

## LXHG100-12(12V100AH)

Maintenance-free Valve Regulated Lead Acid Hybrid Gel Battery



UPS SYSTEM

GENERAL PURPOSE

EMERGENCY LIGHTING

MEDICAL

FIRE & SECURITY

SOLAR SYSTEM



### APPLICATIONS

- Communication power supply
- Engine starting
- Pump systems
- Alarm installations
- Marine and power stations
- Solar system

### GENERAL FEATURES

- Adopted advantage AGM-GEL technology
- Operation temperature  $-20 \sim 55^{\circ}\text{C}$
- $\leq 3\%$  Self discharge @  $25^{\circ}\text{C}$

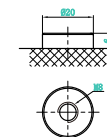
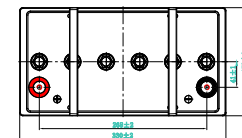
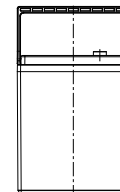
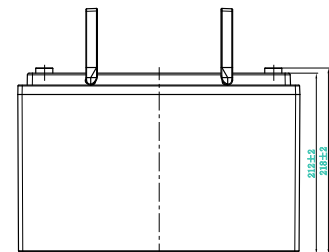
### STANDARDS

- IEC 60896 Certified
- Classified as "Long Life" according to Eurobat
- UL Certified, CE Certified
- Manufactured with IATF16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities

### SPECIFICATIONS

Rated Voltage	12V	
Nominal Capacity	100Ah	( $C_{10}, 1.80\text{V}/\text{cell}$ )
Dimension	Length	330±3mm (13.0 inches)
	Width	173±2mm (6.81 inches)
	Container Height	212±3mm (8.35 inches)
	Total Height	218±3mm (8.58 inches)
Approx Weight	30.8 Kg (67.9 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity(25°C)	103.0 Ah	(20hr, 5.15A, 1.80V/cell)
	100.0 Ah	(10hr, 10.0A, 1.80V/cell)
	85.0 Ah	(5hr, 17.0A, 1.75V/cell)
	73.8 Ah	(3hr, 24.6A, 1.75V/cell)
	57.0 Ah	(1hr, 57.0A, 1.60V/cell)
Max. Discharge Current	1200A (5s)	
Internal Resistance(25°C)	Approx 4.9mΩ	
Operating Temp. Range	Discharge	$-15 \sim 50^{\circ}\text{C}$ ( $5 \sim 122^{\circ}\text{F}$ )
	Charge	$-20 \sim 40^{\circ}\text{C}$ ( $-4 \sim 104^{\circ}\text{F}$ )
	Storage	$-15 \sim 40^{\circ}\text{C}$ ( $5 \sim 104^{\circ}\text{F}$ )
National Operating Temp Range	$25 \pm 3^{\circ}\text{C}$ ( $77 \pm 5^{\circ}\text{F}$ )	
Cycle Use	Initial Charging Current less than 25.0A. Voltage 14.4V-15.0V at $25^{\circ}\text{C}$ ( $77^{\circ}\text{F}$ ) Temp. Coefficient -30mV/°C	
	Standby Use	
Effect of temp. to Capacity	Initial Charging Current less than 25.0A. Voltage 13.5V-13.8V at $25^{\circ}\text{C}$ ( $77^{\circ}\text{F}$ ) Temp. Coefficient -20mV/°C	
	$40^{\circ}\text{C}$ ( $104^{\circ}\text{F}$ )	103%
	$25^{\circ}\text{C}$ ( $77^{\circ}\text{F}$ )	100%
$0^{\circ}\text{C}$ ( $32^{\circ}\text{F}$ )	86%	
Self Discharge	LXHG series batteries may be stored for up to 6 months at $25^{\circ}\text{C}$ ( $77^{\circ}\text{F}$ ) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

### DIMENSIONS



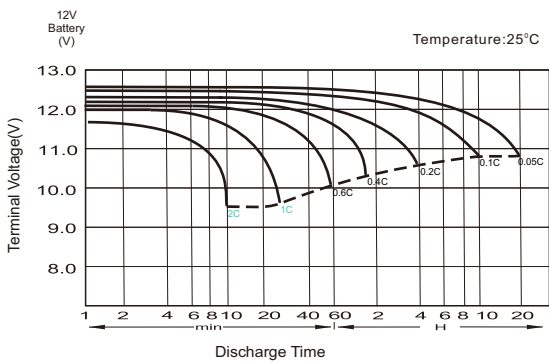
## LXHG100-12(12V100AH)

Maintenance-free Valve Regulated Lead Acid Hybrid Gel Battery

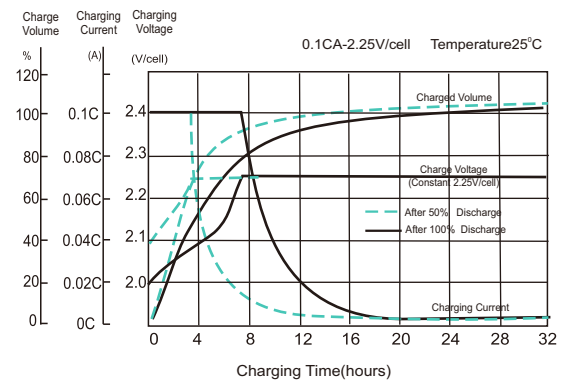
- UPS SYSTEM
- GENERAL PURPOSE
- EMERGENCY LIGHTING
- MEDICAL
- FIRE & SECURITY
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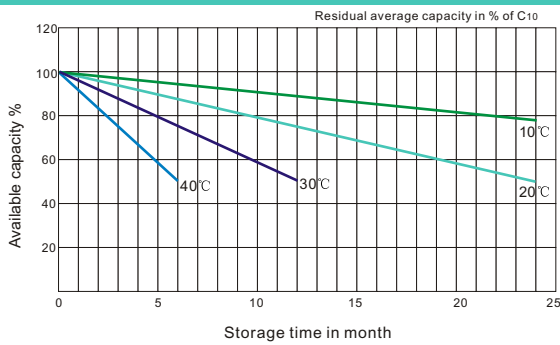
### DISCHARGE CHARACTERISTICS



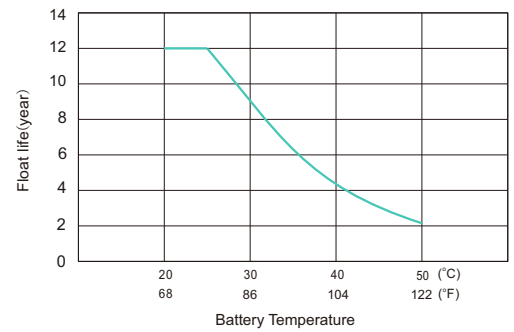
### FLOAT CHARGING CHARACTERISTICS



### GENERAL RELATION OF CAPACITY VS. STORAGE TIME



### FLOAT SERVICE LIFE



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	161.2	126.8	107.8	90.2	71.2	54.1	44.8	28.5	22.1	18.2	15.4	13.5	11.0	9.28	5.00
1.80V/cell	213.3	159.6	128.3	105.0	82.0	61.4	49.8	30.9	23.8	19.4	16.6	14.4	11.7	10.0	5.15
1.75V/cell	245.4	179.0	143.1	115.3	87.4	64.9	52.7	32.4	24.6	20.0	17.0	14.8	11.9	10.1	5.20
1.70V/cell	273.4	197.4	154.5	122.6	92.2	68.2	55.0	34.0	25.5	20.6	17.5	15.2	12.0	10.2	5.30
1.65V/cell	298.6	210.9	162.7	129.0	96.6	70.2	57.0	34.9	26.4	21.2	17.9	15.5	12.2	10.3	5.35
1.60V/cell	332.0	230.9	175.5	138.5	102.6	74.3	59.7	36.2	27.3	21.7	18.2	15.8	12.4	10.4	5.40

### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	297.0	235.9	202.7	171.2	136.5	104.5	86.8	55.4	43.2	35.7	30.4	26.5	21.7	18.4	9.94
1.80V/cell	389.0	293.8	238.3	196.7	155.2	117.7	96.0	59.9	46.2	37.8	32.5	28.4	23.1	19.8	10.2
1.75V/cell	437.8	324.0	262.2	213.7	164.0	123.4	101.1	62.6	47.7	38.9	33.2	29.1	23.4	20.0	10.3
1.70V/cell	473.5	348.6	278.8	225.2	171.8	128.9	105.0	65.5	49.2	40.0	34.0	29.6	23.7	20.1	10.5
1.65V/cell	508.8	368.4	290.7	234.7	178.2	131.7	108.1	66.9	50.9	41.0	34.7	30.2	24.0	20.3	10.6
1.60V/cell	552.6	394.1	308.3	249.3	187.8	138.3	112.7	69.0	52.4	41.8	35.2	30.8	24.3	20.6	10.7