

# VRLA Rechargeable Battery

## HR40-12 Standard 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 for high rate usage
- Absorbent Glass Mat technology for efficient gas recombination
- The power density at 5 min~15min discharging rate is 30% higher than BP series


### APPLICATION

- UPS
- Wheelchairs
- Lawn Mowers
- Electronic Medical Equipment
- Golf-Carts




### SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| Nominal Voltage             | 12 V   |
| Nominal Capacity            | 38Ah @ 10 hour rate F.V.(1.75V/cell)   |
| Approx. Weight              | 12.1Kg(26.68lbs.)  |
| Terminals                   | B7 (Fitting M6 bolt & nut)   |
| Internal Resistance         | ≤6mΩ (Fully Charged)   |
| Max. Discharge Current      | 495 A (5 sec.)   |
| Max. Charge Current         | 11.4 A   |
| Operating Temperature Range | Charge 0°C~40°C(32°F~104°F)<br>Discharge -20°C~50°C(-4°F~122°F)<br>Storage. -20°C~40°C(-4°F~104°F) |
| Container Material          | Standard: ABS( UL94 HB) HR40-12<br>Optional: Flame Retardant ABS(UL94 V-0) HR40-12FR               |

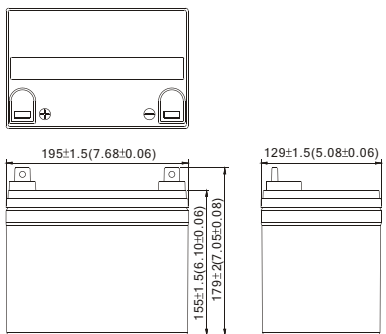
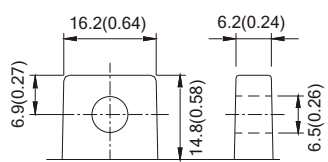


MH19884



C4M20310-2474-E-16

- IEC 61056-1
- JIS C 8702-1
- GB/T 19639.1

| DIMENSION(mm/inch)   | OUTER DIMENSIONS  | TERMINAL TYPE   |
|--|---|---|
| <p>■ Length</p> <p>195±1.5 (7.68±0.06)</p> <p>■ Width</p> <p>129±1.5 (5.08±0.06)</p> <p>■ Container Height</p> <p>155±1.5 (6.10±0.06)</p> <p>■ Total Height</p> <p>179±2.0 (7.05±0.08)</p> |  | <p>● Terminal B7</p>  <p>[M6 BOLT &amp; NUT]</p> <p>Terminal Hardware Initial Torque: B7(5.5Nm±5%)</p> |

**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 | 30 Min | 40 Min | 50 Min | 60 Min | 120 Min |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 1.80V                          | 1640.0 | 1120.0 | 811.0  | 692.0  | 526.0  | 400.0  | 334.0  | 294.0  | 162.2   |
| 1.70V                          | 1960.0 | 1250.0 | 882.0  | 733.0  | 548.0  | 415.0  | 345.0  | 301.0  | 165.3   |
| 1.60V                          | 2100.0 | 1315.0 | 922.0  | 760.0  | 560.0  | 425.0  | 352.0  | 306.0  | 168.0   |
| 1.50V                          | 2160.0 | 1340.0 | 942.0  | 772.0  | 567.0  | 430.0  | 356.0  | 309.0  | 168.9   |
| 1.40V                          | 2200.0 | 1358.0 | 953.0  | 779.0  | 571.0  | 433.0  | 359.0  | 311.0  | 169.3   |
| 1.30V                          | 2220.0 | 1370.0 | 960.0  | 784.0  | 574.0  | 435.0  | 361.0  | 312.0  | 169.8   |

**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 | 30 Min | 40 Min | 50 Min | 60 Min | 120 Min |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 1.80V                          | 146.43 | 98.25  | 70.16  | 59.35  | 44.58  | 33.64  | 27.95  | 24.50  | 13.52   |
| 1.70V                          | 178.18 | 109.65 | 76.30  | 62.86  | 46.44  | 34.90  | 28.87  | 25.08  | 13.78   |
| 1.60V                          | 190.91 | 115.35 | 79.76  | 65.18  | 47.46  | 35.74  | 29.46  | 25.50  | 14.00   |
| 1.50V                          | 196.36 | 117.54 | 81.49  | 66.21  | 48.05  | 36.16  | 29.79  | 25.75  | 14.08   |
| 1.40V                          | 200.00 | 119.12 | 82.44  | 66.81  | 48.39  | 36.42  | 30.04  | 25.92  | 14.11   |
| 1.30V                          | 201.82 | 120.18 | 83.04  | 67.24  | 48.64  | 36.59  | 30.21  | 26.00  | 14.15   |

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