MK POWERED®



Gel Batteries

The Sealed Battery Specialists

Advanced design/manufacturing, including IPF™ technology, combine to make MK Battery's Sealed Gel Batteries the standard by which all other gel batteries are measured.

GENERAL APPLICATIONS

Specifications							Minutes Discharged @*			Discharge Amps*♦			Ah Capacity*			Weight
Model	Voltage	Foot Notes	Terminal	CCA @ 0° F	CA @ 32° F	RC @ 80° F	5 Amps	25 Amps	75 Amps	5 Hour	20 Hour	100 Hour	5 Hr Rate	20 Hr Rate	100 Hr Rate	Approx. Lbs. (kg)
8GU1	12	1	Y	200	290	44	325	47	5	5.4	1.6	0.36	26.8	31.6	36.0	23 (10.5)
8GU1H	12	H/1	Y	200	290	44	325	47	5	5.4	1.6	0.36	26.8	31.6	36.0	23 (10.5)
8G40	12	2	C	225	325	59	430	63	11	6.8	2.0	0.48	34.0	40.0	48.0	32 (14.5)
8G22NF	12	2	G	210	300	77	557	82	13	8.6	2.6	0.58	43.2	51.0	58.0	37 (16.8)
8G34	12	2	C	300	420	90	640	96	21	9.5	3.0	0.70	47.5	60.0	70.0	42 (19.1)
8G24	12	1	U	410	575	132	845	140	33	12.6	3.7	0.85	63.0	73.6	84.5	52.5 (23.8)
8G24 FT	12	1	C	335	470	132	845	140	33	12.6	3.7	0.85	63.0	73.6	84.5	52 (23.6)
8G24 UT	12	1	G	335	470	132	845	140	33	12.6	3.7	0.85	63.0	73.6	84.5	52 (23.6)
8G27	12	H/1	U	505	700	160	1000	170	40	14.4	4.4	0.99	72.0	88.0	99.0	63 (28.6)
8G27-T876	12	H/1	B	400	550	160	1000	170	40	14.4	4.4	0.99	72.0	88.0	99.0	63 (28.6)
8G27-T881	12	1	G	400	550	160	1000	170	40	14.4	4.4	0.99	72.0	88.0	99.0	63 (28.6)
8G30H	12	H/1	B	450	640	180	1160	190	51	16.1	4.9	1.1	80.5	97.6	108	70 (31.8)
8G31DT	12	H/1	U	550	780	180	1160	190	51	16.1	4.9	1.1	80.5	97.6	108	70 (31.8)
8G31	12	H/1	X	450	640	180	1160	190	51	16.1	4.9	1.1	80.5	97.6	108	70 (31.8)
8GGC2	6	4	G	585	850	345	2200	375	92	29.4	9.0	2.0	147	180	198	68 (30.8)
8G4D	12	H/3	S	970	1245	375	2300	395	105	30.5	9.2	2.1	153	183	210	127 (57.6)
8G4D LTP	12	H/3	T	970	1245	375	2300	395	105	30.5	9.2	2.1	153	183	210	127 (57.6)
8G8D	12	H/3	S	1150	1470	475	3000	500	135	37.6	11.3	2.7	188	225	265	157 (71.2)
8G8D LTP	12	H/3	T	1150	1470	475	3000	500	135	37.6	11.3	2.7	188	225	265	157 (71.2)

Charging Information

* AMPERE HOUR CAPACITY IS A NOMINAL RATING. CAPACITIES ARE BASED ON PEAK PERFORMANCE.
♦ DISCARGE AMPS TO 1.75VPC @ 77ºF (25ºC).

IMPORTANT CHARGING INSTRUCTIONS: WARRANTY VOID IF OPENED OR IMPROPERLY CHARGED. Constant under or overcharging will damage any battery and shorten its life! Use a good constant potential, voltage-regulated charger. **For 12-volt batteries, charge to at least 13.8 volts but no more than 14.1 volts at 68ºF (20ºC). For 6-volt batteries, charge to at least 6.9 volts but no more than 7.05 volts at 68ºF (20ºC).** Do not charge in a sealed container.

BENEFITS

- Sealed construction eliminates periodic watering, corrosive acid fumes and spills.
- Electrolyte will not stratify, no equalization charging required. Allows faster recharge.
- Increases durability and deep cycle ability for heavy demand applications.
- Less than 2% per month stand loss means little deterioration during transport and storage.
- Individual plate formation (IPF™) ensures voltage matching between cells.
- Transports easily and safely by air.
- Quality construction ensures reliable performance.

APPLICATIONS

- Water Pumping
- Residential
- Communications
- Cathodic Protection
- Remote Monitoring
- Refrigeration
- Lighting
- Aids to Navigation
- Wind Generation
- Power Wheelchairs
- RV
- Golf Cart
- Solar
- Many Other Applications

SPECIFICATIONS

Plate Alloy	Lead calcium
Posts	Forged terminals & bushings
Container/Cover	Polypropylene
Charge Voltage @ 68ºF (20ºC)	Cycle 2.30 to 2.35; Float 2.25 to 2.30 v.p.c.
Electrolyte	Sulfuric acid thixotropic gel
Vent	Self sealing
Operating Temperature	Fully charged range: -76ºF (-60ºC) to 140ºF (60ºC)
Non-Spillable Rating	by DOT (Department of Transportation), ICAO (International Commercial Airline Organization), and IATA (International Airline Transport Association) definitions.

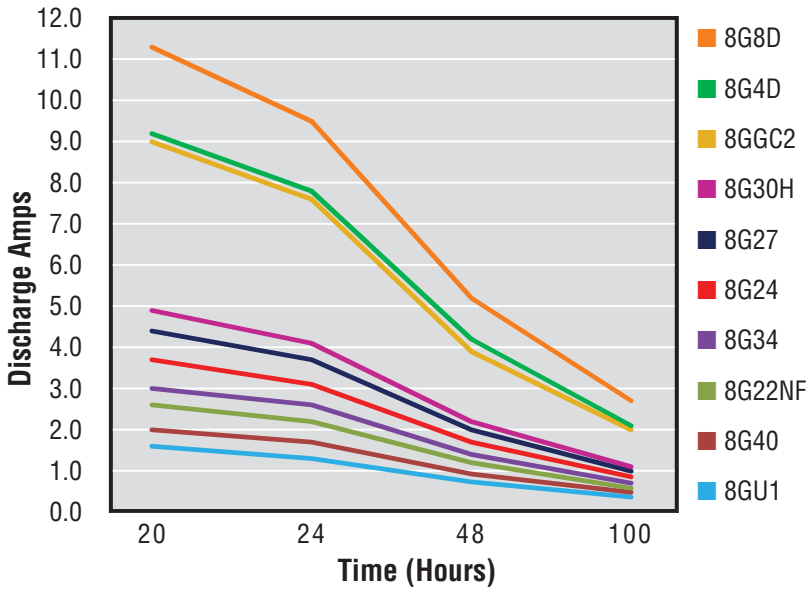
GEL SPECIFICATIONS

Dimensions – Inches (mm)

L	W	H[n]
7.71 (196)	5.18 (132)	7.22 (183)
8.31 (211)	5.18 (132)	7.22 (183)
7.76 (197)	6.62 (168)	6.87 (174)
8.99 (228)	5.47 (139)	9.24 (235)
10.20 (259)	6.65 (169)	7.05 (179)
10.90 (277)	6.80 (173)	9.88 (251)
10.20 (259)	6.80 (173)	8.24 (209)
10.20 (259)	6.80 (173)	9.24 (235)
12.75 (324)	6.80 (173)	9.88 (251)
12.83 (326)	6.56 (167)	9.30 (236)
12.83 (326)	6.56 (167)	9.24 (235)
12.93 (329)	6.75 (171)	9.76 (248)
12.93 (329)	6.75 (171)	9.34 (237)
12.93 (329)	6.75 (171)	9.34 (237)
10.26 (261)	7.09 (180)	11.06 (281)
20.73 (527)	8.44 (214)	10.00 (254)
20.73 (527)	8.44 (214)	10.82 (275)
20.75 (527)	11.00 (279)	10.00 (254)
21.03 (534)	11.00 (279)	10.82 (275)

[n] Total height includes terminals.

Discharge Amps to 1.75 VPC @ 77ºF (25ºC)



LEAD RETURN Pb RECYCLE

UL Recognized Component
MH17218

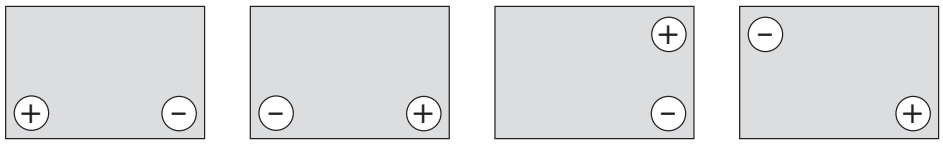
East Penn Manufacturing
QUALITY SYSTEM CERTIFIED TO
ISO 9001
ISO/TS 16949
ISO 14001

Pb

Please refer to the MK Battery website at www.mkbattery.com for more detailed specifications

FOOTNOTES

TERMINAL POLARITY



1
8GU1, 8GU1H, 8G24, 8G24FT, 8G24UT, 8G27, 8G27T876, 8G27T881, 8G30H, 8G31DT, 8G31

2
8G22NF, 8G34, 8G40

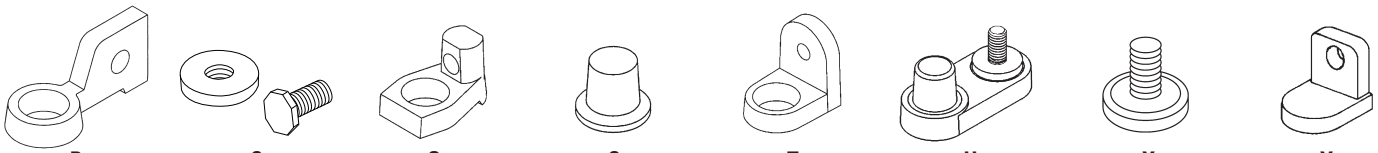
3
8G4D, 8G4DLTP, 8G8D, 8G8DLTP

4
8GGC2

CASE OPTIONS

H
Includes handles

TERMINAL TYPE



B
Flag terminal with 3/8" diameter hole (T876)

C
Insert with 1/4" - 20 round hole

G
Offset post with horizontal hole, stainless steel 5/16" bolt & hex nut (T881)

S
SAE "Automotive Post" (TSAE)

T
Heavy Duty "L" terminal with 3/8" diameter hole (T975)

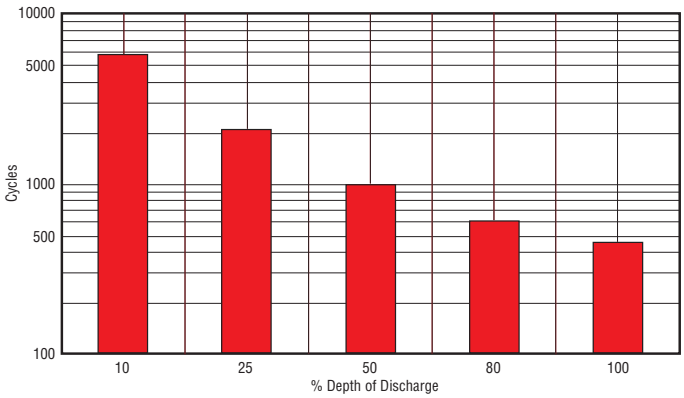
U
Molded-in offset SAE post & vert 5/16" NEG. & 5/16" POS. stainless steel studs & wing nuts

X
3/8" - 16 stainless steel stud posts (STUD)

Y
Small "L" terminal with 1/4" - 20 round hole (T873)

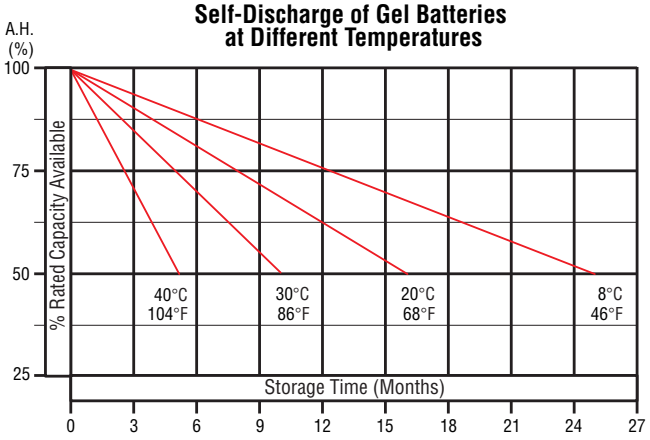
CHARACTERISTICS OF MK GEL BATTERIES

Gel Cycle Life vs Depth of Discharge at +25ºC (77ºF) Based on BCI 2-hour Capacity

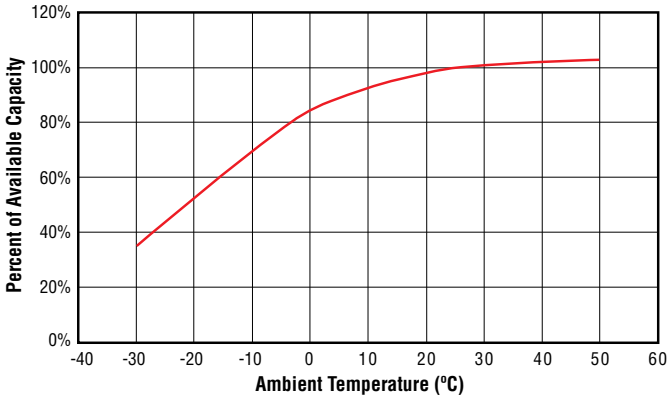


Cycle Chart applies to all MK Gel batteries (except 8GGC2 cycle chart x 2, 8G24/8G27 with a U terminal and 8G31DT cycle chart x .67).

Self-Discharge of Gel Batteries at Different Temperatures

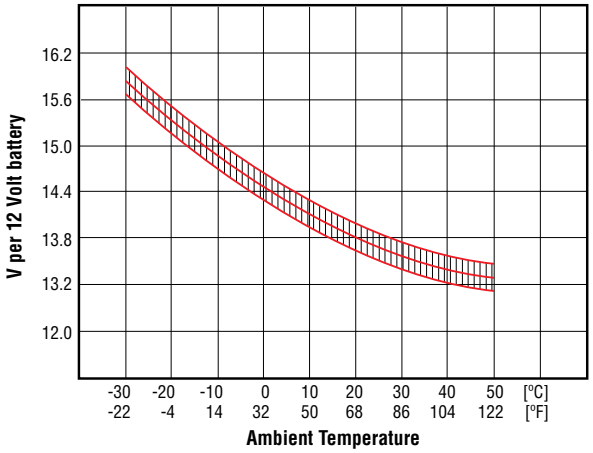


Capacity vs Operating Temperature



Capacity vs Operating Temperatures
Shown 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.

Constant Charging Voltage



Constant Charging Voltage
Shown is the constant charging voltage in relation to the ambient temperature. The bandwidth shows a tolerance of ± 30mV/cell. This constant voltage is suitable for continuous charging and cyclic operation. In a parallel stand-by mode it always keeps the battery in a fully charged state; in a cyclic mode, it provides for rapid recharging and high cyclic performance.

YOUR PARTNER IN POWER

MK Battery is one of the largest sealed lead acid battery suppliers worldwide due to our total commitment to the following core principles:

Products
MK Battery supplies only the highest quality batteries (gel, AGM and flooded deep cycle) that are specifically designed for our customers' many, varied applications including broadband communications, UPS (uninterruptible power supplies), power wheelchairs, telephony (valve-regulated stationary), solar, marine and electronics.

Service
MK Battery ships fresh inventory fast, often within 24 hours, from a stock of more than 100,000 batteries in multiple distribution centers throughout the world and assists our customers with proper spent battery disposal through EPA permitted smelters. (Please note that violation of hazardous waste disposal laws can place heavy penalties on offenders).

Customer Care
MK Battery is genuinely concerned for our customers' well-being as a long-term partner... not just a supplier. MK Battery listens to our customers and delivers what you want, when you need it.

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