

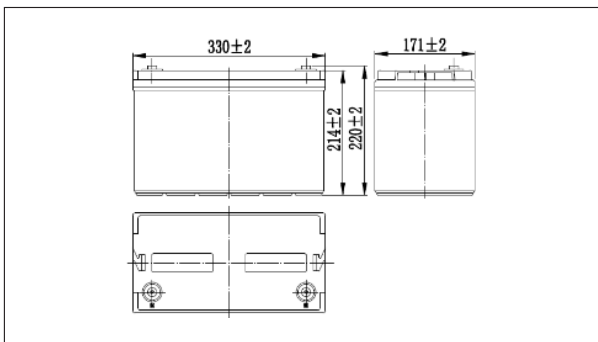
HR12390W-FR (12V390 Watts/cell)



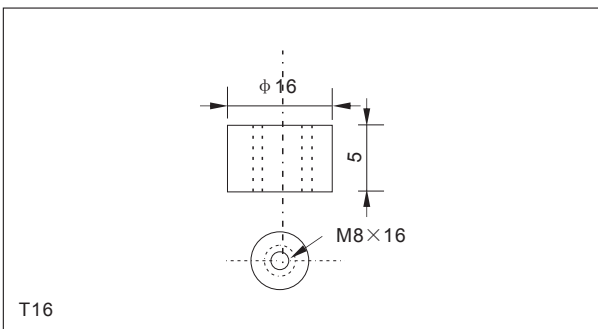
Specifications

| | | |
|---------------------------|--------------------|--------------------|
| Nominal Voltage | 12V | |
| Number of cell | 6 cells | |
| Rated capacity(15min.rat) | 390 Watts/cell | |
| Dimensions | Length | 330±2mm(12.99inch) |
| | Width | 171±2mm(6.73inch) |
| | Height | 214±2mm(8.43inch) |
| | Total Height | 220±2mm(8.66inch) |
| Approx. Weight | 32.7kg(72.1lbs)±3% | |

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

| | | |
|--|---|------------------------|
| Capacity(10HR,25°C) | 100Ah | |
| Capacity(15min.rate,25°C) | 390 Watts/cell | |
| Terminal type | T16 | |
| Internal resistance (Fully charged,25°C) | Approx.4m Ω | |
| 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 | |
| Cyclic charging voltage(25°C) | 14.50 to 15.00V Temperature compensation: -30mV/°C | |
| Maximum charging current | 30A | |
| Maximum discharge current | 800A(5 sec.) | |
| Designed floating life(20°C) | 10years | |

Construction

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

Constant Current Discharge Characteristics Unit:A(25°C,77°F)

| F.V/Time | 10min | 15min | 20min | 30min | 45min | 60min | 2h | 3h | 4h | 5h | 6h |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1.60V/cell | 255 | 208 | 167 | 118 | 88.0 | 71.8 | 38.4 | 27.5 | 22.2 | 19.3 | 16.5 |
| 1.67V/cell | 243 | 202 | 160 | 114 | 85.2 | 70.0 | 38.0 | 27.3 | 22.0 | 19.1 | 16.3 |
| 1.70V/cell | 237 | 196 | 157 | 112 | 83.6 | 68.9 | 37.8 | 27.2 | 21.9 | 19.0 | 16.3 |
| 1.75V/cell | 227 | 189 | 151 | 110 | 81.6 | 67.6 | 37.2 | 27.0 | 21.7 | 18.9 | 16.2 |
| 1.80V/cell | 214 | 179 | 143 | 105 | 78.6 | 65.5 | 36.3 | 26.2 | 21.1 | 18.3 | 15.7 |

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

| F.V/Time | 10min | 15min | 20min | 30min | 45min | 60min | 2h | 3h | 4h | 5h | 6h |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1.60V/cell | 479 | 402 | 322 | 228 | 170 | 139 | 74.8 | 54.2 | 43.7 | 38.2 | 32.7 |
| 1.67V/cell | 457 | 390 | 309 | 221 | 164 | 135 | 74.2 | 53.7 | 43.3 | 37.8 | 32.4 |
| 1.70V/cell | 445 | 378 | 303 | 217 | 161 | 133 | 73.7 | 53.5 | 43.1 | 37.7 | 32.2 |
| 1.75V/cell | 426 | 365 | 292 | 211 | 157 | 130 | 72.6 | 53.2 | 42.8 | 37.4 | 32.0 |
| 1.80V/cell | 402 | 346 | 277 | 204 | 152 | 126 | 70.8 | 51.6 | 41.5 | 36.3 | 31.1 |

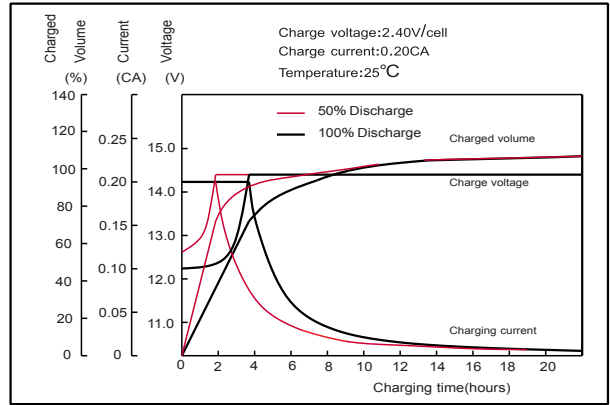
Note: The above characteristics data can be obtained within three charge or discharge cycles.

HR12390W-FR (12V390 Watts/cell)

● Discharge characteristics(25°C)



● Charging characteristics (25°C)



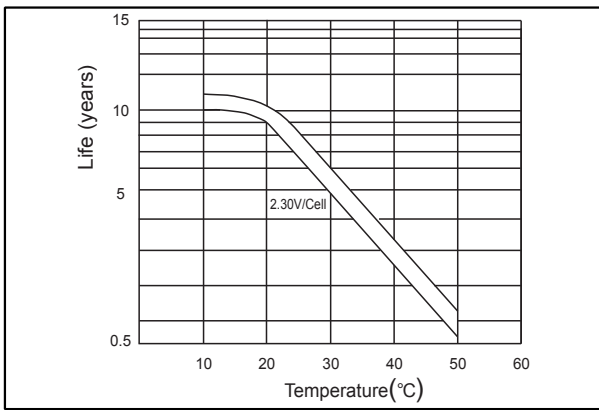
● Effect of Temperature on Capacity



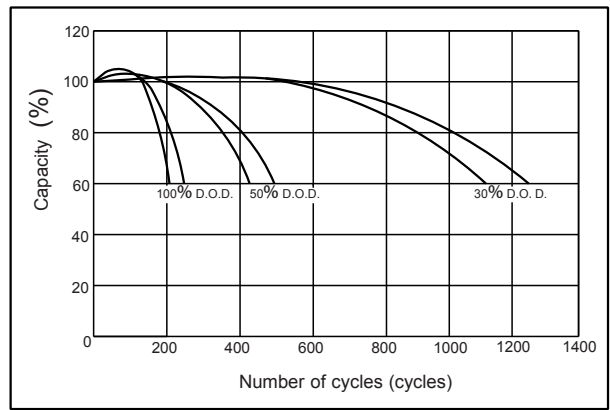
● Self-discharge characteristics



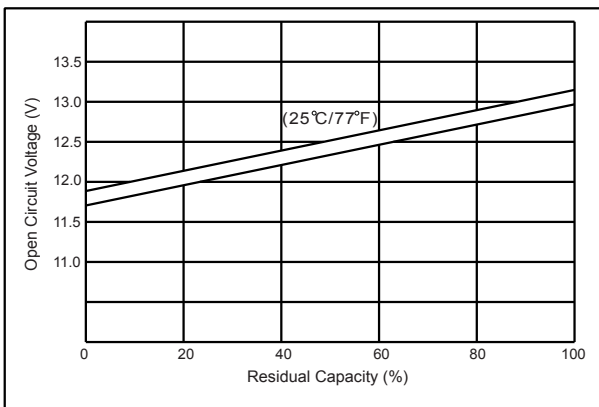
● Floating Life on Temperature



● Cycle service Life on D.O.D (25°C)



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



● The relationship for Charging voltage and Temperature

