

HZS12-12 Valve Regulated Lead Acid battery.  
5 year design life for stand by power applications.  
12 Volts 12 Ah (C20)

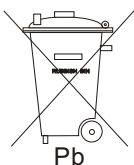
## Innovative Features

- § Completely maintenance free, sealed construction eliminates the need for watering
- § Fully tank formed plates
- § Analytical Grade electrolyte
- § Spill proof / leak proof
- § Valve regulated Max internal pressure 2.5 psi
- § Multi-position usage
- § ABS Case and cover - V0 on request
- § Low self discharge
- § FAA and IATA approved as non-hazardous
- § Built to comply with IEC 896-2, DIN 43534, BS 6290 Pt4, Eurobat.



## Specifications

|                       |                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------|
| Nominal Voltage       | 12 Volts                                                                              |
| Nominal Capacity      | 12Ah (C20 @ 20 °C)                                                                    |
| Design Life           | 5 Years                                                                               |
| Operating Temperature | -20 °C to 50 °C                                                                       |
| Grid alloy            | Calcium / Tin lead alloy                                                              |
| Plates                | Flat Pasted                                                                           |
| Separator             | Microporous polymer                                                                   |
| Active material       | Very high purity lead                                                                 |
| Case and cover        | ABS (VO on request)                                                                   |
| Charge Voltage        | Float 2.25 - 2.30 VPC @25 °C Cycling 2.35 @25 °C<br>Max. 2.4 VPC Max ripple 0.05C (A) |
| Electrolyte           | Gelled Sulphuric acid Analytical grade purity                                         |
| Venting Valve         | EPDM Rubber 1.5 to 2 psi (10.5 - 14 KPa) release pressure. Resealing at 1 psi (7 KPa) |
| Terminal              | Epoxy sealed by extended mechanical paths                                             |



Haze Battery Company keenly encourages environmental awareness; PLEASE follow guidelines for the recycling /disposal of lead.

Website: [www.hazebattery.com](http://www.hazebattery.com)  
E mail : [sales@hazebattery.com](mailto:sales@hazebattery.com)

Sealed Lead Acid 12 Volt Bloc GEL Range  
PRODUCT SHEET HZS12-12

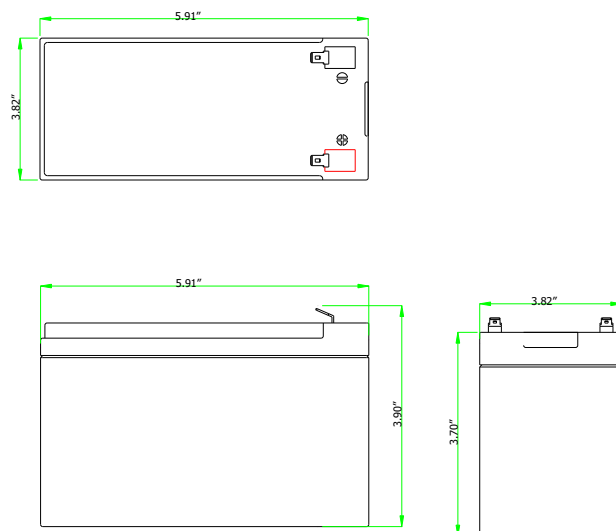
**12V  
AGM**

## Specifications

|                  |                  |         |             |
|------------------|------------------|---------|-------------|
| Nominal Voltage  |                  | 12V     |             |
| Nominal Capacity |                  | 12 Ah   |             |
| Dimensions       | Total Height     | 94 mm   | 3.70 inches |
|                  | (Inc. terminals) | 99 mm   | 3.90 inches |
|                  | Length           | 150 mm  | 5.91 inches |
|                  | Width            | 97 mm   | 3.82 inches |
|                  | Weight           | 4.10 Kg | 9.02 lbs    |
| Box Quantity     |                  | 6       |             |

## Characteristics

|                                                            |                                 |                            |
|------------------------------------------------------------|---------------------------------|----------------------------|
| Capacity<br>20 °C (68 °F)<br>To 1.7 volts                  | 20 hour rate                    | 12.2 Ah                    |
|                                                            | 10 hour rate                    | 11.3 Ah                    |
|                                                            | 5 hour rate                     | 10.2 Ah                    |
|                                                            | 1 hour rate                     | 7.3 Ah                     |
|                                                            | 15 min rate                     | 5.2 Ah                     |
| Internal Resistance                                        |                                 | mOhms                      |
| Capacity correction for<br>Temperature Variations<br>(C20) | 40 °C (104 °F)                  | 102%                       |
|                                                            | 20 °C (68 °F)                   | 100%                       |
|                                                            | 0 °C (32 °F)                    | 85%                        |
|                                                            | -15 °C (5 °F)                   | 65%                        |
| Self-Discharge<br>20 °C (68 °F)                            | Capacity after 1 months storage | 98%                        |
|                                                            | Capacity after 3 months storage | 94%                        |
|                                                            | Capacity after 6 months storage | 86%                        |
| Short Circuit Current<br>°C (68 °F)                        | 300A                            |                            |
| Terminal                                                   | Standard                        | Faston T1                  |
|                                                            | Optional                        | Faston T2                  |
| Charging<br>(Constant Voltage)                             | Cyclic                          | 2.35 - 2.40 VPC (20-25 °C) |
|                                                            | Float                           | 2.27 - 2.30 VPC (15-25 °C) |



## Constant Power Discharge - Watts per Cell @20 °C

| End V per Cell | 5M   | 10M  | 15M  | 20M  | 25M   | 30M   | 35M   | 40M   | 45M   | 60M   | 90M  | 2 hr | 3 hr | 4 hr |
|----------------|------|------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 1.85           | 65.2 | 47.5 | 37.9 | 30.3 | 24.98 | 21.44 | 18.93 | 17.10 | 15.67 | 12.67 | 9.48 | 7.60 | 5.41 | 4.14 |
| 1.80           | 68.2 | 49.3 | 38.6 | 30.7 | 25.34 | 21.74 | 19.20 | 17.33 | 15.85 | 12.83 | 9.58 | 7.70 | 5.46 | 4.18 |
| 1.75           | 71.1 | 50.8 | 39.3 | 31.2 | 25.68 | 22.04 | 19.46 | 17.54 | 16.04 | 12.96 | 9.66 | 7.77 | 5.50 | 4.21 |
| 1.70           | 72.6 | 51.9 | 40.0 | 31.7 | 26.11 | 22.46 | 19.80 | 17.88 | 16.39 | 13.20 | 9.72 | 7.80 | 5.52 | 4.22 |
| 1.65           | 74.3 | 52.6 | 40.4 | 32.0 | 26.42 | 22.66 | 20.08 | 18.14 | 16.61 | 13.28 | 9.80 | 7.83 | 5.53 | 4.25 |
| 1.60           | 77.8 | 53.5 | 41.1 | 32.3 | 26.7  | 22.92 | 20.28 | 18.29 | 16.72 | 13.40 | 9.87 | 7.86 | 5.55 | 4.27 |

## Constant Amps Discharge - Amps @20 °C

| End V per Cell | 5M   | 10M   | 15M   | 20M   | 25M   | 30M   | 35M   | 40M   | 45M  | 60M  | 90M  | 2 hr | 3 hr | 4 hr | 5 hr | 8 hr | 10 hr | 12 hr | 20 hr |
|----------------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 1.85           | 38.8 | 24.23 | 19.23 | 16.20 | 13.99 | 12.29 | 10.99 | 9.87  | 8.98 | 7.08 | 5.14 | 4.12 | 2.97 | 2.35 | 1.96 | 1.33 | 1.10  | 0.93  | 0.59  |
| 1.80           | 41.4 | 25.43 | 19.97 | 16.59 | 14.26 | 12.54 | 11.23 | 10.06 | 9.15 | 7.18 | 5.22 | 4.18 | 3.01 | 2.38 | 1.99 | 1.34 | 1.11  | 0.95  | 0.59  |
| 1.75           | 43.2 | 26.45 | 20.40 | 16.87 | 14.46 | 12.70 | 11.36 | 10.19 | 9.25 | 7.26 | 5.27 | 4.22 | 3.04 | 2.40 | 2.01 | 1.36 | 1.12  | 0.96  | 0.60  |
| 1.70           | 44.9 | 27.48 | 20.77 | 17.10 | 14.62 | 12.83 | 11.49 | 10.29 | 9.34 | 7.33 | 5.31 | 4.27 | 3.08 | 2.43 | 2.03 | 1.37 | 1.13  | 0.96  | 0.61  |
| 1.65           | 46.2 | 28.3  | 21.12 | 17.34 | 14.84 | 13.01 | 11.62 | 10.44 | 9.51 | 7.47 | 5.39 | 4.31 | 3.12 | 2.47 | -    | -    | -     | -     | -     |
| 1.60           | 48.3 | 28.8  | 21.48 | 17.57 | 15.02 | 13.16 | 11.76 | 10.56 | 9.63 | 7.60 | 5.49 | 4.37 | 3.16 | 2.49 | -    | -    | -     | -     | -     |

## Ampere Hour @20 °C

| End V per Cell | 2 hr | 3 hr | 4 hr | 5 hr  | 8 hr  | 10 hr | 12 hr | 20 hr |
|----------------|------|------|------|-------|-------|-------|-------|-------|
| 1.85           | 8.23 | 8.91 | 9.38 | 9.81  | 10.60 | 10.95 | 11.21 | 11.76 |
| 1.80           | 8.36 | 9.03 | 9.51 | 9.93  | 10.73 | 11.10 | 11.34 | 11.88 |
| 1.75           | 8.45 | 9.12 | 9.61 | 10.05 | 10.85 | 11.22 | 11.48 | 12.05 |
| 1.70           | 8.53 | 9.23 | 9.73 | 10.17 | 10.95 | 11.32 | 11.57 | 12.16 |
| 1.65           | 8.62 | 9.36 | 9.86 | -     | -     | -     | -     | -     |
| 1.60           | 8.73 | 9.47 | 9.94 | -     | -     | -     | -     | -     |



UL Recognised  
Component  
MH28512

