



# PHOTOVOLTAIC BATTERIES

## FLOODED - MONOBLOC

**DEKA SOLAR FLOODED MONOBLOC BATTERIES** are designed to offer reliable, low-maintenance power for renewable energy applications where frequent deep cycles are required and minimum maintenance is desirable.

The **DEKA SOLAR FLOODED MONOBLOC** include 3 cell (6 volt) and 6 cell (12 volt) photovoltaic batteries.



FEATURES & BENEFITS	
Case and Cover	Heat sealed, lightweight, crack resistant, molded high impact polypropylene.
Separators	Microporous polyethylene envelopes/separators
Retainers	20 mil glass mat (DC27- 10 mil).
Positive and Negative Plate	Antimony flat plate
Specific Gravity (fully charged)	1.275 @ 25°C (77°F).
Cell Connections	TP welded (through partition)
Vents	Individual quarter - turn bayonet vent cap (DC27 - removable pod vents, 3 cells per vent)
Self discharge	4% per month
Cycle life for DC25, DC27	200 cycles @ 80% DOD, 900 cycles @ 20% DOD (Number of cycles based on 25 amp discharge to 1.75 vpc @ 29°C (85°F))



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

**UL**  
®  
UL Recognized Component

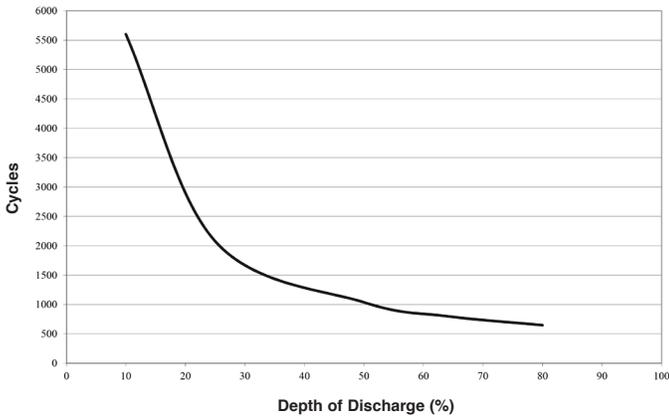
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Photovoltaic Charging Parameters		
Bulk Charge	Max Current (amps)	30% of 20 Hr Rate
Absorption (Regulation) Charge	Constant Voltage	2.40 - 2.45 vpc
Float Charge	Constant Voltage	2.30 - 2.35 vpc
Equalize Charge	Constant Voltage	2.50 - 2.55 vpc
Temperature Coefficient	0.003 V / °C	

### IMPORTANT CHARGING INSTRUCTIONS:

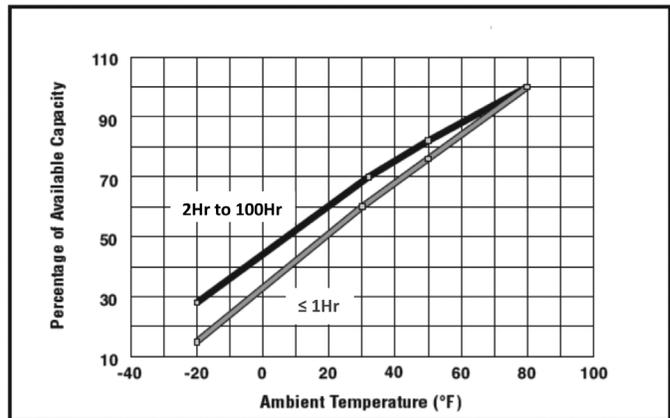
- Use a good constant potential charger.
- Do not install battery in a sealed container.
- Cut-off parameters per charge & equalize intervals are application specific and will vary dependent upon site specific characteristics such as temperature, days of autonomy, array to load ratio, etc.
- Constant under or overcharging will damage battery and shorten its life.

Cycle Life vs Depth of Discharge at +25°C (77°F)\*



The solar battery excels in cycling applications.  
\*Dependent upon proper charging and ambient temperatures.

Capacity vs. Operating Temperature



Capacity vs. Operating Temperatures: Above are the changes in capacity for wider ambient temperature range, giving the available capacity, as a percentage of the rated capacity, at different ambient temperatures. The curves show the behavior of the battery after a number of cycles.

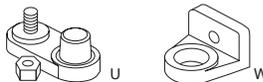
TYPE NO.		FOOT-NOTES	PERFORMANCE (Ah) <sup>1</sup>		SHORT CIRCUIT CURRENT	ELECTROLYTE VOLUME		APPROXIMATE WEIGHT				MAXIMUM OVERALL DIMENSIONS					
WET	DRY <sup>2</sup>		20 HR	100 HR		QUART	LITER	WET		DRY		LENGTH		WIDTH		HEIGHT	
6-VOLT SOLAR FLOODED MONOBLOC																	
8C11	8C11D	17, U	235	260	2636	8.0	7.6	66.5	30	48.0	22	11.75	298	7.00	178	11.50	292
9C11	9C11D	17, U	250	290	2465	7.5	7.1	73.0	33	52.5	24	11.75	298	7.00	178	11.50	292
8L16	8L16D	17, W	370	420	2339	11.5	10.9	113.0	51	83.0	38	11.75	298	7.00	178	16.50	419
GC10	-	U	215	239	2400	7.5	7.1	60.5	27	-	-	10.25	260	7.13	181	10.88	276
GC15	GC15D	U	230	258	2620	19.0	18.0	63.0	29	44.0	20	10.25	260	7.13	181	10.88	276
GC25	GC25D	U	235	260	2850	7.3	6.9	68.0	31	-	-	10.25	260	7.13	181	11.13	283
GC45	-	U	255	280	3750	6.7	6.3	77.0	35	-	-	10.25	260	6.81	173	11.58	294
8C6V	-	17, U	330	365	3200	9.9	9.4	97.5	44	-	-	11.73	198	7.02	178	14.41	366
12-VOLT SOLAR FLOODED MONOBLOC																	
DC24	-	17, U	75	80	2000	5.1	4.8	45.5	21	-	-	10.75	273	6.75	171	9.38	238
DC27	-	17, U	90	95.5	2339	6.0	5.7	53.0	24	-	-	12.50	318	6.75	171	9.38	238
DC31DT	-	17, U	105	111	2200	6.1	5.8	60.0	27	-	-	12.95	320	6.81	173	9.29	236
9C12	-	17, U	228	250	2650	12.3	11.6	127.0	58	-	-	15.50	394	7.00	178	14.25	362

- 1 - Ratings after 15 cycles
- 2 - "D" suffix indicated dry option available

### FOOTNOTES:

- 17 - Includes Handle
- U - Molded-in offset SAE post and 5/16 threaded post
- W - Flag terminal with 5/16" diameter hole

### Terminal Information



**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.**



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