



JDG Series AGM-GEL battery

JDG12-40(D)

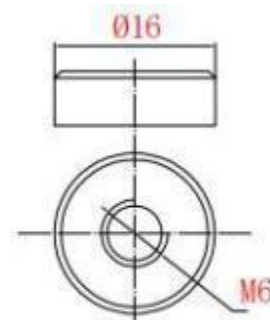
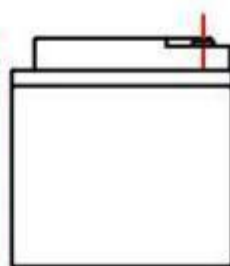
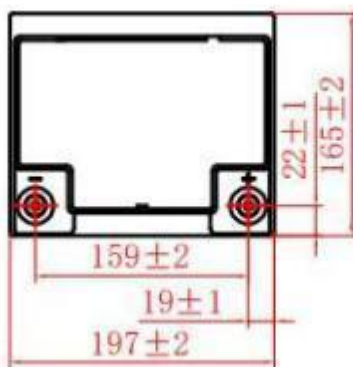
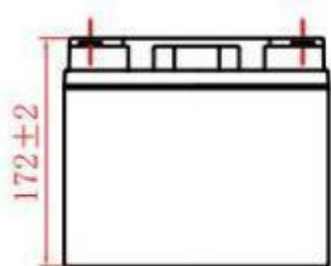
General Features

- ▶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:197(L) × 165(W) × 172(H) × 172(TH)/(±2mm)

Unit: mm



Terminal Dimensions

Specification	
Nominal Voltage	12V
Nominal Capacity	40Ah@10hour-rate to 1.80V per cell @25°C
Design life	10 years
Terminal	M6
Approx. Weight	Approx.12.5kg±3% (32.2±3%lbs)
Container Material	ABS(UL94-HB, UL94-V0 Optional)
short-circuit current	1290A
Internal resistance(Full charged at 25°C:)	9.3 mΩ
Self discharge	3% of capacity declined per month at 25°C
Operating Temperature	
Discharge:	-20 ~50°C(-4~ 122°F)
Charge :	-20 ~50°C(-4~ 122°F)
Storage:	-20 ~50°C(-4~ 122°F)
Charge Method(25 °C)	
Charge current:	Max. 10.0A; Recom.4.0A
Float charge:13.5-13.8V	recom.13.8V(-18mV/ °C)
Equalize charge:13.8-14.1V	recom.14.1V(-24mV/ °C)
Cycle charge:14.4-15.0V	recom.14.7V(-30mV/ °C)

Standards

Executive standard: IEC 60896-21/22, GB/T 19638.1-2014, YD/T 1360-2005

Applications

- ▶UPS/EPS
- ▶Power systems
- ▶Telecommunications system
- ▶Emergency lighting, Auto control system
- ▶Solar/wind generating storage cyclic
- ▶Other general purpose

Rated Capacity

10Hour Rate (4.00A to 10.8V)	40.0Ah
3Hour Rate (10.6A to 10.2V)	31.8Ah
1Hour Rate (25.3A to 9.6V)	25.3Ah

Attain Certificate

	RoHS

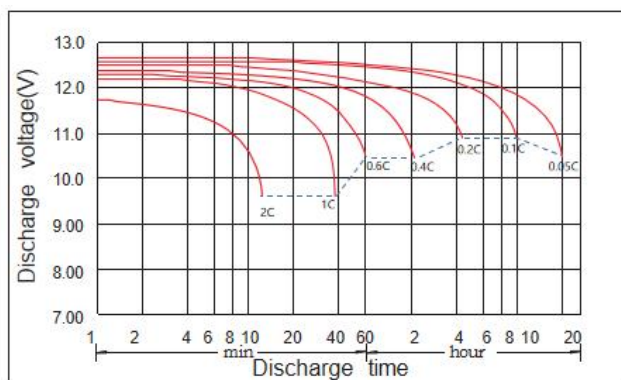
Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.



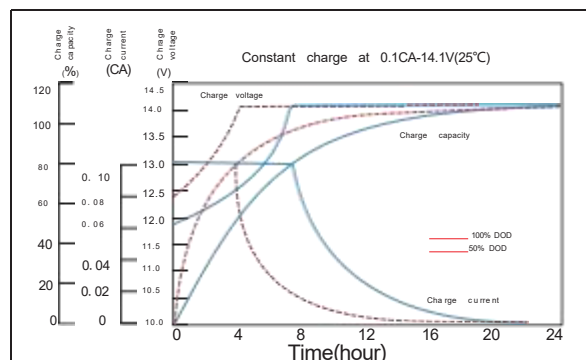
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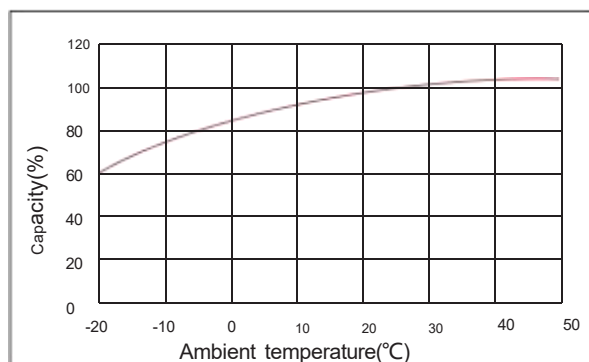
Discharge characteristic



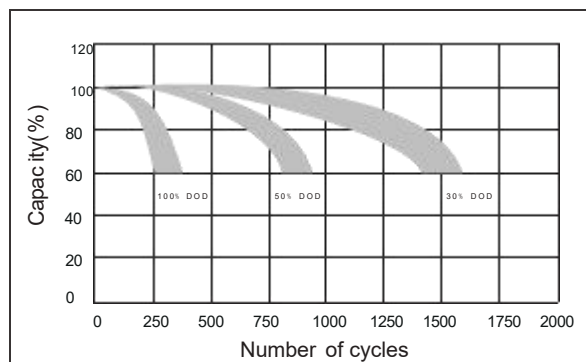
Charging characteristic



The effect of temperature on capacity



The effect of discharge depth on cycle life



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

FV/Time	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	73.8	43.8	32.1	25.3	18.8	15.0	11.3	9.09	7.74	6.57	5.07	4.22	2.21
1.65V	70.9	42.1	30.8	24.3	18.2	14.7	10.9	8.80	7.53	6.48	5.01	4.17	2.17
1.70V	66.4	40.2	29.4	23.3	17.5	14.0	10.6	8.60	7.34	6.34	4.94	4.11	2.15
1.75V	61.8	38.0	28.1	22.6	16.8	13.6	10.3	8.38	7.15	6.18	4.87	4.05	2.14
1.80V	58.2	37.0	27.1	21.6	16.0	13.1	10.2	8.14	6.97	6.00	4.79	4.00	2.12
1.85V	48.3	31.3	23.7	19.0	14.5	11.6	8.97	7.38	6.34	5.47	4.49	3.69	2.03

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

FV/Time	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	129.7	79.6	58.4	46.3	34.8	27.6	21.3	17.0	14.5	12.6	9.90	8.30	4.35
1.65V	125.8	77.2	56.5	45.0	33.9	27.1	21.0	16.6	14.2	12.5	9.81	8.21	4.28
1.70V	119.6	74.5	55.8	43.8	33.4	26.2	20.1	16.2	13.9	12.2	9.68	8.09	4.24
1.75V	112.9	72.0	53.5	42.9	32.5	25.5	20.0	15.9	13.6	12.0	9.57	8.00	4.22
1.80V	106.8	69.5	51.5	41.1	30.8	25.1	19.4	15.7	13.3	11.8	9.43	7.90	4.20
1.85V	89.0	60.4	45.7	36.7	28.6	23.0	17.4	14.4	12.4	10.8	8.87	7.45	3.95