

TECHNICAL DATA SHEET

DGY12-18EV

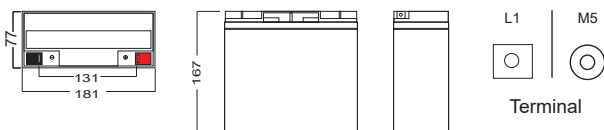


General Features

- › 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: 181(L)×77(W) ×167(H) ×167(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	18.0Ah
Design life	12 years
Terminal	L1/M5
Approx. Weight	Approx 5.5kg
Container Material	ABS
Rated Capacity	18.0Ah 20Hour Rate (0.90A to 10.5V)
	16.9Ah 10Hour Rate (1.69A to 10.5V)
	15.6Ah 5Hour Rate (3.13A to 10.5V)
Internal resistance	Full charged at 25°C: 18.0 mΩ
Max. Discharge Current	270A(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.3.60 A
Charge Method (25 °C)	Float Charge: 13.5-13.8V, recom. 13.8V(-18mV/ °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	71.3	46.6	34.7	22.8	11.9	6.80	4.97	3.98	3.38	2.23	1.78	0.954
1.65V	70.7	44.6	31.9	21.6	11.2	6.53	4.82	3.85	3.31	2.20	1.76	0.936
1.70V	58.0	41.9	29.7	21.0	10.8	6.41	4.73	3.65	3.28	2.16	1.73	0.918
1.75V	53.8	40.0	27.7	20.5	10.4	6.25	4.66	3.60	3.13	2.11	1.69	0.900
1.80V	49.5	37.6	25.7	19.8	10.1	6.08	4.41	3.53	3.01	2.05	1.66	0.864

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	134	84.0	63.6	38.5	21.8	12.8	9.39	7.53	6.39	4.21	3.45	1.89
1.65V	123	79.5	59.7	38.2	20.5	12.3	9.12	7.29	6.27	4.15	3.39	1.84
1.70V	113	77.1	57.0	38.1	19.9	12.0	8.97	6.93	6.09	4.11	3.36	1.82
1.75V	102	74.7	54.9	37.7	19.3	11.8	8.85	6.84	5.97	3.94	3.28	1.79
1.80V	91.8	72.3	52.5	37.4	19.0	11.7	8.61	6.78	5.82	3.81	3.22	1.77

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

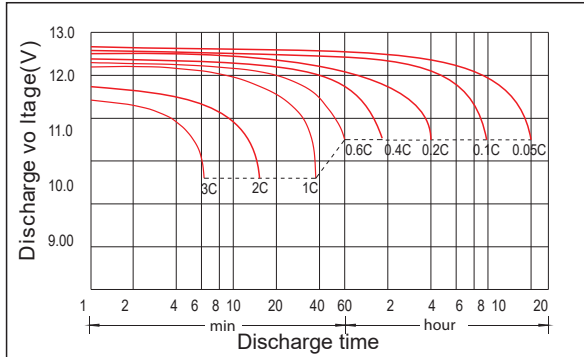
Type of charger	Zivan	AQHF WP	AQHF24-30FC G2
Matching profile	AGM =BA1+CU2	AMG SLA	AGM

Max. charging current 2.4Vpc

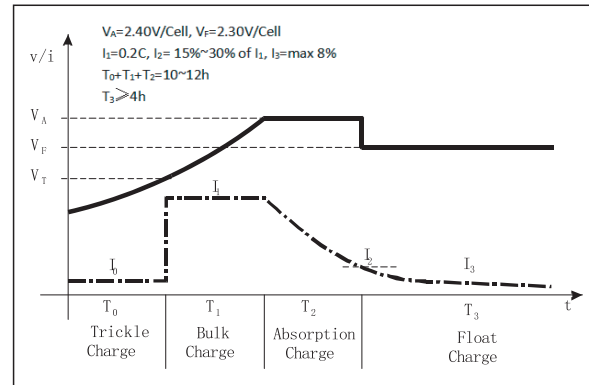
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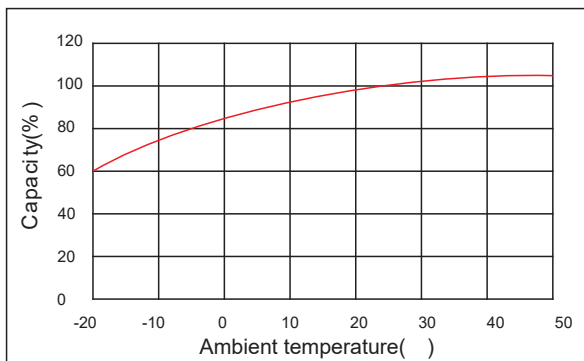
Discharge characteristic



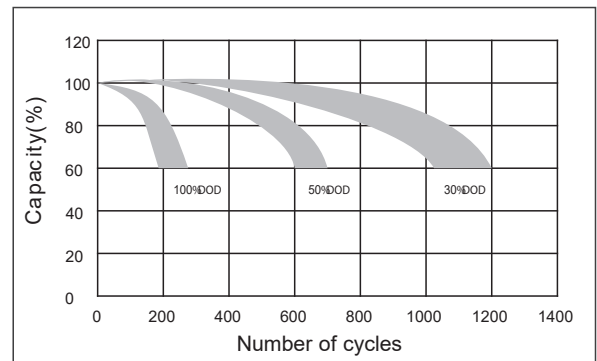
Charging characteristic



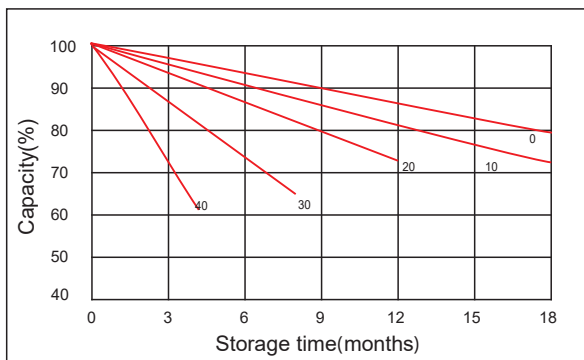
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

