



Deep Cycle Batteries

6FM45D/12Volt 45Ah



Deep cycle Series Battery is specially designed for frequent cycling applications. The series battery uses high-tin alloy positive plate, active paste materials and stronger electrolyte, which gives 30% longer life than normal battery. Suitable for solar and wind energy systems.

Application

- ☆ Emergency Power System
- ☆ Communication equipment
- ☆ Telecommunication systems
- ☆ Uninterruptible power supplies
- ☆ Electric toy car and wheelchairs, etc
- ☆ Power tools
- ☆ Alarm system
- ☆ Marine equipment
- ☆ Medical equipment
- ☆ Fire and Security System

General Features

- ☆ Heavy Duty Grid
- ☆ Mechanized assembly
- ☆ Non-spillable construction
- ☆ High Reliability and Stability
- ☆ Sealed and Maintenance-free
- ☆ Long Life and low self-discharge design

Construction

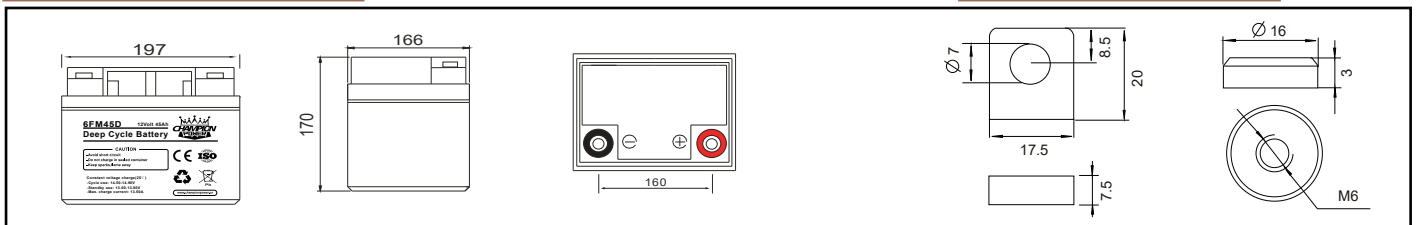
- ☆ Positive.....Lead dioxide
- ☆ Electrolyte.....Colloidal Sulfuric acid
- ☆ Separator.....Fiber glass
- ☆ Container.....ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- ☆ Negative.....Lead
- ☆ Safety Valve.....EPDR
- ☆ Terminal.....Copper

Specification

| | | | | | |
|------------------------------------|---|---|--------------------------|--------------------------|--|
| Battery Model | Nominal Voltage | 12V | | | |
| | Rated capacity (10Hour rate) | 45Ah | | | |
| | Cells Per battery | 6 | | | |
| Dimension | Length | Width | Height | Total Height | |
| | 199mm | 166mm | 171mm | 171mm | |
| Approx Weight | 13.50Kg | | | | |
| Internal Resistance | Full charged at 25°C (77°F): Approx 8.0mΩ | | | | |
| Max. discharge current | 320A(5s) | | | | |
| Floating design life @ 25°C (77°F) | 15 years | | | | |
| Capacity @ 25°C (77°F) | 10Hour rate(4.5A/10.8V) | 5Hour rate(7.65A/10.5V) | 3Hour rate(11.25A/10.5V) | 1Hour rate(24.75A/10.5V) | |
| | 45Ah | 34Ah | 27Ah | 17Ah | |
| Capacity affected by Temp(10 HR) | 40°C (104°F) | 25°C (77°F) | 0°C (32°F) | -15°C (5°F) | |
| | 102% | 100% | 85% | 65% | |
| Self Discharge @ 25°C (77°F) | After 3 months storage | After 6 months storage | After 12 months storage | | |
| | 93% | 84% | 65% | | |
| Charge method @ 25°C (77°F) | Cycle Use | 14.50-14.90V (Initial charging current less than 13.5A) | | | |
| | Float Use | 13.60-13.80V | | | |

Outer dimension (mm)

Terminal Type (mm)



Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

| F.V / TIME | | 5min | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|------------|---|---------|---------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 9.60V | A | 162.00 | 99.00 | 78.75 | 51.75 | 27.23 | 15.75 | 11.70 | 9.45 | 7.89 | 5.21 | 4.95 | 2.57 |
| | W | 1717.20 | 1051.38 | 842.63 | 558.90 | 296.75 | 171.68 | 128.70 | 103.95 | 86.83 | 57.86 | 54.95 | 28.86 |
| 10.20V | A | 148.50 | 94.95 | 72.37 | 49.13 | 27.00 | 15.11 | 11.48 | 9.00 | 7.74 | 5.13 | 4.73 | 2.52 |
| | W | 1618.65 | 1053.95 | 806.98 | 552.66 | 303.75 | 170.77 | 129.67 | 102.15 | 87.89 | 58.23 | 53.63 | 28.60 |
| 10.50V | A | 137.72 | 90.75 | 67.50 | 47.62 | 26.10 | 14.81 | 11.25 | 8.55 | 7.65 | 5.06 | 4.64 | 2.49 |
| | W | 1514.91 | 1020.90 | 762.75 | 542.92 | 297.54 | 169.60 | 128.81 | 98.33 | 87.98 | 58.22 | 53.30 | 28.62 |
| 10.80V | A | 125.40 | 89.96 | 63.00 | 45.45 | 25.65 | 14.44 | 11.03 | 8.40 | 7.31 | 4.93 | 4.50 | 2.46 |
| | W | 1379.40 | 1025.59 | 721.35 | 524.95 | 296.26 | 166.75 | 127.89 | 97.86 | 85.19 | 57.45 | 52.43 | 28.62 |
| 11.10V | A | 108.45 | 85.50 | 58.50 | 42.30 | 24.75 | 14.06 | 10.58 | 8.25 | 6.99 | 4.80 | 4.39 | 2.43 |
| | W | 1225.49 | 987.53 | 678.60 | 494.91 | 289.58 | 164.53 | 124.26 | 97.35 | 82.53 | 56.64 | 51.77 | 28.67 |

Note: The above datas are average values. (Edition 2017-11)



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