

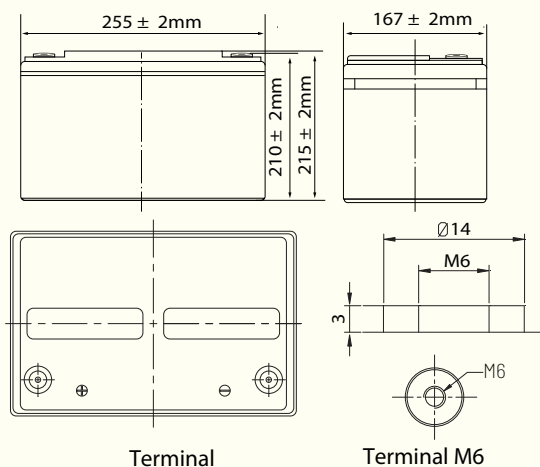
# KS12-80AH(12V80Ah/10HR)

## VALVE REGULATED LEAD-ACID BATTERY



Color : ●

### Dimensions



### Specifications

|                                           |               |                                                       |
|-------------------------------------------|---------------|-------------------------------------------------------|
| Nominal Voltage                           |               | 12V                                                   |
| Capacity (25°C)                           | 10HR (10.80V) | 80Ah                                                  |
|                                           | 5HR (10.50V)  | 70Ah                                                  |
|                                           | 1HR (9.60V)   | 49.60Ah                                               |
| Dimension                                 | Length        | 255±2mm                                               |
|                                           | Width         | 167±2mm                                               |
|                                           | Height        | 210±2mm                                               |
|                                           | Total Height  | 215±2mm                                               |
| Approx. Weight                            |               | 22 Kg ± 3%                                            |
| Terminal type                             |               | M6                                                    |
| Internal resistance (Fully charged, 25°C) |               | Approx. 6.2 mΩ                                        |
| Capacity affected by temperature (20HR)   | 40°C          | 102%                                                  |
|                                           | 25°C          | 100%                                                  |
|                                           | 0°C           | 85%                                                   |
|                                           | -15°C         | 65%                                                   |
| Self-discharge (25°C)                     | 3 Month       | Remaining Capacity: 91%                               |
|                                           | 6 Month       | Remaining Capacity: 82%                               |
|                                           | 12 Month      | 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<br>Temperature compensation: -18mV/°C |
| Cyclic charging voltage (25°C)            |               | 14.10 to 14.40V<br>Temperature compensation: -30mV/°C |
| Standard / Maximum charging current       |               | 8A / 24A                                              |
| Terminal material                         |               | Copper                                                |
| Maximum discharge current                 |               | 720A (5 sec.)                                         |
| Designed floating life (25°C)             |               | 10 Years                                              |

- ABS container;
- Absorbent glass mat technology (AGM).

### Applications

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- DC power supply
- Auto control system

### General Features

- 5 years design life (25°C)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

### Standards

- Compliance with IEC 60896 standards EU Battery Directive
- Manufactured by ISO & CE certified Company

## VALVE REGULATED LEAD-ACID BATTERY

### Discharge Table

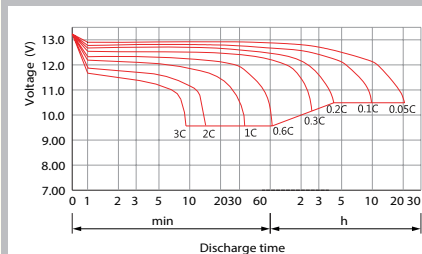
| Constant Current Discharge (Amperes) at 25°C (77°F) |       |       |       |       |       |       |      |      |      |      |      |      |      |      |      |      |
|-----------------------------------------------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| F.V/Time                                            | 5min  | 10min | 15min | 20min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
| 1.85V/cell                                          | 162.8 | 115.7 | 104.7 | 82.3  | 73.6  | 53.8  | 45.6 | 33.0 | 27.8 | 20.4 | 16.0 | 13.9 | 12.2 | 9.40 | 7.79 | 4.13 |
| 1.80V/cell                                          | 185.1 | 131.4 | 118.6 | 93.1  | 80.1  | 57.0  | 47.2 | 34.2 | 28.7 | 22.1 | 17.1 | 14.6 | 13.1 | 9.89 | 8.00 | 4.28 |
| 1.75V/cell                                          | 201.1 | 142.5 | 128.4 | 100.5 | 81.8  | 59.0  | 49.5 | 35.9 | 30.2 | 22.5 | 17.4 | 14.9 | 13.2 | 9.95 | 8.24 | 4.33 |
| 1.70V/cell                                          | 215.0 | 151.9 | 136.4 | 106.5 | 83.4  | 60.2  | 50.5 | 36.6 | 30.8 | 23.0 | 17.7 | 15.1 | 13.3 | 10.1 | 8.32 | 4.37 |
| 1.67V/cell                                          | 222.5 | 156.7 | 140.4 | 109.4 | 84.6  | 61.1  | 51.3 | 37.2 | 31.2 | 23.2 | 18.0 | 15.4 | 13.4 | 10.2 | 8.43 | 4.43 |
| 1.60V/cell                                          | 230.4 | 162.1 | 144.7 | 112.2 | 85.9  | 62.0  | 52.0 | 37.7 | 31.7 | 23.4 | 18.2 | 15.6 | 13.4 | 10.4 | 8.53 | 4.48 |

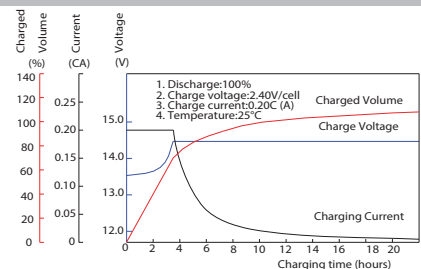
| Constant Power Discharge (Watts/cell) at 25°C (77°F) |       |       |       |       |       |       |      |      |      |      |      |      |      |      |      |      |
|------------------------------------------------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| F.V/Time                                             | 5min  | 10min | 15min | 20min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
| 1.85V/cell                                           | 304.0 | 217.8 | 198.2 | 156.6 | 140.6 | 101.3 | 88.2 | 64.1 | 54.0 | 39.8 | 31.4 | 27.3 | 24.1 | 18.7 | 15.5 | 8.23 |
| 1.80V/cell                                           | 340.1 | 243.6 | 221.7 | 175.1 | 151.9 | 106.6 | 90.8 | 65.9 | 55.5 | 43.0 | 33.4 | 28.6 | 25.8 | 19.6 | 16.2 | 8.52 |
| 1.75V/cell                                           | 363.0 | 260.0 | 236.6 | 186.9 | 153.8 | 109.8 | 94.9 | 69.0 | 58.2 | 43.7 | 33.9 | 29.0 | 25.9 | 19.6 | 16.3 | 8.59 |
| 1.70V/cell                                           | 381.6 | 273.3 | 248.7 | 196.5 | 155.6 | 111.2 | 96.3 | 70.1 | 59.1 | 44.4 | 34.3 | 29.4 | 26.0 | 19.9 | 16.5 | 8.67 |
| 1.67V/cell                                           | 387.8 | 277.8 | 252.8 | 199.7 | 156.7 | 112.2 | 97.1 | 70.7 | 59.7 | 44.6 | 34.7 | 29.9 | 26.1 | 20.1 | 16.7 | 8.77 |
| 1.60V/cell                                           | 393.2 | 281.6 | 256.3 | 202.5 | 157.4 | 112.8 | 97.9 | 71.3 | 60.2 | 44.8 | 35.0 | 30.2 | 26.2 | 20.4 | 16.8 | 8.86 |

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

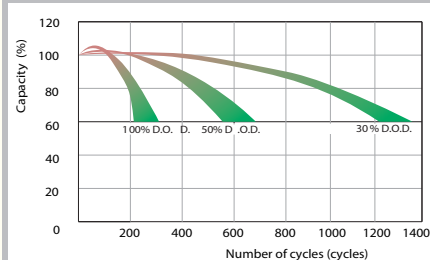
Discharge Characteristics (25°C)



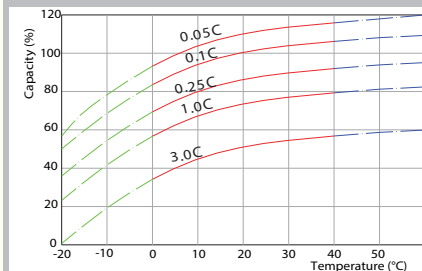
Charging Characteristics (25°C)



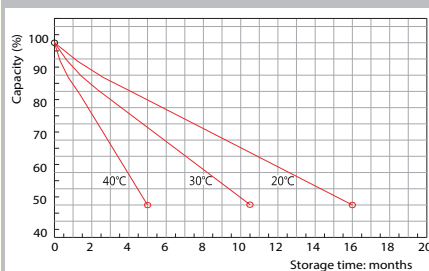
Cycle Life on D.O.D (25°C)



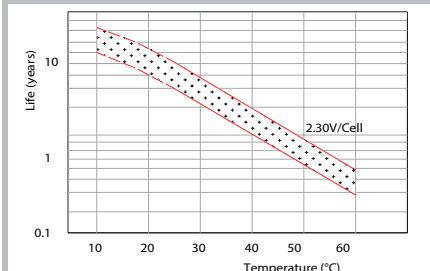
Effect of Temperature on Capacity



Self-discharge Characteristics



Floating Life on Temperature



This specification provided by Lab report might differ from the practically tests.

