

ELC12-20 (12V 20Ah)

Specifications

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	20Ah	
Dimension	Length	181±1mm(7.13 inches)
	Width	77±1mm(3.03 inches)
	Containeriner Height	167±1mm(6.57 inches)
	Total Height	167±1mm(6.57 inches)
Approx Weight	Approx6.10kgs(13.45 lbs)	
Design life	5 years	
Terminal	M5	
Container Material	ABS	
Rated Capacity	20.00Ah/1.0A	(20hr, 1.75V/Cell, 25 °C/77°F)
	18.80Ah/1.88A	(10hr, 1.80V/Cell, 25 °C/77°F)
	17.85Ah/3.57A	(5hr, 1.75V/Cell, 25 °C/77°F)
	13.06Ah/13.06A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	300A(5s)	
Internal Resistance	Appro≤14.0mΩ	
Operating Temp. Range	Discharge: -20 °C~50 °C	
	Charge: -20 °C~50 °C	
	Storage: -20 °C~50 °C	
Nominal Operating Temp. Range	25±3 °C(77±5°F)	
Cycle Use	Initial Charging Current Less than 6A. Voltage 14.4V-15.0V at 25 °C(77°F) Temp. Coefficient-20mV/C	
Standby Use	No limit on Intital Charging Current 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%
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)

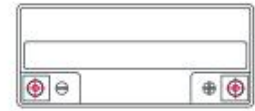
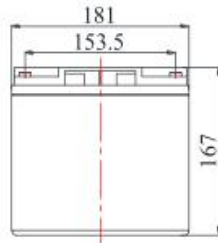
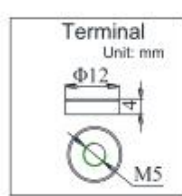
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	79.83	52.34	38.43	22.81	16.63	13.06	8.26	5.66	3.77	2.53	2.00	1.057
1.67V	76.05	50.17	37.60	22.43	16.36	12.63	8.11	5.54	3.71	2.48	1.97	1.037
1.70V	72.86	47.43	37.09	22.13	16.16	12.23	7.94	5.46	3.63	2.43	1.95	1.020
1.75V	69.44	45.23	35.11	21.40	15.73	11.86	7.80	5.34	3.57	2.41	1.91	1.000
1.80V	64.12	42.13	32.77	20.54	15.21	11.51	7.51	5.14	3.43	2.34	1.88	0.989

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

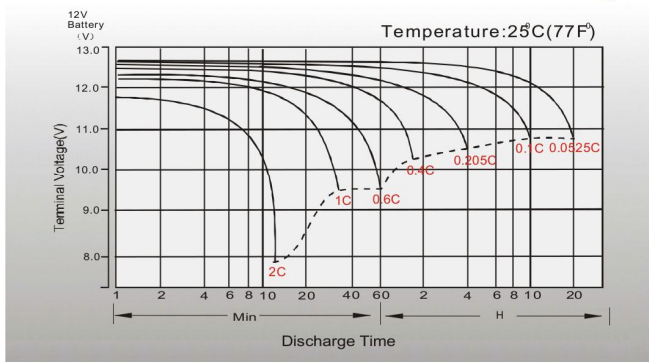
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	148.66	100.46	74.29	44.37	32.46	25.69	16.20	11.16	7.47	5.05	4.01	2.109
1.67V	142.46	96.39	72.86	43.74	32.03	24.80	15.91	10.95	7.33	4.98	3.98	2.077
1.70V	136.60	91.17	72.03	43.26	31.71	23.91	15.62	10.75	7.21	4.90	3.95	2.051
1.75V	130.86	87.04	68.34	41.94	30.94	23.03	15.33	10.54	7.06	4.86	3.88	2.009
1.80V	122.00	81.41	63.89	40.40	30.00	22.14	14.72	10.13	6.80	4.73	3.84	2.000

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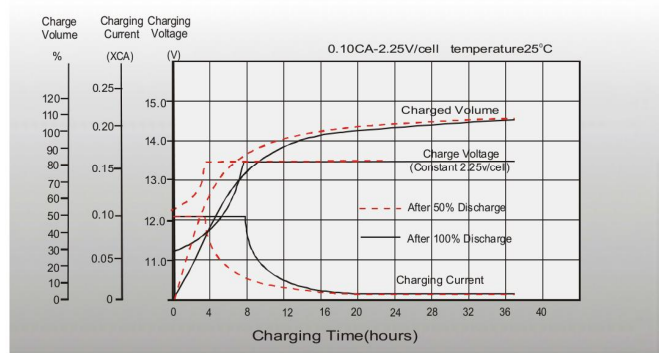
Dimensions



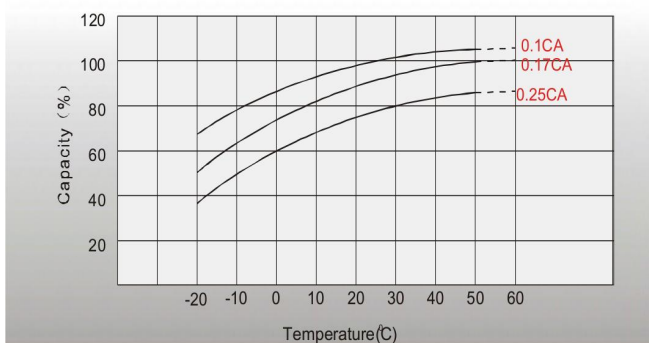
Discharge Characteristics



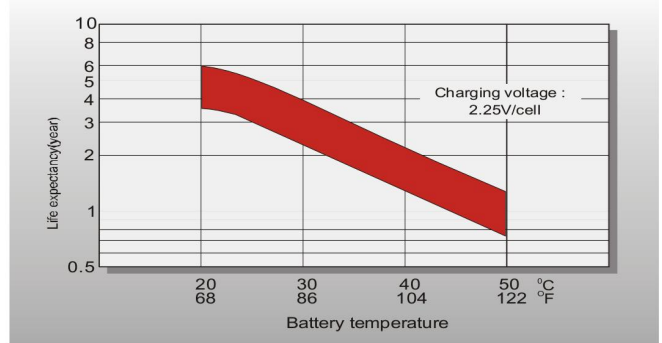
Float Charging Characteristics



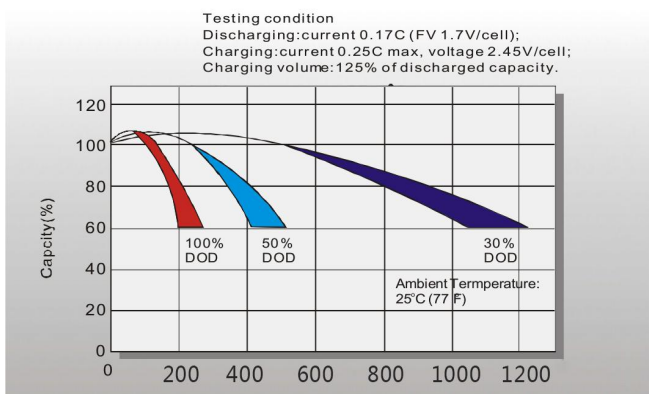
Temperature Effects in Relation to Battery Capacity



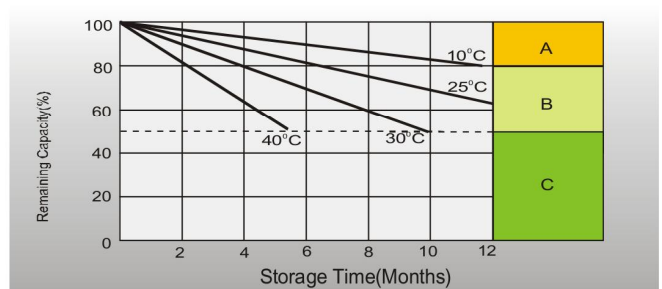
Effect of Temperature on Long Term Float Life



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.