

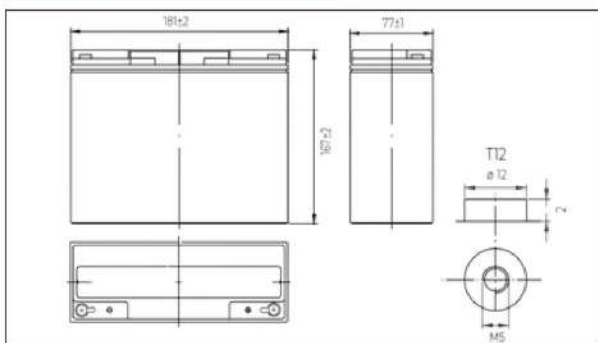
HR1276W-FR (12V76 Watts/cell)

Specifications

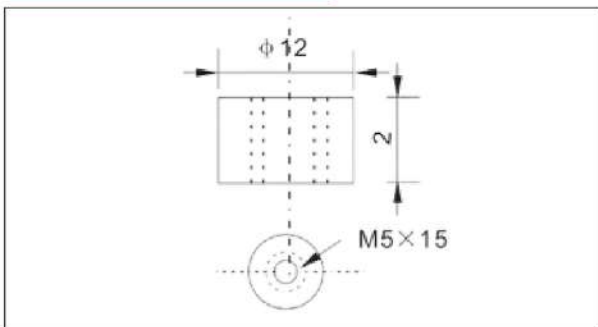
| | | |
|--------------------------|---------------|-----------|
| Nominal Voltage | 12V | |
| Number of cells | 6 cells | |
| Rated capacity (15 min.) | 76 watts/cell | |
| Dimensions | Length | 181+/-1mm |
| | Width | 77+/-1mm |
| | Height | 167+/-1mm |
| | Total height | 167+/-1mm |
| Approximated weight | 5.90kgs+/-5% | |



Outer dimensions (mm)



Terminal Type (mm)



Characteristics

| | | |
|--|---|------------------------|
| Capacity (20HR,25°C) | 18Ah | |
| Capacity (15min.rate,25°C) | 76W/Cell | |
| Terminal type | T12 | |
| Internal resistance (Fully charged @ 25°C) | 12mΩ | |
| 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 | |
| Operating temperature range | Discharge | -15°C - 50°C |
| | Charge | -15°C - 50°C |
| | Storage | -20°C - 50°C |
| Float charging voltage (25°C) | 13.5 to 13.80V Temp. compensation -18mV/°C | |
| Cyclic charging voltage (25°C) | 14.5 to 15.00V Temp. compensation -30mV/°C | |
| Maximum charging current | 6.08A | |
| Terminal material | Copper | |
| Maximum discharge current | 270A (5 sec.) | |
| Designed floating life (20°C) | 10 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/C (25°C, 77°F)

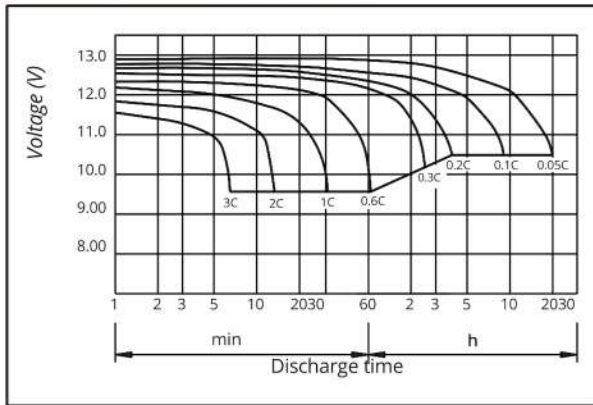
| F.V/Time | 5min | 10min | 15min | 20min | 30min | 45min | 60min | 2h | 3h | 4h | 5h |
|------------|------|-------|-------|-------|-------|-------|-------|-----|-----|-----|------|
| 1.60V/cell | 86.8 | 55.8 | 40.5 | 34.8 | 21.8 | 17.80 | 15.8 | 7.8 | 5.8 | 4.8 | 3.72 |
| 1.67V/cell | 84.7 | 54.7 | 38.7 | 30.1 | 20.3 | 16.84 | 15.7 | 7.7 | 5.7 | 4.7 | 3.61 |
| 1.70V/cell | 83.2 | 49.2 | 37.2 | 29.8 | 20.2 | 16.72 | 15.64 | 7.6 | 5.6 | 4.6 | 3.60 |
| 1.75V/cell | 77.3 | 47.3 | 36.8 | 28.3 | 19.3 | 16.55 | 15.5 | 7.3 | 5.3 | 4.3 | 3.59 |
| 1.80V/cell | 72.1 | 44.1 | 34.1 | 27.1 | 19.1 | 16.31 | 15.4 | 7.1 | 5.1 | 4.1 | 3.55 |

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

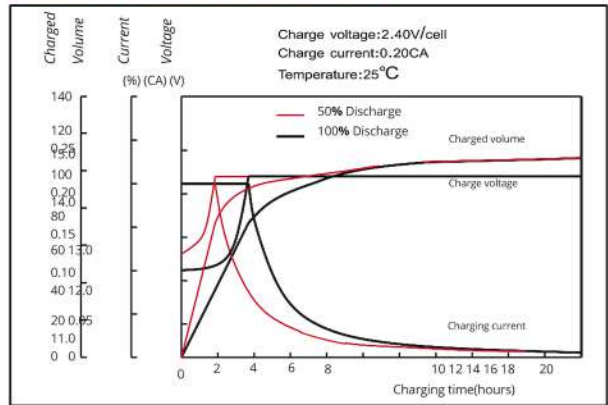
| F.V/Time | 5min | 10min | 15min | 20min | 30min | 45min | 60min | 2h | 3h | 4h | 5h |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 1.60V/cell | 172.8 | 98.80 | 79.8 | 62.9 | 42.9 | 31.8 | 25.8 | 14.70 | 10.82 | 8.80 | 7.27 |
| 1.67V/cell | 167.7 | 94.70 | 76.7 | 60.8 | 41.7 | 30.7 | 25.7 | 14.52 | 10.78 | 8.57 | 7.24 |
| 1.70V/cell | 165.7 | 91.80 | 74.2 | 58.2 | 40.2 | 29.3 | 24.2 | 14.48 | 10.40 | 8.34 | 7.22 |
| 1.75V/cell | 162.9 | 87.90 | 71.3 | 56.3 | 39.5 | 29.1 | 24.8 | 14.39 | 10.30 | 8.28 | 7.20 |
| 1.80V/cell | 159.4 | 82.90 | 68.3 | 53.1 | 39.9 | 28.5 | 23.4 | 14.22 | 9.49 | 8.03 | 7.11 |

HR1276W-FR (12V76 Watts/cell)

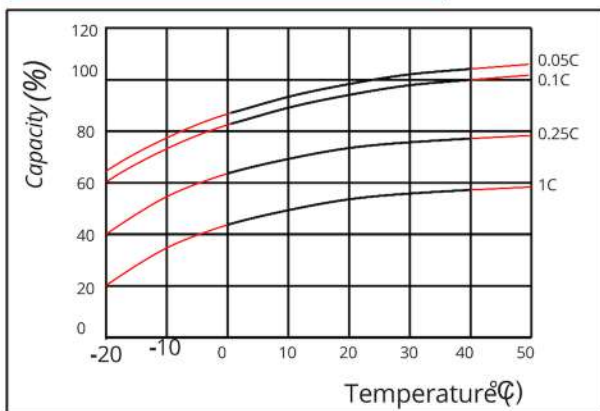
Discharge characteristics(25°C)



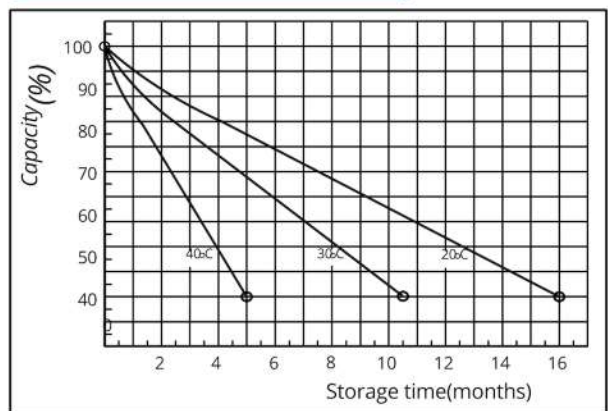
Charging characteristics (25°C)



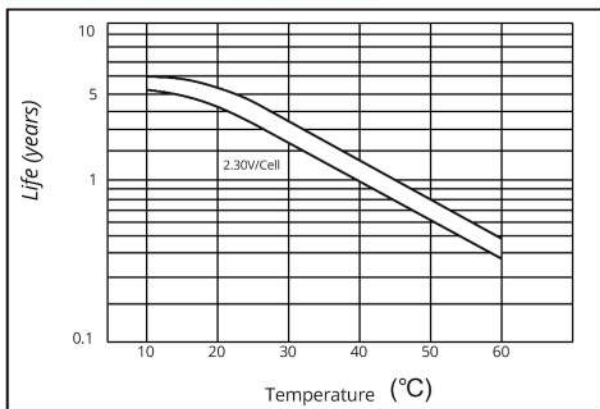
Effect of Temperature on Capacity



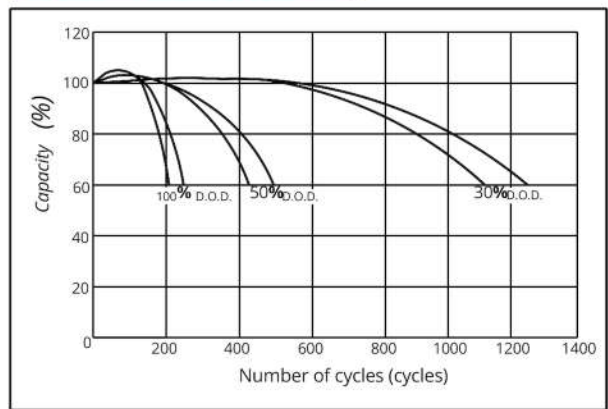
Self-discharge characteristics



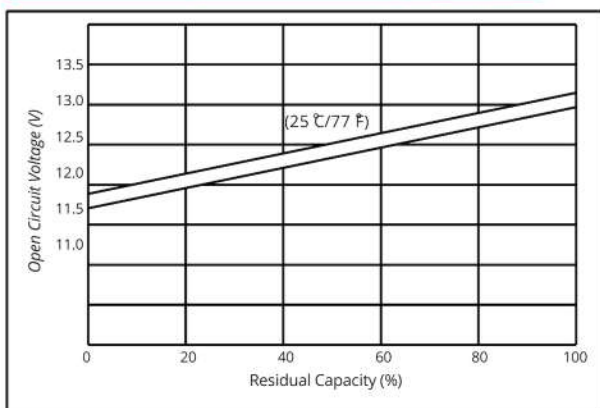
Floating Life on Temperature



Cycle service Life on D.O.D



The relationship for OCV and Capacity (25°C)



The relationship for Charging voltage and Temperature

