GINZA TRADING

NEWSTAR

12V42Ah

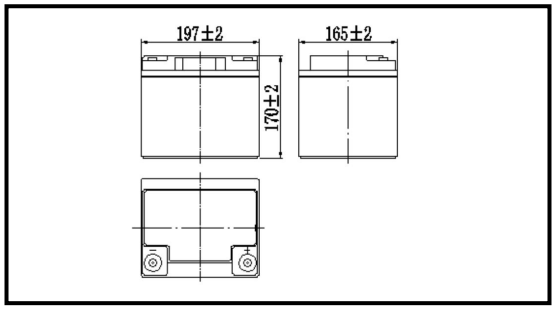
Valve Regulated Lead Acid Battery



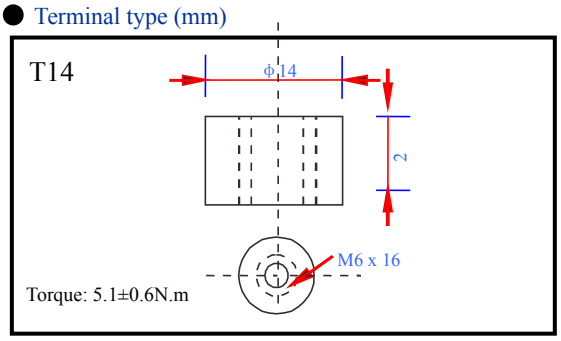
Specifications

Nominal voltage		12V (6 cells per unit)
Rated capacity (10HR)		42Ah/10.8V
Dimensions	Length	197±2mm (7.76inch)
	Width	165±2mm (6.50inch)
	Height	170±2mm (6.69inch)
	Total height	170±2mm (6.69inch)
Approx. weight		13.50kg (29.80lbs)±3%

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	10HR (10.8V)	42Ah
	3HR (10.8V)	31.5Ah
	1HR (10.5V)	23Ah
Terminal type		T14
Internal resistance (Fully charged, 25°C)		Approx. 8mΩ
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)		13.50 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		12.6A
Maximum discharge current		400A (5 sec.)
Design life	10 years for floating (25°C)	
	Eurobat (20°C): 6-9 years, general purpose.	

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

Constant current discharge characteristics unit: Ampere/Block (at 25°C, 77°F)

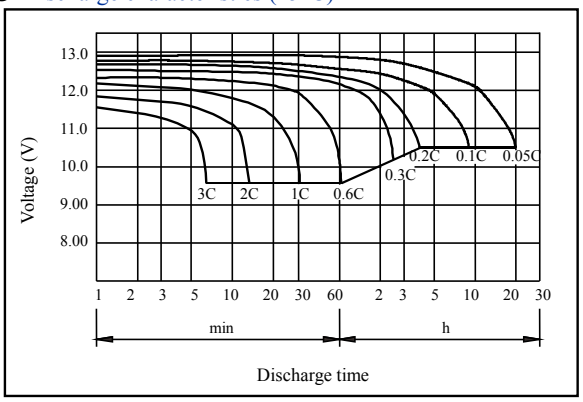
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	91.6	70.6	42.2	26.0	15.3	11.1	8.83	7.54	5.18	4.28	2.27
9.90V	88.8	68.9	41.4	25.6	15.3	11.0	8.77	7.50	5.15	4.27	2.26
10.2V	85.2	66.3	40.1	24.9	15.1	10.9	8.71	7.44	5.12	4.25	2.25
10.5V	81.5	64.1	39.1	24.1	14.9	10.8	8.65	7.39	5.08	4.23	2.24
10.8V	76.9	60.7	37.7	23.4	14.5	10.5	8.39	7.17	4.93	4.20	2.23

Constant power discharge characteristics unit: Watt/Block (at 25°C, 77°F)

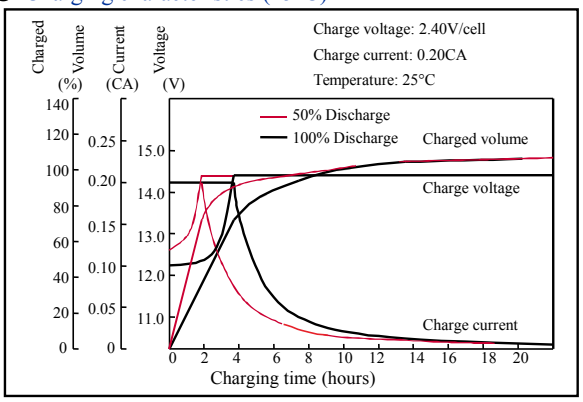
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	989	775	474	296	178	130	104	89.1	61.6	51.1	27.2
9.90V	959	756	464	291	177	129	103	88.6	61.2	510	27.1
10.2V	920	728	450	284	175	128	102	88.0	60.8	50.8	27.1
10.5V	880	703	439	275	172	127	102	87.4	60.4	50.5	26.9
10.8V	831	666	423	266	168	124	98.7	84.8	58.6	50.1	26.7

Note 1: Above characteristics data can be obtained within three charge and discharge cycles.

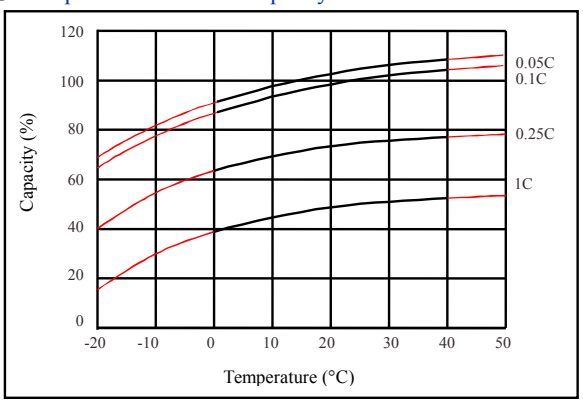
Discharge characteristics (25°C)



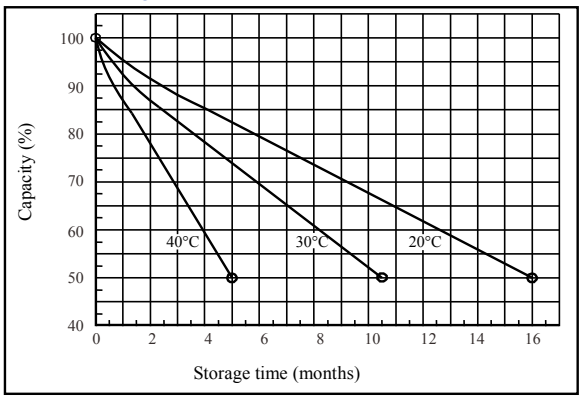
Charging characteristics (25°C)



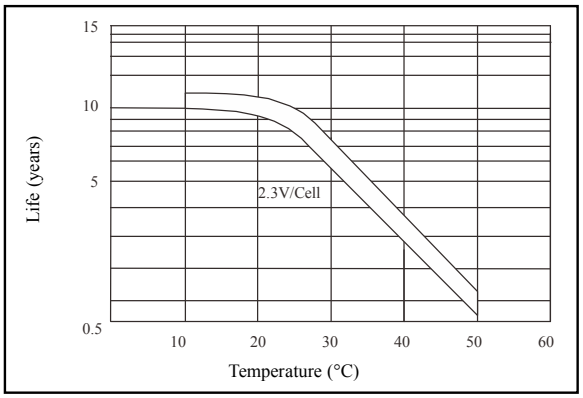
Temperature effects on capacity



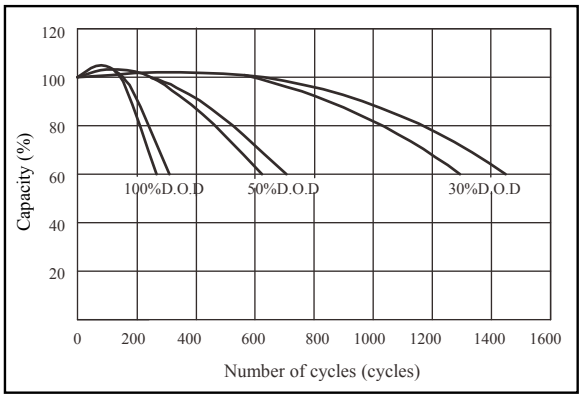
Self-discharge characteristics



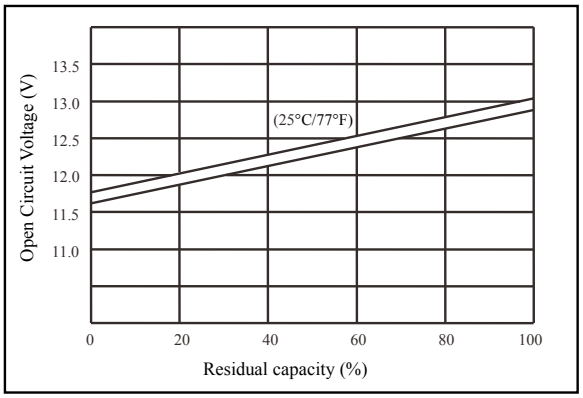
Floating life on temperature



Cycle life on D.O.D (25°C)



Relationship for OCV and capacity (25°C)



Relationship for charging voltage and temperature

