



VRLA Rechargeable Battery

MPL110-12

Handle Type

FEATURES

- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- The battery is designed with very lower resistance and exceeding high power performance
- Long life expectancy 10 years in float application
- Flame-arrestor is installed to ensure safety
- Carry handles for easy installation
- Absorbent Glass Mat technology for efficient gas recombination



APPLICATION

- UPS
- Cable TV
- Golf-Carts
- Telecom
- Power station
- Marine

SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	10 Hour Rate (10.8A, 10.5V)	108.0 Ah
	5 Hour Rate (18.7A, 10.5V)	93.5 Ah
	1 Hour Rate (76.0A, 9.6V)	76.0 Ah
	15 Min Rate (440W, 9.6V)	55.0 Ah
Approx. Weight	34.3Kg(75.62lbs.)	
Terminals	B3 (Fitting M6 bolt & nut) I2 is optional	
Max. Charge Current	32.4 A	
Cold Cranking Amp @ -18°C	850 A	
Short Circuit Current	2900 A	
Operating Temperature Range	Charge	0°C~50°C(32°F~122°F)
	Discharge	-20°C~60°C(-4°F~140°F)
	Storage	-20°C~50°C(-4°F~122°F)
Self Discharge	< 3% per month (25°C)	
Internal Resistance	≤ 3mΩ (Fully Charged)	

CONTAINER MATERIAL

- Standard: PP(UL 94-HB)
Model Name: MPL110-12
- Optional: Flame Retardant PP(UL 94-V0)
Model Name: MPL110-12FR

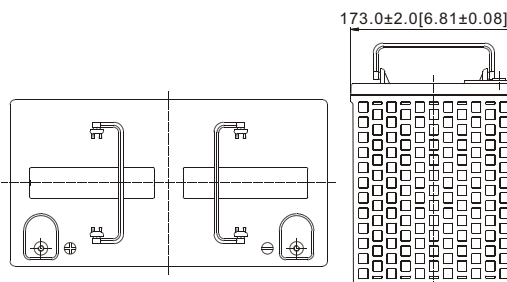
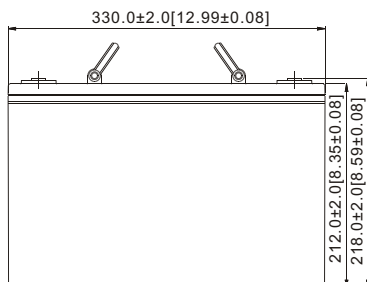
WSF **WSF** **WSF**
ISO9001 ISO14001 OHSMS



- IEC60896-21/22 ● JIS C 8704-2
- GB/T 19638.2

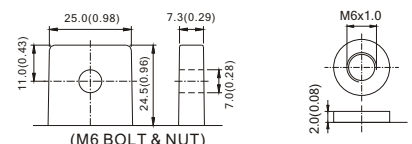
OUTER DIMENSIONS mm(inch)

Length (L)	Width (W)	Container Height (H)	Total Height (TH)
330±2.0(12.99±0.08)	173±2.0(6.81±0.08)	212±2.0(8.35±0.08)	B3: 241±2.0(9.49±0.08) I2: 218±2.0(8.59±0.08)



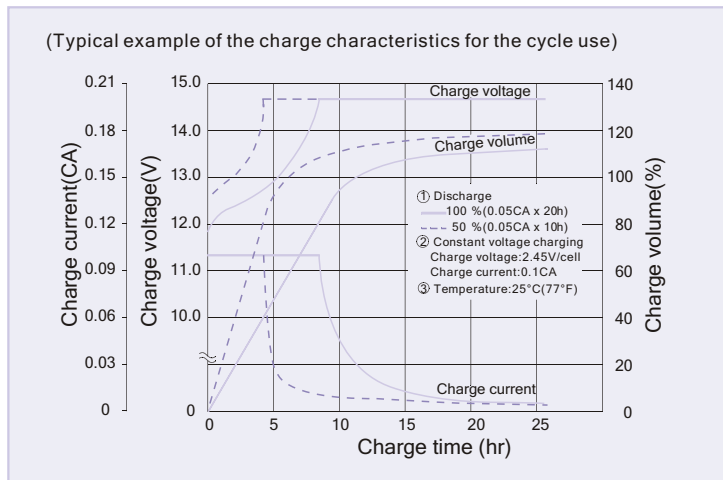
TERMINAL TYPE

- Terminal B3
- Terminal I2

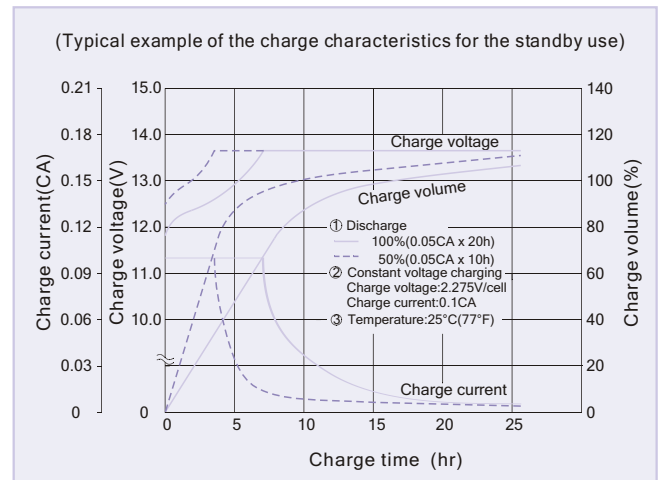


Terminal Hardware Initial Torque:
B3,I2(5.5Nm±5%)

MPL110-12 (MPL110-12FR) Charging Characteristics



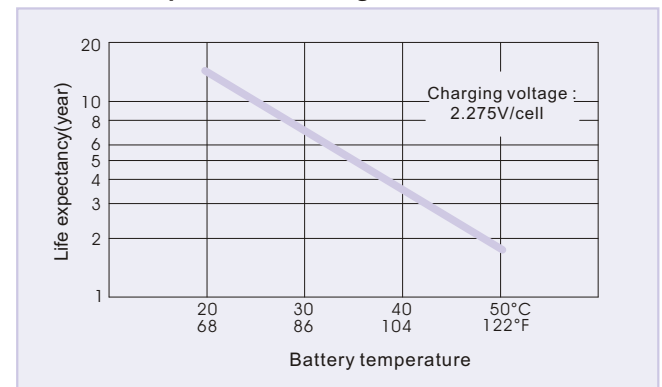
Battery Charging Characteristics



Charging Procedure

Application	Charging method	Charging Voltage at 25°C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C /cell)	Max. charging current (CA)	Charging time 0.1CA, 25°C (h)		Temp (°C)
					100% discharge	50% discharge	
For standby power Source	Constant voltage & Constant current charging (with current restriction)	2.25~2.30	-3	0.3	24	20	0~50 (32~122°F)
For cycle service		2.40~2.50	-4	0.3	16	10	

Effect Of Temperature On Long Term Float Life



Constant power discharge characteristics at 25 °C/77 °F Unit: W

F.V. (V/cell) \ Discharge Time	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min	40 Min	50 Min	60 Min	90 Min
1.80V	3810	2800	2326	1945	1685	1480	1192	1000	867	616
1.75V	4270	3005	2460	2020	1736	1518	1216	1021	880	626
1.70V	4554	3129	2545	2073	1770	1542	1233	1033	890	633
1.65V	4740	3225	2602	2112	1798	1560	1248	1044	898	638
1.60V	4880	3288	2640	2140	1820	1574	1260	1052	906	642

Constant current discharge characteristics at 25 °C/77 °F Unit: A

F.V. (V/cell) \ Discharge Time	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min	40 Min	50 Min	60 Min	90 Min
1.80V	354	246	202	166	142	123	99	83.1	72.8	51.7
1.75V	389	265	213	174	148	128	101	85.6	73.9	52.6
1.70V	414	276	220	178	152	131	104	86.8	74.8	53.2
1.65V	430	285	226	182	154	133	105	88.0	75.5	53.7
1.60V	444	290	230	185	156	134	106	88.0	76.0	54.0

All data and artworks shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.

A/5 REV. Jul. 2013

USA:
 B&B BATTERY(USA) INC.
 6415 RANDOLPH ST.COMMERCE, CA,90040 U.S.A.
 TEL:1-323-278-1900.1-800-278-8599
 FAX:1-323-278-1268
 E-Mail:sales@bb-battery.com

CHINA FACTORY:
 B.B. BATTERY CO., LTD.
 CHENG DONG TRIAL AREA,HUANG GANG,
 RAOPING, GUANG DONG,CHINA,515700
 TEL:86-768-7601001-2
 FAX:86-768-7601469
 E-Mail:maggy@bb-battery.com

EUROPE:
 B&B BATTERY(EUROPE) B.V.
 SUITE 8, HAAKSBERGWEG 33, 1101
 BP AMSTERDAM, THE NETHERLANDS
 TEL: 31-30-320-0190
 MOBILE: 852-9128-2711
 E-Mail: dliu@bb-battery.com

HONG KONG:
 B&B BATTERY(Hong Kong) Co.
 TEL:852-2311-4918
 FAX:852-2739-1182
 E-Mail:bbhk@hkstar.com

JAPAN:
 B&B BATTERY(JAPAN) CO., LTD.
 1375-11 NARAHARA-MACHI,HACHIOJI,
 TOKYO 193-0803,JAPAN.
 TEL:81-426-25-6375
 FAX:81-426-25-6375
 E-Mail:miyata@bb-battery.com

TAIWAN:
 B.B. BATTERY(TAIWAN) CO., LTD.
 TEL:886-6-502-5150
 FAX:886-6-589-8087
 E-Mail:kevinlin@bb-battery.com