

Specifications

Nominal Voltage (V)		12	
Nominal Capacity (AH)		90	
Dimensions	Length	307 mm	12.09 inch
	Width	169 mm	6.65 inch
	Height	211 mm	8.31 inch
	Total Height	227 mm	8.94 inch
Approx. Weight		28.0 kgs	61.73 lbs
Standard Terminals Case Material		V4 ABS UL 94-HB	

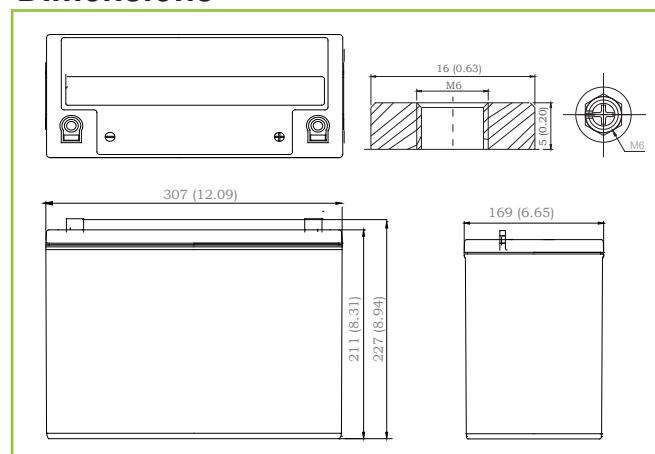
Characteristics

Capacity	20 hour rate	4.50 A	90.00 Ah
	10 hour rate	8.36 A	83.57 Ah
	5 hour rate	14.40 A	72.00 Ah
	1 hour rate	55.80 A	55.80 Ah
	15 Min Rate	158.40 A	39.60 Ah
Internal Resistance		5.00 mΩ	
Max. Discharge Current (5 sec)		700 A	
Constant Voltage Charge Method	Max. Charge Current	27 A	
	Standby Use	2.25 - 2.30 V /Cell	
	Cycle Use	2.40 - 2.50 V /Cell	
Operating Temperature Range	Discharge:	-15 ~ 50 °C (5 ~ 122 °F)	
	Charge:	-15 ~ 40 °C (5 ~ 104 °F)	
	Storage:	-15 ~ 40 °C (5 ~ 104 °F)	
Temperature coefficient	For standby use:	-3.3mV / °C /Cell	
	For cycle use:	-5.0mV / °C /Cell	
Self discharge 25°C (77°F)	After 3-month	91%	
	After 6-month	82%	
	After 12-month	64%	
Temperature dependency of Capacity	40 °C (104 °F)	102%	
	25 °C (77 °F)	100%	
	0 °C (32 °F)	85%	
	-15 °C (5 °F)	65%	

Discharge Voltage vs Discharge Current

Final Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current (A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Dimensions



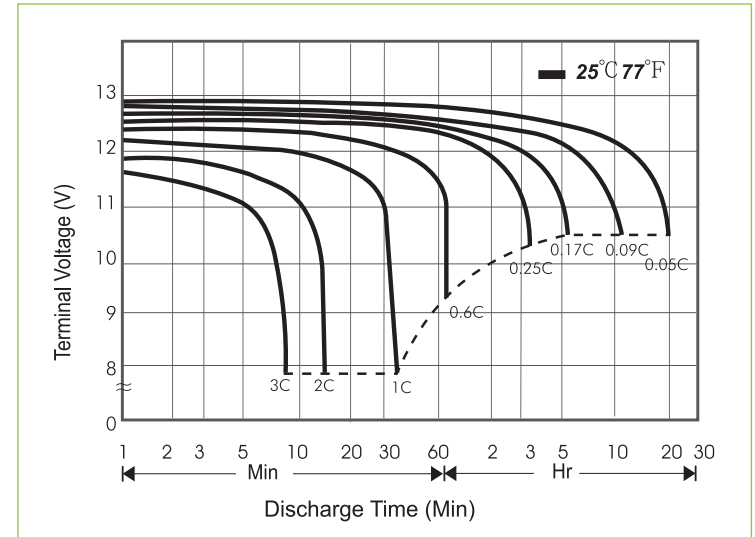
LVL 90-12



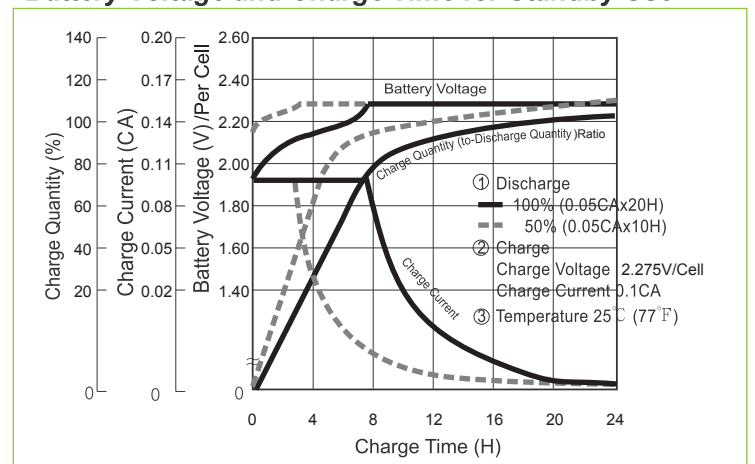
LVL 90-12 VRLA (valve-regulated lead acid) battery is designed for general purpose application with 10 years standby life at 25°C. This battery is rechargeable, highly-efficient, leak-proof and maintenance-free.

LivEn is ISO9001 and UL certified for quality assurance.

Terminal Voltage (V) and Discharge Time



Battery Voltage and Charge Time for Standby Use



Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

VpcEnd	5MIN	10MIN	15MIN	20MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	6HR	10HR	20HR
1.60	286	218	165	135	103	55.8	33.8	24.4	19.6	15.4	11.2	9.36	4.95
1.65	271	212	162	133	101	54.9	33.6	24.0	19.4	15.2	11.1	9.27	4.86
1.70	256	207	158	130	99.0	54.0	33.4	23.7	19.2	14.9	11.0	9.18	4.77
1.75	239	202	154	127	97.2	53.1	33.1	23.7	19.2	14.9	10.9	9.09	4.68
1.80	233	185	148	123	94.5	52.2	31.1	22.8	18.7	14.7	10.7	9.00	4.50
1.85	188	144	122	106	88.2	50.4	30.0	21.5	17.7	14.6	10.3	8.82	4.37
1.90	152	112	100	92.3	82.3	48.7	28.9	20.3	16.8	14.5	9.83	8.64	4.23

Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

VpcEnd	5MIN	10MIN	15MIN	20MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	6HR	10HR	20HR
1.60	3195	2440	1895	1565	1196	653	401	292	235	185	130	105	58.5
1.65	3023	2381	1857	1537	1177	643	398	287	232	182	129	104	57.6
1.70	2851	2321	1819	1508	1158	633	395	282	230	179	128	104	56.7
1.75	2667	2255	1771	1473	1137	627	393	282	230	179	127	103	55.8
1.80	2600	2070	1696	1422	1109	605	367	270	223	176	124	102	54.0
1.85	1823	1418	1301	1140	947	585	346	248	205	169	120	99.2	51.8
1.90	1277	971	999	915	808	566	325	227	189	162	116	96.6	49.6