

Deka **SOLAR**

PHOTOVOLTAIC BATTERIES



**GEL MONOBLOC/
6V & 12V**

The **Deka Solar Valve-Regulated Gel Monobloc series** offers reliable, versatile, maintenance-free power. The thixotropic

gel enables these batteries to be completely spillproof providing many available options

for installation. The gelled electrolyte gives more protection to the battery plates, and is better suited for deep cycle discharge. With longer discharge and less charging time, these batteries are ideal for many renewable energy applications.

FEATURES & BENEFITS

Valve-Regulated	Sealed construction eliminates periodic watering, corrosive acid fumes, and spills
Gelled Electrolyte	Electrolyte will not stratify
Positive and Negative Plate	Lead calcium
Self-Discharge	Less than 2% per month stand loss means little deterioration during transport and storage
Exclusive IPF® Technology	Optimizes power capacity, cell consistency, and long-term reliability
Rated Non-Spillable by ICAO, IATA, and DOT	Transports easily and safely by air, no special containers needed

APPLICATIONS

Renewable Energy • Water pumping • Residential • Communications
 • Cathodic protection • Remote monitoring • Refrigeration
 • Lighting • Aids to navigation • Wind generation



QUALITY SYSTEM
CERTIFIED
ISO 9001
ISO/TS 16949
ENVIRONMENTAL
SYSTEM CERTIFIED
ISO 14001

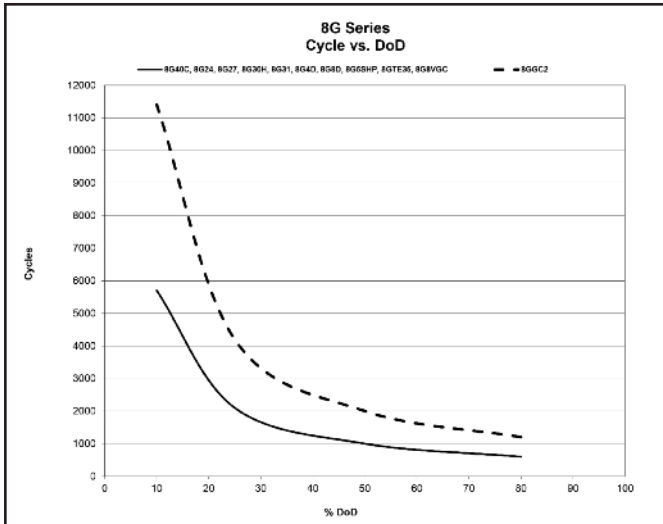


PHOTOVOLTAIC BATTERIES

Photovoltaic Charging Parameters		
Bulk Charge	Max Current (amps)	30% of 20 Hr Rate
Absorption (Regulation) Charge	Constant Voltage	2.35 - 2.40 vpc
Float Charge	Constant Voltage	2.25 vpc ± 0.01
Equalize Charge	Constant Voltage	2.40 - 2.43 vpc
Temperature Coefficient		0.003 v / °C

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.

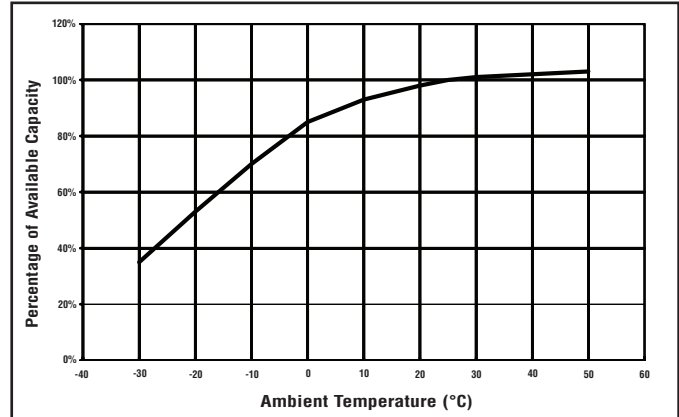
Cycle Life vs Depth of Discharge at +25°C (77°F)*



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.

PART NO.	FOOT NOTES	VOLTS	PERFORMANCE LEVEL				PEAK RATING**			SHORT CIRCUIT CURRENT	WEIGHT lb (kg)	DIMENSIONS		
			AMPERE HOUR CAPACITY 77°F (25°C)				[1.75 vpc @ 77°F (25°C)]					in (mm)		
			10 HR	20 HR	24 HR	100 HR	5 HR	20 HR	100 HR			L	W	H
8G40C	38,39,C	12	37.0	40.0	40.8	48.0	36.0	42.1	48.7	1335	31.5 (14)	7.76 (197)	6.62 (168)	6.87 (174)
8G22NF	38,39,G	12	47.5	51.0	51.6	58.0	45.8	53.7	58.9	1337	37.5 (17)	8.99 (228)	5.47 (139)	9.24 (325)
8G24	17,38,39,G,C	12	68.0	73.6	74.9	84.5	66.0	77.0	85.0	2023	51.5 (23)	10.20 (259)	6.80 (173)	9.24 (235)
8G27	17,38,39,G	12	80.3	88.0	88.1	99.0	76.0	91.0	100	2312	62.0 (28)	12.83 (326)	6.56 (167)	9.24 (235)
8G30H	17,38,39,B	12	90.0	97.6	98.4	108	85.0	102	108	2730	68.5 (31)	12.93 (329)	6.75 (171)	9.76 (248)
8G31	17,38,39,X	12	90.0	97.6	98.4	108	85.0	102	108	2730	68.5 (31)	12.93 (329)	6.75 (171)	9.34 (237)
8GGC2	38,39,U	6	168	180	182	198	154	189	198	4384	69.0 (31)	10.26 (216)	7.09 (180)	11.05 (281)
8G4D	17,T	12	169	183	187	210	153	193	213	5530	127.5 (58)	20.73 (527)	8.44 (214)	10.82 (275)
8G8D	17,T	12	210	225	229	265	188	237	269	5915	157.0 (71)	21.03 (534)	11.00 (279)	10.82 (275)
8G5SHP	17,B	12	107	115	116	123	110	125	137	2342	84.5 (38)	13.58 (345)	6.77 (172)	11.42 (290)
8G8VGC	U	8	126	140	142	160	114	147	162	4313	70.0 (31)	10.26 (216)	7.09 (180)	11.05 (281)

ALL RATINGS ARE AFTER 15 CYCLES AND CONFORM TO B.C.I. SPECIFICATIONS.

IMPORTANT CHARGING INSTRUCTIONS: WARRANTY VOID IF OPENED OR IMPROPERLY CHARGED. Do not install in a sealed container. Constant under or overcharging will damage any battery and shorten its life! Use a good constant potential, voltage-regulated charger. The **open circuit voltage** of a fully charged 12-volt battery is 12.8V at 77°F (25°C).

Batteries manufactured in polypropylene cases and covers. Batteries manufactured with gray case / gray cover unless noted.

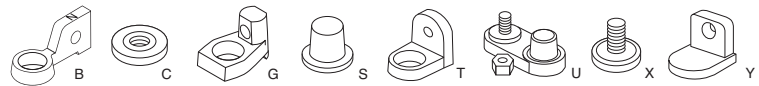
**Peak Rating - Maximum amount of amp-hours a battery can deliver at a specified rate

Footnotes:

- 17 - Includes handle
- 38 - "Non-Spillable" defined by DOT (Department of Transportation) definitions
- 39 - "Non-Spillable" defined by ICAO (International Commercial Airline Organization) and IATA (International Airline Transport Association) definitions

Terminal Information

- B - Flag Terminal w/ 3/8" diameter hole
- C - 1/4-20 Treaded Insert
- G - Flag Terminal w/ 5/16" diameter hole
- S - SAE "automotive type" post (TSAE)
- T - "L" Terminal w/ 3/8" diameter hole
- U - 5/16" Threaded Post / SAE
- X - 3/8-16 stainless steel threaded post
- Y - Small "L" terminal w/ 5/16" diameter hole



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