

TECHNICAL DATA SHEET

DGY12-13EV

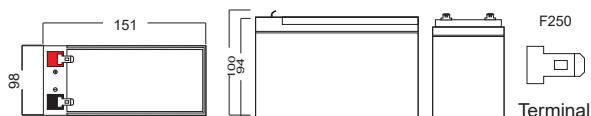


General Features

- › Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- › Relatively rich electrolyte, high temperature and low temperature performance is superior
- › Long cycle life, excellent deep cycle discharge ability
- › Excellent charge acceptance ability
- › Precision sealing technology
- › Long life



Dimension: 151(L)×98(W) ×94(H) ×100(TH) Unit: mm



Applications

- › Electric vehicle
- › Electric wheelchair
- › Electric scooter
- › Electric play car for children
- › Garbage truck
- › Patrol car

Specification

Nominal Voltage	12V
Nominal Capacity	12.0Ah
Design life	12 years
Terminal	F250
Approx. Weight	Approx.3.8kg
Container Material	ABS
Rated Capacity	12.0Ah 20Hour Rate (0.60A to 10.5V)
	11.3 Ah 10Hour Rate (1.13 A to 10.5V)
	10.4 Ah 5Hour Rate (2.09 A to 10.5 V)
Internal resistance	Full charged at 25°C: 18.0 mΩ
Max. Discharge Current	180A(5S)
Operating Temperature	Discharge: -20 ~50°C (-4~ 122°F)
	Charge: -20 ~50 °C (-4~ 122°F)
	Storage: -20 ~50°C (-4~ 122°F)
Charge current:	Max. 2.40A
Charge Method (25 °C)	Float Charge: 13.5-13.8V,recom.13.8V/ °C)
	Cycle charge:14.28-14.4V,recom.14.4V(-30mV/ °C)
Self discharge	3% of capacity declined per month at 25°C

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Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	47.5	31.1	23.2	15.2	7.92	4.54	3.31	2.65	2.26	1.49	1.19	0.636
1.65V	47.2	29.8	21.2	14.4	7.44	4.36	3.22	2.57	2.21	1.46	1.18	0.624
1.70V	38.6	28.0	19.8	14.0	7.20	4.27	3.16	2.44	2.18	1.44	1.15	0.612
1.75V	35.9	26.6	18.5	13.6	6.95	4.16	3.11	2.40	2.09	1.40	1.13	0.600
1.80V	33.0	25.1	17.2	13.2	6.71	4.06	2.94	2.35	2.00	1.37	1.10	0.576

Constant Power Discharge Characteristics Unit: W/cell(25°C, 77°F)

FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	89.2	56.0	42.4	25.6	14.5	8.50	6.26	5.02	4.26	2.81	2.30	1.26
1.65V	82.2	53.0	39.8	25.5	13.7	8.18	6.08	4.86	4.18	2.77	2.26	1.23
1.70V	75.2	51.4	38.0	25.4	13.2	8.02	5.98	4.62	4.06	2.74	2.24	1.22
1.75V	68.2	49.8	36.6	25.1	12.9	7.84	5.90	4.56	3.98	2.63	2.19	1.19
1.80V	61.2	48.2	35.0	24.9	12.7	7.78	5.74	4.52	3.88	2.54	2.14	1.18

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

Charger recommendations

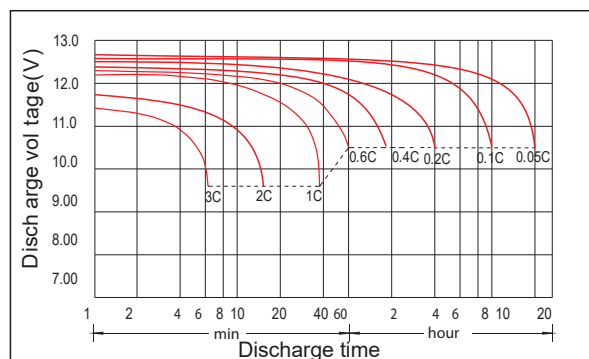
Type of charger	Zivan	AQHF WP	AQHF24-30FC G2
Matching profile	AGM =BA1+CU2	AMG SLA	AGM

Max. charging current 2.4Vpc

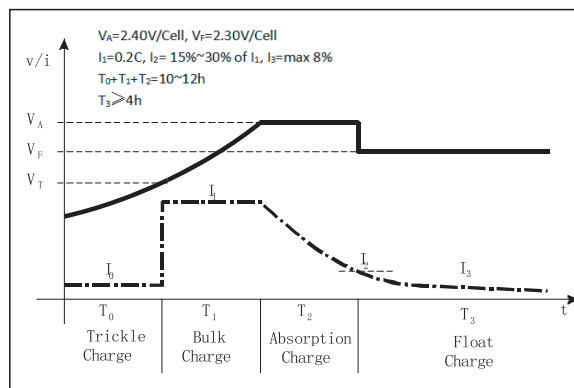
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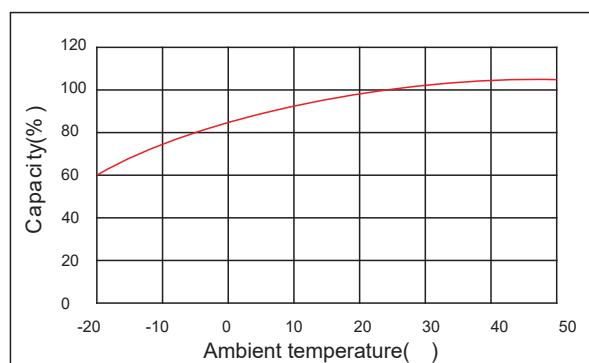
Discharge characteristic



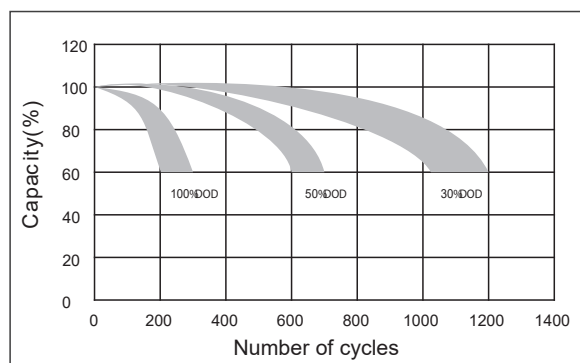
Charging characteristic



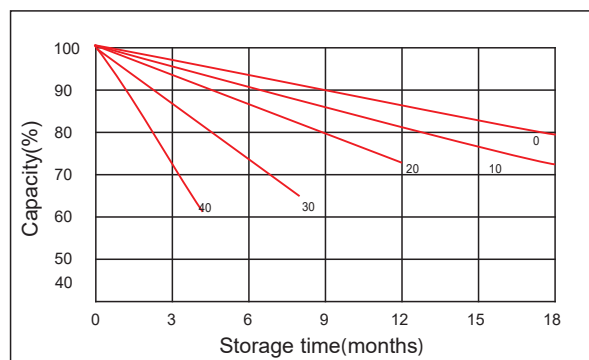
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

