Ginza Trading

NEWSTAR

12V45AH(GNS4512)

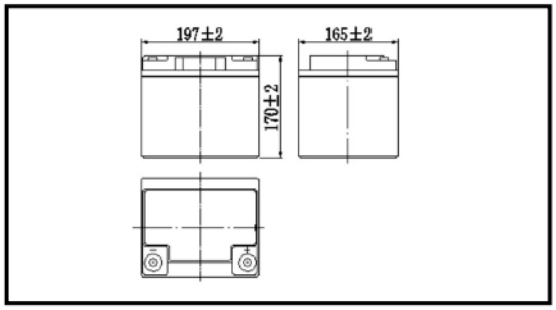
Valve Regulated Lead Acid Battery



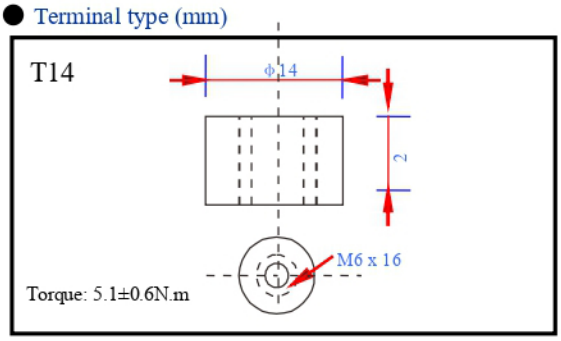
Specifications

Nominal voltage		12V (6 cells per unit)
Rated capacity (10HR)		45Ah/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		13.80kg (30.40lbs)±3%

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	10HR (10.8V)	45Ah
	3HR (10.8V)	33Ah
	1HR (10.5V)	25Ah
Terminal type		T14
Internal resistance (Fully charged, 25°C)		Approx. 7.5mΩ
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		13.5A
Maximum discharge current		400A (5 sec.)
Design life	10 years for floating (25°C)	
	Eurobat (20°C): 10-12 years, long life.	

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)

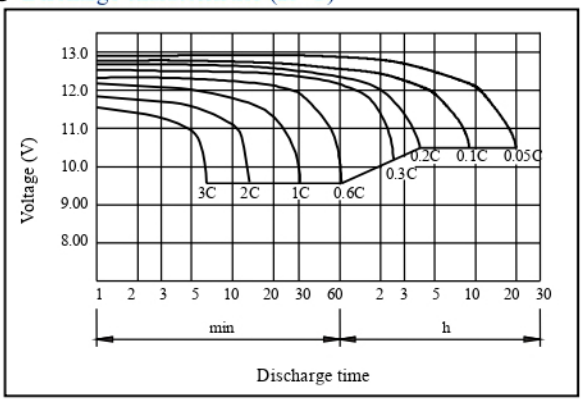
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	98.1	75.6	45.2	27.8	16.4	11.8	9.46	8.08	5.55	4.58	2.43
9.90V	95.2	73.8	44.3	27.4	16.3	11.8	9.40	8.03	5.52	4.57	2.42
10.2V	91.2	71.1	43.0	26.7	16.2	11.7	9.33	7.98	5.48	4.56	2.42
10.5V	87.3	68.6	41.9	25.9	16.0	11.6	9.27	7.92	5.45	4.53	2.40
10.8V	82.4	65.0	40.4	25.0	15.6	11.3	8.99	7.68	5.28	4.50	2.39

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

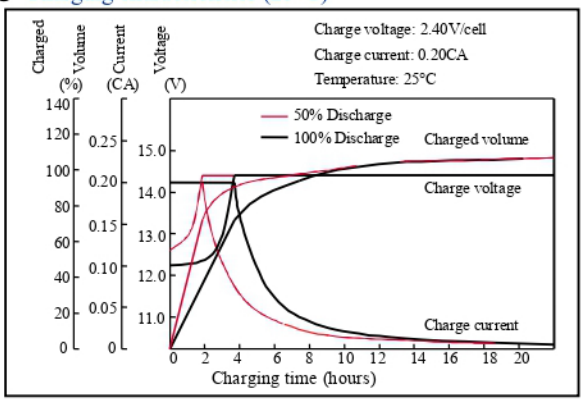
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	1059	830	507	317	190	139	111	95.5	66.0	54.7	29.1
9.90V	1028	810	497	312	189	138	111	94.9	65.6	54.6	29.1
10.2V	985	780	482	304	188	137	110	94.3	65.1	54.4	29.0
10.5V	943	754	470	295	185	137	109	93.6	64.7	54.1	28.8
10.8V	890	714	453	285	180	132	106	90.8	62.7	53.7	28.6

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

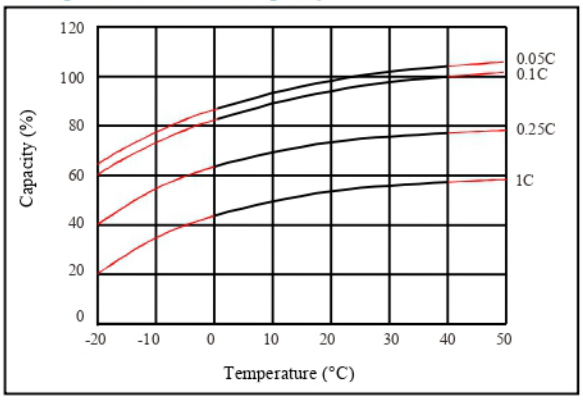
Discharge characteristics (25°C)



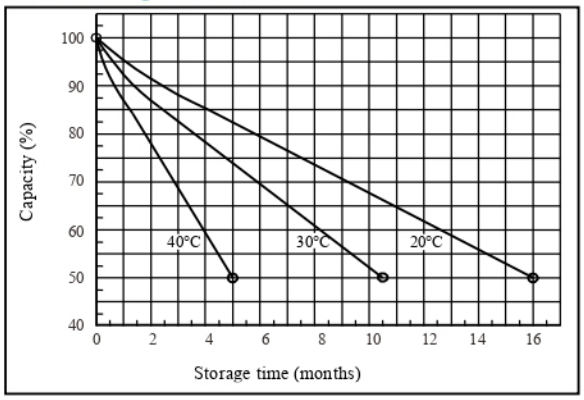
Charging characteristics (25°C)



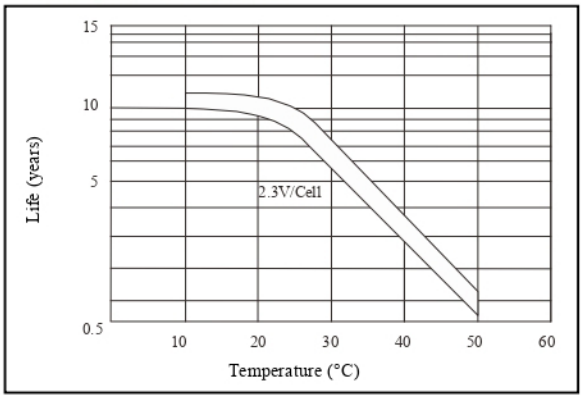
Temperature effects on capacity



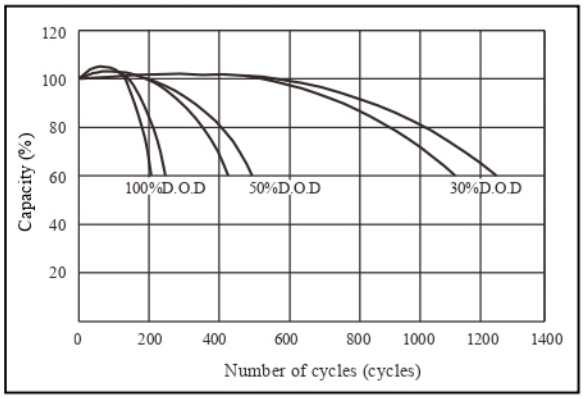
Self-discharge characteristics



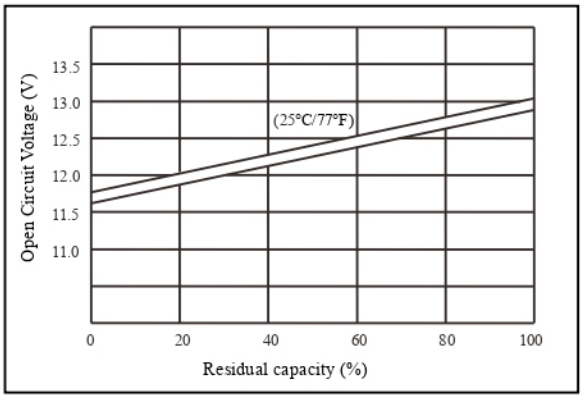
Floating life on temperature



Cycle life on D.O.D (25°C)



Relationship for OCV and capacity (25°C)



Relationship for charging voltage and temperature

