

# DCS-88BT



INDUSTRIAL POWER SOLUTIONS



## DEEP CYCLE SERIES

### DCS-88BT VALVE-REGULATED LEAD-ACID BATTERY FOR DEEP-CYCLE MOBILITY APPLICATIONS 12V 74 AH @ 5 HR RATE 12V 88 AH @ 20 HR RATE

#### FEATURES

- Robust plate for extended cycle life.
- Computer-generated grid design optimized for high power density.
- Low-calcium grid alloy for reduced gas emissions and ease of recycling.
- Flame-arresting, one-way pressure-relief vent for safety and long life.
- UL-recognized component.
- Multicell design for economy of installation and maintenance.
- Case and cover available in standard polypropylene.
- Thermally welded case-to-cover bond to eliminate leakage.
- Removable carrying handles.
- Can be used in any orientation. Upright, side or end mounting recommended.
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Not restricted for air transport — complies with IATA/ICAO Special Provision A67.
- Not restricted for surface transport — classified as nonhazardous material as related to DOT-CFR Title 49 parts 171-189.
- Not restricted for water transport — classified as nonhazardous material per IMDG Amendment 27.
- Dual Bi-Marine Terminal to accept ring lug and standard SAE automotive connections.

#### 12-Volts – 88 Ampere Hour Capacity @ 20 Hour Rate

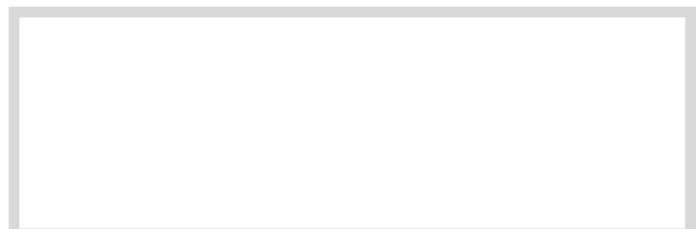
Ampere Hour Capacity to 1.75 Volts per Cell @ 77°F (25°C)

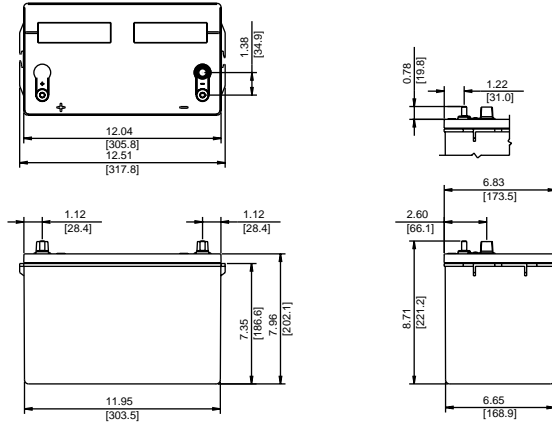
Discharge in Hours	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	10.00	12.00	20.00	24.00	72.00	100.00
Amp-Hr Capacity	47.0	58.0	66.0	70.8	74.0	76.2	78.0	79.2	81.7	83.6	88.0	88.8	93.0	95.0

#### Interstate PowerCare

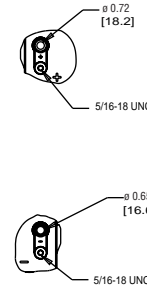
##### Home Office

12770 Merit Drive, Suite 400  
Dallas, TX 75251  
Toll Free: 1-866-210-6679  
FAX: 1-888-538-9300





### INDUSTRIAL POWER SOLUTIONS



DIMENSION TOLERANCES:  $\pm 0.05$  INCHES  
 $\pm 1.3$  INCHES

\*All dimensions in inches and (millimeters). All dimensions are for reference only. Contact an Interstate representative for complete dimensional information.

## DCS-88BT – Specifications

BCI Group Size	Cells Per Unit	Full Charge OCV	Weight	Electrolyte	Max. Discharge Current	Short Circuit Current	Ohms Imped. 60 Hz ( $\Omega$ )
27	6	12.84	64 lbs. 29 kg	Absorbed H <sub>2</sub> SO <sub>4</sub> SG = 1.300	800 Amps	3300 Amps @ 0.1 sec.	0.0045 Ohms

<b>Capacity</b>	88.0 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C) CCA – 550 amps for 30 sec. @ 0°F MCA – 660 amps for 30 sec. @ 32°F RC – 166 minutes @ 25 amps to 1.75 volts per cell @ 77°F (25°C)
<b>Operating Temperature Range</b>	<b>Discharge:</b> -40°F (-40°C) to +160°F (71°C), <b>Charge:</b> -10°F (-23°C) to +140°F (60°C) (with temperature compensation)
<b>Recommended Operating Temperature Range</b>	+74°F (23°C) to +80°F (27°C)
<b>Float Charging Voltage</b>	13.5 to 13.8 VDC/unit Average at 77°F (25°C).
<b>Recommended Maximum Charging Current Limit</b>	C/5 amperes (17.6 amperes @ 100% depth of discharge) @ 20 hour rate
<b>Equalization and Cycle Service Charging Voltage</b>	14.4 to 14.8 VDC/unit Average at 77°F (25°C).
<b>Maximum AC Ripple (Charger)</b>	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Maximum AC ripple float charge voltage allowed = (4% P-P) Maximum AC ripple current allowed = 4.4 amperes RMS (C/20)
<b>Self Discharge</b>	Interstate's batteries may be stored for up to 6 months at 77°F (25°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.
<b>Terminal</b>	5/16-18 UNC stainless steel stud and standard SAE automotive posts.
<b>Terminal Hardware Initial Torque</b>	50-70 in.-lbs. Stud post – 1/2 turn past hand tight.
<b>Terminal Hardware Annual Retorque</b>	40-55 in.-lbs. Stud post – untighten then 1/2 turn past hand tight.

## Constant Current Discharge Ratings – Amperes @ 77°F (25°C)

End Point Volts/Cell	Operating Time to End Point Voltage (in hours)													
	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	10.00	12.00	20.00	24.00	72.00	100.00
1.90	36.5	22.1	16.8	13.7	11.60	10.10	8.93	8.00	6.70	5.75	3.80	3.25	1.17	0.85
1.85	40.6	25.1	19.0	15.5	13.20	11.50	10.15	9.10	7.60	6.45	4.13	3.50	1.23	0.91
1.80	44.0	27.5	20.7	16.8	14.20	12.25	10.77	9.60	7.96	6.75	4.30	3.67	1.28	0.94
1.75	47.0	29.0	22.0	17.7	14.80	12.70	11.14	9.90	8.17	6.97	4.40	3.70	1.29	0.95

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