

HR12130W (12V130 Watts/cell)

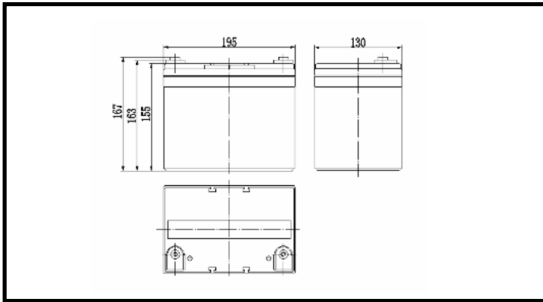
Valve Regulated Lead Acid Battery



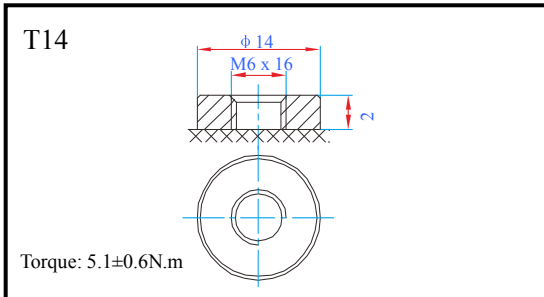
Specifications

Nominal voltage	12V (6 cells per unit)	
Rated capacity (15min. rate)	130 Watts/cell /1.67V	
Dimensions	Length	195±2mm (7.68inch)
	Width	130±2mm (5.12inch)
	Height	155±2mm (6.10inch)
	Total height	167±2mm (6.57inch)
Approx. weight	11.50kg (25.40lbs)±3%	

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	15min. rate	130 Watts/cell /1.67V
	10HR	33Ah/10.8V
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		10.4A
Maximum discharge current		330A (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/cell (at 25°C, 77°F)

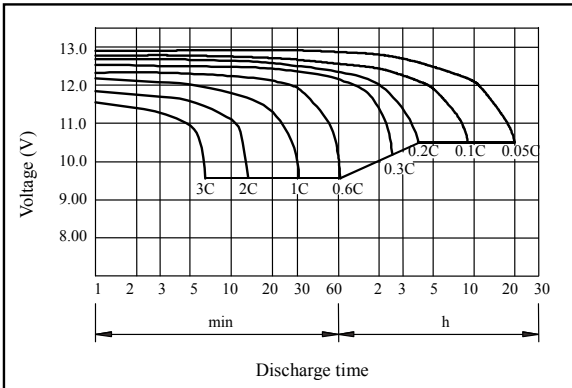
F.V/Time	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	90.93	74.43	56.16	39.79	29.30	23.90	12.10	8.65	6.97	6.06	5.18
1.67V/cell	86.86	72.19	53.93	38.48	28.40	23.30	12.00	8.57	6.91	6.01	5.14
1.70V/cell	84.61	69.94	52.82	37.77	27.90	23.00	11.90	8.54	6.88	5.98	5.12
1.75V/cell	80.97	67.58	51.01	36.87	27.20	22.50	11.70	8.48	6.83	5.94	5.08
1.80V/cell	76.47	64.05	48.28	35.55	26.20	21.80	11.40	8.23	6.63	5.76	4.93

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

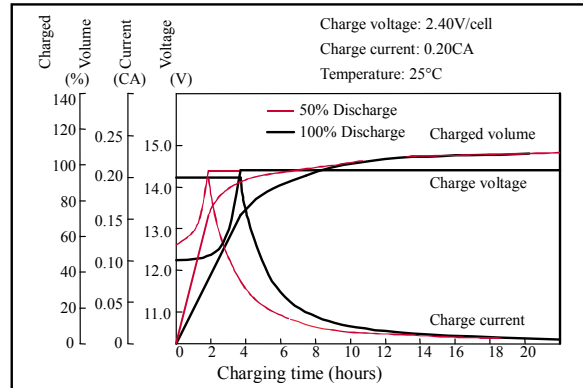
F.V/Time	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	166.46	135.34	108.07	76.76	56.60	46.20	23.50	17.00	13.70	12.00	10.30
1.67V/cell	159.18	130.00	104.03	74.34	54.80	45.00	23.30	16.90	13.60	11.90	10.20
1.70V/cell	155.02	127.26	102.01	72.92	53.80	44.40	23.20	16.80	13.60	11.80	10.10
1.75V/cell	147.73	123.22	98.37	71.21	52.50	43.50	22.80	16.70	13.50	11.80	10.10
1.80V/cell	139.41	116.15	93.22	68.58	50.60	42.10	22.20	16.20	13.10	11.40	9.76

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

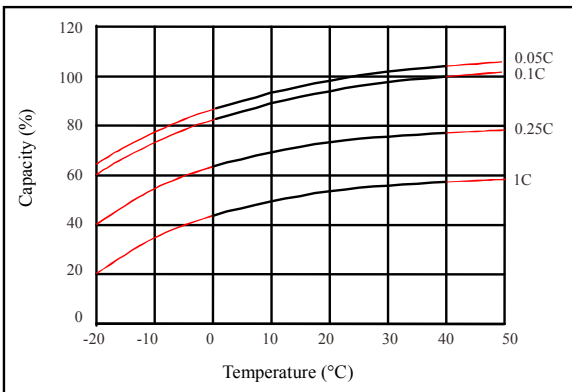
● Discharge characteristics (25°C)



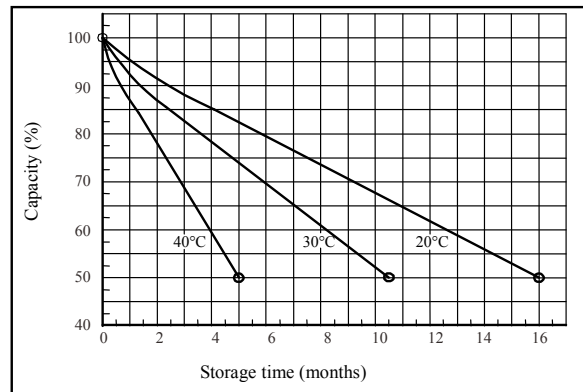
● Charging characteristics (25°C)



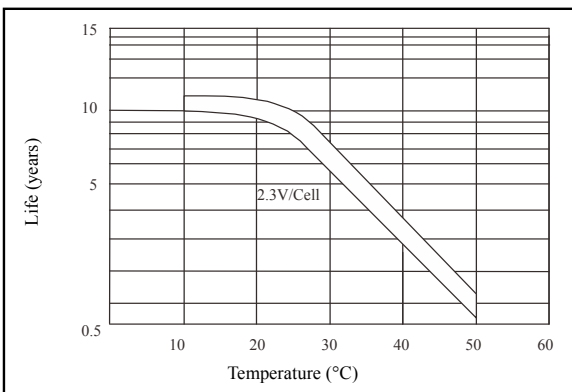
● Temperature effects on capacity



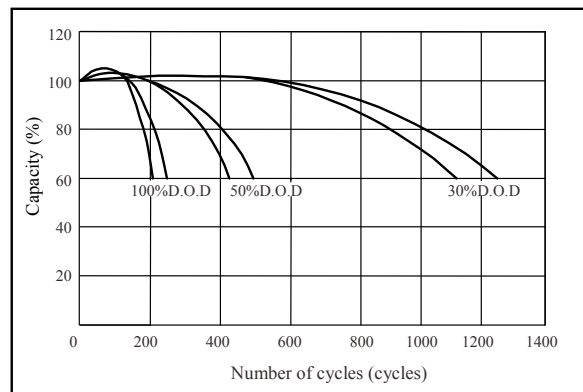
● Self-discharge characteristics



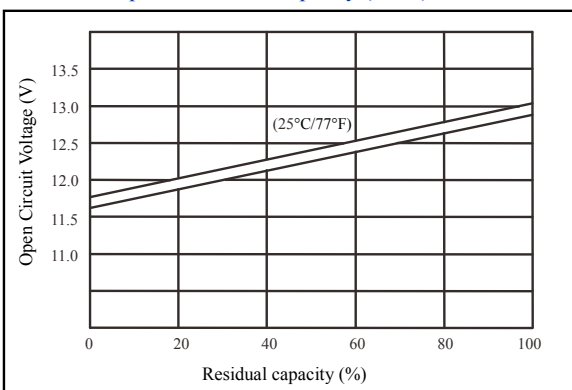
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

