)
Approx Weight	Approx 0.5 kgs(1.10 lbs)
Design life	5 years
Terminal	F1
Container Material	ABS
Rated Capacity	1.30Ah/0.065A (20hr, 1.75V/Cell, 25 °C/77°F)
	1.20Ah/0.12A (10hr, 1.80V/Cell, 25 °C/77°F)
	1.15Ah/0.23A (5hr, 1.75V/Cell, 25 °C/77°F)
	0.89Ah/0.89A (1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	19.5A(5s)
Internal Resistance	Appro≤100.0mΩ
Operating Temp. Range	Discharge: -20 °C~50 °C
	Charge: 0 °C~40 °C
	Storage: -20 °C~50 °C
Nominal Operating Temp. Range	25±3 °C(77±5°F)
Cycle Use	Initial Charging Current Less than 0.39A. Voltage 14.4V-14.9V at 25 °C(77°F) Temp. Coefficient-20mV/C
	No limit on Intital Charging Current Voltage 13.6V-13.8V at 25 °C(77°F) Temp. Coefficient-20mV/C
Standby Use	40 °C(104°F) 103%
Capacity affected by Temperature	25 °C(77°F) 100%
	0 °C(32°F) 86%
Self Discharge	ELC series batteries may be stored for up to 6 months at25 °C(77°F) 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 securitysystem
- ♦ Electronic apparatus & equipment
- ♦ Communication power supply
- ♦ DC power supply
- ♦ Auto controlsystem

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

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	4.47	3.23	2.55	1.49	1.04	0.89	0.53	0.36	0.24	0.16	0.13	0.069
1.67V	4.39	3.20	2.47	1.46	1.02	0.88	0.52	0.35	0.24	0.16	0.13	0.067
1.70V	4.31	3.11	2.42	1.44	1.01	0.86	0.51	0.35	0.23	0.16	0.13	0.066
1.75V	4.23	2.96	2.35	1.41	0.99	0.85	0.50	0.34	0.23	0.15	0.12	0.065
1.80V	4.06	2.93	2.28	1.35	0.95	0.81	0.48	0.33	0.22	0.15	0.12	0.064

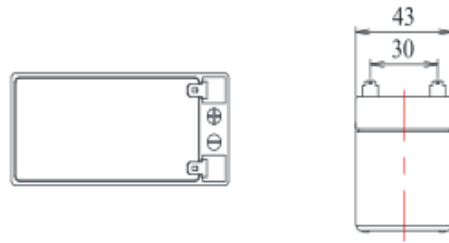
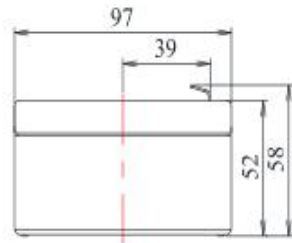
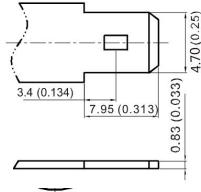
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	8.60	6.37	4.91	2.87	2.01	1.72	1.01	0.69	0.46	0.31	0.26	0.135
1.67V	8.45	6.27	4.77	2.81	1.97	1.69	0.99	0.68	0.45	0.31	0.25	0.132
1.70V	8.29	6.14	4.64	2.76	1.93	1.66	0.98	0.67	0.45	0.30	0.25	0.130
1.75V	8.13	5.78	4.51	2.71	1.90	1.63	0.96	0.66	0.44	0.29	0.24	0.128
1.80V	7.82	5.60	4.39	2.61	1.83	1.56	0.92	0.63	0.42	0.28	0.24	0.126

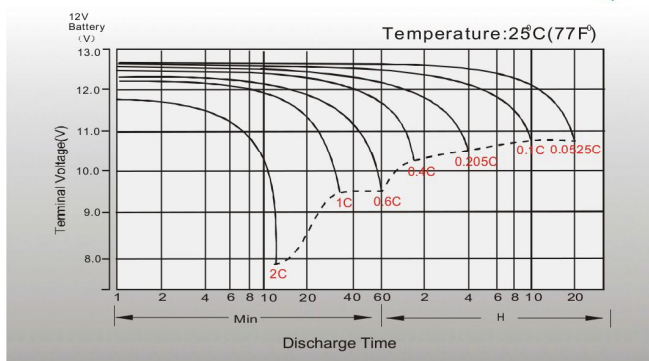
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Dimensions

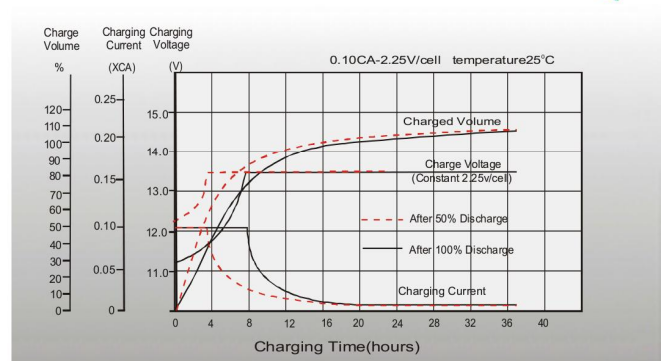
■ F1 Terminal
Unit: mm [inches]



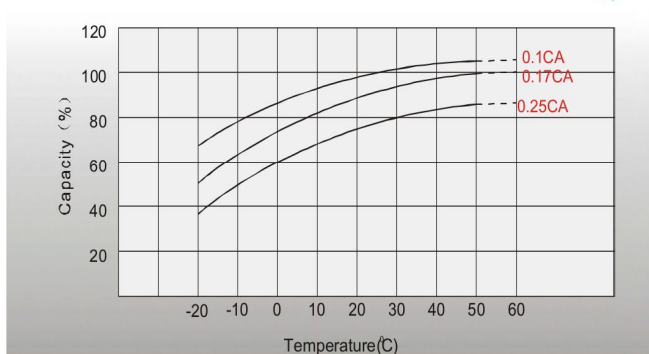
Discharge Characteristics



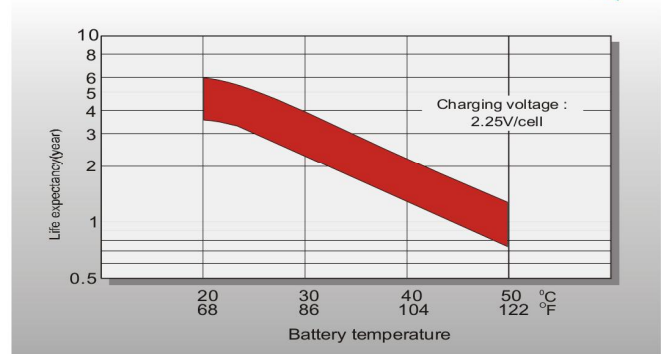
Float Charging Characteristics



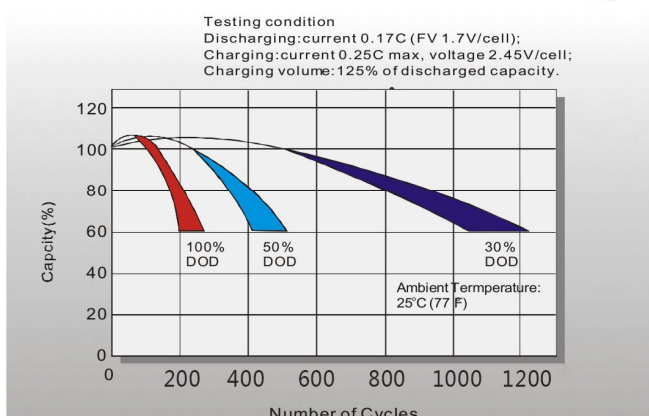
Temperature Effects in Relation to Battery Capacity



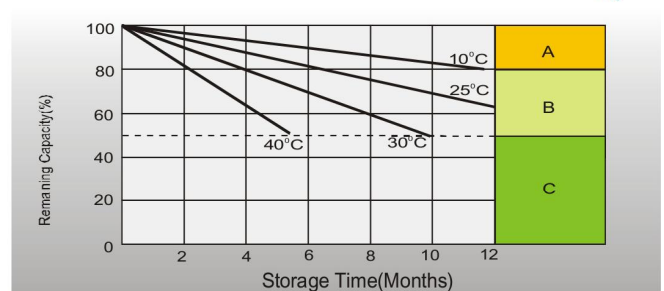
Effect of Temperature on Long Term Float Life



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.