



## FW6000-B12420

RECHARGEABLE BATTERY

HX12-42

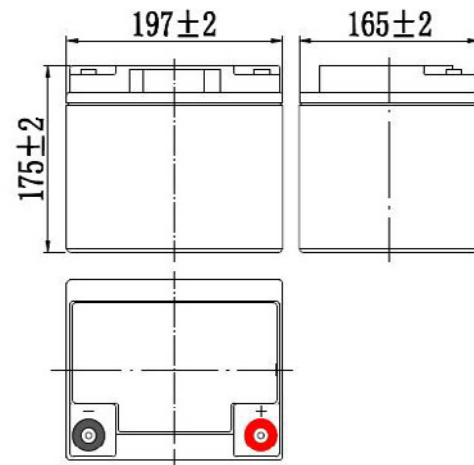
(12V42Ah)

### SPECIFICATIONS

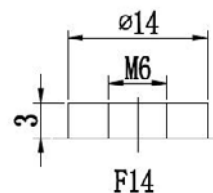
18 MONTHS WARRANTY

Nominal Voltage		12 V
Capacity (25°C)	10HR(10.8V)	42 Ah
	5HR(10.5V)	35.7Ah
	1HR(9.60V)	25.2Ah
Dimension	Length	197±2mm (7.76inch)
	Width	165±2mm (6.50inch)
	Height	175±2mm (6.89inch)
	Total Height	175±2mm (6.89inch)
Approx. Weight		13.5kg (29.7lbs) ± 4%
Terminal type		F14
Internal resistance (Fully charged, 25°C)		Approx. 8.5m Ω
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	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
Cyclic charging voltage(25°C)		14.40 to 14.70V Temperature compensation: -30mV/°C
Maximum charging current		12.6A
Maximum discharge current		420A(5 sec.)
Designed floating life(20°C)		12 years

### Dimensions



### Terminal



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

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	79.80	66.36	40.43	25.20	15.33	10.82	8.56	7.29	5.15	4.27	2.26
9.90V	77.39	64.79	39.59	24.78	15.23	10.82	8.52	7.25	5.11	4.26	2.26
10.2V	74.24	62.37	38.43	24.15	15.12	10.71	8.46	7.20	5.08	4.26	2.26
10.5V	70.98	60.27	37.49	23.73	14.91	10.61	8.40	7.14	5.04	4.24	2.24
10.8V	66.99	57.12	36.12	23.00	14.49	10.31	8.14	6.93	4.89	4.20	2.23

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

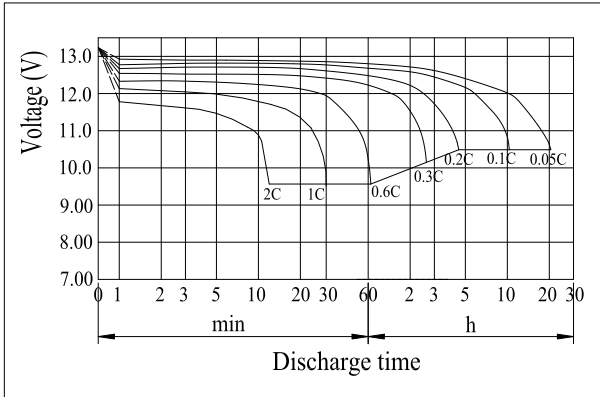
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	862.05	728.70	453.60	287.70	177.45	127.05	100.80	86.10	61.11	51.03	27.20
9.90V	835.80	710.85	444.15	282.45	176.40	127.05	100.17	85.58	60.69	50.93	27.09
10.2V	801.15	684.60	430.50	276.15	175.35	126.00	99.44	84.95	60.27	50.82	27.09
10.5V	767.55	661.50	420.00	269.85	172.20	124.95	98.81	84.42	59.85	50.51	26.88
10.8V	723.45	626.85	405.30	262.50	168.00	120.75	95.87	81.90	58.07	50.19	26.67

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

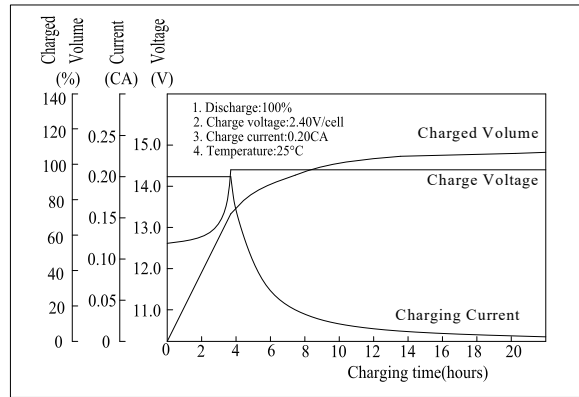
**Construction**

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

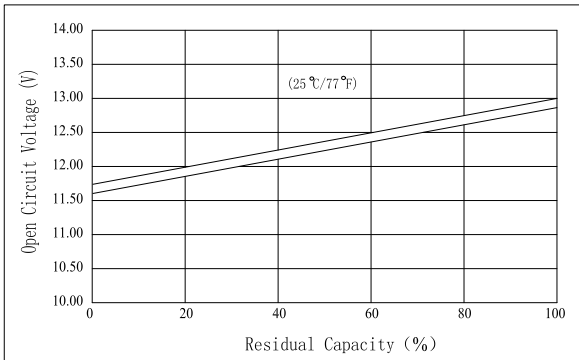
**Discharge Characteristics(25°C)**



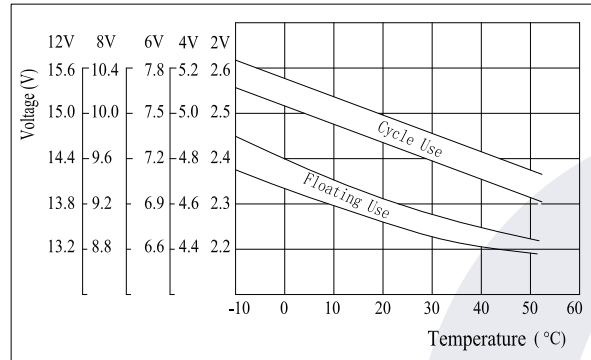
**Charging Characteristics(25°C)**



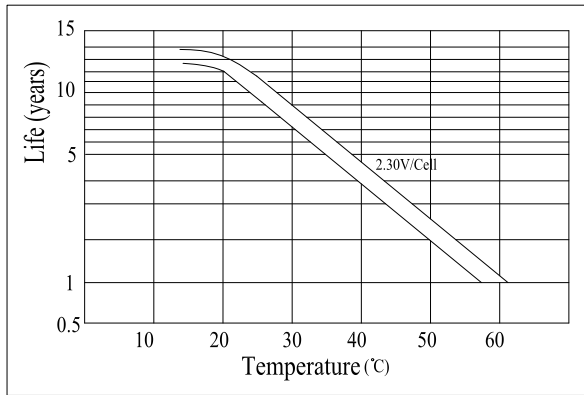
**The Relationship for Open Circuit Voltage and Residual Capacity (25°C)**



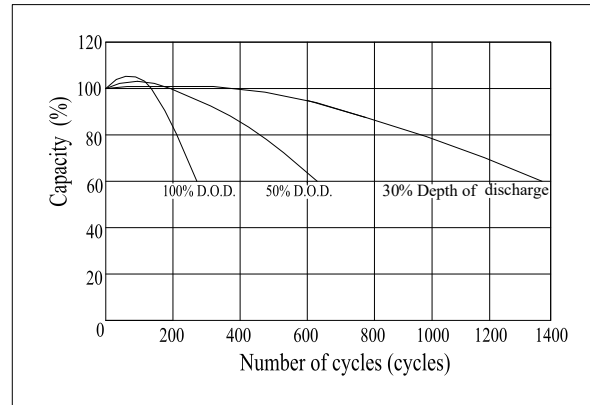
**The Relationship for Charging Voltage and Temperature**



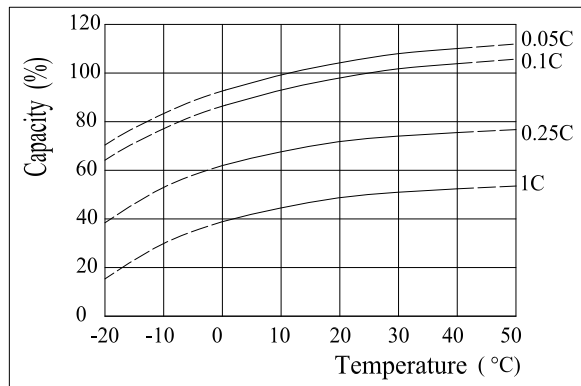
**Floating Life on Temperature**



**Cycle Life on D.O.D(25°C)**



**Effect of Temperature on Capacity**



**Self-discharge Characteristics**

