Drypower

VRLA AGM CYCLIC RANGE
DEEP CYCLE POWER

12V | **80Ah** | **SLA** | **CYCLIC AGM**

12SB80CL-FR

Rechargeable AGM Sealed Lead Acid Battery

UL94 V-0
FLAME RETARDANT CASE

SPECIFICATIONS

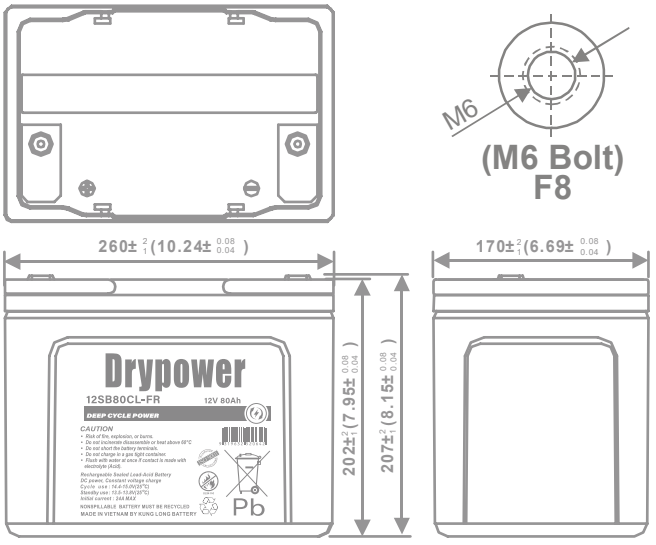
Nominal Voltage		12V
Nominal Capacity		
20 hour rate	(4.02A to 10.20V)	80.4Ah
10 hour rate	(7.50A to 10.80V)	75Ah
5 hour rate	(12.75A to 10.20V)	63.75Ah
1 hour rate	(45A to 9.60V)	45Ah
1C	(75A to 9.60V)	47.5Ah
Weight		Approx. 24.2kg
Internal Resistance (at 1KHz)		Approx. 5mΩ
Maximum Discharge Current (5 secs)		900A
Charge Methods at 25°C		
Cycle Use		
Charging Voltage Coefficient -5.0mV/°C/Cell		14.4V to 15.0V
Maximum Charging Current		24A
Standby Use		
Float Charging Voltage Coefficient -3.0mV/°C/Cell		13.5V to 13.8V
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		UL94 V-0 Flame Retardant
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		12 years

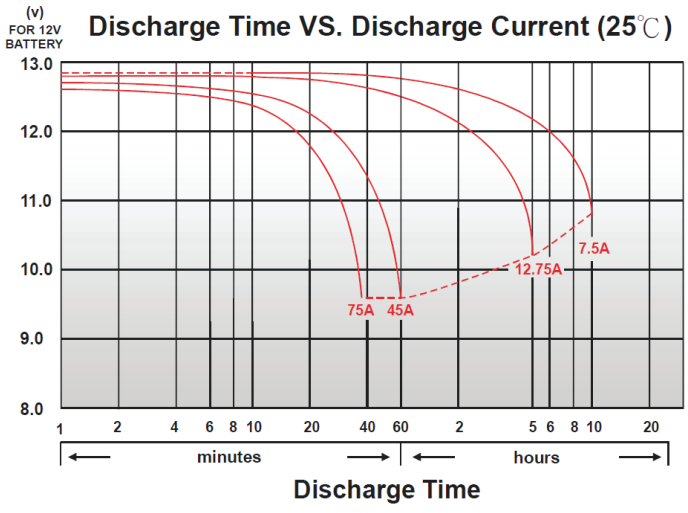
Classified as a non-spillable battery.
Approved for transportation by:
- Air (IATA/ICAO provision A67)
- Road
- Sea (per IMDG Special Provision 238)

IATA

Barcode	9319632520642

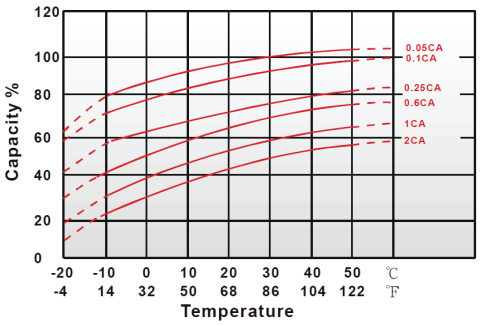
DIMENSIONS mm (inch)



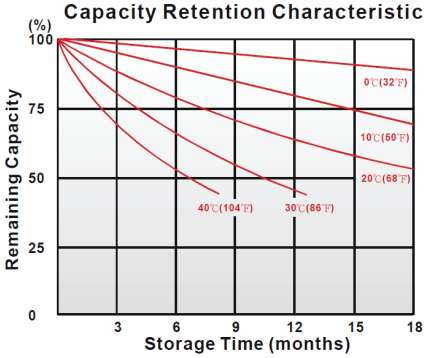


CHARACTERISTICS CHARTS

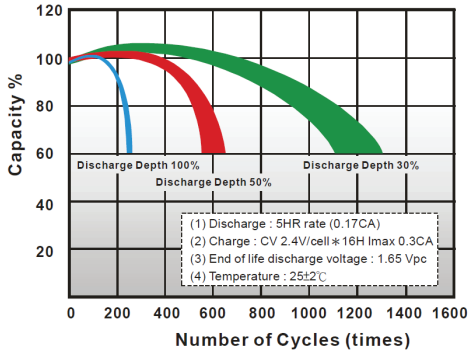
Effect of Temperature on Capacity 25℃(77℉)



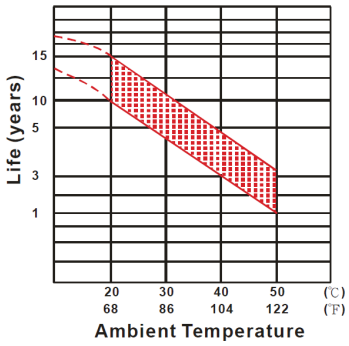
Capacity Retention Characteristic



Cycle Service Life



Trickle (or float) Service Life



FEATURES & BENEFITS

- Industry leading 99.99% pure lead content for superior service life and dependable performance.
- Special grid frame alloy design with outstanding anti-corrosion performance.
- Maintenance free technology and non-spillable design.
- Suitable for use in any orientation (except inverted) for use in hard to reach locations.
- Higher percentage of tin content compared with the industry standard. Tin extends battery standby life by minimising sulphation (corrosion) especially at higher 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)

Time \ End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	407	429	491	521	537	552	567
10	min	278	294	336	357	368	378	388
15	min	178	225	240	274	280	287	294
30	min	139	149	155	159	160	162	165
60	min	80.8	85.3	87.8	89.8	90.5	91.3	92.3
120	min	47.2	49.8	51.3	52.7	53.2	53.7	54.3
180	min	34	35.8	36.8	37.7	38	38.3	38.8
240	min	27.8	28.8	29.7	30.3	30.5	30.8	31.2
300	min	24.8	25.3	25.7	26	26.20	26.3	26.5
600	min	15	15.2	15.3	15.5	15.50	15.6	15.6
1200	min	7.85	7.97	8.07	8.15	8.2	8.23	8.28

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	178	214	245	272	281	292	304
10	min	112	143	167	186	192	199	207
15	min	90.5	109	124	138	141	145	150
30	min	63.2	72.6	79.4	84.5	85.6	87.2	89
60	min	38.6	41.5	43.3	44.8	45.3	45.9	46.7
120	min	20.2	22.4	23.9	25	25.4	25.8	26.3
180	min	15.8	17.4	18.4	19.3	19.6	20	20.4
240	min	12.90	13.9	14.7	15.3	15.6	15.9	16.2
300	min	11.8	12.6	13.1	13.4	13.6	13.8	14.1
600	min	7.53	7.62	7.69	7.74	7.76	7.81	7.85
1200	min	3.87	3.93	3.98	4.02	4.03	4.05	4.08

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

The tolerance range : X < 6min (+15%~–15%), 6min ≤ X < 10min (+12%~–12%), 10min ≤ X < 60min (+8%~–8%), X ≥ 60min (+5%~–5%)

Aug2020