

NP Series

NP12009 12V 9AH



NP Series VRLA battery uses AGM technology and high-purity raw materials. Its good floating back up and large current discharge performance makes it optimal and economical choice



Benefits

- Standard Commercial according to EUROBAT Classification
- Maximum charge efficiency
- High gas recombination efficiency
- Low self-discharge rate
- Easy installation and handling
- Vertical or horizontal installation

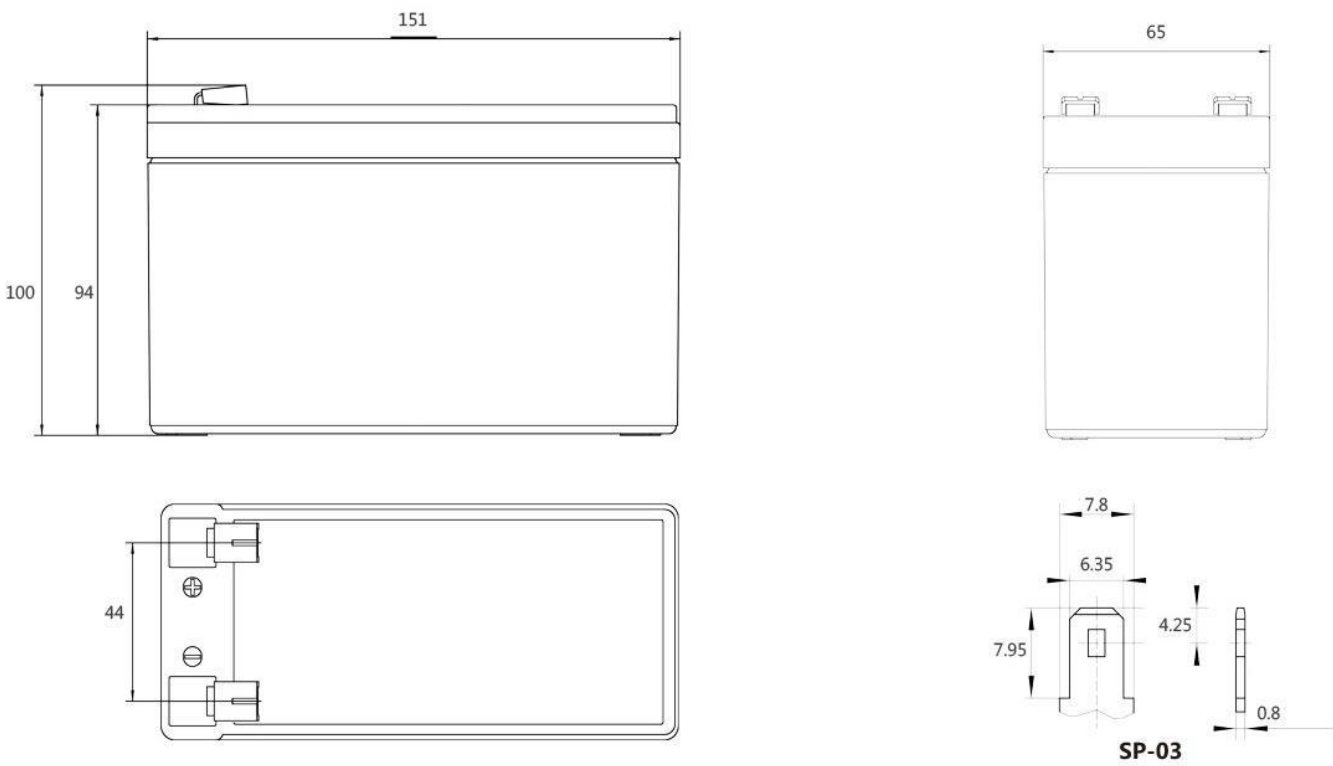
Applications

- UPS units
- Emergency power
- Starting generators
- EPS units

Standards

- IEC 61056-1/2
- JIS C8702-1/2
- EUROBAT guide

Drawing



Specifications

Battery Model	NP12009			
Design Life (years, 25°C)	5			
Capacity (Ah, 25°C)	20HR (0.45A, 1.75V)	10HR (0.82A, 1.75V)	5HR (1.44A, 1.75V)	1HR(5.314A, 1.70V)
	9	8.2	7.2	5.314
Dimensions (mm)	Length	Width	Height	Total Height
	151	65	94	100
Approx. Weight (kg)	2.50			
Reference Internal Resistance (mΩ)	14.5 (full charged @ 25°C)			
Maximum Discharge Current (A/5 Sec.)	135			
Self-Discharge (25°C)	≤3% per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.45 (-3.5mV/°C/cell), max charge current: 2.7 A		2.27 (-3.5mV/°C/cell)	
Short Circuit Current (A)	230			

Discharge Data

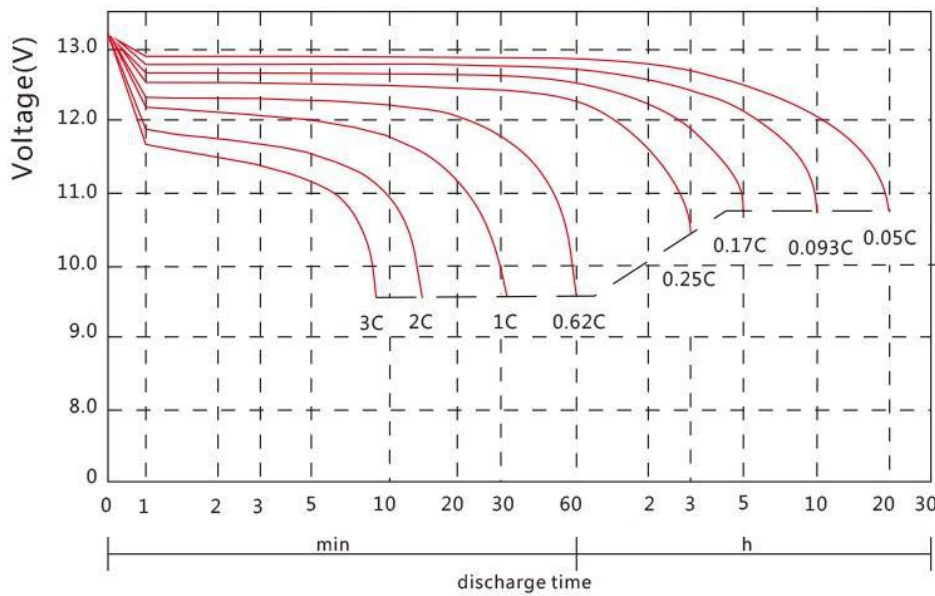
Constant Current Discharge Data (25°C, A)

End Voltage (V/cell)	min					h						
	10	15	20	30	45	1	1.5	2	3	5	10	20
1.60	25.22	17.33	13.44	9.722	6.765	5.444	3.883	3.108	2.303	1.471	0.840	0.458
1.65	24.59	16.96	13.19	9.558	6.656	5.372	3.834	3.072	2.274	1.464	0.835	0.456
1.67	24.41	16.84	13.12	9.503	6.605	5.346	3.812	3.057	2.265	1.460	0.830	0.454
1.70	24.23	16.73	13.00	9.430	6.573	5.314	3.797	3.042	2.254	1.453	0.825	0.452
1.75	22.56	15.84	12.48	9.120	6.400	5.200	3.733	3.000	2.232	1.440	0.820	0.450
1.80	20.64	14.78	11.82	8.755	6.189	5.080	3.670	2.958	2.205	1.424	0.810	0.445

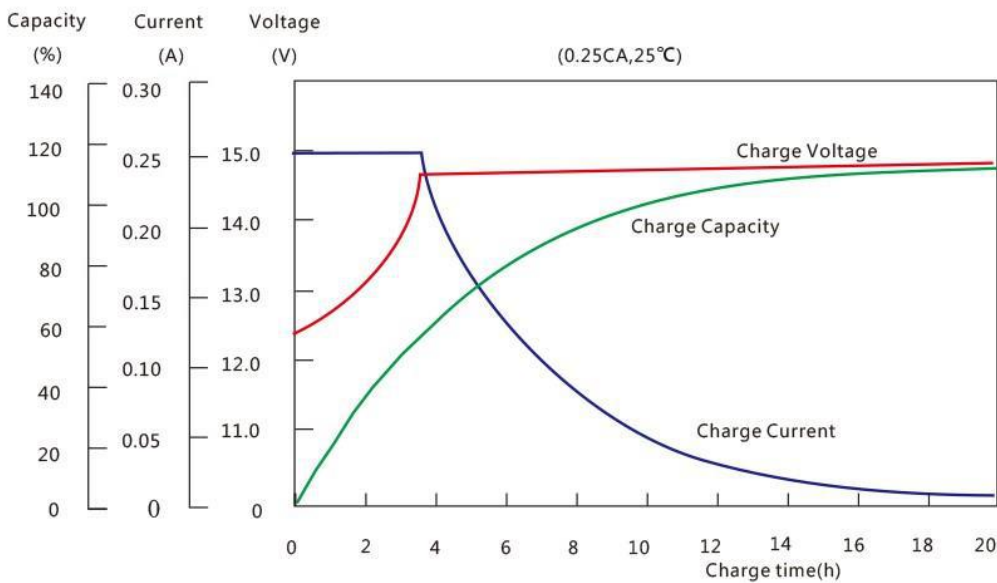
Constant Power Discharge Data (25°C, W/Cell)

End Voltage (V/cell)	min					h						
	10	15	20	30	45	1	1.5	2	3	5	10	20
1.60	47.45	32.97	25.83	18.83	13.19	10.676	7.643	6.142	4.566	2.926	1.674	0.916
1.65	46.43	32.38	25.42	18.55	13.01	10.564	7.571	6.086	4.518	2.917	1.668	0.913
1.67	46.26	32.21	25.32	18.48	12.94	10.52	7.536	6.063	4.506	2.912	1.659	0.909
1.70	46.02	32.05	25.13	18.37	12.90	10.476	7.514	6.038	4.488	2.901	1.651	0.906
1.75	43.01	30.45	24.20	17.81	12.59	10.270	7.405	5.967	4.452	2.881	1.644	0.904
1.80	39.53	28.55	22.99	17.15	12.197	10.065	7.296	5.898	4.406	2.855	1.627	0.895

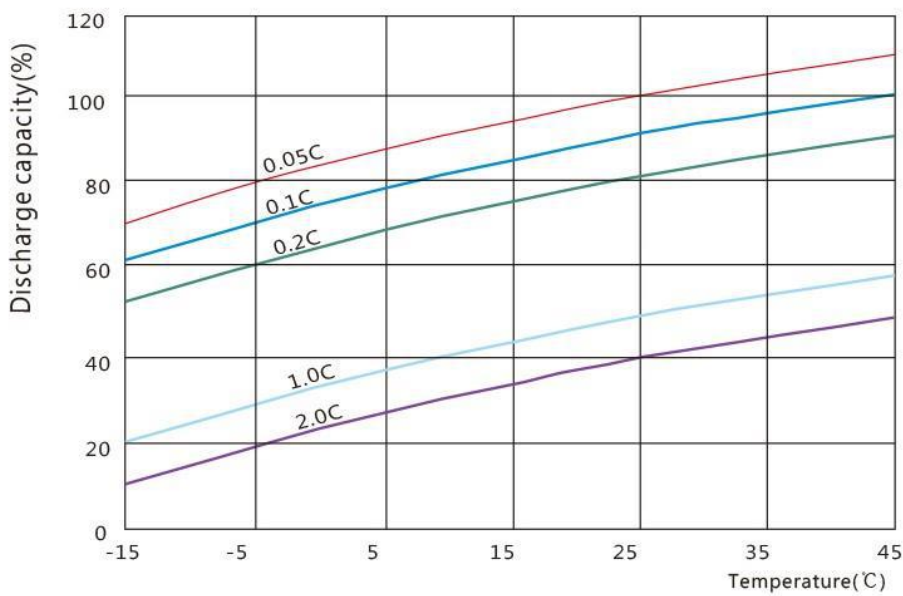
Performance Curve



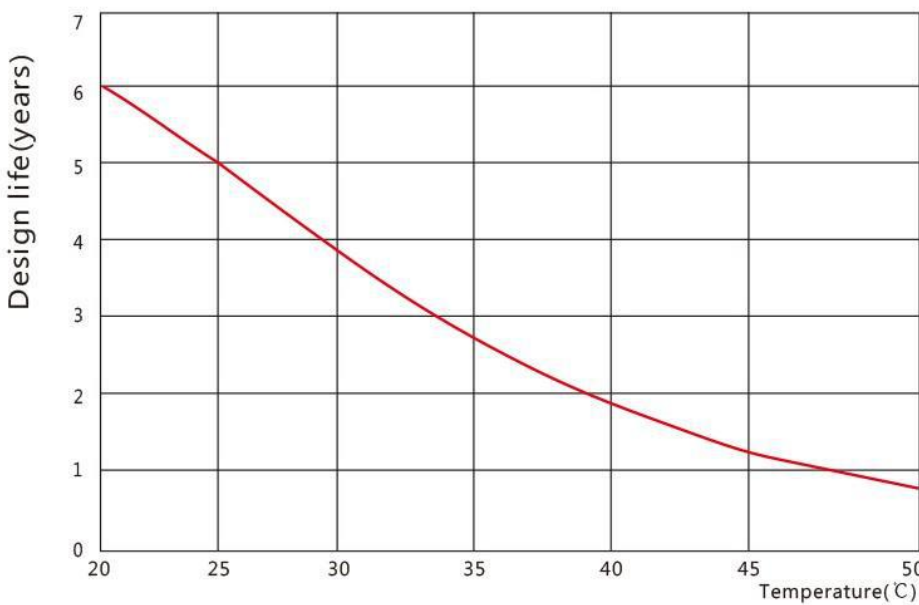
Discharge voltage vs. discharge time



Charge capacity vs. charge time



Discharge capacity vs. temperature



Design life vs. temperature