



# Energizing Independence



HME / Mobility





Advanced design/manufacturing, and proven performance over time combine to make MK Battery's Genuine Gel Batteries the standard by which all others are measured.



# High Capacity Gel Batteries

## General Specifications

Model	Volt	Amp Hour 5 HR*	Amp Hour 20 HR*	Weight Lbs. (Kgs.)	Length In. (mm)	Width In. (mm)	Total Height In. (mm)**	Terminal Type
MU-1 SLD G	12	26.8	31.6	23.5 (11)	7.71 (196)	5.18 (132)	7.22 (183)	Y
M40-12 SLD G	12	34.0	40.0	31.5 (14)	7.76 (197)	6.62 (168)	6.88 (175)	C
M22NF SLD G	12	43.2	51.0	37.5 (17)	8.99 (228)	5.47 (139)	9.26 (235)	G
M34 SLD G	12	47.5	60.0	41.0 (19)	10.20 (259)	6.64 (169)	7.05 (179)	C
M24 SLD G	12	63.0	73.6	51.5 (23)	10.20 (259)	6.56 (167)	9.27 (235)	G
M24 SLD G FT	12	63.0	73.6	51.5 (23)	10.20 (259)	6.80 (173)	8.24 (209)	C
E27 SLD G	12	72.0	88.0	62.0 (28)	12.83 (326)	6.56 (167)	9.33 (237)	B
E31 SLD G ST	12	80.5	97.6	68.5 (31)	12.93 (328)	6.74 (171)	9.33 (237)	X

\*Ampere hour capacity is a nominal rating. All ratings are after 15 cycles and conform to B.C.I. specifications. \*\*Includes Terminal. All data subject to change without notice.

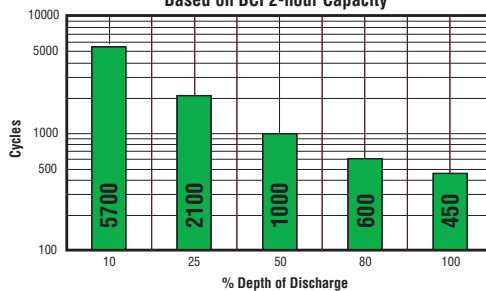
## MK Genuine Gel The Mobility Industry Standard

When you think quality Deep Cycle batteries, think of MK Battery. Our premium, Sealed Genuine Gel batteries have been the number one choice for years by the leading wheelchair manufacturers. When it comes to performance and quality, accept no imitations.

- Deep Cycle - Premium, Sealed Valve Regulated Lead Acid (VRLA) batteries capable of up to 1100 cycles for a typical HME mobility user.
- Gelled/Suspended Electrolyte - No liquid of any kind; battery is completely sealed. Safe in any position.
- Maintenance Free - Water is never added; low liability.
- Travel & Ship Easily - MK batteries are F.A.A., IATA, and UPS approved. Others may not be.
- Safety - MK Sealed VRLA batteries have a special re-sealing vent system that prevents excessive internal pressure; thus, they cannot explode under normal conditions.



MK Gel Cycle Life vs Depth of Discharge at +25°C (77°F)  
Based on BCI 2-hour Capacity



In a battery, one discharge plus one recharge equals one cycle.

Number of Cycles at 80% Depth of Discharge



Gel Cycle Life and AGM Cycle Life vs Depth of Discharge at +25°C (77°F) based on BCI 2-hour capacity

\*When comparing MK GEL Batteries with MK AGM Batteries at 80% depth of discharge

MK Battery considers AGM batteries to be suitable for lighter duty mobility equipment only. AGM batteries used in more robust applications such as complex rehab mobility devices, where daily deep discharges are the norm, may void the warranty.



ISO 9001



## 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.
- Meets standard industry gel battery definition which states that "the electrolyte must be immobilized by a gelling agent." (see definition below).
- Transports safely by air.
- Quality construction ensures reliable performance.

## DESIGN SPECIFICATIONS

Voltage	12 volts nominal
Plate Alloy	Lead Calcium
Posts	Forged terminals and bushings
Container/Cover	Polypropylene
Charge/Absorption /Equalize	2.30 vpc to 2.43 vpc @ 77°F (25°C)
Float/Standby	2.25 vpc ± 0.01 77°F (25°C)
Electrolyte	Sulfuric acid thixotropic gel
Vent	Self sealing
Operating Temperature	Fully charged range: -76°F (-60°C) to 140°F (60°C)

**BCI Definition:** GEL – Electrolyte that has been immobilized by the addition of a chemical agent, normally fine silica, to prevent spillage. Batteries made with gelled electrolyte are often referred to as Gel batteries.

**NON-SPILLABLE** by DOT (Department of Transportation), ICAO (International Commercial Airline Organization), and IATA (International Airline Transport Association, A67) definitions.

# Small Sealed AGM Batteries

## General Specifications

Model	Volt	Amp Hour 20 HR*	Weight Lbs. (Kgs.)	Length In. (mm)	Width In. (mm)	Total Height In. (mm)**	Terminal Type
ES4-6	6	4.5	1.80 (0.82)	2.76 (70)	1.85 (47)	4.17 (106)	F1
ES12-6	6	12	4.05 (1.84)	5.94 (151)	1.97 (50)	3.90 (99)	F1
ES1.2-12	12	1.2	1.21 (0.55)	3.82 (97)	1.69 (43)	2.32 (59)	F1
ES3-12	12	3	2.87 (1.3)	5.28 (134)	2.64 (67)	2.58 (66)	F1
ES5-12	12	5	4.18 (1.9)	3.54 (90)	2.76 (70)	4.21 (107)	F1, F2
ES7-12	12	7.2	5.28 (2.4)	5.94 (151)	2.56 (65)	4.02 (102)	F1, F2
ES9-12	12	9	5.94 (2.7)	5.94 (151)	2.56 (65)	4.02 (102)	F1, F2
ES10-12S	12	10	7.24 (3.3)	5.94 (151)	2.56 (65)	4.67 (118)	F2
ES12-12	12	12	8.84 (4.0)	5.94 (151)	3.86 (98)	3.86 (98)	F2
ES14-12	12	14	9.68 (4.4)	5.94 (151)	3.86 (98)	3.86 (98)	F2
M17-12 SLD M	12	18	12.89 (5.9)	7.13 (181)	2.99 (76)	6.57 (167)	F2, F3
ES20-12C	12	20	13.09 (6.0)	7.13 (181)	2.99 (76)	6.57 (167)	F3, F6
ES22-12	12	22	15.18 (6.9)	7.13 (181)	2.99 (76)	6.57 (167)	F8
M12260 SLD M	12	26	20.50 (9.3)	6.54 (166)	6.89 (175)	4.92 (125)	F2, F3

\*Ampere hour capacity is a nominal rating. \*\*Includes Terminal. All data subject to change without notice.



MK Battery carries a complete line of replacement batteries for all types of medical device applications.

## 24V Chargers

All chargers are fully automatic with LED indicators that signal charging status for Sealed GEL/AGM batteries.

Model	Amp
LS24/3.5A-08	3.5
LS24/5A-08	5
LS24/8A-08	8
LS24/10A-08	10

# High Capacity 12V AGM Batteries

## General Specifications

Model	Amp Hour 20 HR*	Weight Lbs. (Kgs.)	Length In. (mm)	Width In. (mm)	Total Height In. (mm)**	Terminal Type
MU-1 SLD A	32	23.00 (10.0)	8.41 (214)	5.18 (132)	7.22 (183)	Y
MU-1 SLD M-33	33	22.20 (10.1)	7.76 (197)	5.16 (131)	7.09 (180)	F4
MU-1 SLD M-33-FT	33	22.20 (10.1)	7.76 (197)	5.16 (131)	6.65 (169)	F6
MU-1 SLD M	35	22.71 (10.3)	7.76 (197)	5.16 (131)	7.09 (180)	F4
MU-1 SLD M FT	35	22.71 (10.3)	7.76 (197)	5.16 (131)	6.65 (169)	F6
M40-12 SLD M	45	29.70 (13.5)	7.78 (198)	6.54 (166)	6.73 (171)	F4
M22NF-HC	48.4	40.00 (18.0)	8.99 (228)	5.47 (139)	8.27 (210)	C
M50-12 SLD M	50	33.20 (15.1)	7.83 (199)	6.54 (166)	6.73 (171)	F8
M22NF SLD A	55	37.00 (17.0)	9.60 (244)	5.47 (139)	9.24 (235)	G
M55-12 SLD M	55	38.06 (17.3)	8.90 (226)	5.31 (135)	8.43 (214)	F8
M65-12 SLD M	65	45.32 (20.6)	10.20 (259)	6.61 (168)	7.01 (178)	F8
M75-12 SLD M	75	53.68 (24.4)	10.24 (260)	6.69 (170)	8.15 (207)	F8

\*Ampere hour capacity is a nominal rating. \*\*Includes Terminal. All data subject to change without notice.

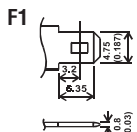


## Test Equipment

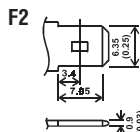
Model	Description
E-100-20	Volt Meter, Digital 5-60 DC
E-100-10	Battery Load Tester, 12 Volt
MK70	Discharge Capacity Tester



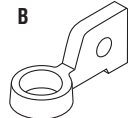
## Terminals



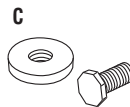
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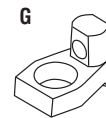
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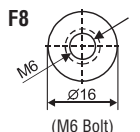
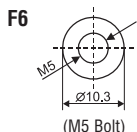
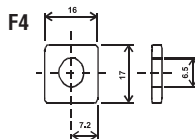
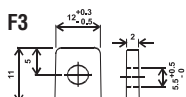
Flag terminal with 3/8" diameter hole (T876)



Insert with 1/4" - 20 round hole



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



3/8" - 16 stainless steel threaded post



Small "L" terminal with 5/16" diameter hole

## Alkaline Batteries



# Supporting the HME Industry

MK Battery is committed to helping our HME business partners succeed in today's challenging environment. While supporting legislative initiatives to improve access and reimbursement for home medical equipment, we offer an array of training and merchandising options specifically designed for the HME provider. Resources like accredited technical training programs and consumer-oriented battery care support tools enhance the total customer experience in the power mobility business. From batteries to chargers to wheelchair parts and accessories, we've got you covered.



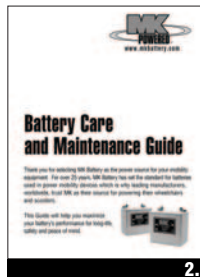
1.



3.



4.



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5.

1. Attractive "Recharge Every Night" reminder stickers are available to MK customers free of charge for placement on dispensed power mobility equipment. Authorized dealer decals also available.

2. The Battery Care & Maintenance Guide provides consumers with concise tips on proper care, charging, storage & maintenance and safety aspects associated with batteries used in their mobility equipment.

3. The complete line of Rolko parts and accessories is available through MK Battery, with many of the most popular items stocked locally for route delivery (where available). Consolidate your orders for batteries, chargers, parts and accessories to reduce or eliminate freight, handling, and administrative costs.

4. MK Battery offers an assortment of technical and educational support, specifically designed for the HME industry. Accredited in-service presentations and a host of other technical and training tools are available to authorized dealers.

5. MK Battery is committed to supporting the strategic industry initiatives at the national, state and local levels. Through educational programs, participation in global wheelchair standards committees, direct lobbying efforts, and financial support of industry associations, MK Battery is your partner in protecting the interests of the HME community.

MK Battery proudly supports:

AAHOMECARE | NRRTS | NCART | RESNA | ALL WHEELS UP

MK Battery is a proud sponsor and the official battery of the United States Power Soccer Association.

[www.powersoccerusa.org](http://www.powersoccerusa.org)

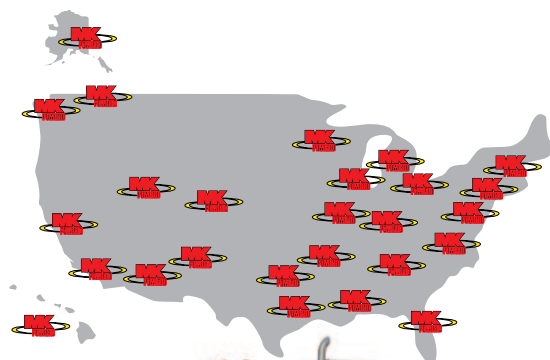


## YOUR PARTNER IN POWER

MK Battery is one of the world's largest specialty Sealed VRLA, deep-cycle battery suppliers. Trusted globally by mobility products manufacturers and HME providers, our mission to supply the highest quality battery products to the mobility industry has kept us at the forefront of providing unsurpassed battery performance and dependability.

Extended cycle life and high capacity sealed batteries are MK's hallmark. This means greater service life and performance for your customers. Our ongoing R&D efforts ensure you the most effective technology to meet your unique requirements.

MK Battery ships fresh inventory fast, often within 24 hours, from a stock of more than 100,000 batteries in over 30 distribution centers throughout the world, and assists our customers with proper spent battery disposal thru EPA permitted smelters. (Please note that violation of hazardous waste disposal laws can place heavy penalties on offenders).



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