



6-GFX-100 12V 2 OPzS 100



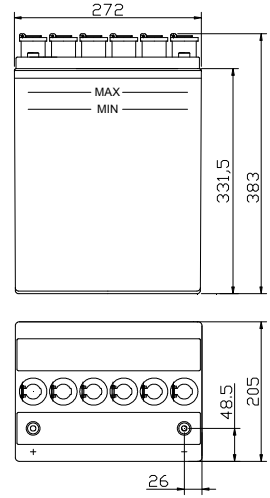
Application:

- Solar and wind power system
- Electric power, nuclear power
- Telecommunication
- UPS
- Situation with high environmental protection and energy-saving

Features of performance application

- ✚ Designed service life of 18 years
- ✚ Water supplement cycle 0.25-1 year (normal)
1-2 year (choose water content recombination valve)
- ✚ High cycle service life
- ✚ Better temperature resistance performance
- ✚ Excellent deep cycle performance
- ✚ Superior low current discharge performance
- ✚ Better charge reception capability
- ✚ Better safety performance and reliability
- ✚ Modular and personified installation design
- ✚ Performance price/ratio is high and yearly operating cost is low
- ✚ Environmental friendly, cycle application

Rated voltage	12 V
Capacity@ 25°C (77°F)	100Ah @ 10hr to 10.8V
Weight	Without electrolyte: about 39 kg (85.8 lb) With electrolyte: about 48 kg (105.6 lb)
electrolyte density (charged)	1.240±0.01g/cm ³ (20°C) (68°F)
Reference internal resistance (charged)	About 10.5mΩ@ 25°C (77°F)
Short-circuit current	About 1143A (0.1S reference value)
Max discharge current	300A (5sec)
Self-discharge	< 10% 90 days @ 25°C (77°F)
Temperature range	Application: -20°C ~ 50°C (-4°F ~ 122°F) Storage: 0°C ~ 20°C (32°F ~ 68°F) Recommendation: 20°C ~ 25°C (68°F ~ 77°F)
Max charge current	15A
Charge voltage @ 25°C (77°F)	Float charge: 13.38V, average charge: 14.1V Temperature compensation factor: -18 mV/°C
Terminal output	M8 copper terminal (HPb59-1)



Structure features of Shuangdeng 3/6-GFX series acid-proof stationary battery:

- Plate: positive plate adopts tubular type plate which can effectively prevent active substance falling, positive plate frame is made of multi-component alloy, the alloy crystal particle is tiny and dense, the corrosion-resisting performance is good and service life is long. The negative plate adopts pasted plate, grid adopts radiated structure, which enhances utilization ratio of active substance and discharge capability of strong current; moreover, the charge reception capability is strong.
- Battery case: adopt AS transparent case with corrosion prevention, high strength and beautiful appearance, the internal structure and state of battery can be directly observed via transparent case.
- Separator: the combined separator of multi-hole corrugated plastic plate and micro-bore rubber separator has bigger electrolyte storage space, which enhances dispersion speed of electrolyte, greatly reduces internal resistance of battery and prevents dendrite short circuit after deep discharge.
- Terminal sealing: the built-in copper-core lead-based terminal post has strong current carrying capacity and corrosion resistance. The unique terminal post sealing structure can effectively eliminate the stress which is generated due to plate extension, leakage is avoided, sealing reliability of terminal post is ensured and service life of battery is greatly increased.
- Acid resistant bolt: adopt special funnel-shaped acid resistant bolt which can filter acid fume and prevent flame, the density and temperature of electrolyte can be measured directly, use is safe and maintenance is convenient.



Execution standard:

IEC60896-11 DIN40737-3
BS EN 61427-2002
GB/T13337.1
Q/321284KCC 03-2006

Authentication and certificate:

Certificate of Qualification on Perfecting Measurement & Measuring System
GB/T19022-2003

ISO10012:2003、IDT

Quality Management System Authentication

GB/T19001-2000

NO.03006Q10002R0M-2

Environmental Management System Authentication

ISO 14001:2004

NO.010607E2024R1M-2

Occupational Health Management System Authentication

GB/T28001-2001

NO.010607S10147R0M-2

CE authentication

EN 61000-6-3:2001+A11:2004

EN 61000-6-1:2001

National Industrial Product Production License

XK06-044-00012

Product Quality Test Free Certificate
(2006)GM(321630488)

Export product quality license

Discharge current at different final voltages and different discharge rates unit: A (25°C, 77°F)

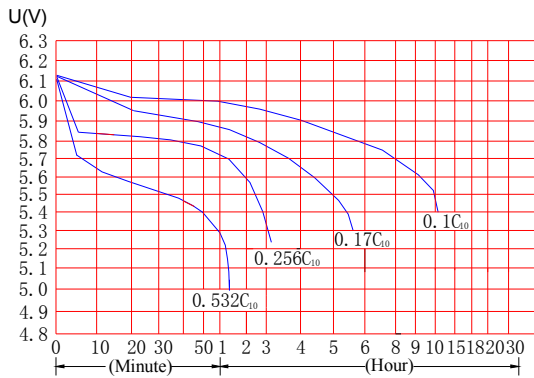
	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
1.90V	56.0	51.0	46.0	42.0	35.0	33.0	26.0	24.0	19.0	16.0	14.0	11.0	9.0	4.75	1.18	0.98
1.85V	62.0	61.0	59.0	49.0	40.0	39.0	30.0	27.0	21.0	18.0	16.0	12.0	10.0	5.22	1.24	1.04
1.80V	82.0	80.0	79.0	64.0	49.0	47.0	33.0	31.0	24.0	20.0	17.0	13.0	11.0	5.48	1.28	1.07
1.75V	101.0	96.0	92.0	71.0	56.0	51.0	37.0	33.0	25.0	21.0	18.0	14.0	11.0	5.70	1.32	1.10

Discharge power at different final voltages and different discharge rates unit: W (25°C, 77°F)

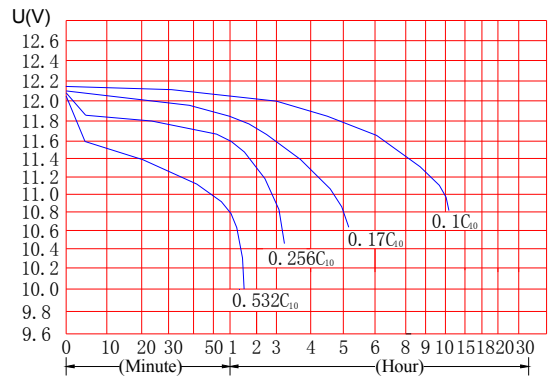
	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
1.90V	660.8	601.8	542.8	495.6	413.0	389.4	306.8	283.2	224.2	188.8	165.2	129.8	108.0	57.48	14.28	11.86
1.85V	731.6	719.8	696.2	578.2	472.0	460.2	354.0	318.6	247.8	212.4	188.8	141.6	120.0	63.16	15.00	12.58
1.80V	967.6	944.0	932.2	755.2	578.2	554.6	389.4	365.8	283.2	236.0	200.6	153.4	132.0	66.31	15.49	12.95
1.75V	1191.8	1132.8	1085.6	837.8	660.8	601.8	436.6	389.4	295.0	247.8	212.4	165.2	132.0	68.97	15.97	13.31



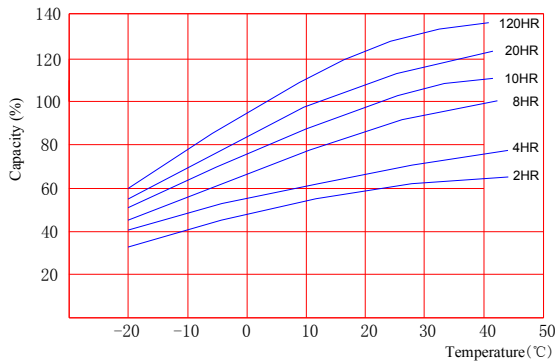
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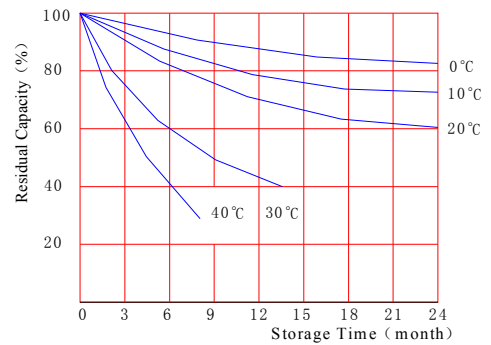
Discharge Characteristic Curve(20°C)



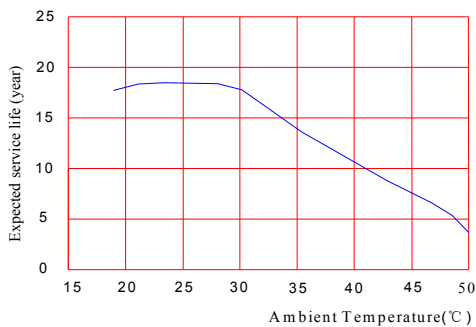
Discharge Characteristic Curve(20°C)



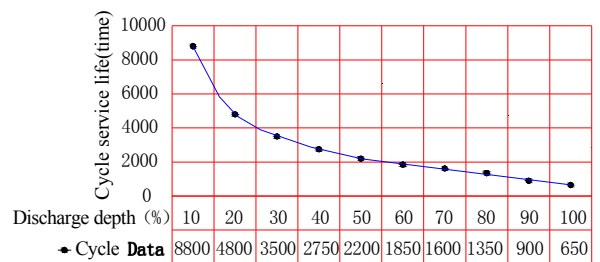
Relation curves between capacity and temperature



Self-discharge characteristic curve



Relation curves between temperature and service Life



Relation curve between discharge depth and cycle service life

Remark: a) test circumstances: 20-30°C, relative humidity is 50~80percent;
 b) charge mode: electricity of charge is equal to 105~115percent of discharge
 c) residual capacity is 80 percent C₁₀

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 We must make a statement, when the battery service life and safe operating performance is confirmed, the test condition will be stricter; accordingly, the battery shall not be used in these conditions, because it's difficult for battery to reach expected service life.