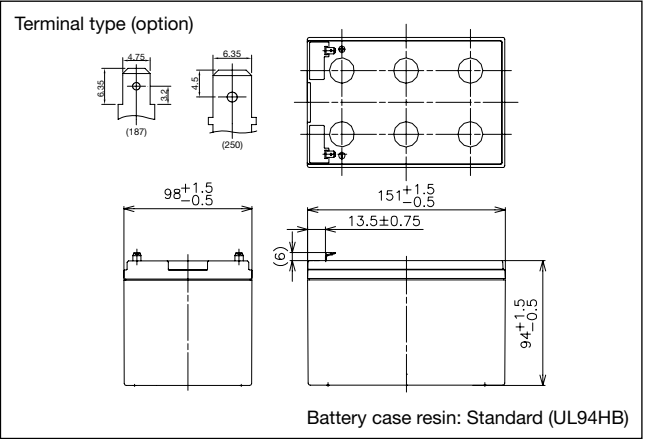


LC-CA1212P

For main power supplies.
Cycle long life type.



Dimensions (mm)



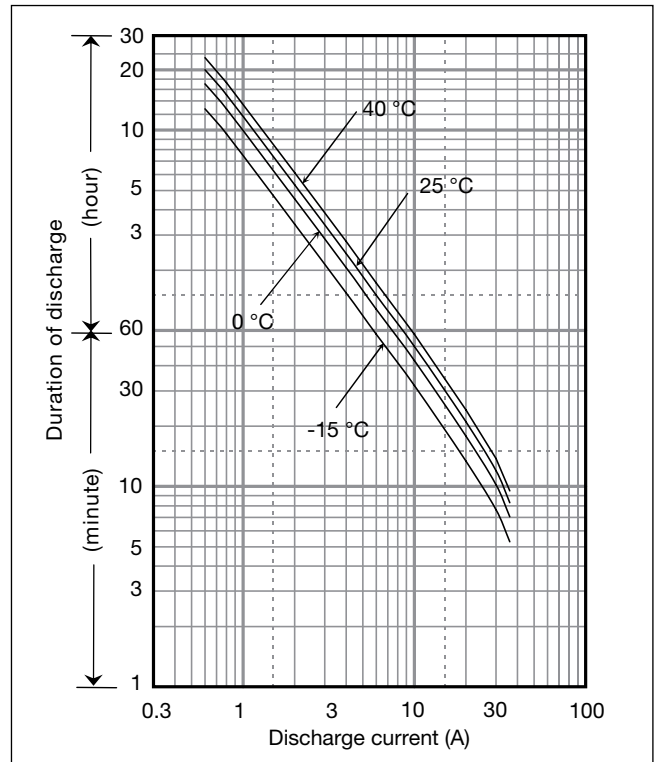
Specifications

| | | |
|---------------------------------|------------------------------------|--------|
| Nominal voltage | 12 V | |
| Nominal capacity (20 hour rate) | 12 Ah | |
| Dimensions | Length | 151 mm |
| | Width | 98 mm |
| | Height | 94 mm |
| | Total Height | 100 mm |
| Approx. mass | 3.8 kg | |
| Terminal | Faston 187 or Faston 250 with hole | |

Characteristics

| | | |
|---|-------------------------------|---------|
| Capacity (25 °C) | 20 hour rate | 12.0 Ah |
| | 10 hour rate | 11.3 Ah |
| | 5 hour rate | 10.4 Ah |
| | 1 hour rate | 8.1 Ah |
| Internal resistance | Fully charged battery (25 °C) | 30 mΩ |
| Temperature dependency of capacity (20 hour rate) | 40 °C | 102 % |
| | 25 °C | 100 % |
| | 0 °C | 85 % |
| | -15 °C | 65 % |
| Self discharge (25 °C) | After 3 months | 91 % |
| | After 6 months | 82 % |
| | After 12 months | 64 % |

Duration of discharge vs Discharge current



Watt Table

(Wattage/Battery)

| Cut-off V | 3min | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 1.5h | 2h | 3h | 4h | 5h | 6h | 10h | 20h | 24h |
|-----------|------|------|-------|-------|-------|-------|-------|-----|------|------|------|------|------|------|------|------|------|
| 9.6V | 679 | 559 | 384 | 298 | 247 | 183 | 137 | 105 | 70.3 | 54.5 | 38.1 | 28.8 | 24.1 | 21.7 | 13.3 | 7.22 | 6.02 |
| 9.9V | 649 | 537 | 373 | 288 | 241 | 177 | 135 | 104 | 69.9 | 54.2 | 37.8 | 28.8 | 24.1 | 21.7 | 13.3 | 7.22 | 6.02 |
| 10.2V | 607 | 506 | 363 | 282 | 235 | 177 | 134 | 102 | 69.1 | 53.9 | 37.5 | 28.8 | 24.0 | 21.6 | 13.2 | 7.21 | 6.01 |
| 10.5V | 556 | 475 | 343 | 271 | 231 | 172 | 133 | 100 | 68.5 | 53.3 | 36.9 | 28.7 | 24.0 | 21.6 | 13.2 | 7.20 | 6.00 |
| 10.8V | 495 | 434 | 321 | 261 | 225 | 166 | 123 | 98 | 66.1 | 52.1 | 36.3 | 28.4 | 23.8 | 21.5 | 13.1 | 7.18 | 5.98 |

Ampere Table

(Ampere/Battery)

| Cut-off V | 3min | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 1.5h | 2h | 3h | 4h | 5h | 6h | 10h | 20h | 24h |
|-----------|------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------|-------|
| 9.6V | 61.1 | 50.1 | 34.3 | 25.9 | 21.3 | 15.6 | 11.7 | 8.90 | 5.95 | 4.60 | 3.20 | 2.41 | 2.01 | 1.81 | 1.11 | 0.602 | 0.502 |
| 9.9V | 58.4 | 48.2 | 33.3 | 25.0 | 20.8 | 15.1 | 11.5 | 8.80 | 5.92 | 4.58 | 3.18 | 2.41 | 2.01 | 1.81 | 1.11 | 0.602 | 0.502 |
| 10.2V | 54.6 | 45.4 | 32.4 | 24.5 | 20.3 | 15.1 | 11.4 | 8.70 | 5.85 | 4.55 | 3.15 | 2.41 | 2.00 | 1.80 | 1.10 | 0.601 | 0.501 |
| 10.5V | 50.0 | 42.6 | 30.6 | 23.6 | 19.9 | 14.7 | 11.3 | 8.50 | 5.80 | 4.50 | 3.10 | 2.40 | 2.00 | 1.80 | 1.10 | 0.600 | 0.500 |
| 10.8V | 44.5 | 38.9 | 28.7 | 22.7 | 19.4 | 14.2 | 10.5 | 8.30 | 5.60 | 4.40 | 3.05 | 2.38 | 1.99 | 1.79 | 1.09 | 0.598 | 0.498 |

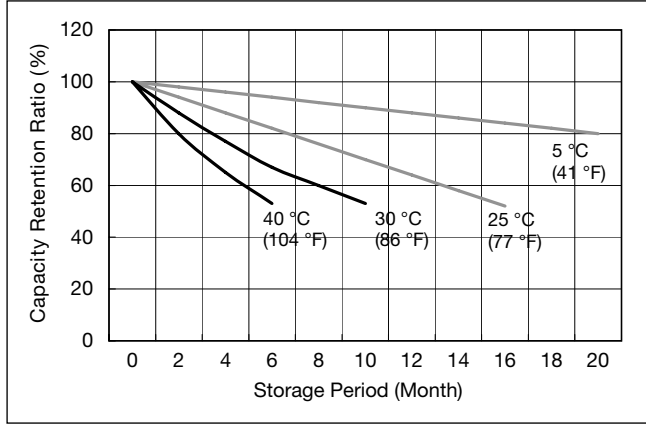
Charging Method

| | |
|-----------|---|
| Cycle Use | Control voltage 14.5 - 14.9 V; Initial current 4.8 A or smaller |
|-----------|---|

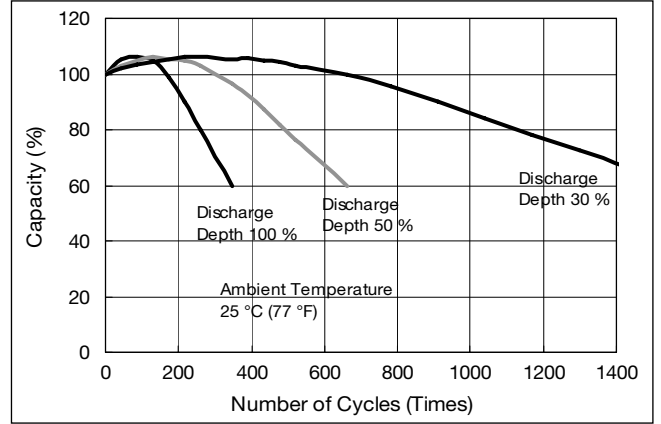
Cut off voltage

| | | | | | |
|---------------------|---------------|-------------|------------|-------------|-------------|
| Discharge current | 0.6 A - 2.4 A | 2.4 A - 6 A | 6 A - 12 A | 12 A - 24 A | 24 A - 36 A |
| Cut off voltage (V) | 10.5 | 10.2 | 9.9 | 9.3 | 8.7 |

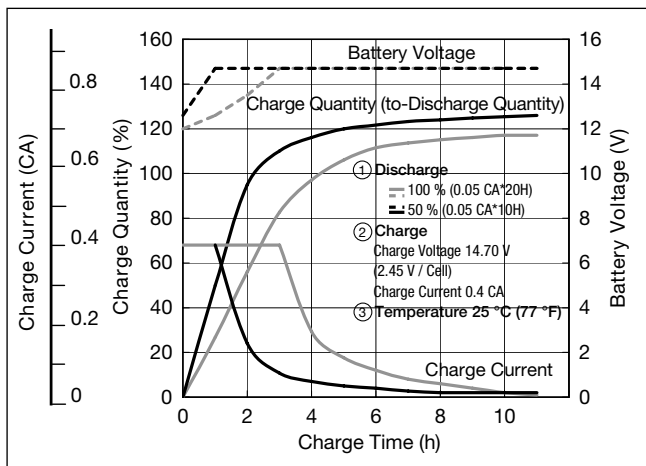
Residual capacity vs storage period



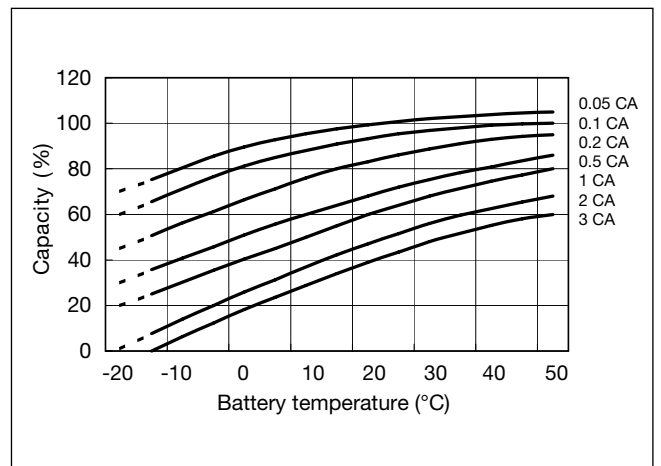
Cycle life vs Depth of discharge



Constant-voltage and constant-current charge characteristics



Discharge capacity by temperature and by discharge current



Discharge characteristics

