

NP12-150Ah 12V150Ah

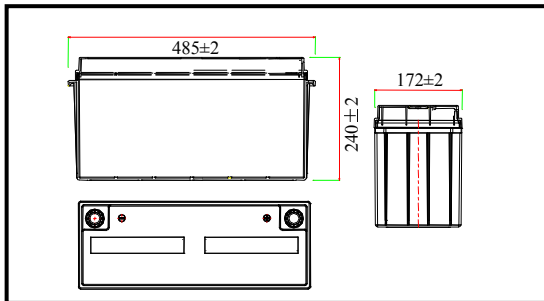
Valve Regulated Lead Acid Battery



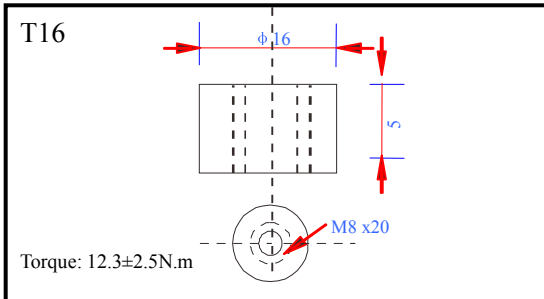
Specifications

| | | |
|-----------------------|------------------------|---------------------|
| Nominal voltage | 12V (6 cells per unit) | |
| Rated capacity (10HR) | 150Ah/10.8V | |
| Dimensions | Length | 485±2mm (19.09inch) |
| | Width | 172±2mm (6.77inch) |
| | Height | 240±2mm (9.45inch) |
| | Total height | 240±2mm (9.45inch) |
| Approx. weight | 41.80kg (92.10lbs)±3% | |

Outer dimensions (mm)



Terminal type (mm)



Characteristics

| | | |
|---|---|--|
| Capacity (25°C) | 10HR (10.8V) | 150Ah |
| | 3HR (10.8V) | 112.5Ah |
| | 1HR (10.5V) | 85Ah |
| Terminal type | | T16 |
| Internal resistance (Fully charged, 25°C) | | Approx. 4mΩ |
| Capacity affected by temperature (10HR) | 40°C | 102% |
| | 25°C | 100% |
| | 0°C | 85% |
| | -15°C | 65% |
| Self-discharge (25°C) | 3 months | Remaining capacity: 91% |
| | 6 months | Remaining capacity: 82% |
| | 12 months | Remaining capacity: 65% |
| Nominal operating temperature | | 25°C±3°C (77°F±5°F) |
| Operating temperature range | Discharge | -15°C~50°C (5°F~122°F) |
| | Charge | -10°C~50°C (14°F~122°F) |
| | Storage | -20°C~50°C (-4°F~122°F) |
| Float charging voltage (25°C) | | 13.50 to 13.80V Temperature compensation: -18mV/°C/Block |
| Cyclic charging voltage (25°C) | | 14.50 to 15.00V Temperature compensation: -30mV/°C/Block |
| Maximum charging current | | 45A |
| Maximum discharge current | | 1200A (5 sec.) |
| Design life | 10 years for floating (25°C) | |
| | Eurobat (20°C): 10-12 years, long life. | |

Construction

| Component | Positive plate | Negative plate | Container | Cover | Separator | Electrolyte | Safety valve | Terminal |
|--------------|----------------|----------------|-----------|-------|-----------|---------------|--------------|----------|
| Raw material | Lead dioxide | Lead | ABS | ABS | AGM | Sulfuric acid | Rubber | Copper |

Constant current discharge characteristics unit: Ampere/Block (at 25°C, 77°F)

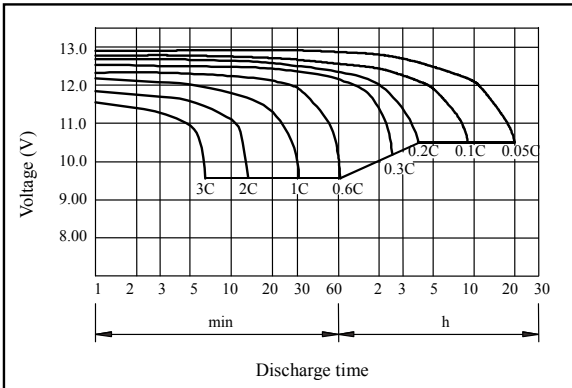
| F.V/Time | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V | 327 | 252 | 151 | 92.7 | 54.8 | 39.5 | 31.5 | 26.9 | 18.5 | 15.3 | 8.09 |
| 9.90V | 317 | 246 | 148 | 91.3 | 54.5 | 39.2 | 31.3 | 26.8 | 18.4 | 15.2 | 8.08 |
| 10.2V | 304 | 237 | 143 | 89.0 | 54.0 | 39.0 | 31.1 | 26.6 | 18.3 | 15.2 | 8.05 |
| 10.5V | 291 | 229 | 140 | 86.2 | 53.2 | 38.7 | 30.9 | 26.4 | 18.2 | 15.1 | 8.01 |
| 10.8V | 275 | 217 | 135 | 83.4 | 51.8 | 37.5 | 30.3 | 25.6 | 17.6 | 15.0 | 7.95 |

Constant power discharge characteristics unit: Watt/Block (at 25°C, 77°F)

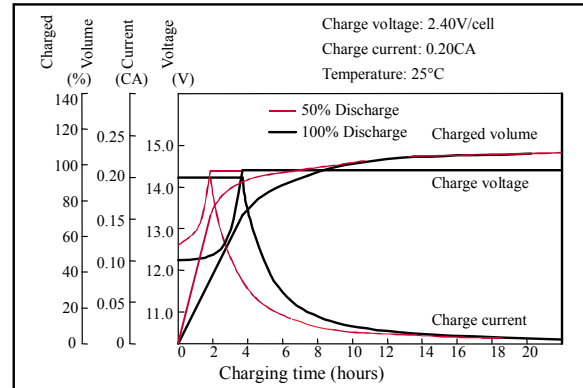
| F.V/Time | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|------|
| 9.60V | 3532 | 2767 | 1691 | 1057 | 635 | 464 | 371 | 318 | 220 | 182 | 97.1 |
| 9.90V | 3426 | 2701 | 1658 | 1041 | 631 | 461 | 368 | 316 | 219 | 182 | 96.9 |
| 10.2V | 3284 | 2601 | 1607 | 1015 | 625 | 458 | 366 | 314 | 217 | 181 | 96.6 |
| 10.5V | 3143 | 2512 | 1568 | 983 | 616 | 455 | 363 | 312 | 216 | 180 | 96.1 |
| 10.8V | 2967 | 2380 | 1510 | 951 | 600 | 441 | 352 | 303 | 209 | 179 | 95.4 |

Note 1: Above characteristics data can be obtained within three charge and discharge cycles.

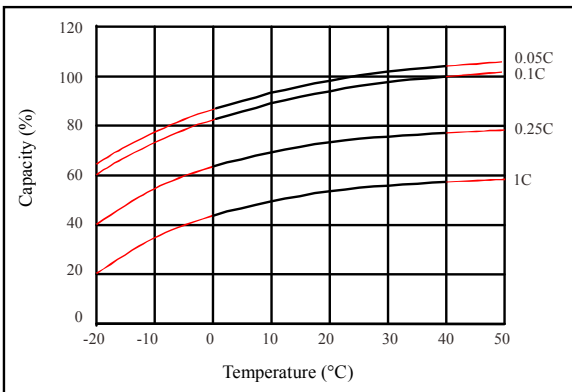
● Discharge characteristics (25°C)



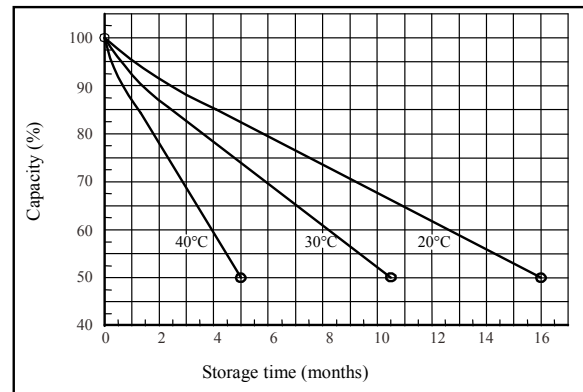
● Charging characteristics (25°C)



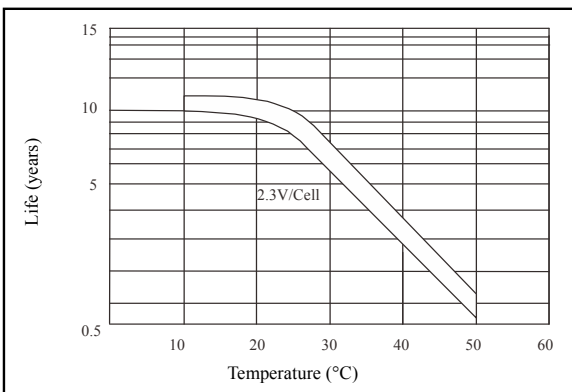
● Temperature effects on capacity



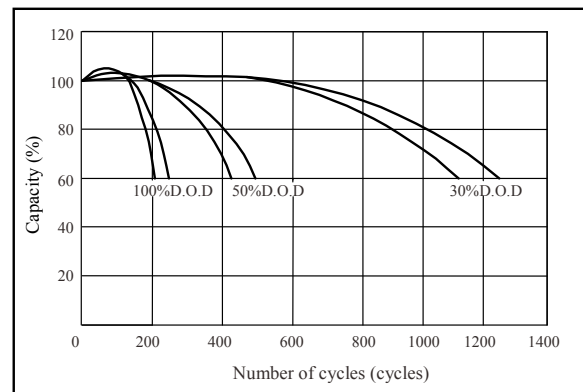
● Self-discharge characteristics



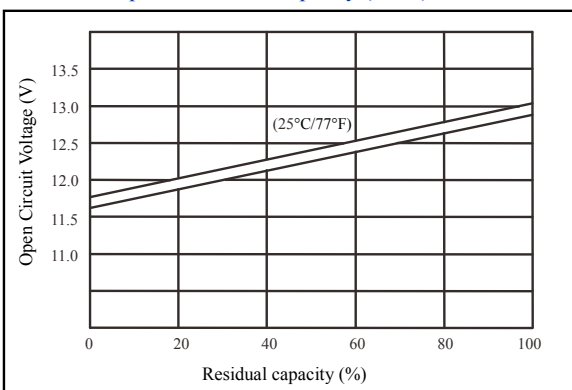
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

