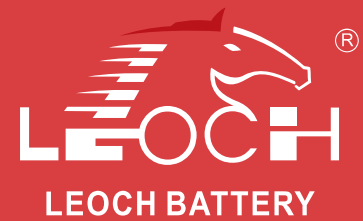




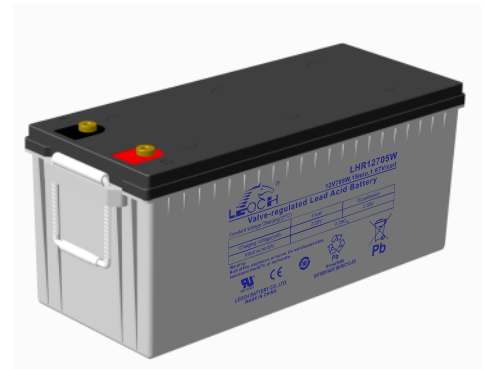
# LHR Series-High Rate

## LHR12705W(12V705W)

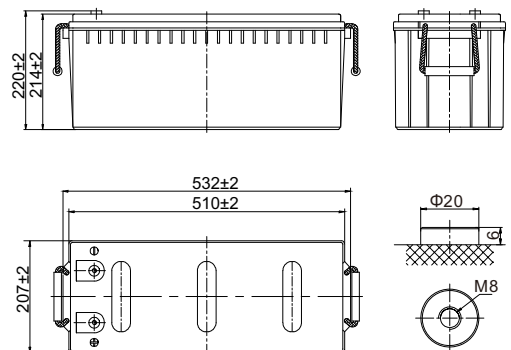


### Specifications

Rated Voltage	12V		
Nominal Rate(W <sub>15</sub> , 1.67V/cell)	705W/cell		
Nominal Capacity(C <sub>10</sub> , 1.80V/cell)	190Ah		
Dimension	Length	532±2mm (20.9 inches)	
	Width	207±2mm (8.14 inches)	
	Container Height	214±2mm (8.42 inches)	
	Total Height	220±2mm (8.66 inches)	
Approx Weight	59.0kg (130.1 lbs)		
Terminal	M8		
Container Material	ABS: UL 94 HB or V-0		
Rated Capacity(25°C)	190.0 Ah	C10(19.0A, 1.80V/cell)	
	176.8 Ah	C8(22.1A, 1.80V/cell)	
	167.5 Ah	C5(33.5A, 1.75V/cell)	
	147.9 Ah	C3(49.3A, 1.75V/cell)	
	120.9 Ah	C1(120.9A, 1.60V/cell)	
Max. Discharge Current	1900A (5s)		
Internal Resistance(25°C)	Approx 3.0mΩ		
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)	47.5A		
Charge voltage(25°C)	Charge voltage	Temp. Coefficient	
	Float	2.25 ~ 2.30V/cell	-3mV/cell/°C
	Equalization	2.30~2.40V/cell	-4mV/cell/°C
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

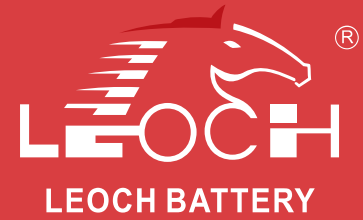


### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	418.7	334.3	289.8	227.9	157.9	129.0	104.6	76.8	62.8	46.8	37.0	31.3	21.6	18.5
1.80V/cell	476.2	379.5	328.5	257.7	178.1	137.0	108.1	79.1	66.5	48.3	38.3	32.5	22.1	19.0
1.75V/cell	517.3	411.5	355.6	278.2	191.5	145.3	112.5	82.4	69.0	49.3	39.6	33.5	22.3	19.1
1.70V/cell	553.0	438.8	377.7	295.0	203.1	152.5	117.5	85.8	70.7	50.4	40.6	34.2	22.6	19.2
1.67V/cell	572.3	452.7	388.7	303.0	207.9	156.6	118.7	88.1	72.4	51.5	41.1	34.7	22.9	19.5
1.60V/cell	592.5	468.2	400.7	310.8	213.0	160.5	120.9	91.0	73.8	52.8	42.0	35.3	23.0	19.6

### 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	782.0	628.9	548.8	433.6	301.8	248.1	202.3	148.9	122.2	91.4	72.5	61.6	42.9	36.8
1.80V/cell	874.8	703.5	613.9	485.0	337.6	261.7	207.9	152.5	128.7	94.0	75.0	63.8	43.7	37.7
1.75V/cell	933.7	750.9	655.2	517.6	360.4	275.8	215.5	158.1	133.1	95.7	77.2	65.4	44.0	37.8
1.70V/cell	981.5	789.4	688.8	544.2	378.8	287.5	223.7	163.9	135.7	97.5	78.7	66.7	44.6	38.1
1.67V/cell	997.5	802.2	700.0	553.0	385.0	293.7	224.9	167.4	138.4	99.1	79.5	67.3	45.0	38.6
1.60V/cell	1011.5	813.4	709.8	560.7	390.4	298.1	227.4	171.8	140.2	101.2	80.9	68.4	45.2	38.7



# LHR Series-High Rate

## LHR12705W(12V705W)

### Applications

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

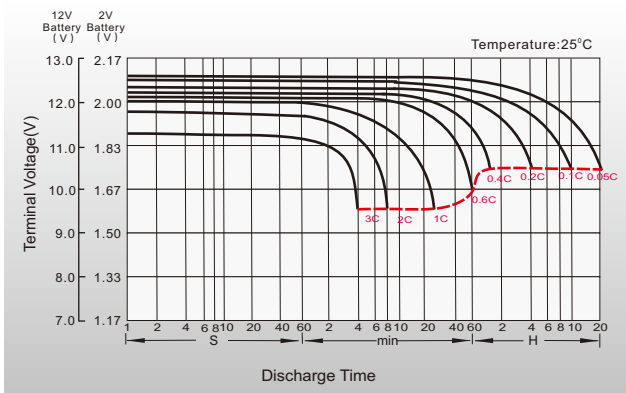
### General Features

- 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

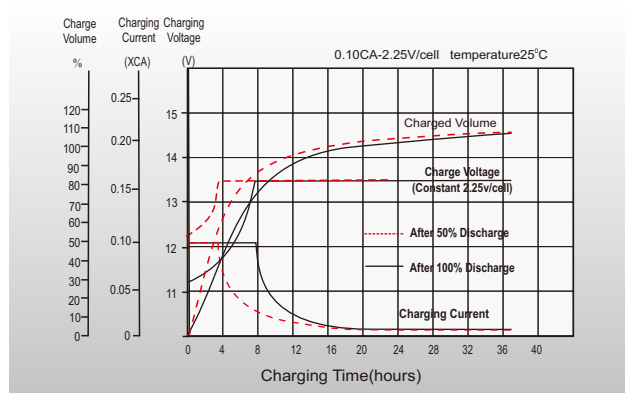
### Standards

- 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

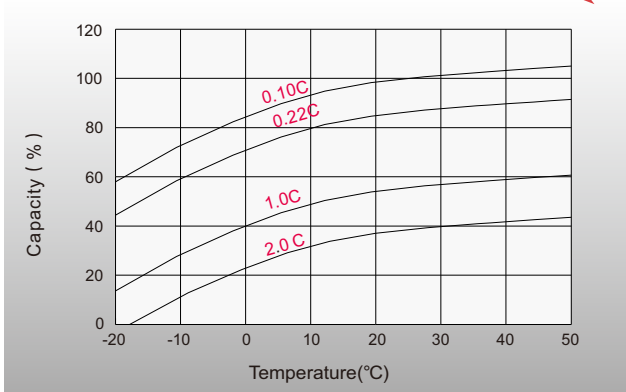
### Discharge Characteristics



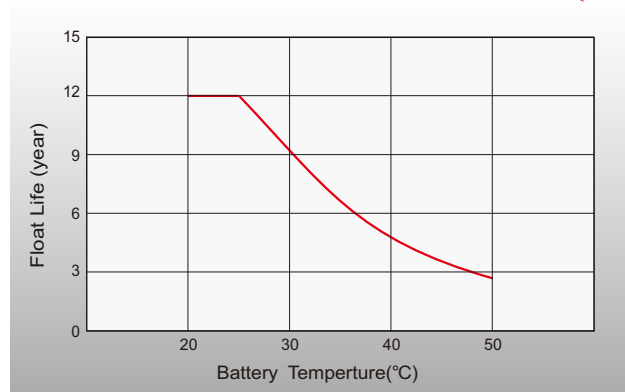
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



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