



# LHR Series-High Rate

## LHR12430W(12V430W)

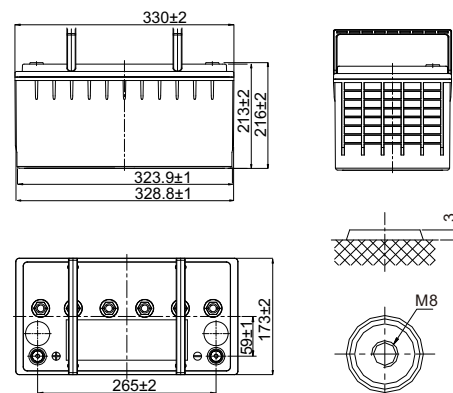


### Specifications

Rated Voltage	12V	
Nominal Rate ( $W_{15}, 1.67V/cell$ )	430W	
Nominal Capacity( $C_{10}, 1.80V/cell$ )	100Ah	
Dimension	Length	330±2mm (12.99 inches)
	Width	173±2mm (6.81 inches)
	Container Height	213±2mm (8.39 inches)
	Total Height	216±2mm (8.50 inches)
Approx. Weight	30.8 Kg (67.9 lbs)	
Terminal	M8	
Container Material	ABS(UL94 V-0)	
Rated Capacity (25°C)	100.0 Ah	(10hr, 10.0A, 1.80V/cell)
	97.6 Ah	(8hr, 12.2A, 1.80V/cell)
	89.0 Ah	(5hr, 17.8A, 1.75V/cell)
	78.3 Ah	(3hr, 26.1A, 1.75V/cell)
	67.0 Ah	(1hr, 67.0A, 1.67V/cell)
Max. Discharge Current	1500A	
Internal Resistance (25°C)	Approx. 3.5mΩ	
Operating Temp. Range	Discharge	-20 ~ 55°C (4 ~ 131°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-15 ~ 50°C (5 ~ 122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max. Charging Current(25°C)	25A	
Charge voltage(25°C)	Float	13.5V
	Temp. Coefficient	-3mV/cell/°C
	Equalization	14.1~14.4V
Effect of temp. to Capacity	40°C (104°F)	106%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤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	294.7	231.6	186.2	145.5	102.0	73.1	57.3	40.9	32.6	24.0	19.6	16.7	11.9	9.70
1.80V/cell	335.8	258.8	208.5	163.0	108.3	77.6	60.9	43.2	34.3	25.1	20.4	17.3	12.2	10.0
1.75V/cell	362.9	271.3	218.6	174.3	113.8	80.9	63.5	44.8	35.6	26.1	21.0	17.8	12.3	10.1
1.70V/cell	385.7	281.4	224.1	183.5	118.9	83.5	65.3	46.3	36.7	26.7	21.5	18.2	12.5	10.2
1.67V/cell	397.8	290.8	230.5	189.4	122.9	85.6	67.0	47.3	37.5	27.2	21.8	18.4	12.6	10.3
1.60V/cell	403.8	299.3	238.1	192.9	126.3	87.4	68.4	48.2	38.2	27.9	22.3	18.8	12.7	10.4

### 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	544.7	452.1	359.6	290.0	209.9	148.3	115.6	82.1	65.3	48.3	39.8	34.1	24.1	20.1
1.80V/cell	615.6	503.9	400.8	315.2	225.1	157.0	122.3	86.2	68.1	50.1	41.0	35.1	24.5	20.5
1.75V/cell	663.5	525.8	418.3	336.3	236.7	164.9	128.0	90.2	71.3	51.9	42.2	36.0	24.9	20.6
1.70V/cell	705.1	532.4	423.6	350.8	245.6	171.1	132.3	93.0	73.2	53.4	43.3	36.7	25.2	20.8
1.67V/cell	731.0	540.5	430.0	358.7	251.9	175.6	135.5	95.0	74.7	54.5	44.1	37.1	25.6	21.0
1.60V/cell	741.5	548.7	443.2	362.6	255.2	178.1	137.7	96.7	76.0	55.1	44.6	37.6	25.9	21.2



# LHR Series-High Rate

## LHR12430W(12V430W)



### Applications

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

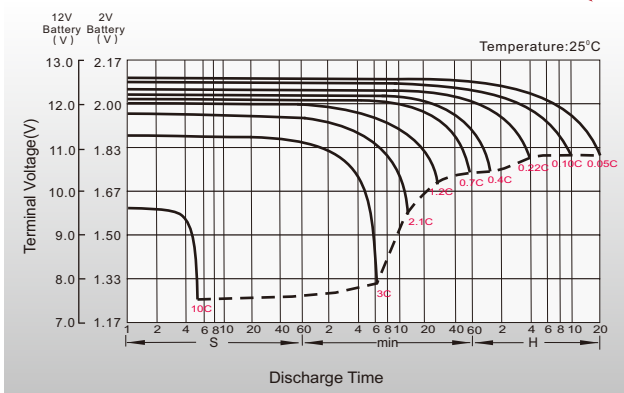
### General Features

- ABS material: UL94 V-0
- Oxygen recombination efficiency:  $\geq 98\%$
- High quality AGM separator: extend cycle life and prevent micro short circuit
- Unique vent valve design: reduce water losing and prevent air/spark going inside
- PbCaSn alloy for plate grids: less gassing, less self-discharging

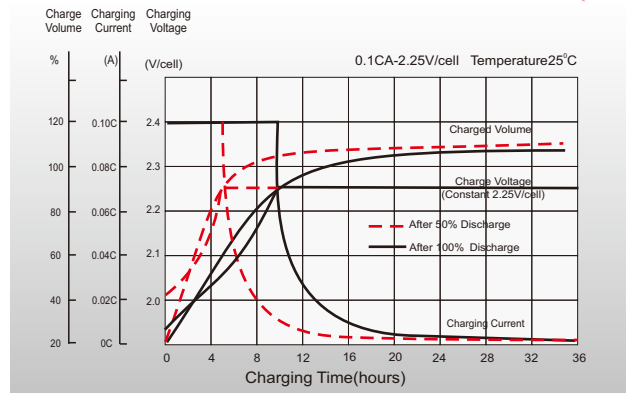
### Standards

- Compliance with IEC 60896 standards
- Classified as "Long Life" according to Eurobat
- CE, UL Certified
- Manufactured in Leoch@IATF16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

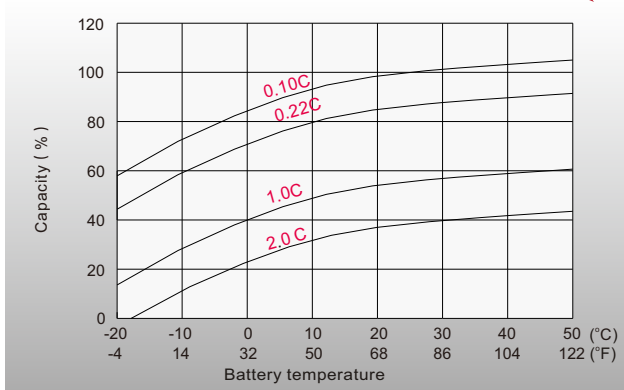
### Discharge Characteristics



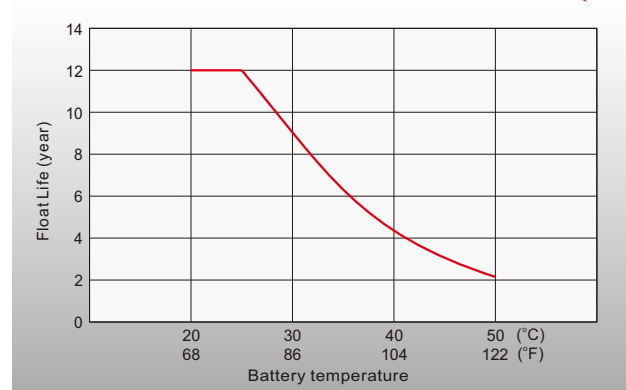
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Temperature Effects on Long Term Float Life



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