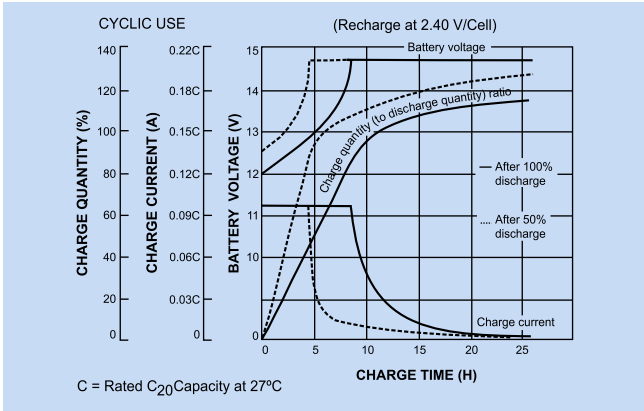
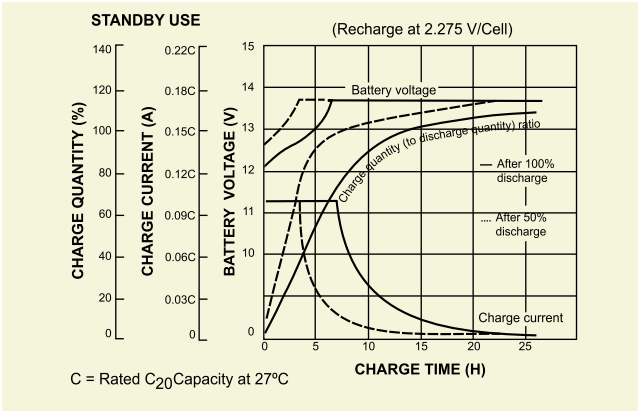


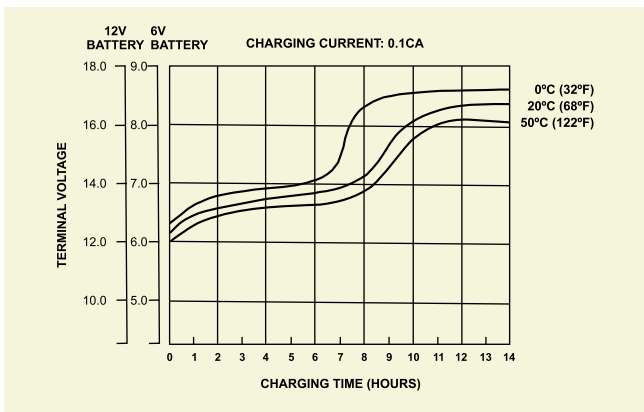
Cyclic Application



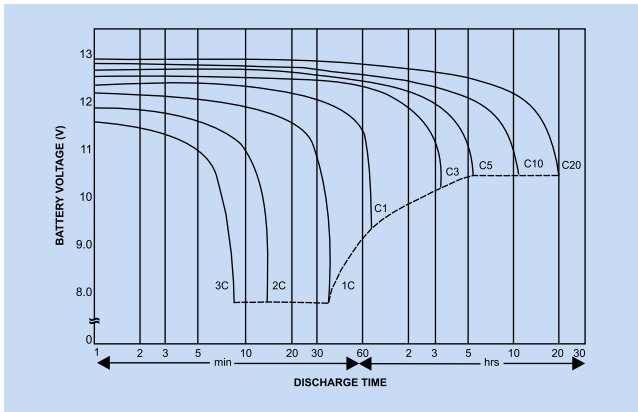
Standby Application



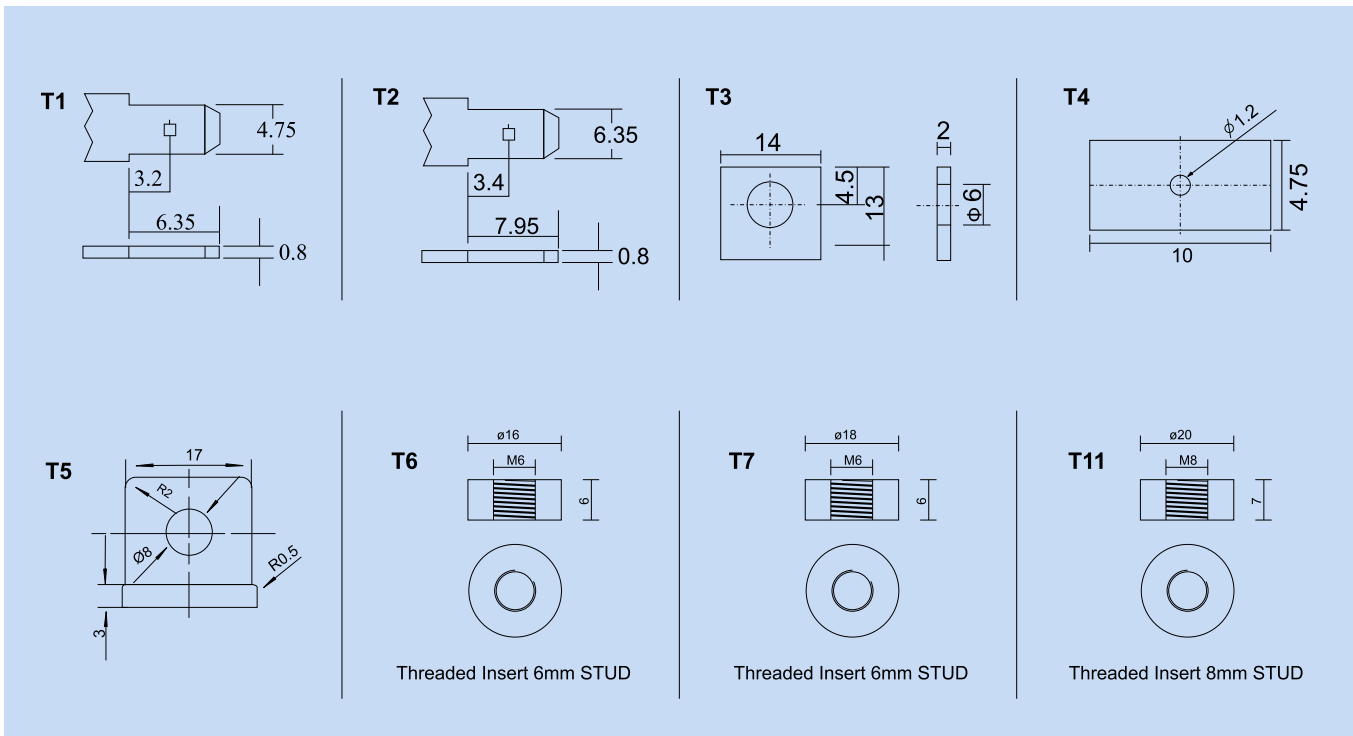
Constant Current Charging



Discharge Characteristics



Battery Terminals (mm)



Specifications of AP Series

Battery Type	Nominal Voltage (V)	Rated Capacity					Maximum Charging current (A)	Charging Voltage		Dimensions (± 3 mm)				Weight Approx Kgs. (± 5%)	Terminal Type
		20HR 1.75V Cell	10HR 1.75V Cell	5HR 1.75V Cell	3HR 1.75V Cell	1HR 1.75V Cell		Stand By Use(V)	Cycle Use(V)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)		
AP 4.5-6	6	4.5	4.3	3.85	3.45	2.65	1.125	6.75 to 6.9 V (27°C)	7.2 to 7.5 V (27°C)	70	48	101	106	0.71	T1
AP 7-12	12	7	6.63	6.0	5.37	4.18	1.75	13.5 to 13.8 V (27°C)	14.4 to 15 V (27°C)	151	64	94	100	2.0	T2
AP 12-12	12	12	11.5	10.2	9.18	7.07	3.0			151	98	94	100	3.6	T2
AP 18-12	12	18	17	15.2	13.65	10.6	4.5			181	77	167	167	5.6	T3
AP 26-12	12	26	24.6	22.2	19.95	15.1	6.5			166	175	125	125	7.8	T3, T6
AP 28-12	12	28	26.7	23.8	21.42	16.5	7.0			175	166	125	125	8.6	T3, T6

Specifications of APE Series

Battery Type	Nominal Voltage (V)	Rated Capacity					Maximum Charging current (A)	Charging Voltage		Dimensions (± 3 mm)				Weight Approx Kgs. (± 5%)	Terminal Type
		20HR 1.75V Cell	10HR 1.75V Cell	5HR 1.75V Cell	3HR 1.75V Cell	1HR 1.75V Cell		Stand By Use(V)	Cycle Use(V)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)		
APE 40-12	12	44	40	32	29.4	21.8	11.0	13.5 to 13.8 V (27°C)	14.4 to 15 V (27°C)	197	166	171	171	13.0	T7
APE 65-12	12	70	65	52	47.7	35.5	17.5			348	167	178	178	19.0	T7
APE 90-12	12	100	90	72	66	49.1	25.0			307	169	211	215	27.5	T7
APE 100-12	12	110	100	80	73.2	54.6	27.5			330	173	212	220	30.0	T7
APE 120-12	12	132	120	96	87.9	65.5	33.0			407	174	209	218	38.0	T11
APE 150-12	12	160	150	120	109.8	81.9	40.0			484	171	241	241	44.0	T11
APE 200-12	12	220	200	160	146.4	109.2	55.0			522	240	216	224	61.5	T11

Specifications of API Series

Battery Type	Nominal Voltage (V)	Rated Capacity					Maximum Charging current (A)	Charging Voltage		Dimensions (± 3 mm)				Weight Approx Kgs. (± 5%)	Terminal Type
		20HR 1.75V Cell	10HR 1.75V Cell	5HR 1.75V Cell	3HR 1.75V Cell	1HR 1.75V Cell		Stand By Use(V)	Cycle Use(V)	Length (mm)	Width (mm)	Height (mm)	Total Height (mm)		
API-26-12	12	26	24	22.1	19.5	15.5	6.5	13.5 to 13.8 V (27°C)	14.4 to 15 V (27°C)	166	175	125	125	9.0	T6
API-42-12	12	42	38	35.7	31.5	25	10.5			197	166	176	176	13.5	T7
API-65-12	12	65	60	55.2	48.7	39	16.3			350	166	175	175	22.5	T7
API-100-12	12	100	90	85	75	60	25.0			330	173	219	224	31.0	T7
API-120-12	12	120	110	102	90	72	30.0			406	173	235	235	33.5	T11
API-150-12	12	150	140	127.5	112.5	90	37.5			483	170	240	240	46.0	T11
API-200-12	12	200	185	170	150	120	50.0			522	240	219	224	64.0	T11



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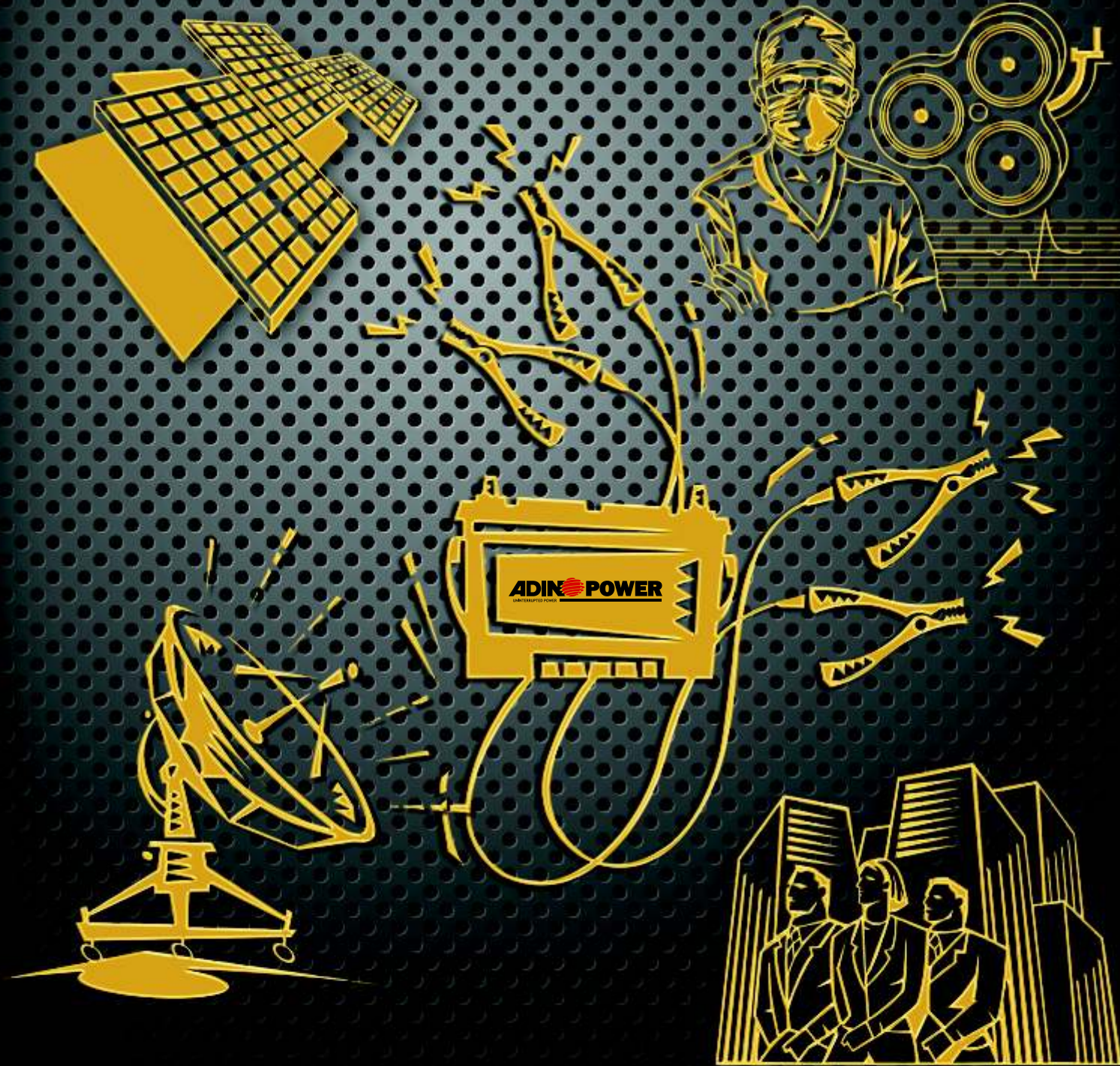
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Battery Applications



ADINO Power® Brand of Battery is manufactured to the latest national and international quality standards such as ISO 9001 : 2000, EN, ISO 14001 : 2004 UL, CE, VDS. The battery meets the IEC standard, JIS standard, EB standard, Earobat standard, BS standard and GB standard. The VRLA Batteries are manufactured in the plant which was set up in 1997 using precision global standard test and measuring equipments to ensure the product quality and reliability.

ADINO Power® Brand of Battery is introduced by the most trusted house serving the Indian market since 1992. The company popularly known as ADINO telecom Limited is having its head quarters located in Mumbai with PAN India Regional Sales cum Service offices to ensure high level of Customer Satisfaction since almost 2 decades now.

These Batteries are designed keeping Indian power conditions in mind like cyclic / non-cyclic use by UPS system, DC Power applications in Industrial as well as telecom companies, Solar and PV solutions.

ADINO Power® range of Batteries comes in predominantly 3 technology platforms i.e., AGM, GEL and OPZ technology. The AGM technology takes care of all the general purpose applications. The GEL technology is used for high operating temperature application which drives down your OPEX and the OPZ technology offers very high life cycle Battery which is used for continuous process Industry, Power Plants, Steel Plants, OIL and Gas Refineries, etc.

ADINO is further undertaking the R&D on other technology platform which would provide green lead free batteries.

A VRLA – AGM battery uses oxygen recombination technology. The oxygen produced from the positive plates of the battery is absorbed by the negative plates. This suppresses the generation of hydrogen at the negative plates. The recombination of oxygen and hydrogen leads to water, retaining the electrolyte amount within the battery. Water filling is never required. Battery should never be opened as this would damage the battery with additional oxygen from the air. The warranty will be void if the battery is opened and the serial number sticker is removed.

Definition of VRLA-AGM Battery

A VRLA-AGM battery is an electric storage lead acid battery • Sealed with special compound epoxy & using pressure controlled vent valves. • Starved electrolyte design – acid solution is absorbed in separators. • Using a recombination reaction to prevent the escape of hydrogen & oxygen gases. • Non spillable – can be operated in any position. Upside down installation is not recommended. • Maintenance free. Connections must be re-torqued & the battery should be cleaned periodically.

Technical Features

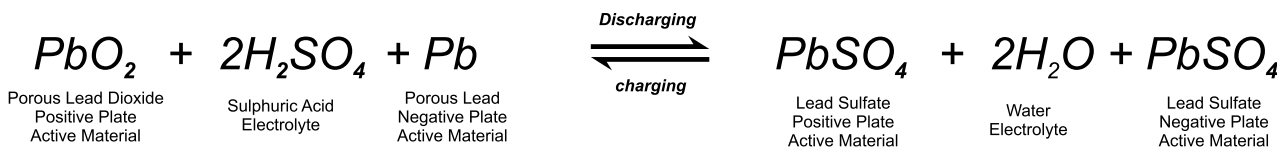
- Maintenance Free. No Water Adding Required • Sealed Valve Regulated • Spill Proof / Leak Proof
- Deep Discharge Protection • No Corrosion • Low Pressure Venting System • Long Shelf Life • Heavy Duty Grids
- Gas Recombination • ABS Container • Rugged & Vibration – Resistance • Good High Rate Discharge
- Good Cyclic & Stationary Performance

Designed Life

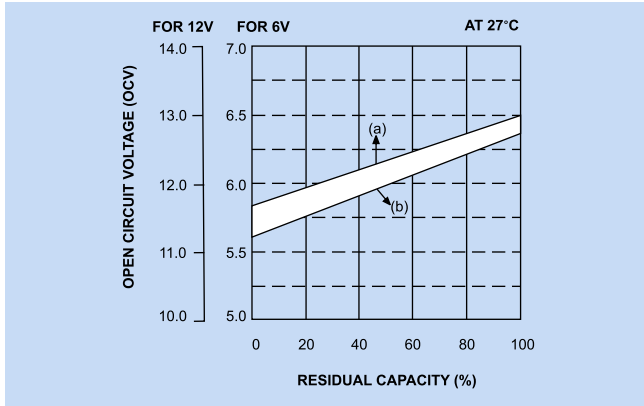
- AP Series Designed for float life of 4-5 years at an ambient temperature of 25° C.
- APE Series Designed for float life of 7-10 years at an ambient temperature of 25° C.

Applications

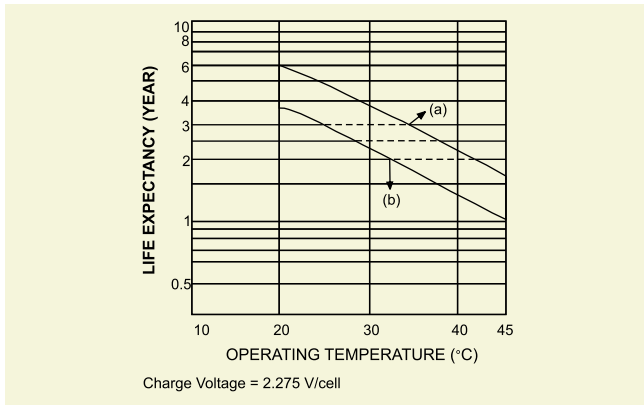
- UPS Systems • Emergency Lighting • Computer Backup • Telecommunication Equipments • Security Systems & Fire Alarm
- Medical Equipments • Solar Power Systems



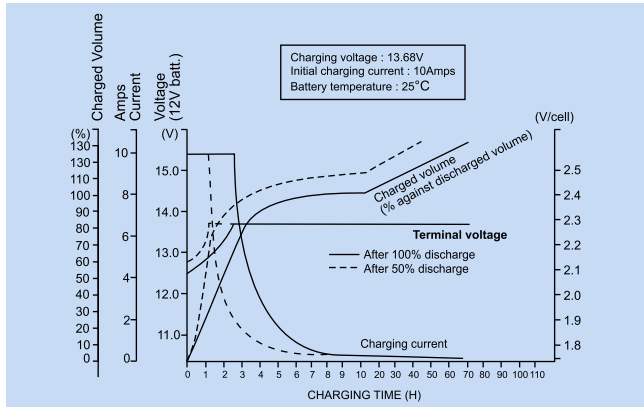
Open Circuit Voltage Vs Remaining Capacity



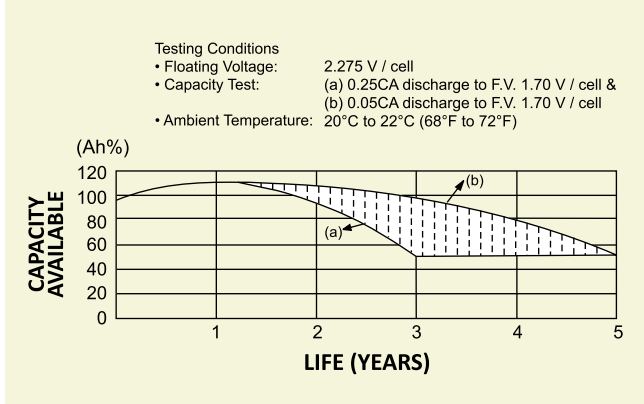
Discharge Characteristic in Standby use



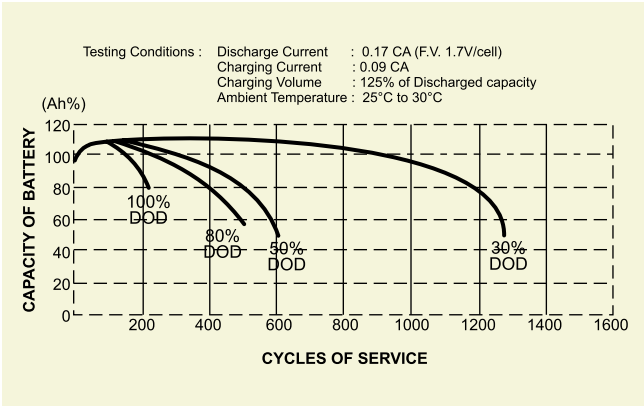
Floating Charge Characteristics



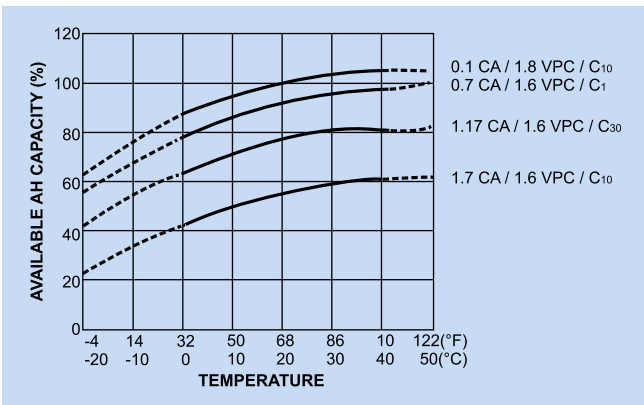
Service Life under Float Charging Condition



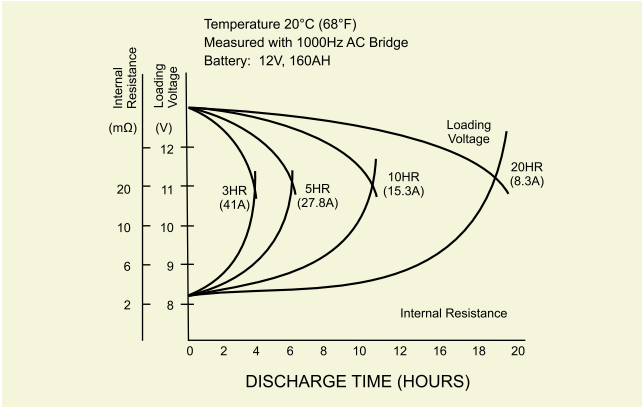
Discharge Characteristic in Cyclic use



Effect of Temperature on AH Capacity



Battery Internal Resistance



Overdischarge Characteristics

