



EverExceed® Patented Robust AGM Technology

ST-12120
VALVE REGULATED
LEAD ACID BATTERY
FOR TELECOM / ELECTRIC
UTILITY APPLICATIONS
12V 120 AH @ 10 HR to 1.80VPC
12V 135 AH @ 20 HR to 1.75VPC

**LONG
DURATION**

**HIGH
PERFORMANCE**

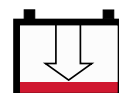
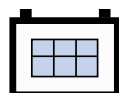


Innovative Features

- ◆ Thick positive plate design for maximum service float life 12 years design life @ 20°C(68°F).
- ◆ Valve regulated lead acid battery (VRLA).
- ◆ High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- ◆ Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection.
- ◆ Operates at a low internal pressure.
- ◆ Heavy duty insert copper alloy terminals for ease of assembly, reduced maintenance and increased safety.
- ◆ Advanced lead tin calcium alloy, reduces grid corrosion and promotes long battery life.
- ◆ Over-sized, through the partition inter-cell welds provide low resistance connections, with minimal power loss.
- ◆ Flame arresting, low pressure safety release venting system for individual cells, recognized per U.L. 924.
- ◆ Multicell design for ease of installation and maintenance
- ◆ Horizontal or vertical operation.
- ◆ **Standard:**
Reinforced ABS (UL 94HB) container and cover
Optional:
Flame-retardant reinforced ABS container and cover compliant with U.L.94 V-0 with an Oxygen limiting Index of greater than 28%.

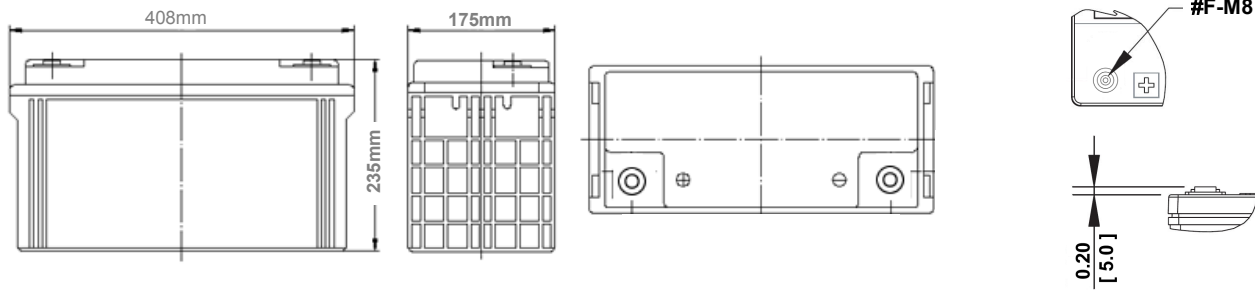
| 12 VOLTS - 120 AMPERE HOUR @ 10 HOUR RATE | | | | | | | | | | |
|---|-------|-------|------|------|-----|-----|-----|------|------|------|
| AH Capacity to 1.80VPC @ 68°F (20°C) | | | | | | | | | | |
| End Point Volts/Cell | 60min | 1.5hr | 2hr | 3hr | 4hr | 5hr | 8hr | 10hr | 12hr | 20hr |
| 1.80 | 77.5 | 86.8 | 91.9 | 93.1 | 103 | 107 | 116 | 120 | 122 | 132 |

For Telecom / Electric Utility Applications



Standard Range VRLA

EverExceed®
power your applications



Length: 408mm Width: 175mm Height: 235mm

| Electrical Specifications | | | | | | |
|---------------------------|------------------|----------------|-------------|------------------------------|-----------------------|--------------------------|
| Cells Per Unit | Voltage Per Unit | Weight | Electrolyte | Maximum Discharge Current@5s | Short Circuit Current | Internal Resistance (mΩ) |
| 6 | 12.84 | 78.1lbs 35.5kg | SG = 1.300 | 1320 Amps | 3300 Amps | 4.2 |

| | |
|--|---|
| Capacity | 135 Ah @ 20 hr. rate to 1.75 volts per cell @ 68°F (20°C). 120 Ah @ 10 hr. rate to 1.80 volts per cell @ 68°F (20°C). |
| Applicable Operating Temperature Range | -40°F (-40°C) to +158°F (70°C). |
| Ideal Operating Temperature Range | +68°F (+20°C) to +82.4°F (28°C). |
| Floating Charging Voltage | 13.5 to 13.8 VDC/unit Average at 68°F~77°F (20°C~25°C). |
| Recommended Maximum Charging Current Limit | 30.0 Amperes (0.25C10 Amperes) |
| Equalization and Cycle Service Charging Voltage | 14.1 to 14.4 VDC/unit Average at 68°F~77°F (20°C~25°C). |
| Maximum AC Ripple (Charger) | 0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Maximum voltage allowed = 1.4% RMS (4% P-P). Maximum current allowed = 0.60 amperes RMS (C/10). |
| Self Discharge | EverExceed Standard Range batteries may be stored for up to 12 months at 68°F~77°F (20°C~25°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |
| Accessories | Inter unit connectors racks and cabinet systems are available. |
| Terminal: Inserted | Threaded copper alloy insert terminal |
| Terminal Hardware Initial Torque: Inserted Terminal | 11 N-m |

| Constant Power Discharging Ratings - Watts Per Cell @ 20°C (68°F) | | | | | | | | | | | | |
|---|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| End Point Volts/Cell | 15min | 30min | 60min | 1.5hr | 2hr | 3hr | 4hr | 5hr | 8hr | 10hr | 12hr | 20hr |
| 1.85 | 355 | 235 | 155 | 106 | 83.9 | 57.7 | 48.0 | 40.5 | 27.7 | 23.2 | 20.8 | 13.1 |
| 1.80 | 362 | 240 | 158 | 110 | 88.0 | 60.9 | 50.1 | 41.6 | 28.7 | 23.7 | 22.3 | 13.4 |
| 1.75 | 384 | 248 | 163 | 113 | 90.2 | 62.0 | 50.9 | 42.5 | 29.1 | 24.3 | 22.6 | 13.6 |

| Constant Current Discharging Ratings - Amperes Per Cell @ 20°C (68°F) | | | | | | | | | | | | |
|---|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| End Point Volts/Cell | 15min | 30min | 60min | 1.5hr | 2hr | 3hr | 4hr | 5hr | 8hr | 10hr | 12hr | 20hr |
| 1.85 | 191 | 125 | 76.0 | 53.9 | 43.3 | 29.6 | 24.4 | 20.4 | 14.0 | 11.6 | 9.86 | 6.38 |
| 1.80 | 195 | 127 | 77.5 | 57.8 | 45.9 | 31.3 | 25.6 | 21.3 | 14.4 | 12.0 | 10.2 | 6.60 |
| 1.75 | 213 | 131 | 80.4 | 59.7 | 47.1 | 32.2 | 26.4 | 22.0 | 14.9 | 12.3 | 10.5 | 6.77 |

Note: Batteries to be mounted with 0.5 in (1.25 cm) spacing minimum and free air ventilation.
Specifications subject to change without notification.

