



JSB-G12-40 (12V40Ah)

JSB-G12-40 is GEL Standby battery with 10 + years floating design life time . The solid Gel protects no way to suffer electrolyte stratification and ensure mild corrosion, **its** special separator eradicates infection between plates to prevent short circuit. it offers extra-durable performance under extreme temperature.



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	40Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 13.5 Kg
Max. Discharge Current	400 A (5 sec)
Internal Resistance	Approx. 8 mΩ
Operating Temperature Range	Discharge: -40°C~60°C Charge: -20°C~50°C Storage: -40°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	8 A
Equalization and Cycle Service	14.2 to 14.4 VDC/unit Average at 25°C
Self Discharge	JALpower batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F4/F11
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.



MH28539



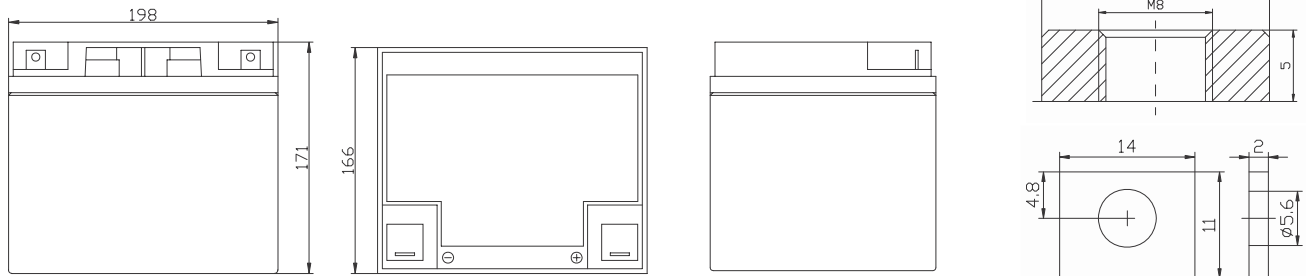
G4M20206-0910-E-16



ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 198(L)×166(W)×171(H)



Constant Current Discharge Characteristics: A (25°C)

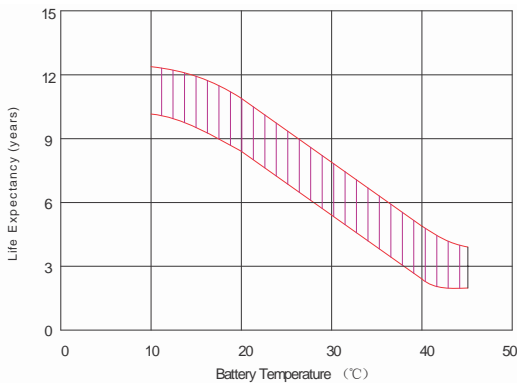
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	131.41	94.164	68.515	43.010	24.310	13.609	9.7614	8.0784	6.3580	4.6954	3.9701	2.0996
10.0V	127.90	89.597	67.110	42.299	24.198	13.507	9.7240	8.0410	6.3206	4.6573	3.9319	2.0614
10.2V	120.52	86.435	66.056	41.925	23.973	13.405	9.6492	8.0036	6.2832	4.6191	3.8938	2.0232
10.5V	108.22	79.759	62.893	40.878	23.749	13.302	9.6118	7.9288	6.2084	4.5809	3.8556	1.9851
10.8V	97.678	72.732	57.974	39.083	23.188	13.064	9.3500	7.7418	6.0962	4.5046	3.8174	1.9469
11.1V	85.029	65.002	52.001	36.615	22.029	12.484	8.9386	7.3678	5.8344	4.3137	3.7029	1.8324

Constant Power Discharge Characteristics: W (25°C)

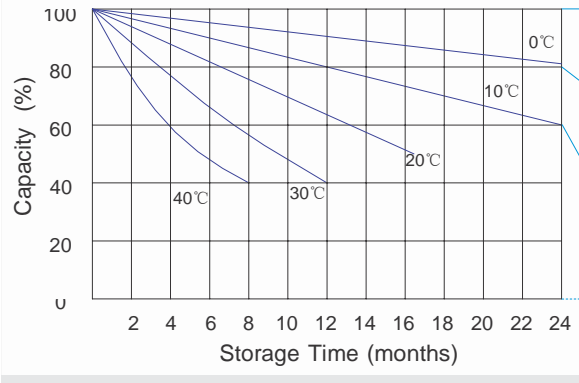
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.6V	1369.3	1001.3	737.26	485.38	278.03	156.56	112.65	93.350	73.603	54.486	44.642	23.580
10.0V	1341.4	956.40	721.95	479.32	276.69	155.95	112.42	93.126	73.154	54.257	44.184	23.351
10.2V	1266.2	924.54	712.14	473.71	274.67	154.51	111.75	92.677	72.930	53.799	43.955	23.122
10.5V	1140.2	854.29	679.06	462.94	271.97	153.08	111.08	92.004	72.257	53.341	43.497	22.893
10.8V	1025.6	775.66	623.92	441.84	265.24	150.83	108.39	89.536	71.135	52.196	43.039	22.664
11.1V	885.33	688.86	557.13	414.02	251.33	143.87	103.00	85.272	67.544	50.365	41.666	21.749

All mentioned values are average values.

Effect of temperature on long term float life



Storage characteristic



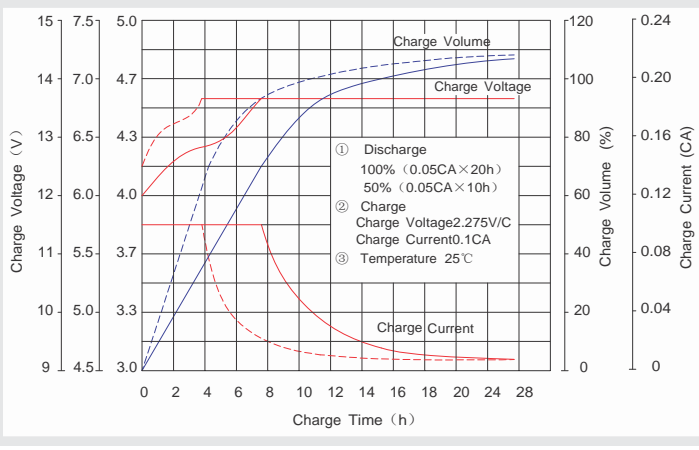
Supplementary charge required (Carry out supplementary charge before use if 100% capacity is required)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

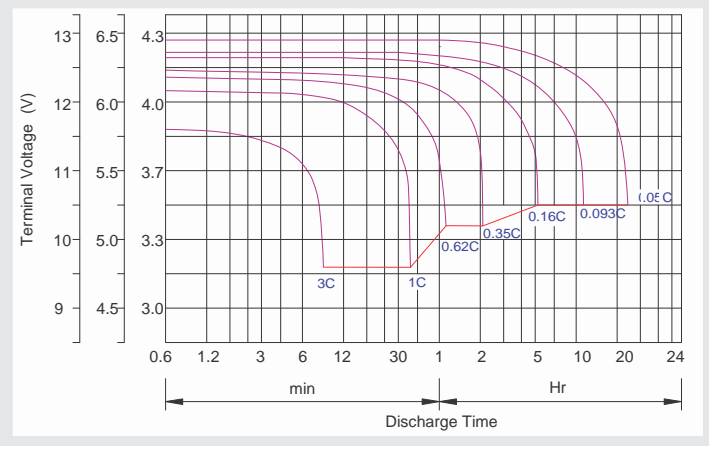
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Maintenance & Cautions

Float Service:
※ Every month, recommend inspection every battery voltage.
※ Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. current 0.2CA, constant voltage 2.35-2.4V/Cell charge 24h.
※ Effect of temperature on float charge voltage: -3mV/°C/Cell.
※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.35-2.4V/cellx24h, Max. Current 0.2CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h