



# 12LCP-56

12V 56Ah



Q-Batteries Akku 12LCP-56 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.

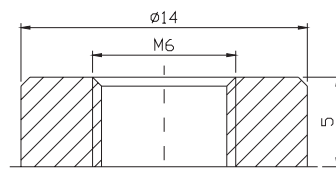
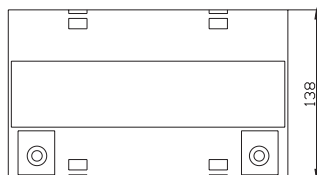
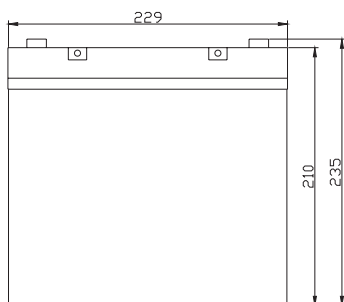


## Specification:

|                                    |   |                                   |                           |
|------------------------------------|---|-----------------------------------|---------------------------|
| Voltage Per Unit                   | 12 V  |                                   |                           |
| Capacity                           | 56 Ah   | @20hr-rate to 1.8V per cell @25°C |                           |
| Cells Per Unit                     | 6   |                                   |                           |
| Weight                             | ca. 18 kg +/- 3%  |                                   |                           |
| Max. Discharge Current             | 550 A (5 sec.)  |                                   |                           |
| Internal Resistance                | ca. 6 m Ω   |                                   |                           |
| Operating Temperature Range Normal | Discharge:<br>- 15°C – 50°C   | Charge:<br>- 10°C – 50°C          | Storage:<br>- 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                           | F11 (M6)  |                                   |                           |
| Container Material                 | A.B.S. (UL94-HB)  |                                   |                           |

## Dimensions:

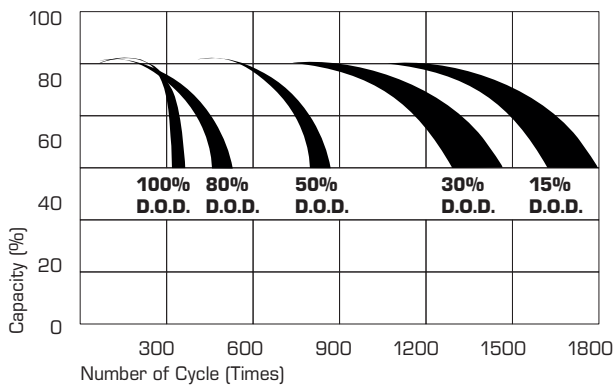
229 Length x 138 Width x 210 mm Height



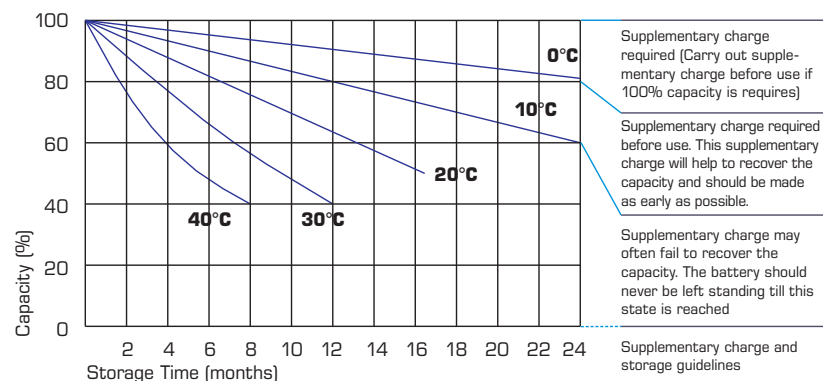
## Constant current discharge characteristics: A (25°C)

| 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   | 180.6  | 133.0   | 103.7   | 63.17   | 35.04 | 20.95 | 14.47 | 11.98 | 10.09 | 6.892 | 5.717 | 3.050 |
| 10.0 V   | 175.4  | 126.5   | 101.5   | 62.08   | 34.87 | 20.79 | 14.41 | 11.93 | 10.03 | 6.836 | 5.662 | 2.995 |
| 10.2 V   | 170.2  | 122.1   | 99.93   | 60.93   | 34.55 | 20.64 | 14.30 | 11.87 | 9.97  | 6.780 | 5.607 | 2.939 |
| 10.5 V   | 152.8  | 112.6   | 95.15   | 60.47   | 34.23 | 20.48 | 14.25 | 11.76 | 9.85  | 6.724 | 5.552 | 2.884 |
| 10.8 V   | 137.9  | 102.7   | 87.71   | 59.43   | 33.42 | 20.11 | 13.86 | 11.49 | 9.675 | 6.612 | 5.497 | 2.828 |
| 11.1 V   | 117.8  | 91.8    | 78.67   | 55.64   | 31.75 | 19.22 | 13.25 | 10.93 | 9.259 | 6.332 | 5.332 | 2.662 |

## Life characteristics of cyclic use:



## Storage characteristic:



## Capacity Factors with different Temperature:

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