

# Drypower Gel

HYBRID GEL TYPE  
**DEEP CYCLE POWER**

**GEL**

12V

50Ah

SLA

**GEL**  
Deep Cycle

## 12GB50C

Rechargeable Hybrid Gel Lead Acid Battery

### SPECIFICATIONS

Nominal Voltage 12V

#### Nominal Capacity

20 hour rate	(2.50A to 10.50V)	50Ah
5 hour rate	(8.50A to 10.20V)	42.5Ah
1 hour rate	(27.5A to 9.60V)	27.5Ah
1C	(50A to 9.60V)	26.67Ah

Weight Approx. 14.8kg

Internal Resistance (at 1KHz) Approx. 6mΩ

Maximum Discharge Current (5 secs) 600A

#### Charge Methods at 25°C

##### Cycle Use

Charging Voltage 13.8V to 14.4V  
Coefficient -5.0mV/°C/Cell

Maximum Charging Current 15A

##### Standby Use

Float Charging Voltage 13.5V to 13.8V  
Coefficient -3.0mV/°C/Cell

#### Operating Temperature Range

Charge -15°C to 40°C

Discharge -15°C to 50°C

Storage -15°C to 40°C

#### Charge Retention (Shelf Life) at 20°C

1 month	98%
3 months	94%
6 months	85%

Case Material ABS UL94 HB

Termination F8 (M6 Bolt)

#### Description of Torque Value of Hardware for the Terminals

Recommended Torque Value M6: 7 N-m (71kgf-cm)  
Max. Allowable Torque Value M6: 9 N-m (92kgf-cm)

#### Design Life

7-10 years

#### Classified as a non-spillable battery.

#### Approved for transportation by:

- Air (IATA/ICAO provision A67)
- Road
- Sea (per IMDG Special Provision 238)



#### Barcode

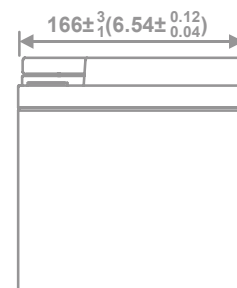
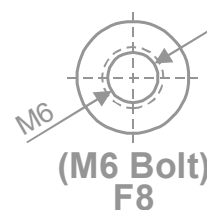
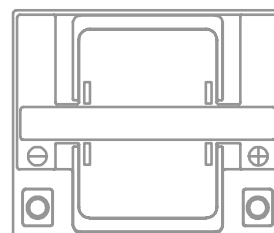


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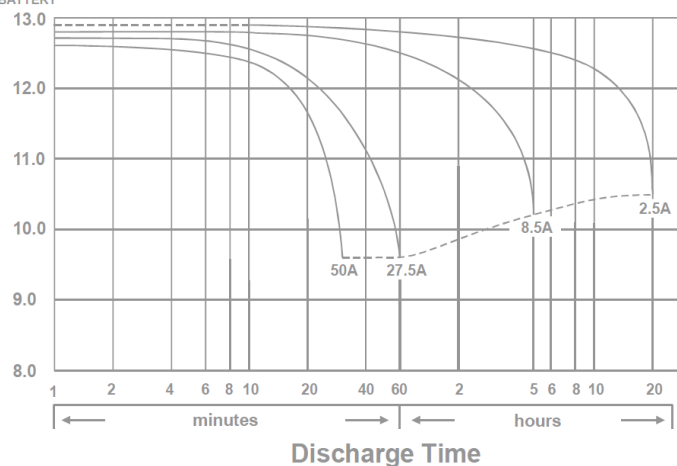
### DIMENSIONS

mm (inch)



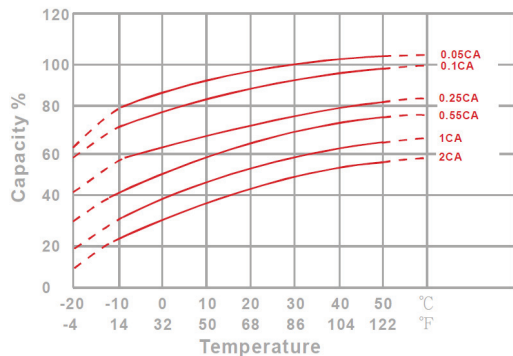
(V)  
FOR 12V  
BATTERY

#### Discharge Time VS. Discharge Current (25°C)

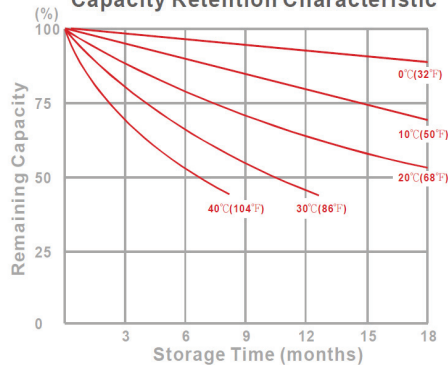


### CHARACTERISTICS CHARTS

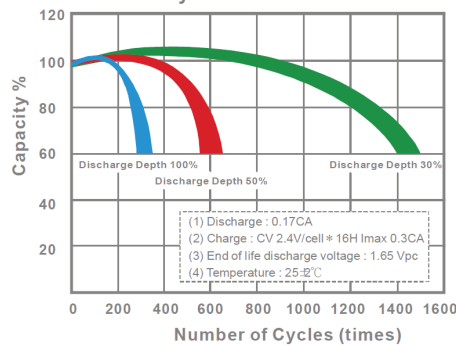
Effect of Temperature on Capacity 25°C(77°F)



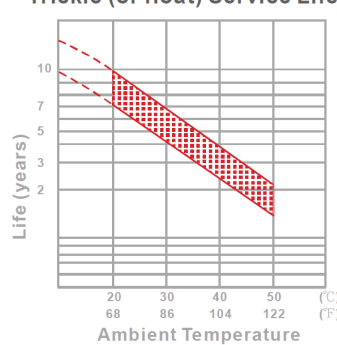
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



### FEATURES & BENEFITS

- ◆ Industry leading 99.99% pure lead content for superior service life and dependable performance.
- ◆ Gel compound contains more electrolyte that is more evenly distributed across the battery, producing stable output throughout its service life, minimising sulphation and significantly improving standby life.
- ◆ Low internal resistance for optimum charge and discharge efficiency.
- ◆ Maintenance free technology and non-spillable design.
- ◆ Better suited for more extreme operating temperatures.
- ◆ Manufactured by Kung Long Battery (KLB) at facilities in Taiwan and Vietnam. KLB is a leading manufacturer and complies with relevant international quality standards including ISO9001, CE ETL9000, UL1989, OHSAS18001 and ISO17025. KLB supports Green Sustainable supply chain practices.



### PERFORMANCE DATA

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	216	259	290	311	315	320	325
10	min	154	183	200	210	213	217	221
15	min	114	131	144	150	153	155	157
30	min	70.2	80.9	87.5	90.3	91.4	92.6	93.9
60	min	50.4	53.1	54.7	55.9	56.4	57	57.5
120	min	27.7	30.4	31.7	32.8	33.1	33.6	34
180	min	20	21.8	22.9	23.7	24	24.3	24.6
240	min	16.6	17.8	18.4	19.1	19.2	19.6	19.9
300	min	15.6	16.2	16.7	17	17.20	17.3	17.5
600	min	8.44	8.92	9.2	9.38	9.42	9.49	9.57
1200	min	4.49	4.77	4.95	5.06	5.1	5.15	5.19

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
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	83.6	84.5	85.5
30	min	40.9	45.6	47.5	49	49.4	50	50.6
60	min	24.4	27.1	28.1	28.8	29	29.2	29.5
120	min	14.3	15.4	16	16.4	16.6	16.8	17
180	min	10.6	11.2	11.6	11.9	12	12.1	12.2
240	min	8.67	9.16	9.41	9.59	9.66	9.8	9.88
300	min	7.69	8.09	8.33	8.5	8.56	8.62	8.69
600	min	4.4	4.64	4.75	4.81	4.83	4.86	4.9
1200	min	2.32	2.44	2.5	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%)

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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.