Drypower

EXTREME HIGH RATE
LONG LIFE for UPS

12V | **135W** | **SLA** | **UPS** AGM

12SB135WHR-FR

Rechargeable AGM Sealed Lead Acid Battery

SPECIFICATIONS

Nominal Voltage		12V
Nominal Power		
15 min rate		135W/cell to 1.67V/cell
Nominal Capacity		
20 hour rate	(1.80A to 10.50V)	36Ah
8 hour rate	(3.87A to 10.50V)	31Ah
5 hour rate	(6.12A to 10.20V)	30.6Ah
Weight		Approx. 11.15kg
Internal Resistance (at 1KHz)		Approx. 8mΩ
Maximum Discharge Current (5 secs)		540A
Short Circuit Current		1800A
Charge Methods at 25°C		
Maximum Charging Current		10.8A
Boost Charging Voltage		14.4V to 15.0V
Boost Charge Time		8-9 hrs
Float Charging Voltage Coefficient -3.0mV/°C/Cell		13.5V to 13.8V
Operating Temperature Range		
Charge		–15°C to 50°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		96%
6 months		94%
Case Material		UL94 V-0 Flame Retardant
Termination		F6 (M5 Bolt)
Torque Value of Terminal Hardware		
Recommended Torque Value		M5: 4 N-m (41kgf-cm)
Max. Allowable Torque Value		M5: 6 N-m (61kgf-cm)
Design Life		6-9 years

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

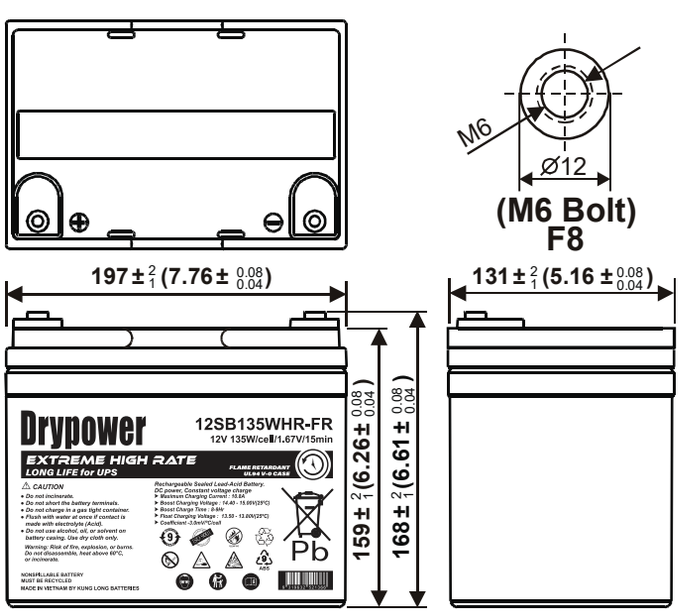
IATA

Barcode 9319632521366

* If charging above 40°C, always use temperature-compensated charging (refer charge methods above). High temperature use accelerates ageing; as a general guide, service life halves for every 10°C sustained rise above 25°C. Consult the engineers at MI for more information if required.

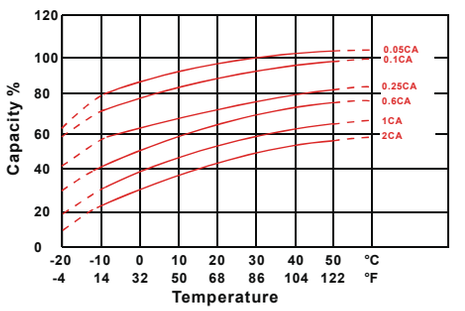
UL94 V-0
FLAME RETARDANT CASE

DIMENSIONS mm (inch)

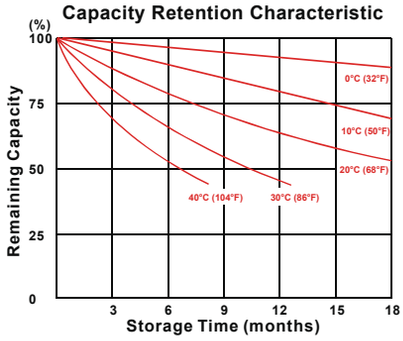


CHARACTERISTICS CHARTS

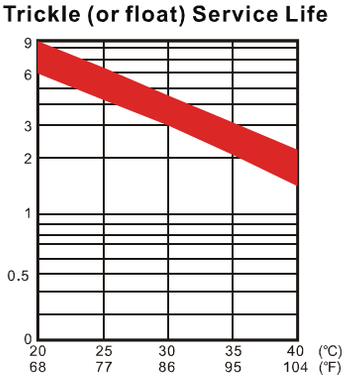
Effect of Temperature on Capacity 25°C (77°F)



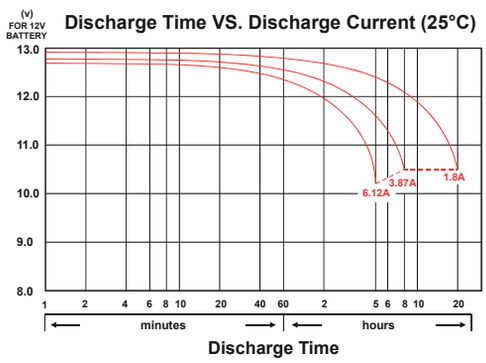
Capacity Retention Characteristic



Trickle (or float) Service Life



Discharge Time VS. Discharge Current (25°C)



FEATURES & BENEFITS

- Industry leading 99.99% pure lead content for superior service life and dependable performance.
- Specially formulated solder paste to ensure reliable power delivery.
- Maintenance free technology and non-spillable design.
- Special grid frame alloy design with outstanding anti-corrosion performance.
- 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	1.63V	1.60V
2	min	271	304	321	336	348	354	356	358
4	min	212	243	260	274	280	285	289	292
5	min	209	226	245	258	265	270	274	277
6	min	205	225	240	247	252	256	259	262
8	min	168	180	190	198	212	216	219	222
10	min	144	157	165	168	171	174	177	179
15	min	125	128	131	133	135	137	138	139
20	min	103	107	109	111	113	115	116	117
30	min	76.5	78.3	79.3	79.9	80.3	80.7	81.1	81.4
45	min	57.2	57.9	58.5	58.8	59.1	59.2	59.3	59.3
60	min	43.7	45	45.8	46.3	46.6	46.7	46.8	46.9
90	min	33	33.7	34.1	34.5	34.8	35	35.2	35.3
120	min	22.4	23.6	24.3	24.7	24.9	25.1	25.3	25.3
180	min	15.1	15.7	16.2	16.6	16.9	17.1	17.2	17.3
240	min	11.2	11.7	11.9	12.1	12.3	12.4	12.5	12.5
300	min	9.53	9.89	10	10.1	10.2	10.2	10.3	10.4
600	min	4.83	5	5.13	5.22	5.28	5.31	5.34	5.37
1200	min	3.22	3.32	3.42	3.44	3.48	3.5	3.52	3.54

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	1.63V	1.60V
2	min	157	171	183	193	203	208	212	217
4	min	130	146	158	166	169	170	171	172
5	min	115	128	134	136	139	140	141	142
6	min	98.2	104	107	109	111	112	113	114
8	min	90.2	96.1	99.2	101	103	105	107	109
10	min	83.2	88.6	91.6	93.7	95.7	97.3	98.3	98.8
15	min	64.2	67.2	71	73.8	75	75.3	75.6	75.8
20	min	53.20	56	58.3	59	59.5	59.7	59.9	60
30	min	35.9	38.1	39.9	40.3	40.5	40.8	41	41.1
45	min	26.8	29.3	31	31.3	31.8	32.1	32.3	32.4
60	min	20	21	21.6	21.9	22.1	22.3	22.4	22.5
90	min	16.3	17	17.5	17.7	17.9	18.1	18.2	18.2
120	min	11.8	12.4	12.8	13	13.1	13.2	13.3	13.3
180	min	8.38	8.73	9	9.22	9.38	9.5	9.58	9.62
240	min	6.78	7.07	7.21	7.3	7.36	7.38	7.39	7.4
300	min	5.69	5.93	6.02	6.06	6.1	6.12	6.14	6.16
600	min	3.22	3.33	3.42	3.48	3.52	3.54	3.55	3.55
1200	min	1.71	1.76	1.8	1.82	1.84	1.84	1.85	1.85

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%)