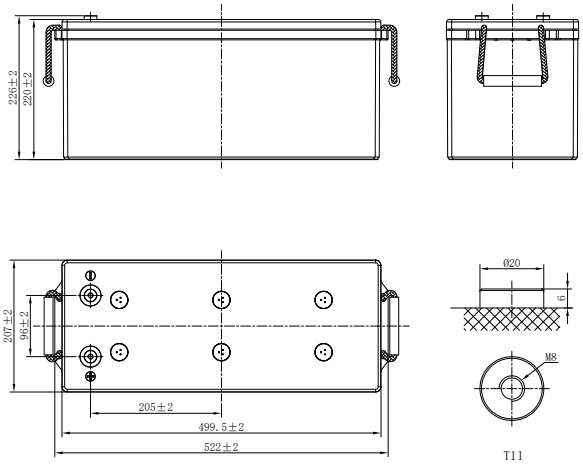
LHR SERIES-HIGH RATE

LHR12705W (12V705W)

LEOCH BATTERY



CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Rate (25℃)	W_{15},1.67V/cell	705W/cell
Nominal Capacity (25℃)	C_{10},1.80V/cell	180Ah
Dimension	Length	522mm(20.6inches)
	Width	207mm(8.15inches)
	Container Height	220mm(8.66inches)
	Total Height	226mm(8.90inches)
Approx Weight		57.3kg(126.3lbs)
Terminal		T11(M8)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		3600A
Internal Resistance (25℃)		Approx 3 mΩ (Fully charged)
Operating Temp. Range	Discharge	-20~55℃ (-4~131°F)
	Charge	-20~40℃ (-4~104°F)
	Storage	-15~50℃ (5~122°F)
Nominal Operating Temp. Range		25±3℃ (77±5°F)
Max.Charging Current (25℃)		0.25C
Charge voltage (25℃)	Float Charge	Equalization Charge
	2.25-2.30V/cell	2.30-2.40V/cell
Temp. Coeffcient	-3mV/cell/℃	-4mV/cell/℃
Effect of temp. to Capacity	40℃ (104°F)	106%
	25℃ (77°F)	100%
	0℃ (32°F)	86%
Self Discharge	⩽3% per month at 25°C (77°F)	

DISCHARGE TABLE

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	122.2	99.1	72.7	59.5	44.3	35.0	29.6	20.5	17.5
1.80V/cell	476.2	379.5	328.5	257.7	178.1	129.8	102.4	74.9	63.0	45.8	36.3	30.8	20.9	18.0
1.75V/cell	508.4	404.5	349.5	273.5	188.3	137.6	106.6	78.0	65.4	46.8	37.5	31.7	21.1	18.1
1.70V/cell	539.5	428.1	368.5	287.8	198.1	144.4	111.3	81.3	67.0	47.8	38.4	32.4	21.4	18.2
1.67V/cell	572.3	452.7	388.7	303.0	207.9	148.4	112.5	83.4	68.6	48.8	38.9	32.8	21.7	18.5
1.60V/cell	592.5	468.2	400.7	310.8	213.0	152.0	114.6	86.2	69.9	50.1	39.8	33.5	21.8	18.6

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	235.0	191.6	141.0	115.7	86.6	68.7	58.4	40.7	34.8
1.80V/cell	874.8	703.5	613.9	485.0	337.6	247.9	197.0	144.5	121.9	89.0	71.0	60.4	41.4	35.7
1.75V/cell	917.7	738.0	644.0	508.8	354.2	261.3	204.2	149.8	126.1	90.7	73.1	61.9	41.7	35.9
1.70V/cell	957.6	770.1	672.0	530.9	369.6	272.3	212.0	155.3	128.6	92.4	74.6	63.2	42.3	36.1
1.67V/cell	997.5	802.2	705.0	553.0	385.0	278.2	213.1	158.6	131.1	93.9	75.3	63.8	42.6	36.6
1.60V/cell	1011.5	813.4	709.8	560.7	390.4	282.4	215.5	162.8	132.8	95.8	76.7	64.8	42.8	36.7

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LEOCH BATTERY

APPLICATIONS

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

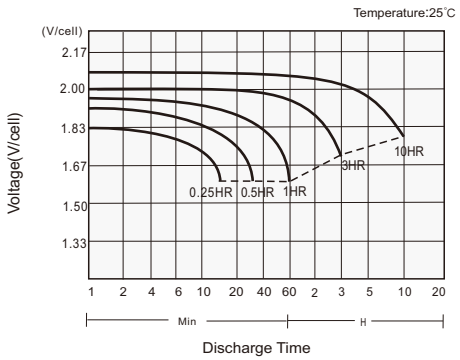
GENERAL FEATURES

- 12 years design life (25°C)
- Excellent high current performance - optimised for short discharge time
- Advanced AGM technology for superior high-rate power
- Long Life Alloy - minimizing grid growth, reducing gassing, and extending battery life
- Epoxy-sealed posts eliminate leaks
- Optimal energy density - saves floor space

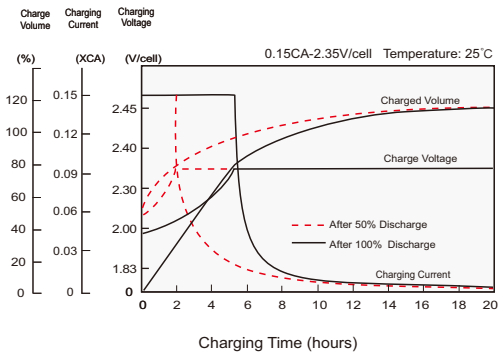
STANDARDS

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

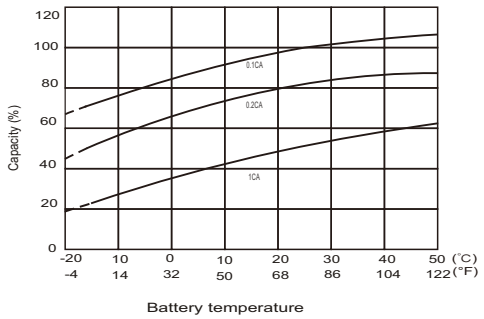
Discharge Characteristics



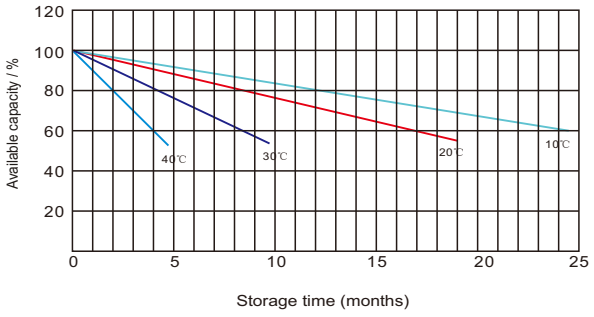
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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