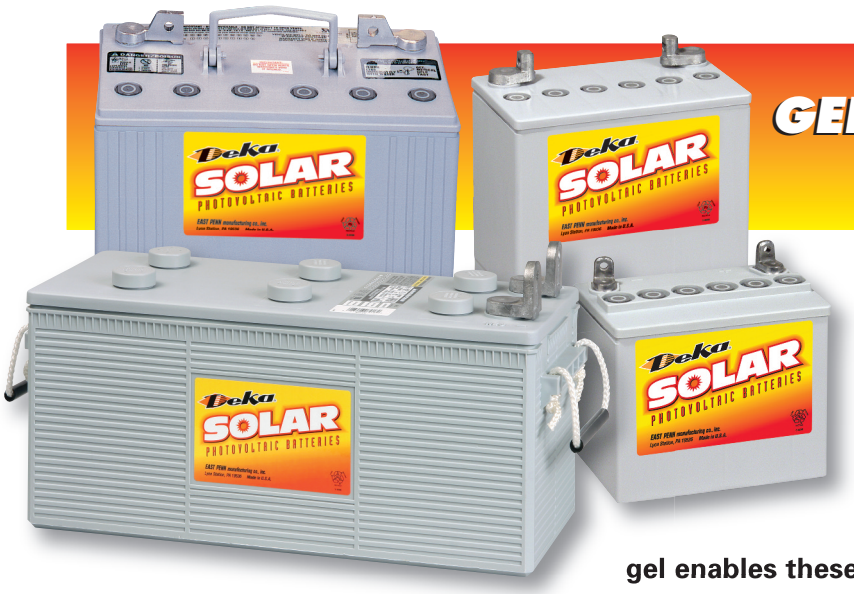
Deka SOLAR

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	

Deka SOLAR PHOTOVOLTAIC BATTERIES

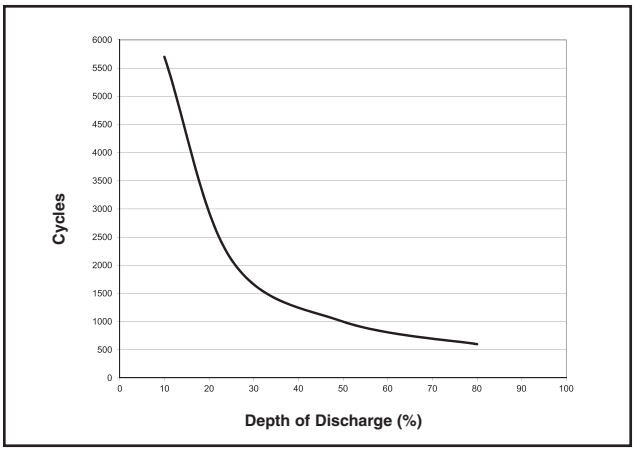
QUALITY SYSTEM CERTIFIED ISO 9001 ISO/TS 16949 ENVIRONMENTAL SYSTEM CERTIFIED ISO 14001

CLASSIFIED UL

Photovoltaic Charging Parameters		
Bulk Charge	Max Current (amps)	30% of 20 Hr Rate
Absorption (Regulation) Charge	Constant Voltage	2.35 - 2.43 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.

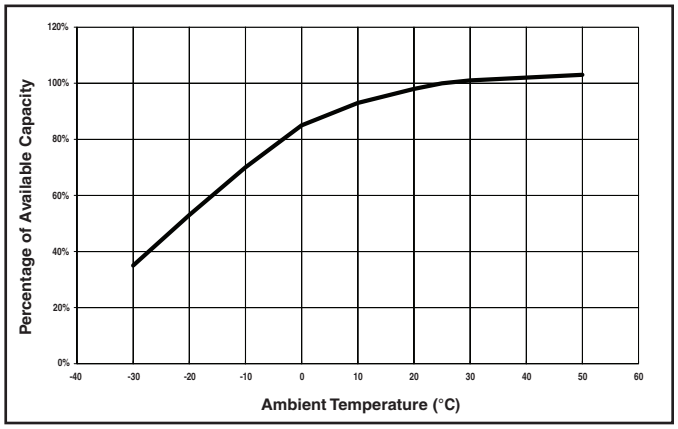
Cycle Life vs Depth of Discharge at +25°C (77°F)*



Cycle Chart applies to types with similiar design characteristics, ex., U1, 22NF, 24, 27, 31.

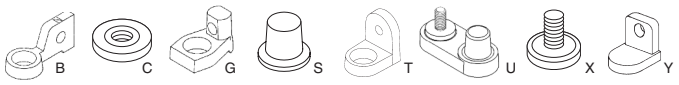
The solar battery excels in cycling applications.
**Dependent upon proper charging and ambient temperatures.*

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.

Terminal Information



BATTERY TYPE	FOOT NOTE	VOLTS	AMPERE HOUR CAPACITY 77°F (25°C)				PEAK RATING** [1.75 vpc @ 77°F (25°C)]			SHORT CIRCUIT CURRENT	WEIGHT lb (kg)	DIMENSIONS - in (mm)		
			10 HR	20 HR	24 HR	100 HR	5 HR	20 HR	100 HR			L	W	H
8GU1	39,39,Y	12	30.5	31.6	31.9	36.0	28.4	33.3	36.5	1175	23 (10.5)	7.71 (196)	5.18 (132)	7.22 (183)
8GU1H	17,38,39,Y	12	30.5	31.6	31.9	36.0	28.4	33.3	36.5	1175	23 (10.5)	8.31 (211)	5.18 (132)	7.22 (183)
8G40C	38,39,C	12	37.0	40.0	40.8	48.0	36.0	42.1	48.7	1331	32 (14.5)	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	1335	37 (16.8)	8.99 (228)	5.47 (139)	9.24 (235)
8G34R	38,39,C	12	53.0	60.0	61.7	70.0	50.3	63.2	71.0	1845	42 (19.1)	10.20 (259)	6.65 (169)	7.05 (179)
8G24	17,38,39,G	12	68.0	73.6	74.9	84.5	66.0	77.0	85.0	2012	52 (23.6)	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	2348	63 (28.6)	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	2715	70 (31.8)	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	2796	70 (31.8)	12.93 (329)	6.75 (171)	9.34 (237)
8GGC2	38,39,U	6	168	180	182	198	154	189	198	3647	68 (30.8)	10.26 (261)	7.09 (180)	11.06 (281)
8G4D	17,T	12	169	183	187	210	153	193	213	5482	137 (62.0)	20.73 (527)	8.44 (214)	10.82 (275)
8G8D	17,T	12	210	225	229	265	188	237	269	5794	166 (75.0)	21.03 (534)	11.00 (279)	10.82 (275)
8G5SHP	17,B	12	107	115	116	123	110	125	137	2686	85 (38.5)	13.58 (345)	6.77 (172)	11.42 (290)
8GTE35	S (TSAE)	6	183	196	199	211	180	210	220	2902	69 (31)	9.64 (245)	7.51 (191)	10.65 (270)
8G8VGC	U	8	126	140	143	160	114	147	162	4117	70 (31.8)	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 AirlineOrganization) and IATA (International Airline Transport Association) definitions

B - Flag Terminal w/ 3/8" diameter hole

C - 1/4-20 Treaded Insert

G - Flag Terminal w/ 5-16" diamater 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

EastPenn

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