



12V

180Ah

SLA

AGM

12TP180FT-FR

Rechargeable AGM Sealed Lead Acid Battery

SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity		
20 hour rate (9.0A to 10.5V)	180Ah	
10 hour rate (18A to 10.8V)	180Ah	
5 hour rate (32.3A to 10.5V)	161.5Ah	
1 hour rate (118A to 9.6V)	118Ah	
Weight	Approx. 58kg	
Internal Resistance (at 1KHz)	Approx. 3.8mΩ	
Maximum Discharge Current (5 secs)	1000A	
Charge Methods at 25°C		
Cycle Use		
Charging Voltage	14.4V to 15.0V	
Coefficient -5.0mV/°C/Cell		
Maximum Charging Current	54A	
Standby Use		
Float Charging Voltage	13.5V to 13.8V	
Coefficient -3.0mV/°C/Cell		
Operating Temperature Range		
Charge	-10°C to 60°C	
Discharge	-20°C to 60°C	
Storage	-20°C to 60°C	
Charge Retention (Shelf Life) at 20°C		
1 month	98%	
3 months	94%	
6 months	85%	

Case Material	UL94 V-0 Flame Retardant
Termination	F18 (M8 Bolt)

Description of Torque Value of Hardware for the Terminals	
Recommended Torque Value	M8: 12 N-m (122kgf-cm)
Max. Allowable Torque Value	M8: 15 N-m (153kgf-cm)

Design Life	12 Years
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Classified as a non-spillable battery.
Approved for transportation by:

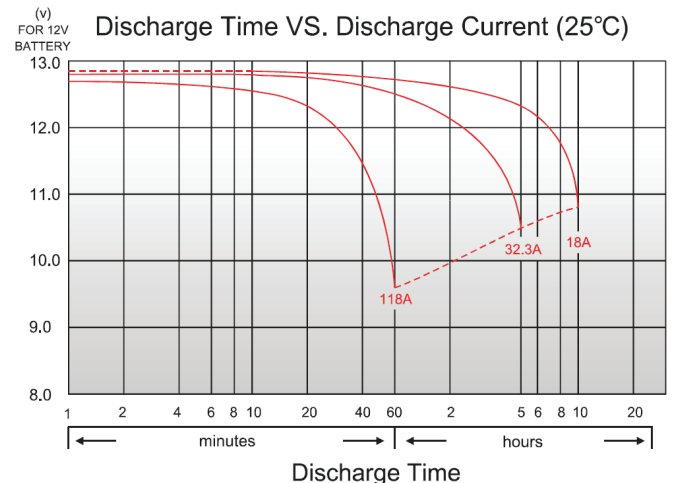
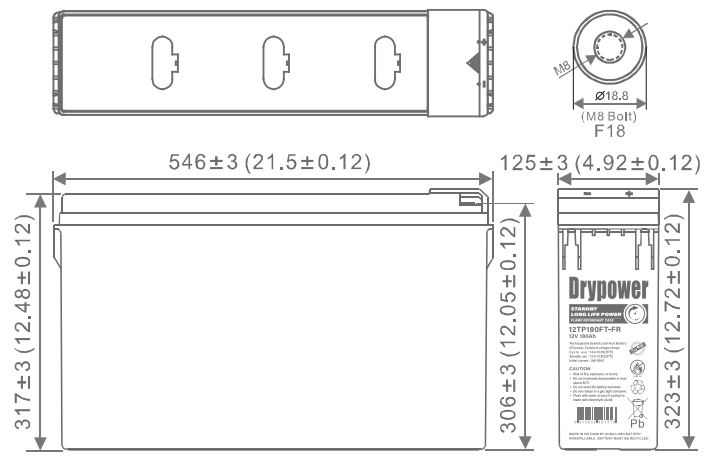
- Air (IATA/ICAO provision A67)
- Road
- Sea (per IMDG Special Provision 238)



Barcode	 9319632521113
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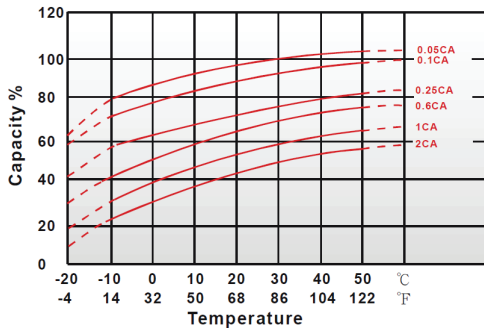


DIMENSIONS mm (inch)

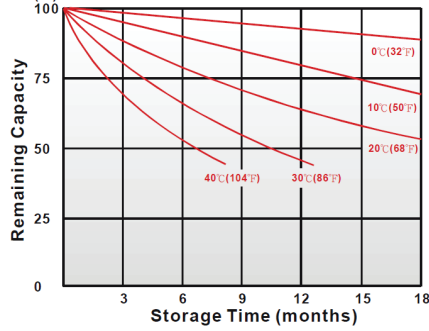


CHARACTERISTICS CHARTS

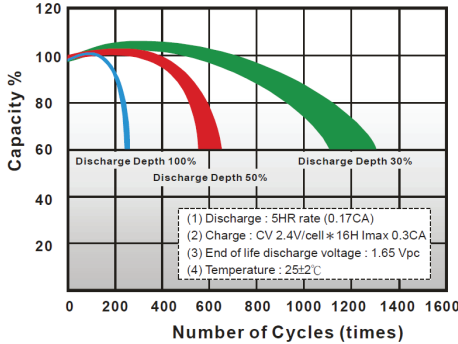
Effect of Temperature on Capacity 25°C (77°F)



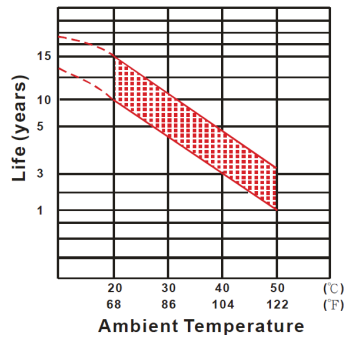
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



FEATURES & BENEFITS

- ◆ Industry leading 99.99% pure lead content for superior service life and dependable performance.
- ◆ Long service life to reduce maintenance and logistical costs across telecom, utilities and off-grid applications.
- ◆ Minimises sulphation with a thicker plate design and higher percentage of tin content to maximise battery standby life.
- ◆ High rate discharge capable to ensure reliable performance.
- ◆ Maintenance free technology and non-spillable design.
- ◆ 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		1.80V	1.75V	1.70V	1.65V	1.60V
Time						
15	min	435	458	480	503	525
30	min	318	328	339	349	360
45	min	251	257	362	268	274
60	min	208	212	217	221	225
120	min	125	127	130	132	134
180	min	94	95	96	97	98
300	min	62	62.5	63.1	63.6	64.1

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

End Voltage		1.80V	1.75V	1.70V	1.65V	1.60V
Time						
15	min	238	254	269	285	300
30	min	176	181	187	192	197
45	min	135	138	140	143	145
60	min	109	111	114	116	118
180	min	48	48.8	49.5	50.3	51
300	min	32.1	32.3	32.6	32.8	33
600	min	18	18.1	18.2	18.3	18.4

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%)