

AccuForce 12V - 80Ah | VRLA Battery



Specifications

| | | |
|---------------------------------|---|---------------|
| Nominal Voltage | 12 V | |
| Number of cells | 6 | |
| Design Life | 10 years | |
| Dimensions | Length | 350 mm |
| | Width | 167 mm |
| | Height | 179 mm |
| | Total Height | 179 mm |
| Approx. Weight | 23 kg | |
| Nominal Capacity (25°C) | 20 hours rate (4.2 A, 10.8 V) | 84.0 Ah |
| | 10 hours rate (8.0 A, 10.8 V) | 80.0 Ah |
| | 5 hours rate (14.0 A, 10.5 V) | 70.0 Ah |
| | 1 hour rate (49.6 A, 9.6 V) | 49.6 Ah |
| Max. Discharge Current (25°C) | 800 A (5s) | |
| Internal Resistance | 4.0 mOhms | |
| Fully Charged battery (25°C) | | |
| Self-Discharge | 3% of capacity declined per month at 20°C (average) | |
| Operating Temperature Range | Discharge | -15°C~50°C |
| | Charge | -10°C~50°C |
| | Storage | -20°C~50°C |
| Short Circuit Current | 2100 A | |
| Charging Characteristics (25°C) | Boost charging voltage | 2.40-2.45 Vpc |
| | Maximum charging current | 24 A |
| | Temperature compensation | -30 mV/°C |
| | Float charging voltage | 2.23-2.27 Vpc |
| | Temperature compensation | -18 mV/°C |

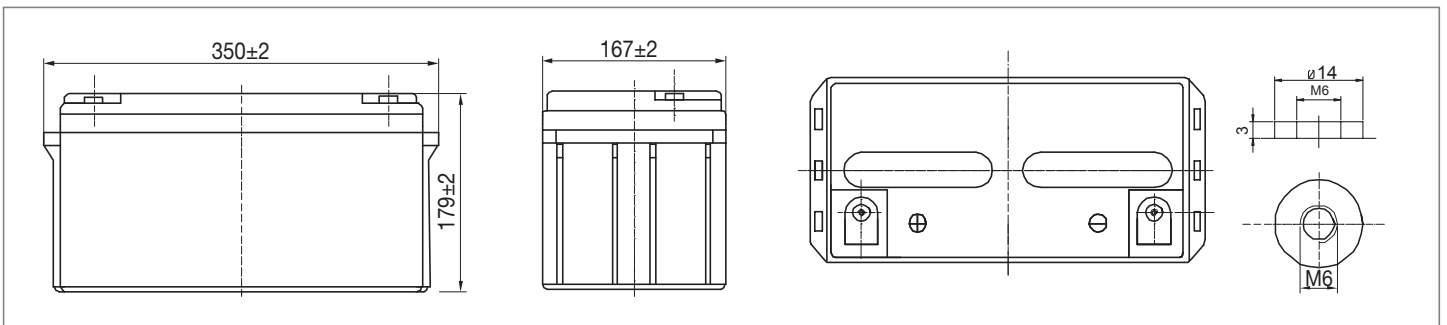
Applications

- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system

Battery Construction

| Component | Positive Plate | Negative Plate | Container | Cover | Safety Valve | Terminal | Separator | Electrolyte |
|--------------|----------------|----------------|-----------|-------|--------------|----------|------------|---------------|
| Raw material | Lead dioxide | Lead | ABS | ABS | Rubber | Copper | Fiberglass | Sulfuric acid |

Dimensions



Constant Current Discharge (Amperes) at 25°C

| End Voltage (Volts/Cell) | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|--------------------------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1.60 V | 168 | 132 | 80.0 | 49.6 | 29.2 | 20.4 | 16.7 | 14.3 | 9.79 | 8.14 | 4.28 |
| 1.65 V | 163 | 129 | 78.4 | 48.9 | 29.1 | 20.3 | 16.6 | 14.2 | 9.73 | 8.13 | 4.27 |
| 1.70 V | 156 | 124 | 76.0 | 47.6 | 28.8 | 20.1 | 16.5 | 14.1 | 9.67 | 8.10 | 4.25 |
| 1.75 V | 150 | 120 | 74.2 | 46.7 | 28.4 | 20.0 | 16.4 | 14.0 | 9.60 | 8.06 | 4.23 |
| 1.80 V | 141 | 114 | 71.4 | 45.2 | 27.6 | 19.4 | 15.9 | 13.6 | 9.31 | 8.00 | 4.20 |

Constant Power Discharge (Watts) at 25°C

| End Voltage (Volts/Cell) | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|--------------------------|-------|-------|-------|-----|-----|-----|-----|-----|-----|------|------|
| 1.60 V | 1814 | 1449 | 898 | 565 | 339 | 240 | 197 | 169 | 116 | 97.2 | 51.3 |
| 1.65 V | 1760 | 1415 | 880 | 557 | 337 | 238 | 196 | 168 | 116 | 97.0 | 51.2 |
| 1.70 V | 1687 | 1362 | 853 | 543 | 334 | 237 | 194 | 167 | 115 | 96.8 | 51.1 |
| 1.75 V | 1615 | 1316 | 832 | 532 | 329 | 235 | 193 | 165 | 114 | 96.2 | 50.8 |
| 1.80 V | 1524 | 1246 | 802 | 516 | 320 | 228 | 187 | 161 | 111 | 95.5 | 50.4 |

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.