

12HRL300

HRL SERIES

The Narada High Rate range of VRLA batteries provide reliable battery backup to any High Rate UPS application.

All Narada High Rate series batteries use optimized plate technology and a patented post design offering 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 valve(s) UL1989
- ◆ 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
- ◆ **TL9001 / ISO9001(TUV) Quality System**
- ◆ Battery installation compliant with: EN 50272-2
- ◆ 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)	300 watts
WPC @ 5 min 1.60 VPC / 77°F (25°C)	627 watts
Ah @ 20hr 1.75 VPC / 77°F (25°C)	75 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)	18.75 Amps

Electrolyte Absorbed H ₂ SO ₄	1.300
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Short circuit current (A)	1800 Amps
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Internal resistance (mΩ)	4.0 mΩ
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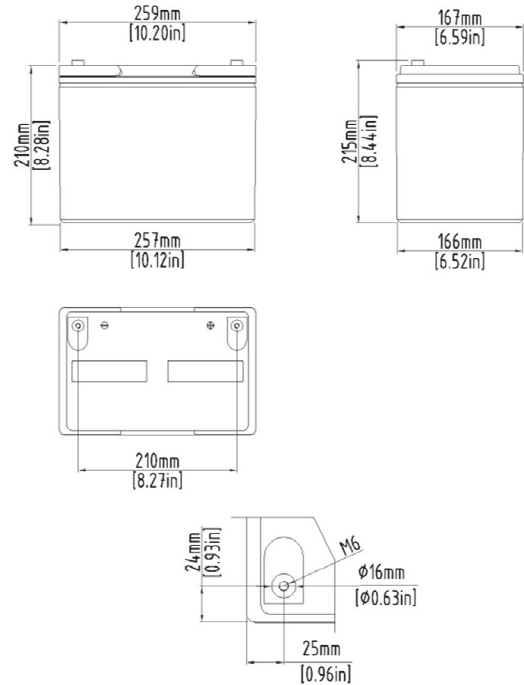
Terminal Type	Torque
M6-F	78 in-lbs (8 ±1 Nm)

Dimension	in	mm
Length	10.20	259
Length Base	10.12	257
Width	6.59	167
Overall Height	8.44	215

Weight	Lbs.	Kg
	56.1	25.5

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
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 Cell Voltage	5min	10min	15min	20min	30min	40min	50min	1h	2h
1.60V	627	407	305	246					
1.63V	606	401	302	244	178				
1.67V	586	395	300	243	178	144	121	104	
1.70V	565	387	296	241	177	143	120	103	
1.75V	526	369	286	234	174	142	119	102	57.7
1.80V	479	342	269	223	167	138	116	101	57.1
1.83V	446	322	255	213	162	134	113	98.4	56.2
1.85V	420	305	244	205	157	131	111	96.6	55.2

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

End Cell Voltage	5min	15min	30min	1h	2h	3h	4h	6h	10h
1.60V	376	165							
1.67V	349	161	94.0	54.3					
1.70V	332	159	93.5	54.2					
1.75V	296	153	92.0	53.7	29.7	20.7	16.1	11.2	7.10
1.80V	259	144	88.8	52.5	29.2	20.4	15.8	11.0	7.00
1.83V	239	137	85.6	51.1	28.5	20.0	15.5	10.8	6.88
1.85V	225	131	82.8	49.7	27.9	19.6	15.2	10.6	6.74

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