



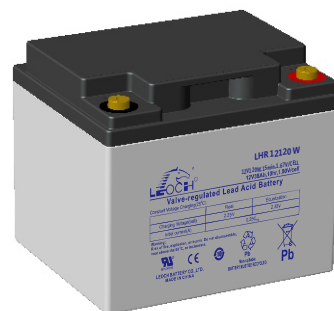
LHR Series-High Rate

LHR12120W(12V120W)

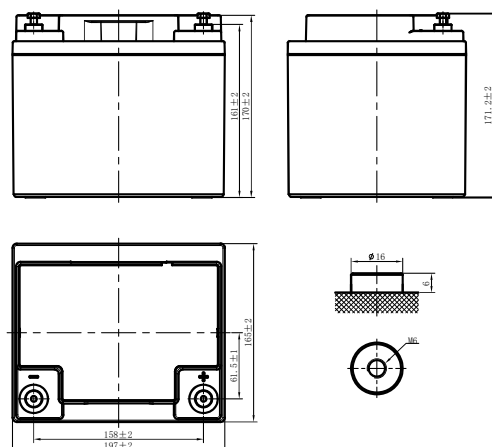


Specifications

Rated Voltage	12V		
Nominal Rate (W ₁₅ , 1.67V/cell)	120W		
Nominal Capacity(C ₁₀ , 1.80V/cell)	38Ah		
Dimension	Length	197±2mm (7.76 inches)	
	Width	165±2mm (6.50 inches)	
	Container Height	170±2mm (6.69 inches)	
	Total Height	170±2mm (6.69 inches)	
Approx. Weight	11.6 Kg (25.57 lbs)		
Terminal	M6		
Container Material	ABS: UL 94 HB or V-0		
Rated Capacity (25°C)	38.0 Ah	(10hr, 3.80A, 1.80V/cell)	
	35.3 Ah	(8hr, 4.41A, 1.80V/cell)	
	33.5 Ah	(5hr, 6.69A, 1.75V/cell)	
	30.3 Ah	(3hr, 10.1A, 1.75V/cell)	
	24.5 Ah	(1hr, 24.5A, 1.67V/cell)	
Max. Discharge Current	500A		
Internal Resistance (25°C)	Approx. 10.0mΩ		
Operating Temp. Range	Discharge	-20 ~ 55°C (-4 ~ 131°F)	
	Charge	-20~ 40°C (-4 ~ 104°F)	
	Storage	-15 ~ 50°C (5 ~ 122°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)		
Max. Charging Current(25°C)	9.5A		
Charge voltage(25°C)	Charge voltage	Temp. Coefficient	
	Float	2.25 ~2.30V/cell	-3mV/cell/°C
Effect of temp. to Capacity	Equalization	2.30~2.40V/cell	-4mV/cell/°C
	40°C (104°F)	106%	
	25°C (77°F)	100%	
Self Discharge	0°C (32°F)	86%	
	≤3%/month @ 25°C		



Layout



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	71.8	57.3	49.7	39.1	27.6	26.8	21.0	15.6	12.6	9.35	7.40	6.26	4.32	3.70
1.80V/cell	81.6	65.1	56.3	44.2	31.1	28.4	22.4	16.6	13.3	9.79	7.67	6.50	4.41	3.80
1.75V/cell	88.7	70.6	61.0	47.7	33.4	29.6	23.3	17.2	13.8	10.1	7.92	6.69	4.46	3.82
1.70V/cell	94.8	75.2	64.7	50.6	35.4	30.5	23.9	17.7	14.1	10.3	8.12	6.84	4.53	3.84
1.67V/cell	98.1	77.6	66.6	52.0	36.3	31.3	24.5	18.1	14.5	10.6	8.22	6.93	4.58	3.90
1.60V/cell	101.6	80.3	68.7	53.3	37.2	31.9	24.9	18.5	14.8	10.8	8.41	7.07	4.60	3.92

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	134.1	107.8	94.1	74.3	52.7	51.6	40.7	30.3	24.4	18.3	14.5	12.3	8.58	7.35
1.80V/cell	150.0	120.6	105.2	83.1	58.9	54.3	43.0	32.0	25.7	19.0	15.0	12.8	8.73	7.55
1.75V/cell	160.1	128.7	112.3	88.7	62.9	56.1	44.6	33.1	26.6	19.6	15.4	13.1	8.80	7.57
1.70V/cell	168.3	135.3	118.1	93.3	66.1	57.5	45.5	33.8	27.1	20.0	15.7	13.3	8.92	7.61
1.67V/cell	171.0	137.5	120.0	94.8	67.2	58.7	46.4	34.4	27.7	20.3	15.9	13.5	9.00	7.72
1.60V/cell	173.4	139.4	121.7	96.1	68.1	59.2	46.9	34.8	28.0	20.7	16.2	13.7	9.03	7.75



LHR Series-High Rate

LHR12120W(12V120W)



Applications

- UPS
- Hospitals & Testing Laboratories
- Emergency Power Supply
- Industrial Process Control Facilities
- Banks & Financial Markets
- Data & Network Operation Centers

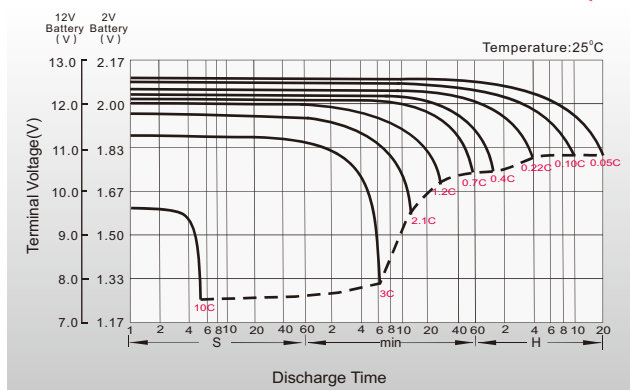
General Features

- High quality AGM separator: extend cycle life and prevent micro short circuit
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- Unique vent valve design: reduce water losing and prevent air/spark going inside

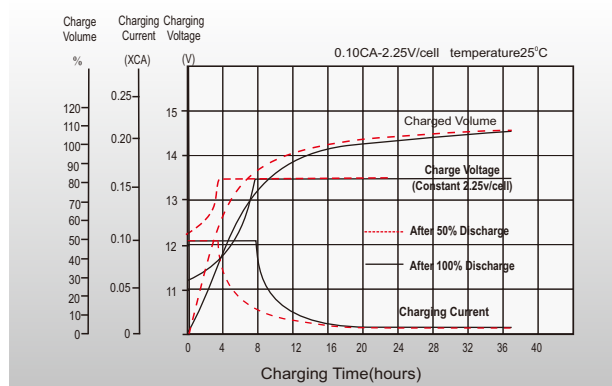
Standards

- Compliance with IEC 60896 standards
- Classified as "Long Life" according to Eurobat
- CE, UL, IEC Certified
- Manufactured in Leoch@IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

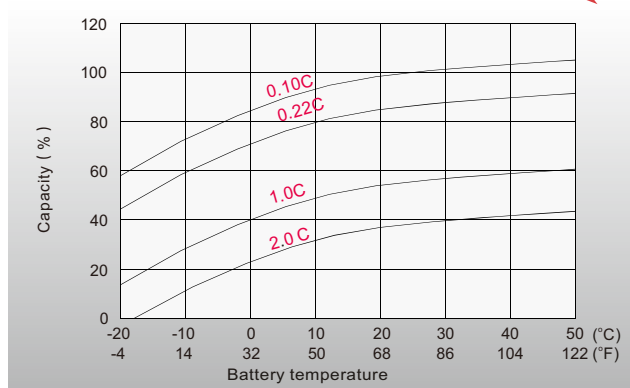
Discharge Characteristics



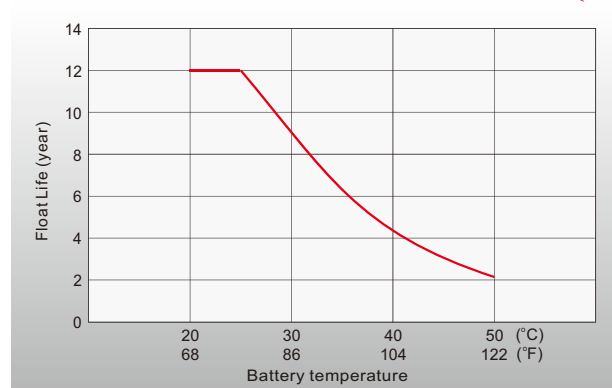
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



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