

## HXRL Series



The HRXL series VRLA batteries are designed to provide Extreme life in conventional temperature application as well as longer life than traditional VRLA batteries in high temperature applications. Perfectly suited to any application that requires a high rate current over a short period. The HRXL series combine proven high temperature technology to offer exceptional service life.

### TECHNICAL FEATURES:

- Flame Retardant ABS Cover and Container, UL94 V-0, LOI>28%
- Patented copper alloy terminal design
- Epoxy TPS design for high reliability post seal
- 6 months of storage at 77°F (25°C) with a capacity > 80%
- Initial capacity at 100%
- Low pressure one-way flame arresting CATALYST valve(s) UL1989
- Optimized Grid Alloy, Separator and Pure Lead Paste
- Absorbent Glass Mat (AGM) Sealed Technology, Recombination efficiency of 99.9%

### COMPLIANCE AND SAFETY:

- ISO 9001:2000 and ISO 14001:2004 certified production facilities
- UL Recognized Component 924, for use in or with listed UL1778, UL1989 and UL924 systems
- IEC60896-21/22 - BS6290 part 4 / Eurobatt guide
- Manufactured under system ISO9001(TUV)
- All batteries meet or exceed IEEE recommended practices

### TRANSPORTATION:

- Classified as Nonspillable UN 2800 and meet the Nonspillable criteria listed in DOT-CFR Title 49, 171-189 (d) (3) (i) and (ii) and exempt from CFR 49, Subchapter C requirements
- Meets transportation conditions of IMDG exemption 238, IATA/ICAO Special Provision A67 (Not Restricted)

WPC @ 15 min 1.67 VPC / 77°F (25°C)	400 watts
WPC @ 5 min 1.67 VPC / 77°F (25°C)	757 watts
Ah @ 20hr 1.75 VPC / 77°F (25°C)	100 Ah

Nominal Voltage	12V
Float Charge Voltage @25°C (2.23 – 2.27vpc)	13.4 – 13.6
Max. Charge Current (A) (5 hour rate @ 1.75vpc)	25 Amps

Electrolyte Absorbed H <sub>2</sub> SO <sub>4</sub>	1.300
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Short Circuit Current (A)	3205 Amps
Internal Resistance (mΩ)	3.80
Terminal Type	Torque
M6-F (Top Insert)	78±5 in-lbs (8 ±1 Nm)

Dimension	In	mm
Length	13.3	337
Length Base	12.8	324
Width	6.81	173
Overall Height	8.46	215

Weight	Lbs.	Kg
	75	34

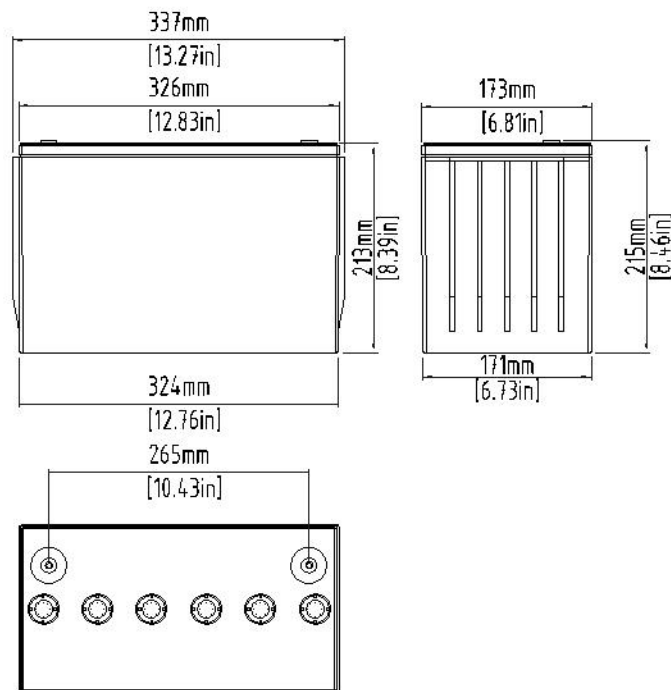
## OPERATING PARAMETERS

Float Charging Voltage	13.5V / 2.25vpc @ 77°F (25°C)
Equalize /Cycle	14.0V – 14.3V 2.33Vpc to 2.38Vpc @ 77°F (25°C)
See Operations and Maintenance Manual for specific guidelines and recharge times	

Charging Temperature Compensation	-2 mV/cell/°F > 77°F (-3.6 mV/cell /°C > 25°C)
	+2 mV/cell/°F < 77°F (+3.6 mV/cell/°C < 25°C)

Maximum AC Ripple (Charger)	0.5% RMS, 1.5% peak-to-peak for float charge voltage for best results
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Operating Temperature Range	
Nominal	+74°F (24°C) to 80°F (27°C)
Charge	-20°F (-28°C) to +122°F (50°C)
Discharge	-40°F (-40°C) to +140°F (60°C)
Storage Temperature Range	-4°F (-20°C) to +104°F (40°C)



Constant Power Discharge Watts per cell (25°C, 77°F)

End vpc	5min	10min	15min	20min	30min	45min	1h	2h
1.6	827	549	412					
1.63	801	543	406					
1.67	795	536	400	332	249	185	147	73.9
1.7	745	527	395	327	248	183	146	82.5
1.75	736	505	382	316	243	182	145	82.4
1.8	675	468	359	302	237	182	145	81.3
1.83	631	442	343	291	230	179	143	79.5
1.85	608	431	334	283	225	176	140	77.7

Constant Current Discharge Amperes (25°C, 77°F)

End vpc	5min	10min	15min	20min	30min	40min	50min	1h	2h
1.60V	500	232							
1.67V	463	225	135	77.8					
1.70V	435	221	134	77.6					
1.75V	377	209	131	76.6	43.0	23.4	12.09	10.20	5.36
1.80V	320	194	124	74.3	42.0	22.9	11.85	10.00	5.25
1.83V	290	182	119	71.9	41.0	22.4	11.65	9.83	5.16
1.85V	272	173	114	69.6	39.9	22.0	11.42	9.64	5.06