



The power for your life

UR12V-40AH

Specifications

Nominal Capacity

| | | | | |
|--------------|-------|----|---------|---------|
| 20 hour rate | (2A | to | 10.50V) | 40Ah |
| 10 hour rate | (3.8A | to | 10.50V) | 38Ah |
| 5 hour rate | (6.8A | to | 10.20V) | 34Ah |
| 1 C | (40A | to | 9.60V) | 22.67Ah |
| 3 C | (120A | to | 9.60V) | 16Ah |

Weight Approx.14KG

Internal Resistance (at 1KHz) Approx. 7.5mΩ

Maximum Discharge Current for 5 seconds: 480 A

Maximum Charging Current : 12 A

Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mV/°C/cell

Standby use:

Float Charging Voltage 13.5 to 13.8V

Coefficient -3.0mV/°C/cell

Operating Temperature Range

Charge -15°C(5°F) to 40°C(104°F)

Discharge -15°C(5°F) to 50°C(122°F)

Storage -15°C(5°F) to 40°C(104°F)

Charge Retention (shelf life) at 20°C (68°F)

1 month 92%

3 month 90%

6 month 80%

(Option: UL94 HB & UL94 V-0 flame retardant)

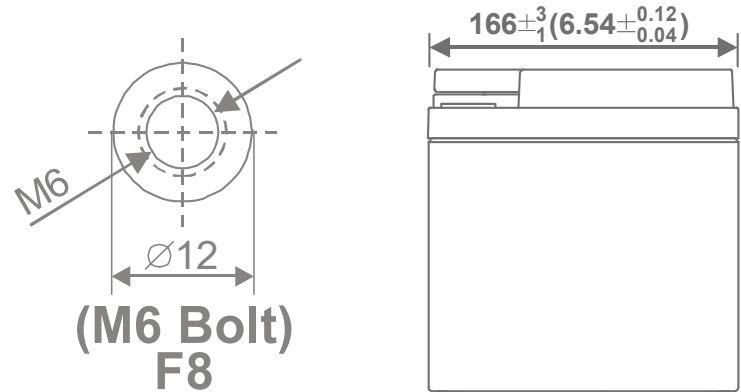
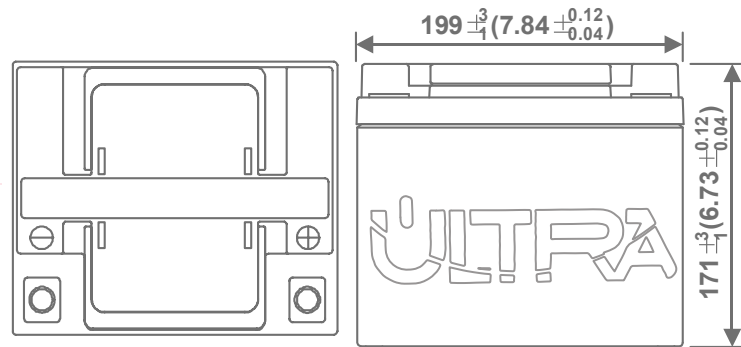
Terminal F8

Description of torque value of hard ware for the terminals:

Recommended torque value M6: 7 N-m (71kgf-cm)

Maximum allowable torque value M6: 9 N-m (92kgf-cm)

Life Time 15Y

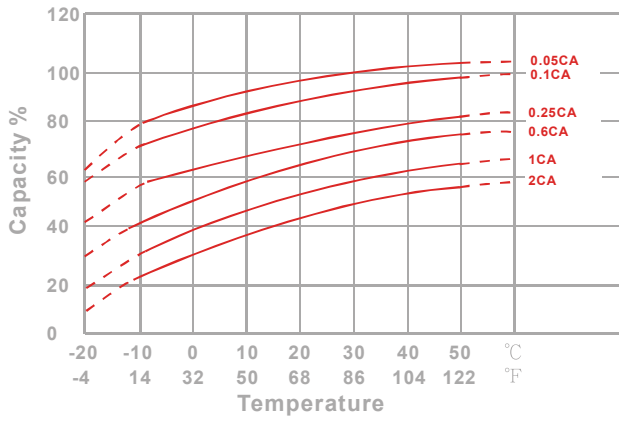


Dimensions

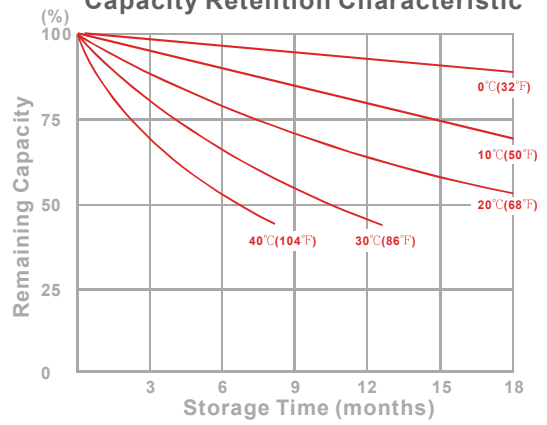
| | |
|-----------------|------------------------------------|
| Length: | 199 ± 0.12 mm (7.84 ± 0.04 inches) |
| Width: | 166 ± 0.12 mm (6.54 ± 0.04 inches) |
| Height: | 171 ± 0.12 mm (6.73 ± 0.04 inches) |
| Overall Height: | 171 ± 0.12 mm (6.73 ± 0.04 inches) |



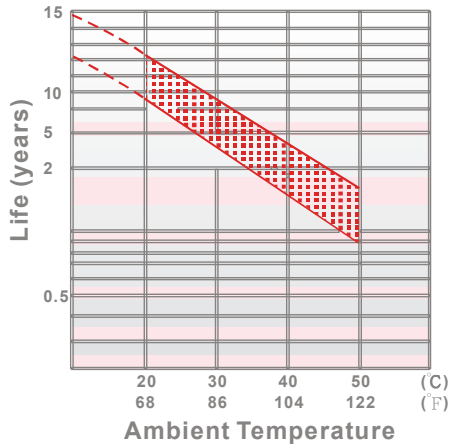
Effect of Temperature on Capacity 25°C(77°F)



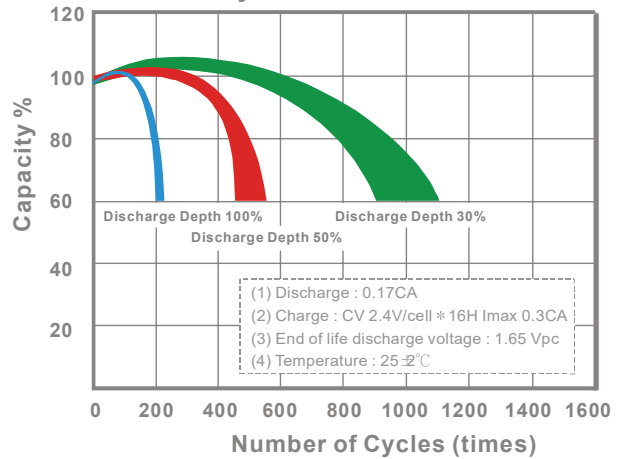
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



PERFORMANCE DATA

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

| end voltage | 5 min | 10 min | 15 min | 30 min | 45 min | 1 h | 2 h | 3 h | 4 h | 5 h | 6 h | 8 h | 10 h | 20 h |
|-------------|-------|--------|--------|--------|--------|-------|-------|-------|------|------|-------|-------|-------|-------|
| 9.6 | 1800 | 1242 | 954 | 570 | 412.2 | 322.8 | 173.4 | 124.8 | 96.6 | 79.8 | 67.2 | 52.92 | 44.76 | 26.1 |
| 9.9 | 1746 | 1224 | 942 | 565.8 | 411 | 321 | 171.6 | 124.2 | 96 | 79.2 | 67.2 | 52.86 | 44.58 | 25.68 |
| 10.02 | 1716 | 1206 | 936 | 563.4 | 409.8 | 320.4 | 171.6 | 124.2 | 96 | 79.2 | 67.2 | 52.86 | 44.52 | 25.5 |
| 10.2 | 1668 | 1188 | 924 | 559.2 | 407.4 | 318.6 | 171 | 123.6 | 95.4 | 79.2 | 67.2 | 52.8 | 44.46 | 25.44 |
| 10.5 | 1596 | 1152 | 906 | 555.6 | 404.4 | 316.2 | 170.4 | 122.4 | 94.8 | 78.6 | 66.6 | 52.68 | 44.22 | 25.14 |
| 10.8 | 1524 | 1122 | 894 | 549 | 396.6 | 310.8 | 168.6 | 120 | 93.6 | 78 | 66 | 52.38 | 43.68 | 24.9 |
| 11.1 | 1296 | 984 | 780 | 501.6 | 369.6 | 294.6 | 162.6 | 109.8 | 85.8 | 71.4 | 61.8 | 49.14 | 40.8 | 23.7 |
| 11.4 | 1038 | 822 | 678 | 444 | 336 | 270.6 | 154.8 | 102.6 | 80.4 | 67.2 | 58.38 | 46.08 | 37.92 | 23.1 |

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

| end voltage | 5 min | 10 min | 15 min | 30 min | 45 min | 1 h | 2 h | 3 h | 4 h | 5 h | 6 h | 8 h | 10 h | 20 h |
|-------------|-------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|------|
| 9.6 | 161 | 108 | 81.7 | 47.2 | 33.6 | 26.1 | 14 | 10.2 | 7.9 | 6.53 | 5.51 | 4.32 | 3.65 | 2.21 |
| 9.9 | 152 | 104 | 79.3 | 46.2 | 33.2 | 25.8 | 13.8 | 10.1 | 7.81 | 6.45 | 5.46 | 4.29 | 3.61 | 2.17 |
| 10.02 | 149 | 103 | 78.4 | 45.8 | 33 | 25.7 | 13.7 | 10.1 | 7.79 | 6.43 | 5.44 | 4.28 | 3.6 | 2.16 |
| 10.2 | 144 | 101 | 76.9 | 45.3 | 32.7 | 25.5 | 13.6 | 10 | 7.75 | 6.41 | 5.42 | 4.26 | 3.59 | 2.15 |
| 10.5 | 134 | 95.8 | 74.4 | 44.6 | 32.2 | 25.1 | 13.5 | 9.89 | 7.65 | 6.34 | 5.37 | 4.23 | 3.55 | 2.12 |
| 10.8 | 126 | 91.7 | 72.4 | 43.6 | 31.4 | 24.5 | 13.2 | 9.65 | 7.5 | 6.23 | 5.3 | 4.19 | 3.49 | 2.1 |
| 11.1 | 106 | 79.7 | 62.8 | 39.6 | 29 | 23.1 | 12.7 | 8.79 | 6.85 | 5.71 | 4.92 | 3.92 | 3.25 | 1.99 |
| 11.4 | 83.8 | 66 | 53.9 | 34.9 | 26.3 | 21.2 | 12.1 | 8.18 | 6.42 | 5.38 | 4.65 | 3.67 | 3.02 | 1.85 |

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%)

