

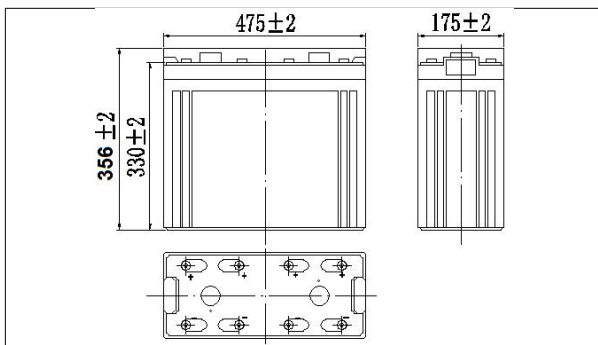
## NPD2-1000Ah 2V1000Ah



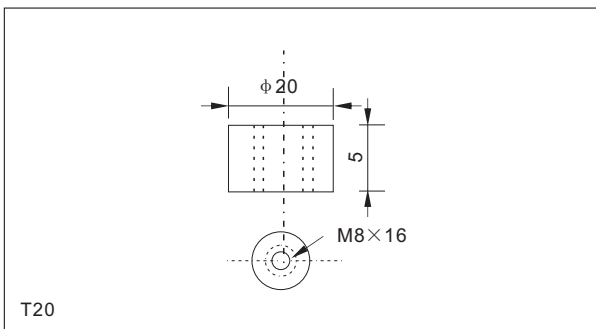
### Specifications

|                               |                   |                    |
|-------------------------------|-------------------|--------------------|
| Nominal Voltage               | 2V                |                    |
| Rated capacity (20 hour rate) | 1000Ah            |                    |
| Dimensions                    | Length            | 475±2mm(18.70inch) |
|                               | Width             | 175±2mm(6.89inch)  |
|                               | Height            | 330±2mm(12.99inch) |
|                               | Total Height      | 356±2mm(14.02inch) |
| Approx. Weight                | 63kg(138.6lbs)±3% |                    |

### Outer dimensions (mm)



### Terminal Type (mm)



### Characteristics

|   |            |  |
|---|------------|--|
| Capacity (25°C)                           | 20HR(1.8V) | 1000Ah   |
|   | 3HR(1.80V) | 780Ah  |
|   | 1HR(1.75V) | 580Ah  |
| Terminal type                             |            | T20  |
| Internal resistance (Fully charged, 25°C) |            | Approx.0.28m Ω                                     |
| Capacity affected by temperature (20HR)   | 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)              |            | 2.25 to 2.30V<br>Temperature compensation: -3mV/°C |
| Cyclic charging voltage(25°C)             |            | 2.40 to 2.50V<br>Temperature compensation: -5mV/°C |
| Maximum charging current                  |            | 200A   |
| Maximum discharge current                 |            | 5500A(5 sec.)                                      |
| Designed floating life(20°C)              |            | 15 years   |

### 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:A(25°C,77°F)

| F.V/Time | 15min | 30min | 60min | 2h  | 3h  | 4h  | 5h  | 6h  | 8h  | 10h | 20h  |
|----------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|------|
| 1.60V    | 1460  | 956   | 662   | 387 | 278 | 223 | 192 | 165 | 130 | 107 | 56.7 |
| 1.65V    | 1424  | 936   | 642   | 385 | 277 | 221 | 191 | 164 | 129 | 107 | 56.5 |
| 1.70V    | 1372  | 908   | 622   | 381 | 275 | 220 | 189 | 163 | 128 | 107 | 56.4 |
| 1.75V    | 1325  | 886   | 602   | 375 | 273 | 218 | 188 | 162 | 128 | 106 | 56.0 |
| 1.80V    | 1255  | 853   | 582   | 366 | 265 | 212 | 182 | 157 | 124 | 106 | 55.7 |

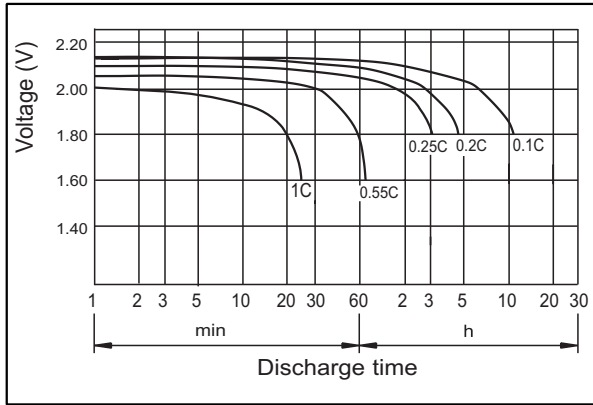
### Constant Power Discharge Characteristics Unit:W(25°C,77°F)

| F.V/Time | 15min | 30min | 60min | 2h  | 3h  | 4h  | 5h  | 6h  | 8h  | 10h | 20h |
|----------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1.60V    | 2671  | 1787  | 1257  | 747 | 546 | 437 | 378 | 325 | 259 | 214 | 113 |
| 1.65V    | 2607  | 1751  | 1219  | 742 | 543 | 434 | 375 | 323 | 257 | 213 | 113 |
| 1.70V    | 2511  | 1697  | 1181  | 736 | 539 | 431 | 373 | 321 | 256 | 213 | 113 |
| 1.75V    | 2425  | 1656  | 1144  | 725 | 535 | 428 | 370 | 319 | 254 | 211 | 112 |
| 1.80V    | 2297  | 1596  | 1106  | 706 | 519 | 415 | 359 | 309 | 246 | 210 | 111 |

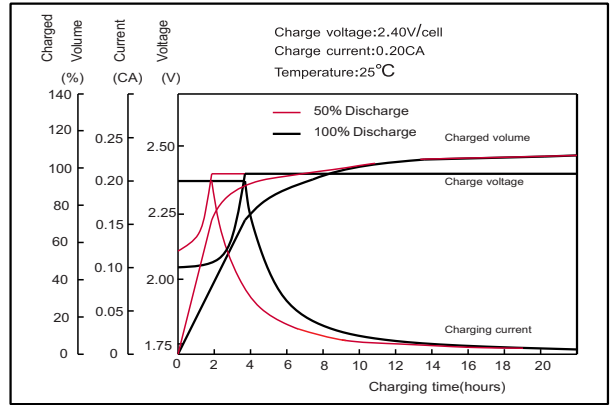
Note: The above characteristics data can be obtained within three charge or discharge cycles.

**NPD2-1000Ah 2V1000Ah**

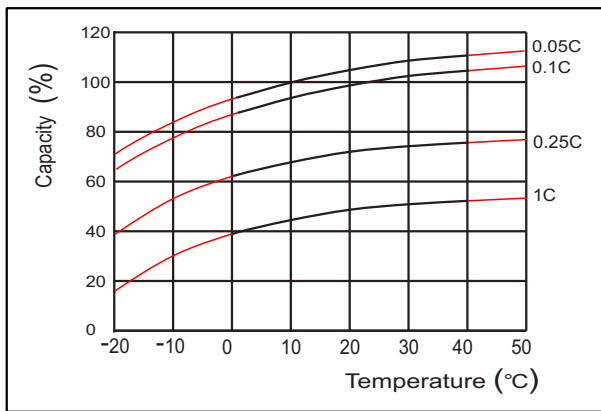
● **Discharge characteristics(25°C)**



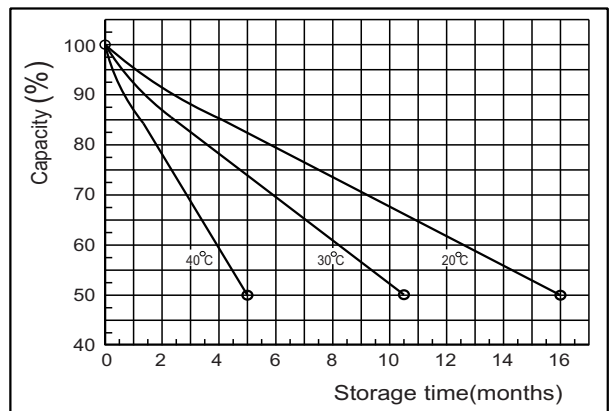
● **Charging characteristics**



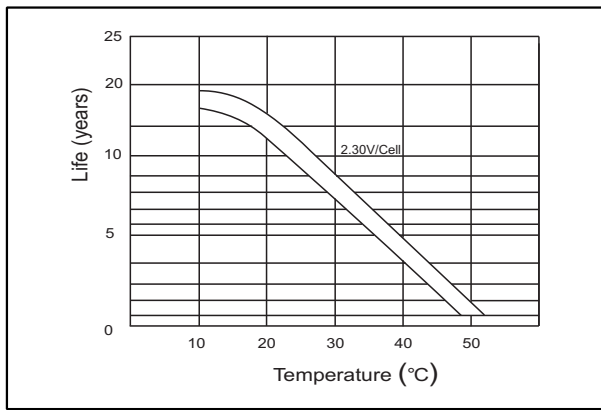
● **Effect of Temperature on Capacity**



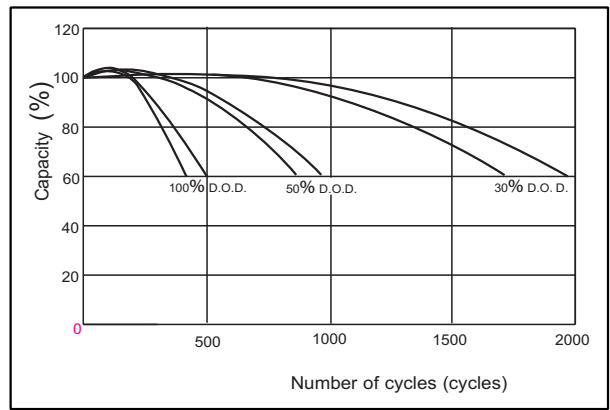
● **Self-discharge characteristics**



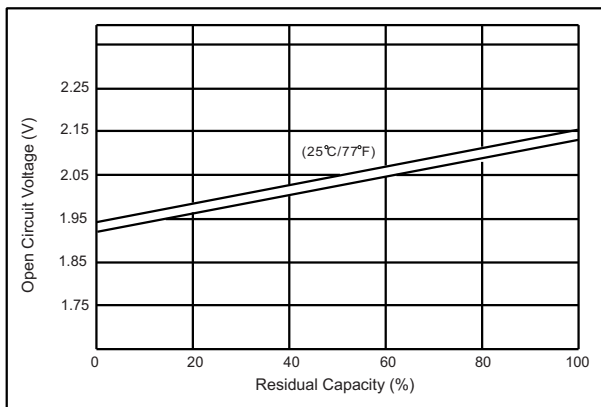
● **Temperature effects on float life**



● **Cycle service life in relation to depth of discharge**



● **The relationship for OCV and Capacity (25°C)**



● **The relationship for Charging voltage and Temperature**

