



LHR Series-High Rate

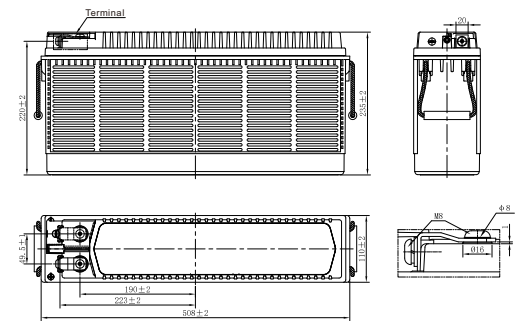
LHR12390FT(12V390W)



Specifications

Rated Voltage	12V	
Nominal Rate($W_{15}, 1.67V/cell$)	390W/cell	
Nominal Capacity($C_{10}, 1.80V/cell$)	95Ah	
Dimension	Length	508±2mm (20.0 inches)
	Width	110±2mm (4.33 inches)
	Container Height	235±2mm (9.25 inches)
	Total Height	235±2mm (9.25 inches)
Approx Weight	34.0kg (75.0 lbs)	
Terminal	M8	
Container Material	ABS: UL 94 HB or V-0 optional	
Rated Capacity(25°C)	95.0 Ah	C10(9.50A, 1.80V/cell)
	88.0 Ah	C8(11.0A, 1.80V/cell)
	83.5 Ah	C5(16.7A, 1.75V/cell)
	75.9 Ah	C3(25.3A, 1.75V/cell)
	59.7 Ah	C1(59.7A, 1.60V/cell)
Max. Discharge Current	950A (5s)	
Internal Resistance(25°C)	Approx 4.2mΩ	
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)	23.75A	
Charge voltage(25°C)	Float	Charge voltage Temp. Coefficient
	Equalization	2.25 ~ 2.30V/cell -3mV/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	234.0	187.6	161.4	126.9	92.7	70.6	50.2	39.0	31.4	23.4	18.5	15.6	10.8	9.24
1.80V/cell	270.6	213.6	183.4	143.9	104.9	74.8	51.3	41.5	33.2	24.5	19.2	16.3	11.0	9.50
1.75V/cell	297.6	234.5	201.0	157.3	114.2	77.8	53.2	43.1	34.5	25.3	19.8	16.7	11.1	9.54
1.70V/cell	315.0	247.6	211.4	165.1	119.9	80.2	55.9	44.2	35.3	25.9	20.3	17.1	11.3	9.60
1.67V/cell	332.8	260.7	222.1	173.2	125.3	82.9	58.2	45.3	36.2	26.4	20.6	17.3	11.4	9.75
1.60V/cell	344.5	269.6	229.0	177.6	128.3	84.5	59.7	46.1	36.9	27.1	21.0	17.7	11.5	9.81

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	437.0	353.0	305.6	241.4	177.2	135.7	97.0	75.7	61.1	45.7	36.3	30.8	21.5	18.4
1.80V/cell	497.1	395.9	342.8	270.8	198.8	142.8	98.7	79.9	64.4	47.6	37.5	31.9	21.8	18.9
1.75V/cell	537.1	427.8	370.4	292.6	214.8	147.7	101.9	82.7	66.5	49.1	38.6	32.7	22.0	18.9
1.70V/cell	559.1	445.4	385.6	304.6	223.6	151.3	106.6	84.4	67.8	50.0	39.4	33.3	22.3	19.0
1.67V/cell	580.0	462.0	400.0	316.0	232.0	155.4	110.2	86.1	69.2	50.8	39.7	33.7	22.5	19.3
1.60V/cell	588.1	468.5	405.6	320.4	235.2	157.0	112.2	87.1	70.1	51.8	40.5	34.2	22.6	19.4



IEEE/UL Battery
Sizing by
MooreU
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LHR Series-High Rate

LHR12390FT(12V390W)

Applications

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

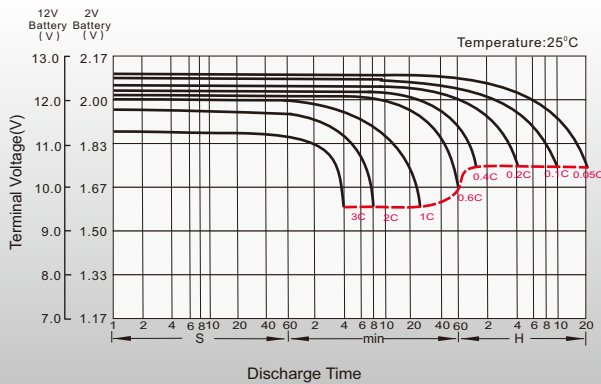
General Features

- 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

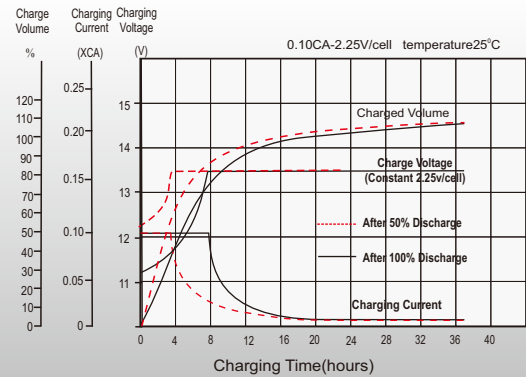
Standards

- Compliance with IEC 60896 and YD/T 3427 standards
- Manufactured in Leoch@IATF16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

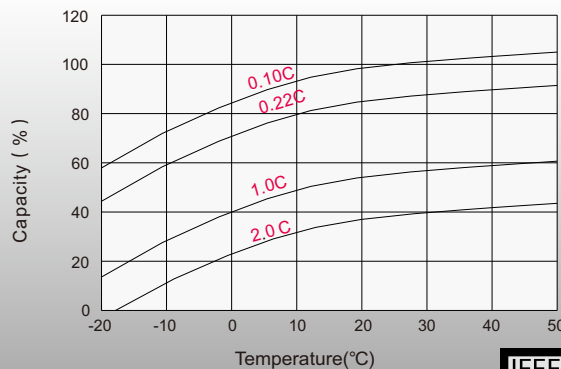
Discharge Characteristics



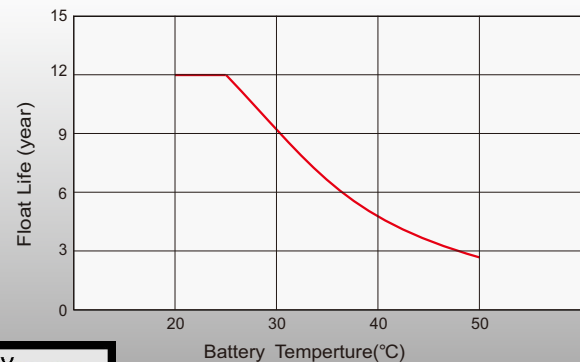
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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