

LSE Series

The LSE range of VRLA batteries offers outstanding performance including a 15+ year design life and a cycle life in excess of 1200 cycles to 80% DOD. Built to the highest standards and compliant with the latest IEC 60896-21/22 standard this range also offers 100% capacity out-of-the-box and is capable of handling deep discharges for complete peace of mind. The use of flexible connectors and the ability to be installed both horizontally and vertically allows for multiple installation possibilities. This robust design uses the latest AGM technology to create a range that is suitable for many applications including both fixed and mobile telecoms, UPS, utilities and solar.

Application

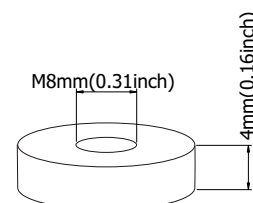
Cable Television	Control Equipment
Communication Equipment	Medical Equipment
Security System	Emergency Power System
UPS	Power Plant

General Features

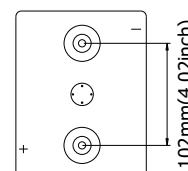
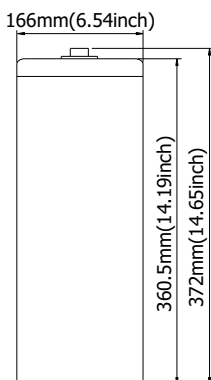
- Extra long life service design.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- Higher safety & reliable construction.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.

Construction

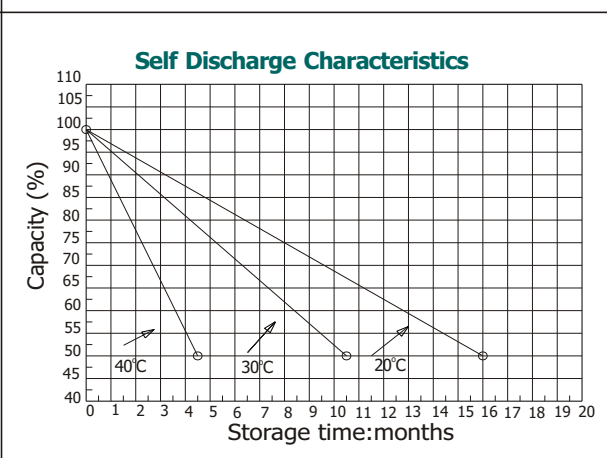
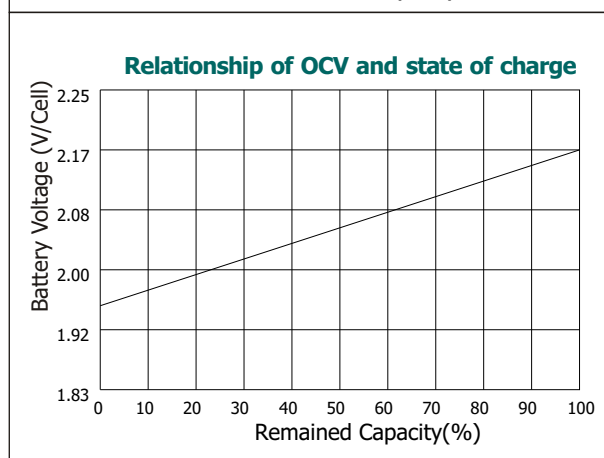
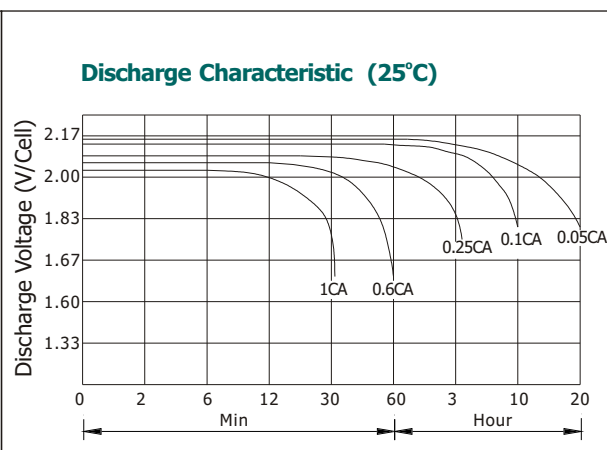
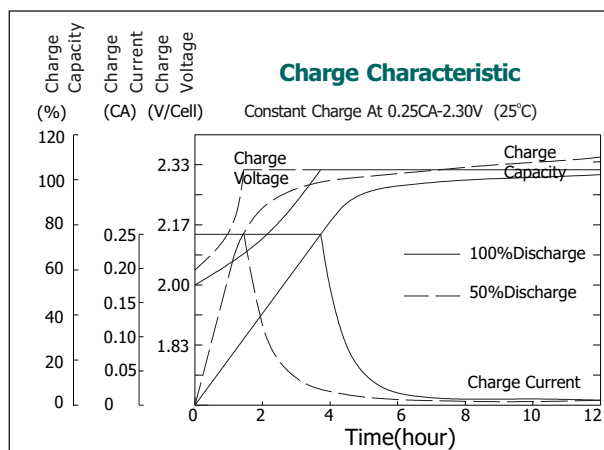
Component	Raw material	Sealant	Epoxy Resin
Positive	Lead dioxide	Safety valve	EPDR
Negative	Lead	Terminal	Copper
Container	ABS	Separator	Fiber glass
Cover	ABS	Electrolyte	Sulfuric acid



Terminal Dimensions



Battery Model	LSE2-400			
Designed Floating Life	15 Years			
Capacity(25°C)	20HR(20.65A,1.75V)	10HR(40A,1.75V)	5HR(72A,1.75V)	1HR(220A,1.75V)
	413AH	400AH	360AH	220AH
Dimensions	Length	Width	Height	Total Height
	166mm(6.54inch)	184.5mm(7.26inch)	360.5mm(14.19inch)	372mm(14.65inch)
Approx. Weight	26Kg (57.27 lbs)			
Internal Resistance	Full charged at 25°C :0.35 mΩ			
Self Discharge	3% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	2.3V-2.35V(-5mV/ °C), max. Current: 100A		2.25-2.27V(-3.3mV/ °C)	



Constant current discharge ratings -amperes at 25°C

Time End Voltage	5min	15min	30min	60min	2hour	3hour	5hour	6hour	8hour	10hour	24hour
1.60V	666.6	558.3	413.4	261.4	154.0	113.0	76.7	66.1	52.7	43.8	19.7
1.65V	615.9	520.5	396.0	247.9	150.5	110.2	74.8	65.3	52.0	43.3	19.6
1.70V	575.7	488.0	364.3	236.8	144.9	107.1	74.1	64.4	51.1	42.7	19.6
1.75V	548.6	462.0	338.6	225.7	139.9	103.8	72.1	63.4	50.5	42.1	19.3
1.80V	527.6	435.6	316.8	211.5	133.8	100.6	70.4	61.8	49.5	41.1	19.0
1.83V	490.8	409.0	301.6	198.0	127.8	97.3	68.7	60.7	48.6	40.2	18.6
1.85V	467.2	386.3	282.5	190.9	120.8	95.4	68.0	59.8	48.1	40.0	18.4
1.88V	434.3	362.2	265.3	182.8	118.1	93.5	67.3	58.9	47.5	39.7	18.2
1.90V	401.8	326.6	242.4	169.5	113.3	89.5	65.5	57.6	46.3	38.6	18.0
1.94V	361.3	290.9	214.5	150.5	102.3	82.3	60.7	53.5	43.2	36.4	17.4

Constant power discharge ratings-watts at 25°C

Time End Voltage	5min	15min	30min	60min	2hour	3hour	5hour	6hour	8hour	10hour	24hour
1.60V	1133.2	949.1	755.7	538.6	347.5	257.4	170.0	145.2	113.5	92.7	41.8
1.65V	1077.8	910.8	714.8	497.6	318.8	241.6	164.1	140.6	109.3	90.4	41.0
1.70V	1036.2	878.5	697.0	473.9	309.5	233.0	160.4	137.8	106.9	87.8	40.2
1.75V	1003.9	845.5	673.2	455.4	298.6	224.4	156.4	134.6	103.0	86.5	39.8
1.80V	976.1	805.9	649.4	444.8	293.0	216.5	152.1	130.7	110.3	85.1	39.2
1.83V	922.7	768.9	612.5	429.0	281.2	211.2	148.9	126.7	98.3	83.5	38.6
1.85V	887.7	733.9	577.5	404.6	269.3	205.0	144.9	123.8	97.0	81.8	37.6
1.88V	838.2	679.8	537.0	380.2	250.3	198.0	140.2	119.3	94.4	79.9	36.6
1.90V	783.4	636.9	487.1	348.5	233.6	190.1	135.4	115.6	90.8	75.9	35.2
1.94V	708.2	570.2	436.4	308.9	215.9	176.6	128.3	110.9	87.1	72.6	34.8