

EO SERIES-AGM Battery



EO1212 (12V12AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	12.0AH	
Dimension	Length	151±2mm (5.95 inches)
	Width	98±1mm (3.86 inches)
	Container Height	95±1mm (3.74 inches)
	Total Height (with Terminal)	101±2mm (3.98 inches)
Approx Weight	Approx 3.30 kg (± %3)	
Design Life	5 years for standby use	
Container Material	ABS	
Rated Capacity	12.5 AH/0.624A	(20hr , 1.80V/cell,25°C/77°F)
	12.0 AH/1.20A	(10hr,1.80V/cell,25°C/77°F)
	10.4 AH/2.08A	(5hr,1.75V/cell,25°C/77°F)
	9.09 AH/3.03A	(3hr,1.75V/cell,25°C/77°F)
	7.41 AH/7.41A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	210A (5s)	
Internal Resistance	Approx 14.0mΩ	
Operating Temp. Range	Discharge : -15~50°C (5~122°F)	
	Charge : 0~40°C (32~104°F)	
	Storage : -15~40°C (5~104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 3.6A. Voltage 3.6V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial 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	EO series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Applications

- ◆ UPS and EPS
- ◆ Emergency light
- ◆ Railway signal and aircraft signal system
- ◆ Marine and power stations Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply, DC power supply

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	18.3	18.1	13.8	10.6	7.97	6.44	3.77	2.79	2.27	1.94	1.70	1.38	1.15	0.607
1.80V/cell	21.6	19.4	15.4	11.6	8.56	6.83	3.98	2.96	2.40	2.03	1.78	1.43	1.20	0.624
1.75V/cell	23.5	20.5	16.2	11.9	8.78	7.03	4.10	3.03	2.46	2.08	1.82	1.45	1.21	0.630
1.70V/cell	25.0	22.4	16.8	12.3	8.96	7.21	4.19	3.08	2.49	2.12	1.84	1.47	1.22	0.636
1.65V/cell	26.4	23.2	17.3	12.6	9.16	7.34	4.25	3.14	2.53	2.14	1.86	1.49	1.23	0.640
1.60V/cell	27.4	24.7	17.6	12.7	9.24	7.41	4.30	3.19	2.56	2.16	1.88	1.50	1.24	0.645

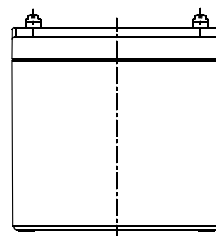
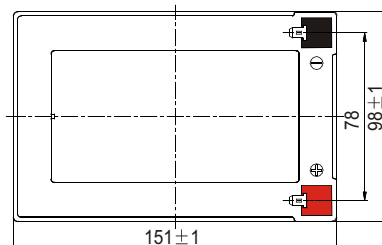
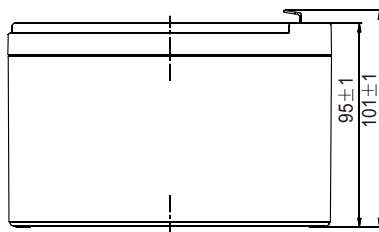
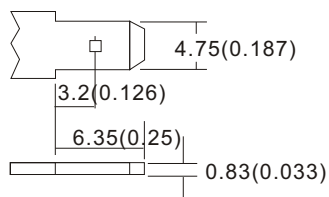
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	39.5	36.7	29.6	20.7	15.6	12.6	7.43	5.53	4.52	3.86	3.40	2.76	2.31	1.22
1.80V/cell	43.5	40.9	31.5	22.4	16.6	13.4	7.82	5.84	4.75	4.03	3.54	2.85	2.40	1.25
1.75V/cell	45.6	41.8	33.8	23.0	17.0	13.7	8.02	5.95	4.85	4.12	3.60	2.88	2.41	1.26
1.70V/cell	49.1	42.7	35.8	23.5	17.3	14.0	8.17	6.03	4.90	4.17	3.64	2.91	2.42	1.26
1.65V/cell	50.2	43.4	37.5	23.9	17.6	14.2	8.26	6.14	4.97	4.21	3.67	2.94	2.44	1.27
1.60V/cell	52.6	44.6	38.9	24.1	17.6	14.3	8.33	6.22	5.01	4.24	3.70	2.96	2.45	1.28

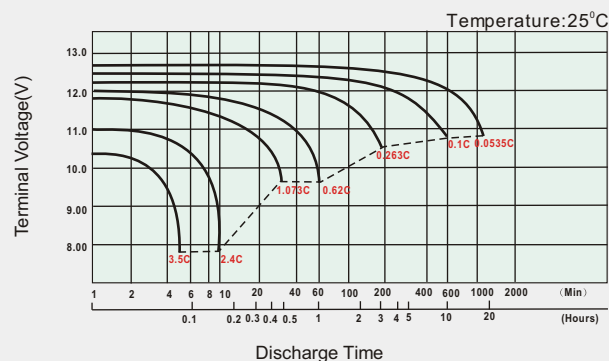
Dimensions

T1 Terminal

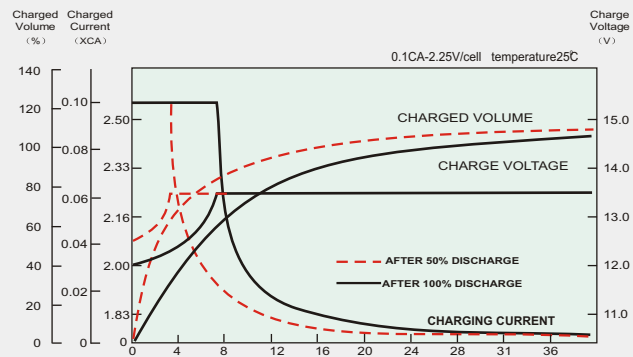
Unit: mm [inches]



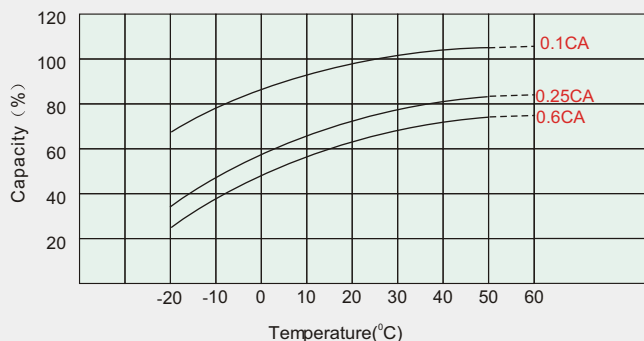
Discharge Characteristics



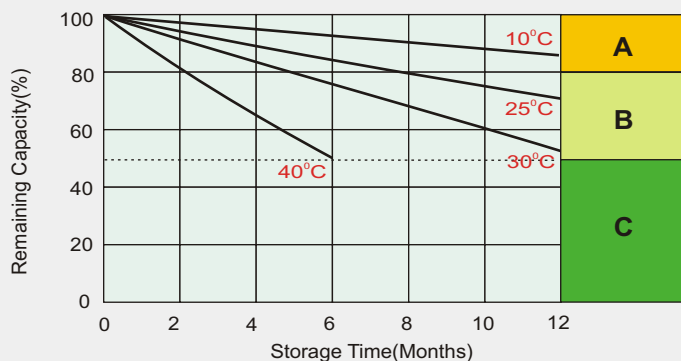
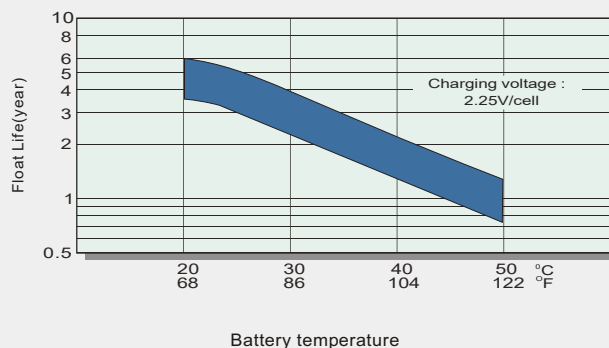
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



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 notice.

Sales Office



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