

Drypower Gel

DEEP CYCLE GEL TYPE SEALED LEAD ACID BATTERY

12GB50C (12V 50Ah)

SPECIFICATIONS

Nominal Voltage (V) 12V

Nominal Capacity

| | |
|-------------------------------|---------|
| 20 hour rate (2.5A to 10.50V) | 50Ah |
| 5 hour rate (8.5A to 10.20V) | 42.5Ah |
| 1 hour rate (27.5A to 9.60V) | 27.5Ah |
| 1C (50.0A to 9.60V) | 26.67Ah |

Weight Approx. 14.5kg (31.9lbs)

Internal Resistance (@1kHz) Approx. 6mΩ

Maximum Discharge Current

For 5 seconds 600A

Charging Methods @25°C (77°F)

Cycle Use:

Charging Voltage 13.80V to 14.40V

Coefficient -5.0mV/°C/Cell

Maximum Charging Current 15A

Standby Use:

Float Charging Voltage 13.50V to 13.80V

Coefficient -3.0mV/°C/Cell

Operating Temperature Range

Charge -15°C (5°F) to +40°C (104°F)

Discharge -15°C (5°F) to +50°C (122°F)

Storage -15°C (5°F) to +40°C (104°F)

Charge Retention (Shelf Life) @20°C (68°F)

1 month 98%

3 months 94%

6 months 85%

Case Material ABS

Terminal F8

Description of Torque Value of Hard Ware for the Terminals

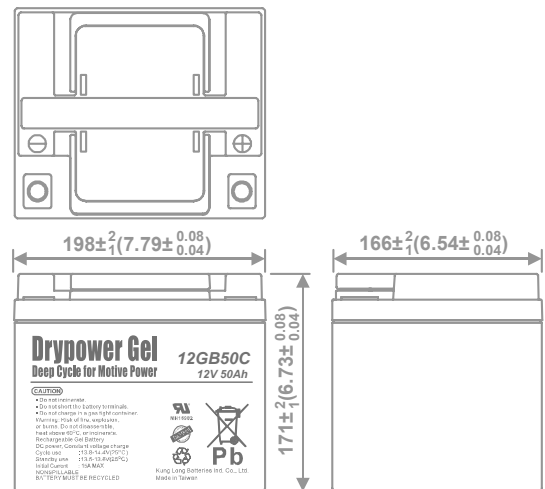
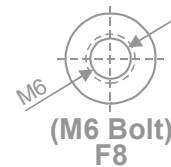
Recommended Torque Value M6: 5.39 N-m (55kg-cm)

Max. Allowable Torque Value M6: 8.82 N-m (90kg-cm)

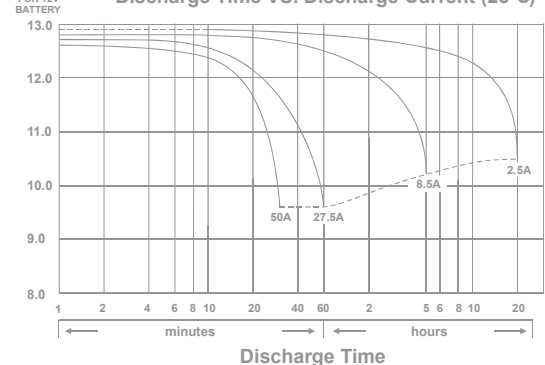


DIMENSIONS

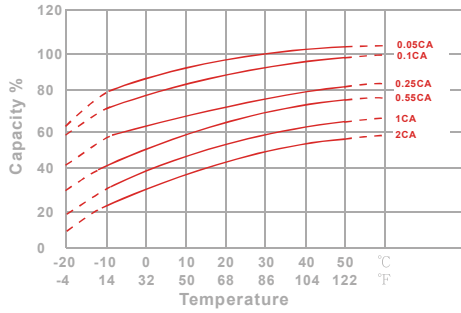
mm (inch)



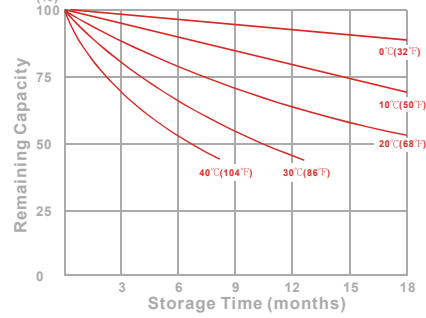
Discharge Time VS. Discharge Current (25°C)



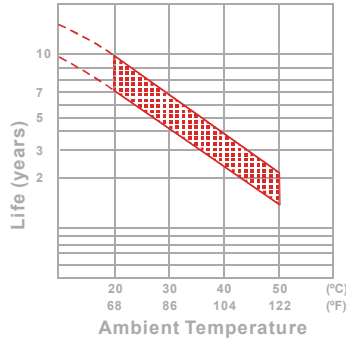
Effect of Temperature on Capacity 25°C (77°F)



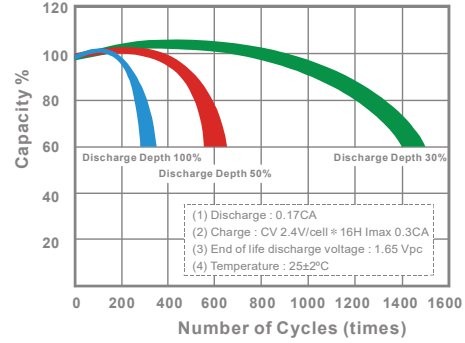
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C (77°F)

| Time | End Voltage | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5 | min | 1295 | 1555 | 1741 | 1865 | 1892 | 1920 | 1950 |
| 10 | min | 923 | 1096 | 1202 | 1258 | 1281 | 1303 | 1327 |
| 15 | min | 681 | 788 | 863 | 901 | 915 | 931 | 943 |
| 30 | min | 421 | 485 | 525 | 542 | 548 | 555 | 563 |
| 60 | min | 303 | 319 | 328 | 336 | 338 | 342 | 345 |
| 120 | min | 166 | 182 | 190 | 197 | 199 | 201 | 204 |
| 180 | min | 120 | 131 | 137 | 142 | 144 | 146 | 148 |
| 240 | min | 99.8 | 107 | 111 | 114 | 115 | 117 | 119 |
| 300 | min | 93.7 | 97.3 | 100 | 102 | 103 | 104 | 105 |
| 600 | min | 50.7 | 53.5 | 55.2 | 56.3 | 56.5 | 56.9 | 57.4 |
| 1200 | min | 27.0 | 28.6 | 29.7 | 30.4 | 30.6 | 30.9 | 31.2 |

- Discharge Rates in Amperes to Various End Voltages at 25°C (77°F)

| Time | End Voltage | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5 | min | 125 | 149 | 167 | 179 | 185 | 189 | 193 |
| 10 | min | 78.1 | 93.5 | 103 | 110 | 113 | 116 | 118 |
| 15 | min | 71.6 | 77.7 | 80.6 | 83.0 | 83.6 | 84.5 | 85.5 |
| 30 | min | 40.9 | 45.6 | 47.5 | 49.0 | 49.4 | 50.0 | 50.6 |
| 60 | min | 24.4 | 27.1 | 28.1 | 28.8 | 29.0 | 29.2 | 29.5 |
| 120 | min | 14.3 | 15.4 | 16.0 | 16.4 | 16.6 | 16.8 | 17.0 |
| 180 | min | 10.6 | 11.2 | 11.6 | 11.9 | 12.0 | 12.1 | 12.2 |
| 240 | min | 8.67 | 9.16 | 9.41 | 9.59 | 9.66 | 9.80 | 9.88 |
| 300 | min | 7.69 | 8.09 | 8.33 | 8.50 | 8.56 | 8.62 | 8.69 |
| 600 | min | 4.40 | 4.64 | 4.75 | 4.81 | 4.83 | 4.86 | 4.90 |
| 1200 | min | 2.32 | 2.44 | 2.50 | 2.55 | 2.57 | 2.59 | 2.61 |

All data on the spec. sheet is an average value:

The tolerance range : $X < 6\text{min}$ (+15%~-15%), $6\text{min} \leq X < 10\text{min}$ (+12%~-12%), $10\text{min} \leq X < 60\text{min}$ (+8%~-8%), $X \geq 60\text{min}$ (+5%~-5%)

Performance may vary depending on application. All specifications are correct at time of creation. All specifications and operation conditions contained in this datasheet are subject to change or improvement without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data. For clarification and updated information, please contact us.