

FTG12-50Ah 12V50Ah

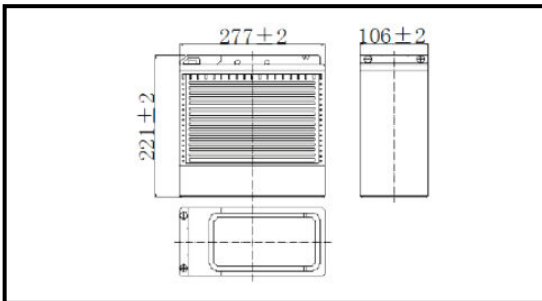
Valve Regulated Lead Acid Battery



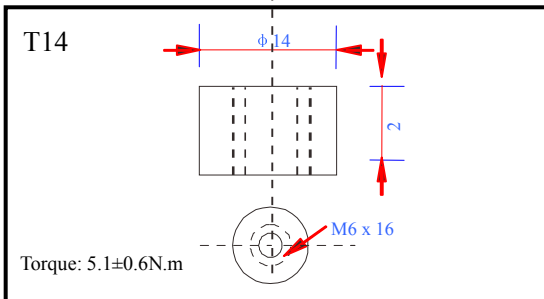
Specifications

Nominal voltage	12V (6 cells per unit)	
Rated capacity (10HR)	50Ah/10.8V	
Dimensions	Length	277±2mm (10.91inch)
	Width	106±2mm (4.17inch)
	Height	221±2mm (8.70inch)
	Total height	221±2mm (8.70inch)
Approx. weight	16.00kg (35.30lbs)±3%	

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	10HR (10.8V)	50Ah
	3HR (10.8V)	36Ah
	1HR (10.5V)	26Ah
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)		14.40 to 14.70V Temperature compensation: -30mV/°C/Block
Maximum charging current		10A
Maximum discharge current		400A (5 sec.)
Design life	12 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	Gel	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	95.6	78.4	47.5	29.4	18.3	13	10.2	8.67	6.12	5.09	2.70
9.90V	92.7	76.5	46.6	29.0	18.2	12.9	10.1	8.62	6.08	5.08	2.69
10.2V	88.9	73.7	45.2	28.2	18.0	12.8	10.1	8.56	6.04	5.07	2.68
10.5V	85.0	71.2	44.1	27.3	17.7	12.8	10.0	8.50	6.00	5.04	2.67
10.8V	80.3	67.4	42.4	26.5	17.3	12.5	9.7	8.25	5.82	5.00	2.65

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

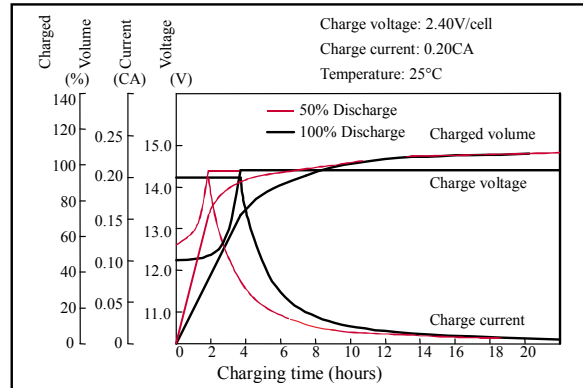
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	1032	861	533	335	212	153	120	102	72.7	60.8	32.4
9.90V	1001	840	523	330	210	152	119	102	72.3	60.7	32.3
10.2V	960	809	507	322	208	151	118	101	71.8	60.5	32.2
10.5V	918	782	494	312	205	150	118	100	71.3	60.1	32.0
10.8V	867	740	476	302	200	147	114	97.5	69.1	59.7	31.8

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

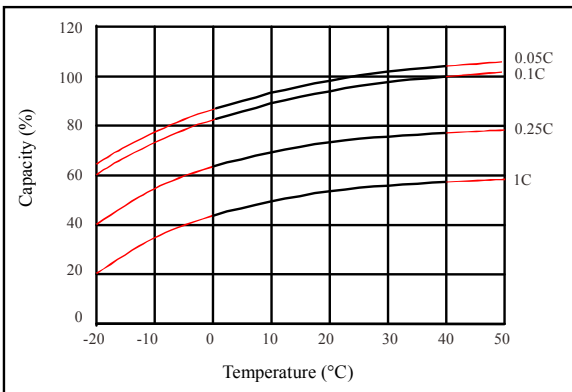
● Discharge characteristics (25°C)



● Charging characteristics (25°C)



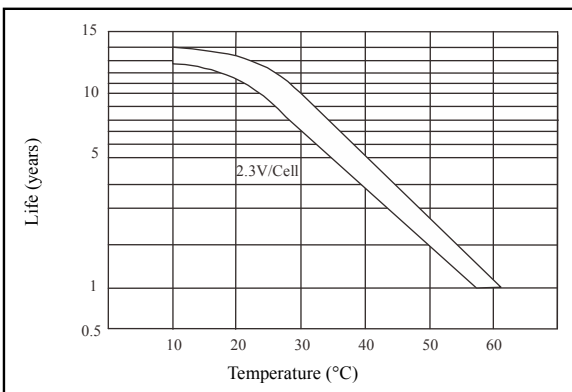
● Temperature effects on capacity



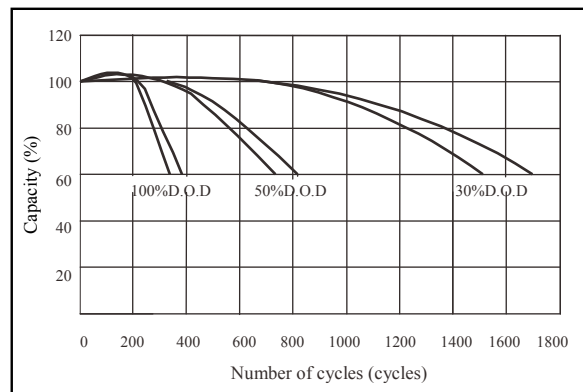
● Self-discharge characteristics



● 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

