GTAD12-20 12V20AH

DEEP CYCLE BATTERY - DC SERIES

Specifications

Nominal Voltage	12V (6 cells per unit)	
Nominal Capacity (20HR)	20Ah/10.5V	
Dimensions	Length Width Height Total height	181±2mm 77±1mm 167±2mm 167±2mm
Approx. Weight	5.70kg±4%	
Terminal Type	T12	
Rated Capacity (25°C)	20HR (10.5V) 10HR (10.5V) 1HR (9.60V)	20Ah 19Ah 12Ah
Max. Discharge Current	300A (5 sec)	
Max. Charging Current	6A	
Internal Resistance (Fully charged, 25°C)	Approx. 12mΩ	
Operating Temp. Range	Discharge Charge Storage	-15°C~50°C (5°F~122°F) -10°C~50°C (14°F~122°F) -20°C~50°C (-4°F~122°F)
Nominal Operating Temp.	25°C±3°C (77°F±5°F)	
Cyclic Charging Voltage (25°C)	14.60 to 15.00V Temperature compensation : -30mV/°C	
Float Charging Voltage (25°C)	13.60 to 13.70V Temperature compensation : -18mV/°C	
Capacity affected by temperature (10HR)	40°C 25°C 0°C -15°C	102% 100% 85% 65%
Self-discharge (25°C)	3 months 6 months 12 months	Remaining capacity: 91% Remaining capacity: 82% Remaining capacity: 65%
Design Life	8 years for floating (25°C) Eurobat (20°C): 6-9 years, general purpose.	

Applications

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply
- Solar Power System

Remarks:
- Use in normal climate environment with standard range of regulated powered electricity.
- Falling, hitting, bending, etc. may cause degradation of battery characteristics.

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	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	78.3	49.6	38.7	21.8	13.4	7.35	5.08	4.20	3.58	1.94	1.04
9.90V	76.0	48.1	37.8	21.4	13.2	7.30	5.05	4.18	3.55	1.93	1.04
10.2V	72.8	46.1	36.4	20.7	12.9	7.24	5.02	4.15	3.53	1.92	1.03
10.5V	69.7	44.2	35.2	20.2	12.6	7.13	4.98	4.12	3.51	1.91	1.03
10.8V	65.8	41.7	33.3	19.5	12.2	6.95	4.83	4.00	3.40	1.87	1.00

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

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	874	560	442	250	155	85.9	60.4	50.1	42.7	23.3	12.5
9.90V	848	543	431	245	153	85.4	60.0	49.8	42.4	23.2	12.4
10.2V	813	520	415	238	149	84.7	59.6	49.4	42.1	23.1	12.4
10.5V	778	498	401	232	146	83.4	59.2	49.1	41.9	23.0	12.3
10.8V	734	470	380	223	142	81.3	57.4	47.6	40.6	22.5	12.1

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

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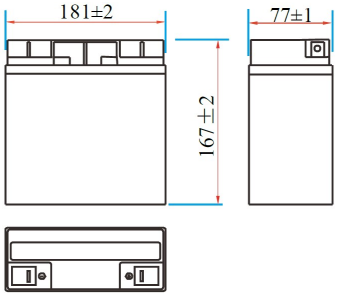
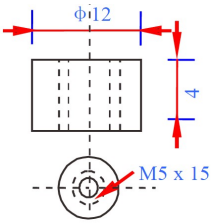
Outer dimensions (mm)

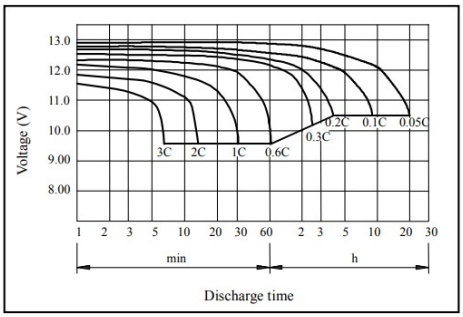


Terminal type (mm)

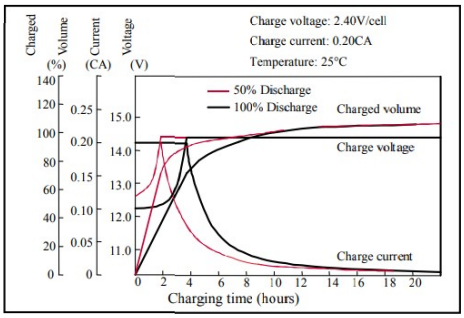


T12
Torque: 3.0±0.6N.m

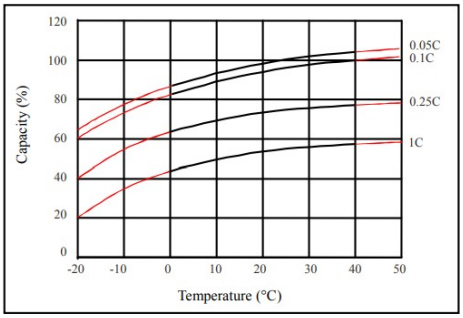
Discharge characteristics (25°C)



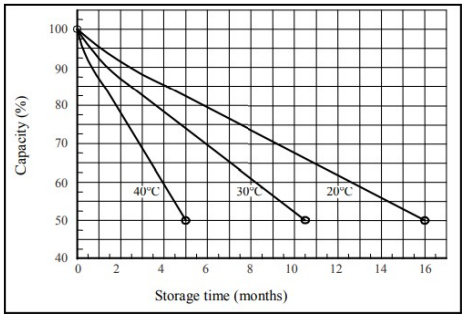
Charging characteristics (25°C)



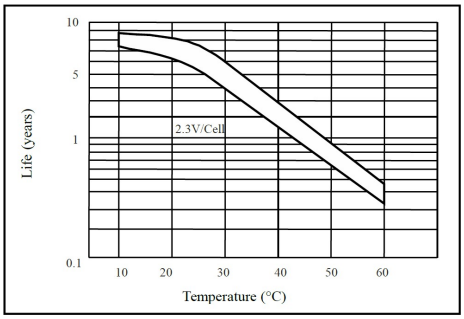
Temperature effects on capacity



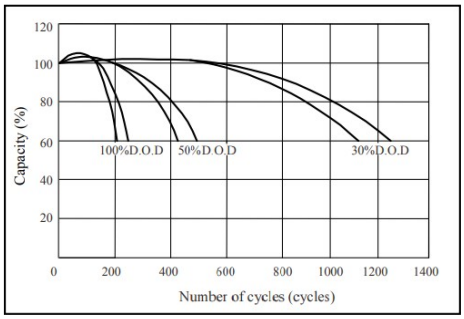
Self-discharge characteristics



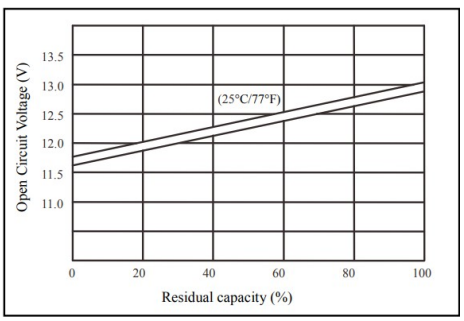
Floating life on temperature



Cycle life on D.O.D (25°C)



Relationship for OCV and capacity (25°C)



Relationship for charging voltage and temperature