

# BLUE BATTERY

## BL12-12 12V12Ah

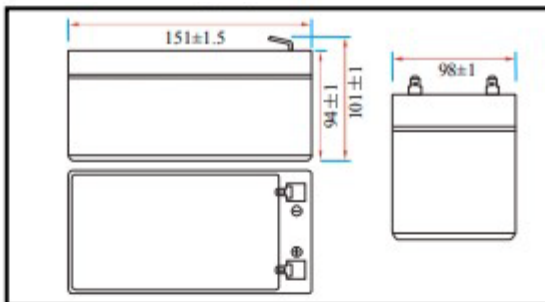
Valve Regulated Lead Acid Battery



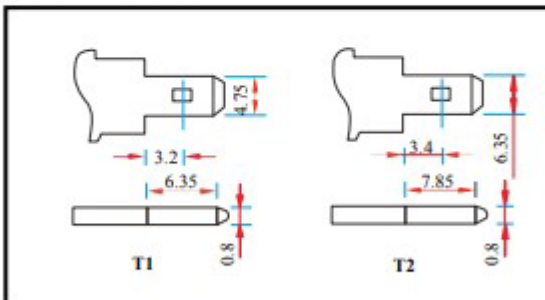
### Specifications

Nominal voltage	12V (6 cells per unit)	
Rated capacity (20HR)	12Ah/10.5V	
Dimensions	Length	151±1.5mm (5.94inch)
	Width	98±1mm (3.86inch)
	Height	95±1mm (3.74inch)
	Total height	101±1mm (3.98inch)
Approx. weight	3.40kg (7.51lbs)±4%	

### Outer dimensions (mm)



### Terminal type (mm)



### Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper

### Characteristics

Capacity (25°C)	20HR (10.5V)	12Ah
	10HR (10.5V)	11Ah
	1HR (9.60V)	7.2Ah
Terminal type		T1/T2
Internal resistance (Fully charged, 25°C)		Approx. 19mΩ
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 months	Remaining capacity: 91%
	6 months	Remaining capacity: 82%
	12 months	Remaining capacity: 65%
Nominal operating temperature		25°C± 3°C (77°F± 5°F)
Operating temperature range	Discharge	-15°C~ 50°C (5°F ~ 122°F)
	Charge	-10°C~ 50°C (14°F ~ 122°F)
	Storage	-20°C~ 50°C (-4°F ~ 122°F)
Float charging voltage (25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C/Block
Cyclic charging voltage (25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C/Block
Maximum charging current		3.6A
Maximum discharge current		180A (5 sec.)
Design life	5 years for floating (25°C)	
	Eurobat (20°C): 3-5 years, standard commercial.	

### Constant Current Discharge Characteristics (A, 25°C)

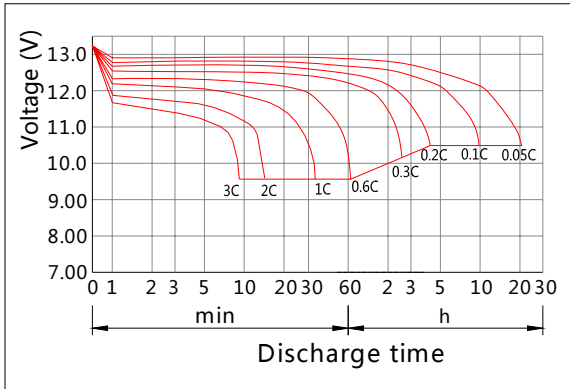
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	28.8	22.8	12.7	7.80	4.26	3.06	2.45	2.08	1.35	1.13	0.61
9.90V	27.9	22.3	12.5	7.68	4.24	3.04	2.43	2.07	1.34	1.13	0.61
10.2V	26.8	21.4	12.1	7.49	4.20	3.02	2.42	2.05	1.33	1.12	0.60
10.5V	25.6	20.7	11.8	7.34	4.14	3.00	2.40	2.04	1.32	1.12	0.60
10.8V	24.2	19.6	11.4	7.11	4.03	2.91	2.33	1.98	1.28	1.09	0.59

### Constant Power Discharge Characteristics (Watt, 25°C)

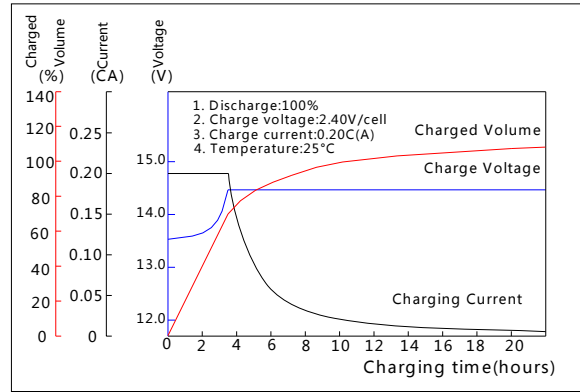
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	325	260	146	90.3	49.9	36.4	29.2	24.8	16.2	13.6	7.31
9.90V	315	254	143	89.0	49.6	36.1	29.0	24.7	16.1	13.5	7.28
10.2V	302	244	138	86.7	49.1	35.9	28.8	24.5	16.0	13.5	7.24
10.5V	289	236	135	85.0	48.4	35.6	28.6	24.4	15.8	13.4	7.20
10.8V	273	224	130	82.4	47.2	34.6	27.7	23.6	15.4	13.1	7.06

Note: The above characteristics data can be obtained within three charge/discharge cycles.

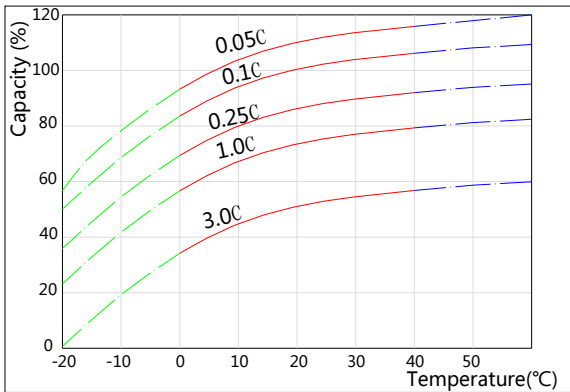
Discharge Characteristics(25°C)



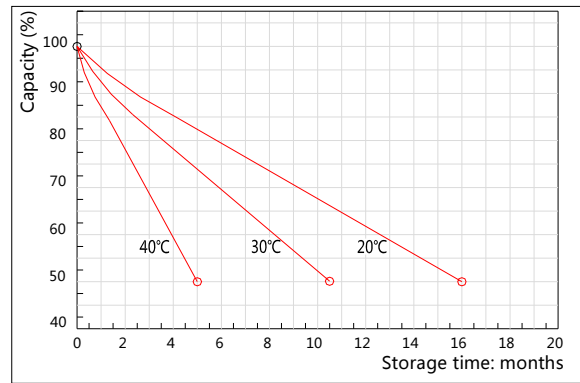
Charging Characteristics(25°C)



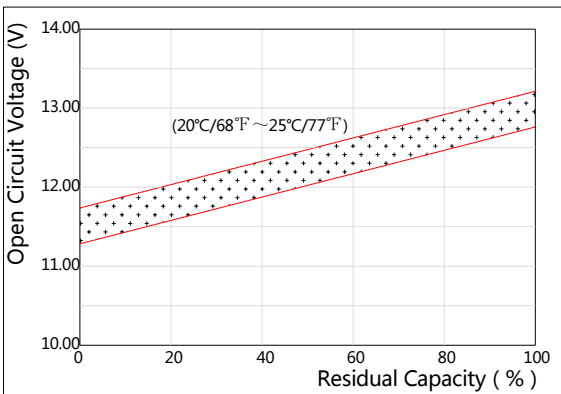
Effect of Temperature on Capacity



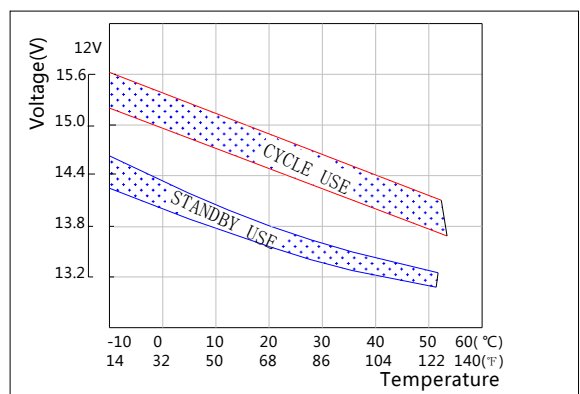
Self-discharge Characteristics



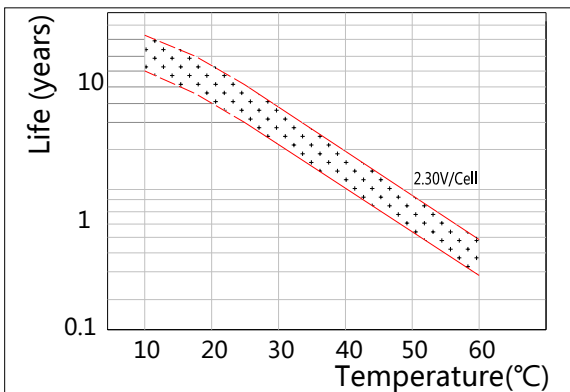
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

