

TECHNICAL DATA SHEET

DGY12-160EV

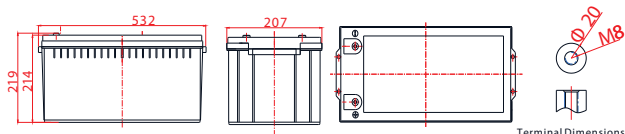


General Features

- › 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:532(L)×207(W)×214(H)×219(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	180Ah
Design life	5 years
Terminal	M8
Approx. Weight	Approx 53.0kg (117lbs)
Container Material	ABS
Rated Capacity	180Ah 20Hour Rate (9.00A to 10.5V)
	173Ah 10Hour Rate (17.3A to 10.5V)
	155Ah 5Hour Rate (31.0A to 10.5V)
Internal resistance	Full charged at 25°C: 4.2 mΩ
Max. Discharge Current	1800A(5S)
Operating Temperature	Discharge: -40 ~60°C (-40~ 140°F)
	Charge: -20 ~50°C (-4~ 122°F)
	Storage: -20 ~50°C (-4~ 122°F)
Charge current: 36.0A	
Charge Method Float Charge:13.5-13.8V,recom.13.8V(-18mV/ °C) (25 °C)	
Cycle charge:14.28-14.4 V,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)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	393	316	194	109	65.1	50.7	39.8	33.8	21.7	18.0	9.33
1.65V	362	295	184	106	62.9	49.2	38.6	32.8	21.5	17.8	9.28
1.70V	336	278	174	102	61.3	47.1	37.4	31.9	21.2	17.5	9.16
1.75V	308	260	167	99.0	58.9	45.9	36.4	31.0	20.9	17.3	9.00
1.80V	280	238	161	94.6	56.9	45.0	35.5	30.6	20.5	17.1	8.91
1.85V	219	197	137	84.5	52.0	41.9	33.3	28.2	19.3	16.1	8.83

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	670	551	353	205	123	96.3	76.7	64.1	42.3	35.3	18.6
1.65V	645	535	344	202	120	93.9	74.8	62.3	42.0	35.0	18.5
1.70V	602	507	328	196	117	90.3	72.4	60.8	41.5	34.3	18.3
1.75V	560	478	316	190	113	88.1	70.7	59.4	40.8	33.9	18.0
1.80V	516	442	306	183	110	87.6	69.4	58.6	40.1	33.6	17.8
1.85V	409	371	263	164	101	81.7	65.3	54.2	37.9	31.7	17.6

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

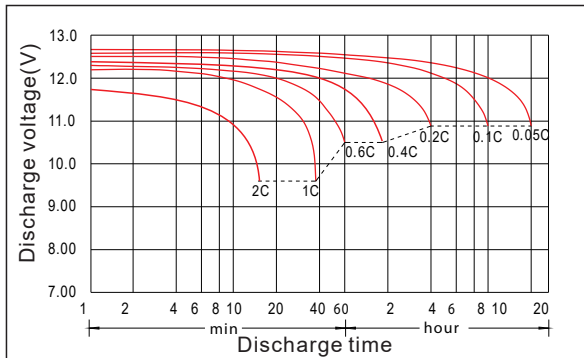
Type of charger	Zivan	AQHF WP	AQHF24-30FC G2
Matching profile	AGM =BA1+CU2	AMG SLA	AGM

Max. charging current 2.4Vpc

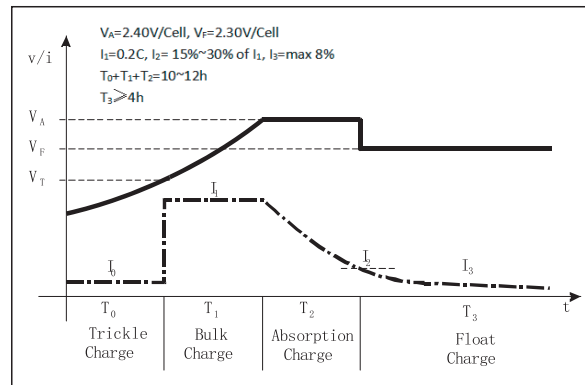
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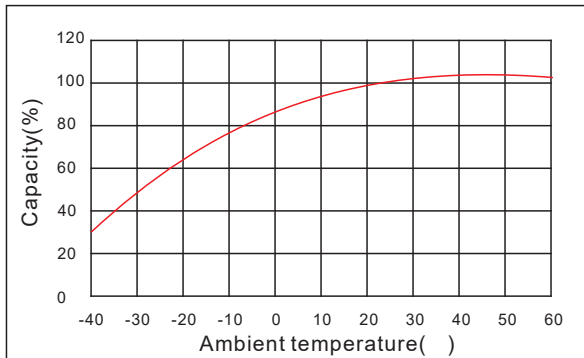
Discharge characteristic



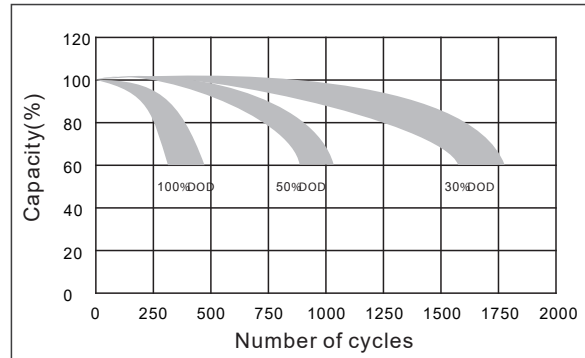
Charging characteristic



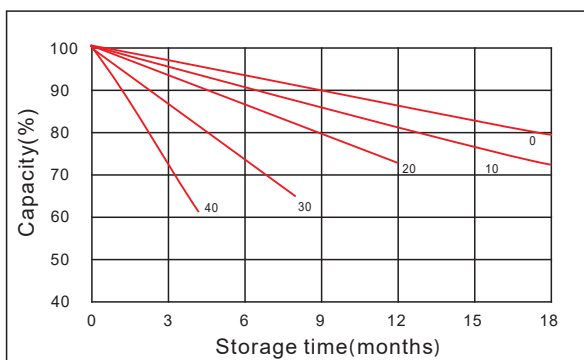
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

