

# Deka® High Rate

## 31HR5000

- **Exclusive IPF® technology optimizes power capacity, cell consistency, and long-term reliability**
- Advanced AGM technology for superior high-rate power
- Puncture resistant micro-porous glass mat separators extend life
- Reinforced case resists bulging and meets safety requirements (UL 94 V-0)
- Case & cover heat sealed and 100% tested to prevent leaks
- Epoxy sealed posts eliminate leaks
- Flame arresting, low-pressure, self-sealing valves are 100% factory tested
- Computer-aided design and manufacturing control processes and standards to ensure quality products
- All batteries meet or exceed IEEE recommended practices
- Battery design and construction meet UL recognition requirements
- Plate thickness optimized for long life
- Guaranteed 100% initial string capacity when tested in accordance with IEEE 1188



### SPECIFICATIONS

**Nominal Voltage:** 12-Volts

**Rating:** 475 Watts/Cell @ 15 min. rate  
to 1.67 V.P.C.

**Positive Plate:** >98% Pure lead with tin-calcium alloy

**Negative Plate:** Pure lead, calcium alloy

**Post Seal:** Epoxy-sealed

**Terminal:** Top access, 1/4" – 20 threaded insert

**Case/Cover:** Flame-retardant, polypropylene –  
UL 94 V-0/>28% L.O.I.

**Safety Vent:** Low positive pressure,  
self-sealing w/ flame arrestor

**Float Voltage:** 2.25 V.P.C. ± 0.01 V.P.C. @ 77°F (25°C)

**Design life:** 10 years in float applications @ 77°F (25°C)

**Dimensions:** Length - 13.46" (341.9 mm)

Width - 6.84" (173.7 mm)

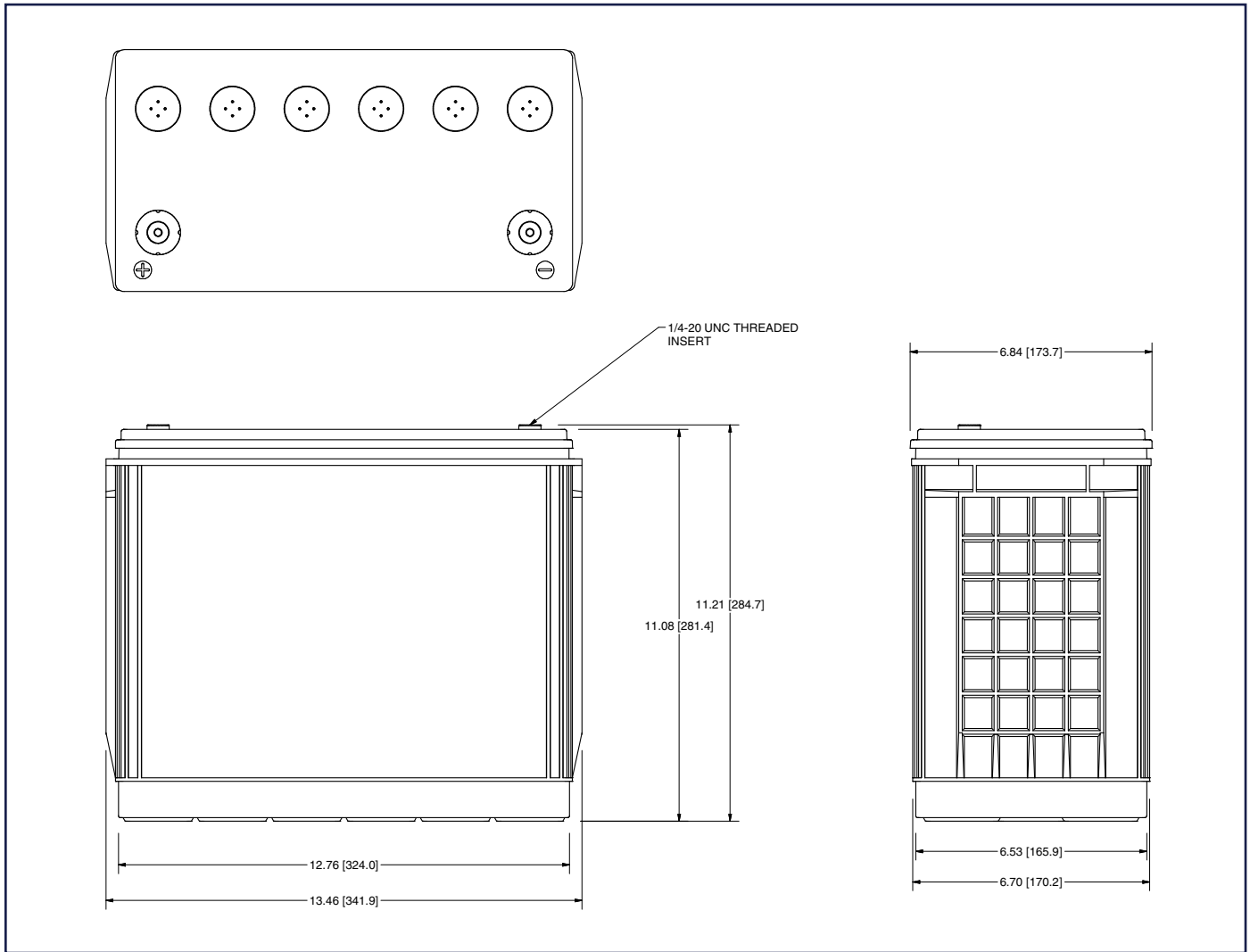
Height - 11.21" (284.7 mm)

**Weight:** 97 lbs. (44 kg)

### DISCHARGE RATINGS IN WATTS PER CELL @ 77°F (25°C)\*

Volts per Cell (V.P.C.)	1 MIN.	5 MIN.	10 MIN.	15 MIN.	20 MIN.	30 MIN.	40 MIN.	50 MIN.	60 MIN.
1.60	1081	830	620	492	406	305	246	206	178
1.63	1048	800	609	487	403	304	245	206	178
1.65	1015	780	598	481	400	303	244	205	177
1.67	983	760	588	475	397	301	244	204	177
1.70	946	727	569	464	391	298	241	203	176
1.75	836	663	530	440	375	290	236	199	173

\*Subject to change without notice.



#### OPTIONAL FACTORY ACCEPTANCE TESTING

- More economical than performing a load test on site
- Confirms published capacity rating of product
- Establishes a factory baseline ohmic reading
- Formal test report provided
- Contact your East Penn Mfg. representative for additional information

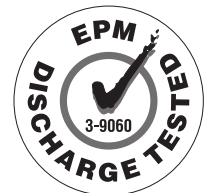
#### TESTING SPECIFICATIONS

- Exceeds IEEE-1188 standards
- 10 minute battery rate to 1.67 V.P.C.
- Constant power discharge
- String  $\geq$  100% capacity — All individual batteries  $\geq$  95% capacity
- Conductance readings taken before the test
- Battery voltage recorded on report every 2 minutes

#### INSTALLATION AND OPERATING INSTRUCTIONS

<http://www.eastpennmanufacturing.com/wp-content/uploads/High-Rate-10-Manual-0970.pdf>

**PROPOSITION 65 WARNING:** Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. **WASH HANDS AFTER HANDLING.**



[www.dekabatteries.com](http://www.dekabatteries.com)

QUALITY SYSTEM  
CERTIFIED  
**ISO 9001**  
**IATF 16949**  
ENVIRONMENTAL  
SYSTEM CERTIFIED  
**ISO 14001**



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