

## Specialty

# Battery Range Summary

Since its introduction in the early 1990s, the Genesis<sup>®</sup> Thin Plate Pure Lead (TPPL) battery has established itself as a premium high performance battery suitable for a wide range of demanding applications.

Today, Genesis EP batteries are found in applications as diverse as electronics, medical equipment, telecommunications, renewable energy, computer backup and Uninterruptible Power Supply (UPS) applications. In addition to its superior performance characteristics, the Genesis EP battery excels in physically demanding applications such as high temperature and high vibration environments.

The TPPL technology allows the battery to pack more power into a smaller footprint. The EP battery also offers deep cycling capabilities, fast recharge abilities and a non-spillable design which allows mounting in any position except inverted.

#### **Features and Benefits**

- Capacity range 13 200Ah
- High power density
- Excellent cycle life
- Superior float life
- High stable voltage delivery
- Wide temperature range
- Rugged construction
- · Fastest recharge when compare to other sealed lead batteries
- 2 year shelf life



#### Construction

- 12V pure lead-tin Valve Regulated Lead Acid (VRLA) Absorbent Glass Mat (AGM) battery
- UL 94V0 flame retardant case and cover
- M6 no-maintenance terminals
- Can be installed in any orientation except inverted
  Rugged construction (optional metal jacket -G200EP excluded)

## **Installation and Operation**

- -40°F (-40°C) to 176°F (80°C) with optional metal jacket (G200EP excluded)
- 2 year shelf life at 77°F (25°C)
- Cycle life up to 400 cycles at 80% depth of discharge

# Standards

- Non-spillable classification
- Approved for shipping as non-hazardous, non spillable (refer to SDS sheet)
- Recognized by UL File no. MH12544 (excludes G200EP); G200EP recognized by UL File no. MH18697
- The management systems governing the manufacture of this product are ISO 9001 and ISO 140001 certified

# **General Specifications**

	Capacity (Ah)				Nominal Dimensions								
ominal tage (V)	10 Hr Rate-Ah	Len in	igth mm	Wi in	dth mm	Hei in	ight mm	Typi Wei Ibs		Torq in-Ibs	ue Nm	Internal Resistance (mΩ)*	Short Circuit Current (A)*
12	13	6.89	175.0	3.27	83.1	5.08	129.0	10.8	4.9	50	5.6	21.4	600
12	16	7.12	180.8	2.99	75.9	6.57	166.9	13.5	6.1	50	5.6	19.1	675
12	28	6.54	166.1	6.89	175.0	4.92	125.0	22.3	10.1	60	6.8	12.3	1150
12	42	7.74	196.6	6.50	165.1	6.69	169.9	32.9	14.9	60	6.8	8.8	1480
12	72	12.94	328.7	6.54	166.1	6.85	174.0	53.5	24.3	60	6.8	6.1	2100
12	200	22.87	580.9	4.92	125.0	12.46	316.5	132.3	59.9	44	5.0	3.15	4000
1 1 1	2 2 2 2	2 28 2 42 2 72	2 28 6.54 12 42 7.74 12 72 12.94	2      28      6.54      166.1        12      42      7.74      196.6        12      72      12.94      328.7	2      28      6.54      166.1      6.89        12      42      7.74      196.6      6.50        12      72      12.94      328.7      6.54	2      28      6.54      166.1      6.89      175.0        12      42      7.74      196.6      6.50      165.1        12      72      12.94      328.7      6.54      166.1	12      28      6.54      166.1      6.89      175.0      4.92        12      42      7.74      196.6      6.50      165.1      6.69        12      72      12.94      328.7      6.54      166.1      6.89	2      28      6.54      166.1      6.89      175.0      4.92      125.0        12      42      7.74      196.6      6.50      165.1      6.69      169.9        12      72      12.94      328.7      6.54      166.1      6.85      174.0	12      28      6.54      166.1      6.89      175.0      4.92      125.0      22.3        12      42      7.74      196.6      6.50      165.1      6.69      169.9      32.9        12      72      12.94      328.7      6.54      166.1      6.85      174.0      53.5	12  28  6.54  166.1  6.89  175.0  4.92  125.0  22.3  10.1    12  42  7.74  196.6  6.50  165.1  6.69  169.9  32.9  14.9    12  72  12.94  328.7  6.54  166.1  6.85  174.0  53.5  24.3	12    28    6.54    166.1    6.89    175.0    4.92    125.0    22.3    10.1    60      12    42    7.74    196.6    6.50    165.1    6.69    169.9    32.9    14.9    60      12    72    12.94    328.7    6.54    166.1    6.85    174.0    53.5    24.3    60	12    28    6.54    166.1    6.89    175.0    4.92    125.0    22.3    10.1    60    6.8      12    42    7.74    196.6    6.50    165.1    6.69    169.9    32.9    14.9    60    6.8      12    72    12.94    328.7    6.54    166.1    6.85    174.0    53.5    24.3    60    6.8	12    28    6.54    166.1    6.89    175.0    4.92    125.0    22.3    10.1    60    6.8    12.3      12    42    7.74    196.6    6.50    165.1    6.69    169.9    32.9    14.9    60    6.8    8.8      12    72    12.94    328.7    6.54    166.1    6.85    174.0    53.5    24.3    60    6.8    6.1

\* Tested per IEC 60896 Part 21

## **Constant Current Discharge Performance**

Constant current discharge rate, amps to 10.02V at 77°F (25°C)

		Minutes		Hours							
Battery Type	10	15	30	1	5	8	10	20			
G13EP	41.4	30.8	17.9	10.3	2.5	1.6	1.3	0.7			
G16EP	49.3	36.6	21.5	12.6	3.1	2.1	1.7	0.9			
G26EP	87.6	65.4	38.3	22.1	5.3	3.5	2.9	1.5			
G42EP	118.9	90.3	54.4	32.1	8.0	5.4	4.4	2.3			
G70EP	218.5	165.7	98.5	57.0	13.6	9.0	7.3	3.9			
G200EP	475.6	380.4	241.9	150.8	36.9	24.3	19.8	10.4			

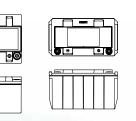
## **Constant Power Discharge Performance**

Constant power discharge rate, watts per battery to 10.02V at 77°F (25°C)

		Minutes		Hours						
Battery Type	10	15	30	1	5	8	10	20		
G13EP	467.0	348.0	206.0	120.0	30.0	20.0	16.0	9.0		
G16EP	560.0	421.0	251.0	149.0	38.0	25.0	20.0	11.0		
G26EP	990.0	749.0	446.0	260.0	63.0	42.0	34.0	18.0		
G42EP	1333.0	1026.0	629.0	376.0	96.0	64.0	52.0	28.0		
G70EP	2443.0	1879.0	1139.0	669.0	162.0	107.0	87.0	46.0		
G200EP	5148.0	4189.0	2736.0	1746.0	442.0	293.0	238.0	125.0		

## **Outline Drawings**





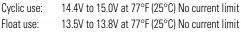
G13EP and G16EP G26EP and G42EP

G70EP

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G200EP

## **Charge Voltage**



Drawing sizes are for terminal position reference only; Diagrams are not proportionate to each other



