

# **12LC-100** 12 V 107 Ah



Q-Batteries Akku 12LC-100 battery is a special deep cycle battery which is designed for intensive cyclic discharge usage. Because of the very thick lead plates it's possible to achieve more cycles and longer lifetime.

#### **Application**

Electric wheelchair, caravan/marine, cleaning machines, golf cart, vehicle lifts, solar energy system, u.v.m.















#### Specification

Voltage Per Unit 12 V

Capacity 107 Ah @20hr-rate to 1.8V per cell @25°C

Cells Per Unit 6

Weight ca. 30 kg

Max. Discharge Current 1000 A (5 sec.)

Internal Resistance ca. 5 m  $\Omega$ 

Operating Temperature Range Discharge: Charge: Storage:

Normal - 15°C - 50°C - 10°C - 50°C - 20°C - 50°C

Operating Temperature Range 25°C ± 5°C

Self Discharge Valve Regulated Lead Acid (VRLA) batteries can be stored for

more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.

Terminal F12 (M8 bolt)

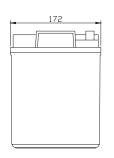
Container Material A.B.S. (UL94-HB)

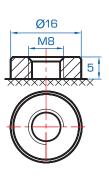
#### **Dimensions**

328 Length x 172 Width x 222 mm Height







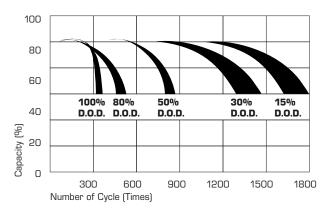




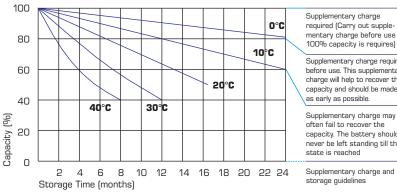
# Constant current discharge characteristics: A (25°C)

| F.V/Time | 5 Min. | 10 Min. | 15 Min. | 30 Min. | 1 HR  | 2 HR  | 3 HR  | 4 HR  | 5 HR  | 8 HR  | 10 HR | 20 HR |
|----------|--------|---------|---------|---------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9.60 V   | 320.7  | 226.9   | 181.4   | 112.7   | 65.00 | 38.89 | 26.88 | 22.03 | 18.03 | 12.42 | 10.50 | 5.777 |
| 10.0 V   | 311.4  | 215.8   | 177.7   | 110.8   | 64.70 | 38.60 | 26.78 | 21.93 | 17.93 | 12.32 | 10.40 | 5.672 |
| 10.2 V   | 302.2  | 208.2   | 174.9   | 109.8   | 64.10 | 38.31 | 26.57 | 21.83 | 17.82 | 12.22 | 10.30 | 5.567 |
| 10.5 V   | 271.3  | 192.1   | 166.5   | 107:1   | 63.50 | 38.02 | 26.47 | 21.62 | 17.61 | 1212  | 10.20 | 5.462 |
| 10.8 V   | 244.9  | 175.2   | 153.5   | 102.4   | 62.00 | 37.33 | 25.75 | 21.11 | 17.29 | 11.92 | 10:10 | 5.357 |
| 11.1 V   | 209.1  | 156.6   | 137.7   | 95.91   | 58.90 | 35.68 | 24.62 | 20.09 | 16.55 | 11.41 | 9.796 | 5.041 |
| 11.1 V   | 209.1  | 156.6   | 137.7   | 95.91   | 58.90 | 35.68 | 24.62 | 20.09 | 16.55 | 11.41 | 9.796 | 5.04  |

# Life characteristics of cyclic use



### Storage characteristic



required (Carry out suppleentary charge before use if

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made

Supplementary charge may capacity. The battery should never be left standing till this

# Capacity Factors with different Temperature

| Batte   | ery Type | -20°C | -10°C | 0°C | 5°C | 10°C | 20°C | 25°C | 30°C | 40°C | 45°C |
|---------|----------|-------|-------|-----|-----|------|------|------|------|------|------|
| GEL     | 6V & 12V | 50%   | 70%   | 83% | 85% | 90%  | 98%  | 100% | 102% | 104% | 105% |
| Battery | 2V       | 60%   | 75%   | 85% | 88% | 92%  | 99%  | 100% | 103% | 105% | 106% |
| AGM     | 6V & 12V | 46%   | 66%   | 76% | 83% | 90%  | 98%  | 100% | 103% | 107% | 109% |
| Battery | 2V       | 55%   | 70%   | 80% | 85% | 92%  | 99%  | 100% | 104% | 108% | 110% |

#### Charging Method

Charge the batteries at least once every six months, if they are stored at 25°C

| Constant Voltage (V) | -0.2C x 2h + 2.4–2.45V/Cell x 24h, max. Current 0.3CA |
|----------------------|---|
| Constant Current (A) | -0.2C x 2h + 0.1CA x 12h                              |
| Fast                 | -0.2C x 2h + 0.3CA x 4.0h                             |