REVOLEAD
INDUSTRIAL BATTERY

AGM DEEP CYCLE SERIES *LDC*

# LDC12-20
(12V - 20AH)

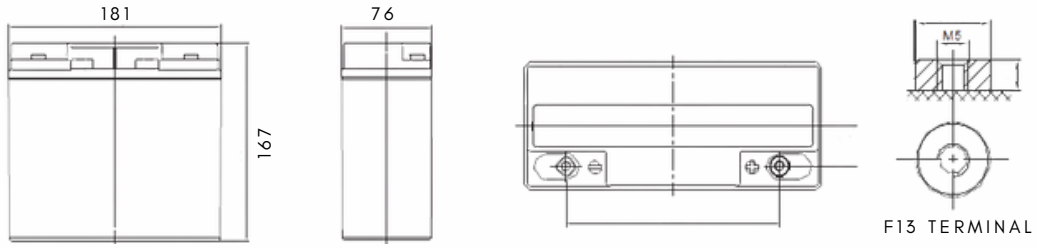
## SPECIFICATIONS

| | |
|---|---|
| Cells per Unit | 6 |
| Voltage per Unit | 12 |
| Capacity | 20Ah@20hr-rate to 1.75V per cell@25°C |
| Weight | Approx. 6.3Kg(Tolerance ± 3%) |
| Internal Resistance | Approx. ⩽14.0 mΩ |
| Terminal | F13/M5 |
| Max. Discharge Current | 234A (5sec) |
| Design Life | 6 years(floating charge) |
| Max. Charging Current | 5.4A |
| Reference Capacity | C3 15.0AH<br>C5 16.8AH<br>C10 18.9AH<br>C20 20.0AH |
| Float Charging Voltage | 13.7V≃13.9V @25°C<br>Temperature Compensation: -3mV/°C/Cell |
| Cycle Use Voltage | 14.6V≃14.8V @25°C<br>Temperature Compensation: -4mV/°C/Cell |
| Operating Temperature Range | Discharge: -20°C ≃ 60°C<br>Charge: 0°C ≃ 50°C<br>Storage: -20°C ≃ 60°C |
| Normal Operating Temperature Range | 25°C ± 5°C |
| Self Discharge | Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self - discharge ratio is less than 3% at 25°C. Please charge batteries before using |
| Container Material | A.B.S. UL94-HB, UL94-V0 Optional |

LDC | Lead Deep Cycle
AGM DEEP CYCLE SERIES

LDC series is specially designed for frequent discharge deep cycle application. By using the specially designed active material, strong grids and thick plate construction, the LDC series battery offers reliable performance in high load situations and could provide competitive cycle performance. It is suitable for Electric Vehicles and Golf Carts, Floor Machines, Forklifts, Aerial lifts, Robotics, Marine, RV, Mobility and Medical Equipment, and most outdoor application.

## DIMENSIONS




| | |
|---|---|
| Lenght | 181mm |
| Width | 76mm |
| Height | 167mm |
| Total Height | 167mm |
| Terminal | Value |
| M5 | 6-7 N°m |
| M6 | 8-10 N°m |
| M8 | 10-12 N°m |

## CONSTANT CURRENT DISCHARGE CHARACTERISTICS A(25°C)

| F.V/Time | 15Min | 30Min | 1Hr | 2Hr | 3Hr | 4Hr | 5Hr | 8Hr | 10Hr | 20Hr |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.60V | 36.75 | 21.13 | 12.4 | 7.08 | 5.0 | 3.91 | 3.26 | 2.2 | 1.82 | 0.94 |
| 1.65V | 35.65 | 20.68 | 12.17 | 6.95 | 4.92 | 3.85 | 3.22 | 2.18 | 1.8 | 0.93 |
| 1.70V | 34.2 | 20.1 | 11.86 | 6.8 | 4.82 | 3.78 | 3.17 | 2.15 | 1.78 | 0.92 |
| 1.75V | 32.26 | 19.3 | 11.43 | 6.58 | 4.68 | 3.68 | 3.1 | 2.1 | 1.75 | 0.9 |
| 1.80V | 29.65 | 18.2 | 10.85 | 6.27 | 4.49 | 3.55 | 2.99 | 2.04 | 1.7 | 0.88 |
| 1.85V | 26.05 | 16.66 | 10.02 | 5.84 | 4.21 | 3.35 | 2.84 | 1.95 | 1.63 | 0.85 |

## CONSTANT POWER DISCHARGE CHARACTERISTICS WPC(25°C)

| F.V/Time | 15Min | 30Min | 1Hr | 2Hr | 3Hr | 4Hr | 5Hr | 8Hr | 10Hr | 20Hr |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.60V | 64.25 | 38.37 | 23.19 | 13.41 | 9.54 | 7.5 | 6.29 | 4.3 | 3.58 | 1.84 |
| 1.65V | 63.63 | 38.13 | 22.99 | 13.28 | 9.46 | 7.44 | 6.24 | 4.27 | 3.55 | 1.83 |
| 1.70V | 61.59 | 37.25 | 22.48 | 13.01 | 9.28 | 7.31 | 6.15 | 4.21 | 3.51 | 1.81 |
| 1.75V | 58.94 | 36.14 | 21.79 | 12.65 | 9.05 | 7.15 | 6.02 | 4.13 | 3.45 | 1.78 |
| 1.80V | 54.93 | 34.44 | 20.77 | 12.13 | 8.71 | 6.91 | 5.84 | 4.01 | 3.36 | 1.74 |
| 1.85V | 48.94 | 31.82 | 19.32 | 11.36 | 8.21 | 6.55 | 5.57 | 3.84 | 3.22 | 1.68 |

(Note)The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.
The battery must be fully charged before the capacity test. The C20 should reach 95% after the first cycle and 100% after the third cycle.

CE

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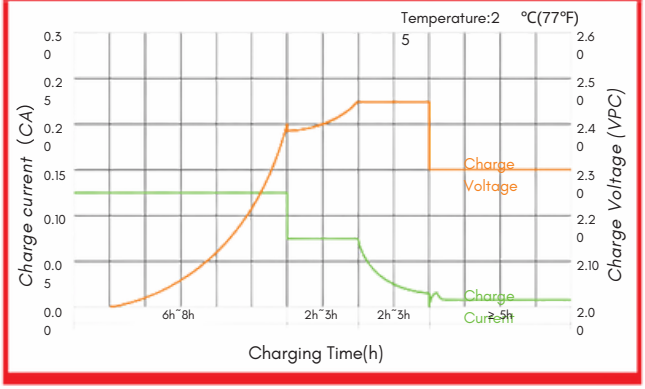
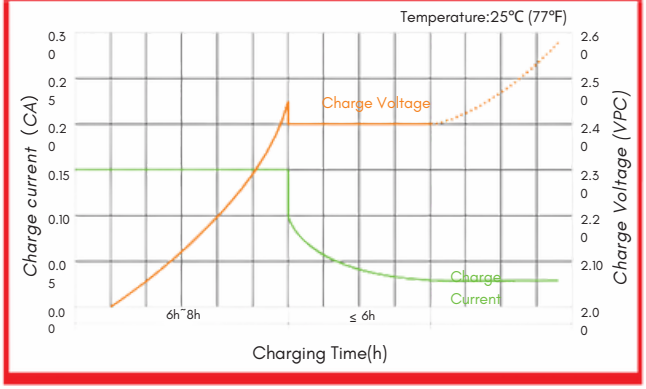
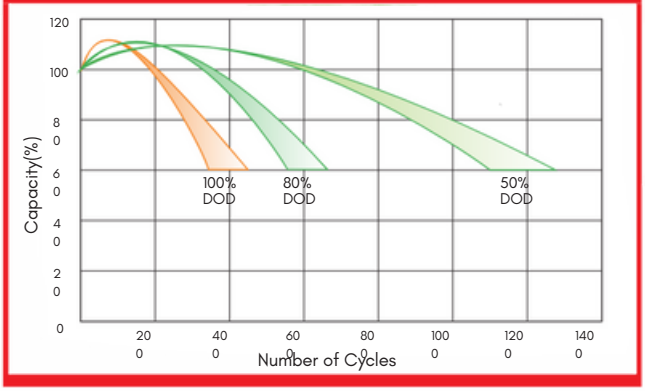
### Charge Characteristic Curve for Cycle Use(IIUU)



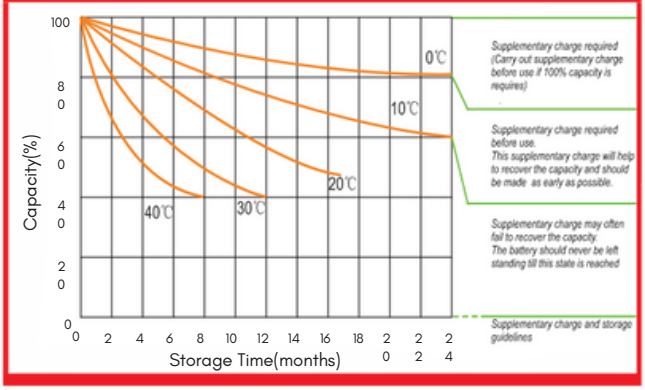

### Charge Characteristic Curve For Cycle Use(IUI)



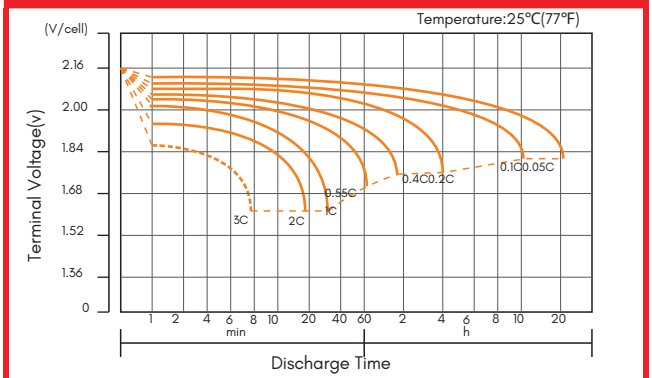

### Cycle Life in Relation to Depth of Discharge



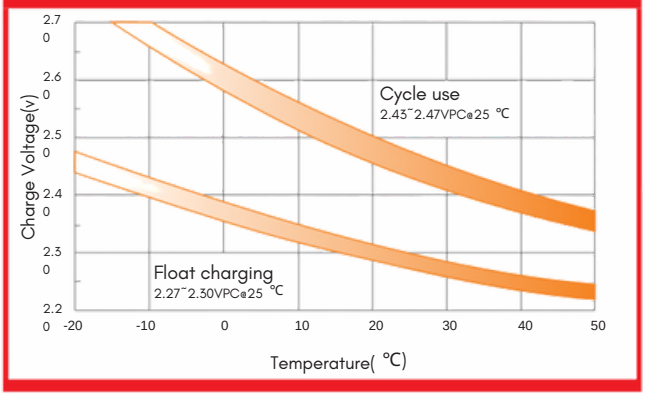

### Storage Characteristics



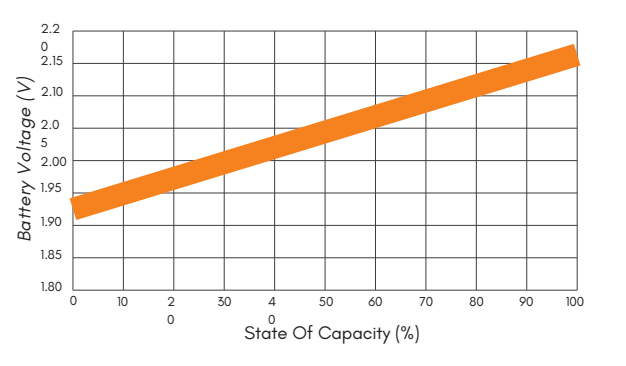

### Discharge Characteristics Curve



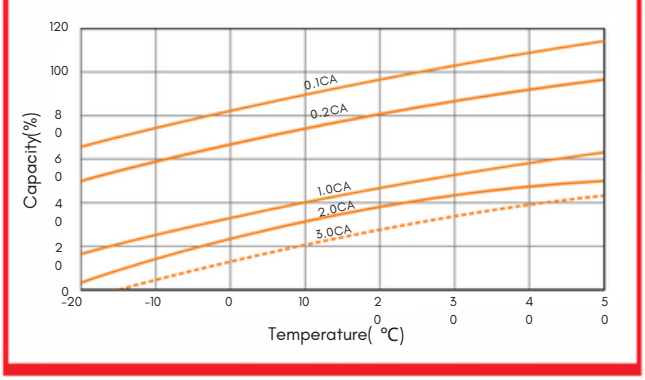

### Relationship Between Charging Voltage and Temperature




### Relationship of OCV And State of Charge(20 ℃)




### Temperature Effects on Capacity




(Note)All of the above information could be changed without prior notice.
IBS Italia reserves the right to explain and update the latest information.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