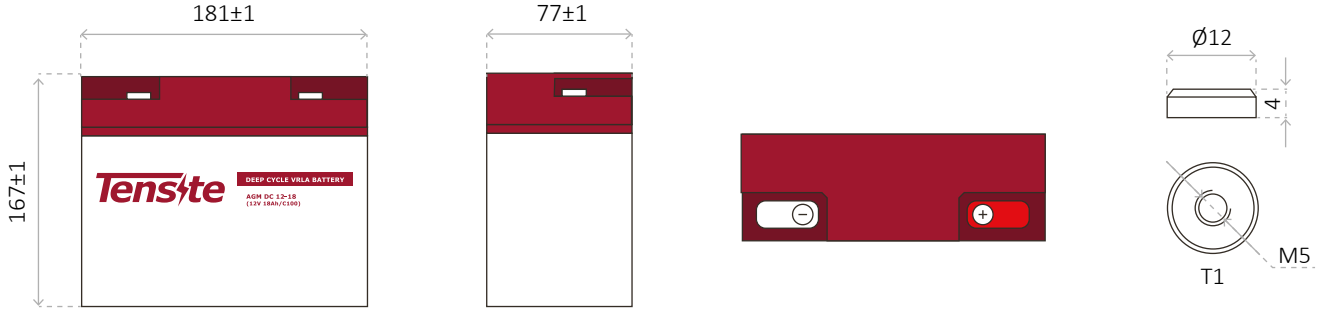
AGM DC 12-18

CHARACTERISTICS

- Compact size ideal for any type of use.
- Great performance due to its Deep Cycle technology.
- Perfect to use as accumulator in photovoltaic installations.

DIMENSIONS



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AGM DEEP CYCLE BATTERY
12V 18 AH

DEEP CYCLE SERIES BATTERY

DC series VRLA batteries are superior Deep Cycle design with thick plates, high-density active materials and slightly stronger electrolyte, which can withstand repeated deep cyclic applications.
Deep Cycle series batteries are the special design batteries with 10 years floating design life at 25ºC. Meet with IEC, BS,JIS and Eurobat standard, UL(MH62092), CE approved.

APPLICATION

- Emergency Power System
- Communication equipment
- Telecommunication systems
- Uninterruptible power supplies
- Power tools
- Marine equipment
- Medical equipment
- Solar and wind power system

GENERAL FEATURES

- Safety Sealing
- Non-spillable construction
- High power density
- Excellent recovery from Deep discharge
- Thick plates and high active materials
- Longer life and low self-discharge design

TECHNICAL SPECIFICATIONS

BATTERY MODEL	**Nominal voltage**			12V			
	Rated capacity (20 hour rate)			18Ah			
	Cells Per battery			6			
DIMENSION	**Length**	**Width**		**Height**	**Total Height**		
	181 mm	77 mm		167 mm	167 mm		
APPROX. WEIGHT	5.3 kg ± 3%						
CAPACITY @ 25°C	**20 hour rate (0.9A, 10.5V)**	**10 hour rate (1.66A, 10.5V)**		**5 hour rate (3.06A, 10.5V)**	**1 hour rate (10.8A, 9.6V)**		
	18 Ah	16.6 Ah		15.3 Ah	10.8 Ah		
MAX. DISCHARGE CURRENT	270 A (5 sec.)						
INTERNAL RESISTANCE	Full charged Vat 25°C: Approx. 10.5mΩ						
CAPACITY AFFECTED BY TEMP. (10 HR)	**40°C**	**25°C**		**0°C**	**-15°C**		
	102%	100%		85%	65%		
SELF DISCHARGE @25°C	**After 3 months storage**			**After 6 months storage**	**After 12 months storage**		
	91%			82%	64%		
CHARGE METHOD @25°C	**Cycle Use**			**Float Use**			
	14.4-14.7V (Initial charging current less than 5.4A)			13.50-13.80V			
CONSTRUCTION	**Container**	**Electrolyte**	**Separator**	**Positive**	**Negative**	**Safety valve**	**Terminal**
	ABS (UL94-HB) / Flame retardant ABS (UL94-V0)	Sulfuric acid	Fiber glass	Lead dioxide	Lead	EPDR	Copper

BATTERY DISCHARGE TABLE

CONSTANT CURRENT (AMP) AND CONSTANT POWER (WATT) DISCHARGE TABLE AT 25 ºC

F.V / TIME		5 min	10 min	15 min	30 min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	20 hr
9.60	A	64.80	42.50	31.50	20.70	10.80	6.30	4.64	3.72	3.16	2.08	1.70	0.93
	W	764.20	480.00	363.00	219.70	124.50	72.90	53.63	43.05	36.53	24.08	19.72	10.80
10.20	A	59.40	40.60	28.90	19.70	10.14	6.04	4.50	3.60	3.10	2.05	1.67	0.91
	W	719.20	454.50	341.20	218.30	117.00	70.00	52.12	41.70	35.85	23.70	19.35	10.50
10.50	A	54.10	38.00	27.00	19.00	9.81	5.93	4.42	3.42	3.06	2.03	1.66	0.90
	W	694.50	441.00	326.30	216.00	113.50	68.60	51.22	39.60	35.63	23.48	19.20	10.43
10.80	A	52.00	36.30	25.20	18.50	9.48	5.77	4.35	3.36	2.93	1.97	1.61	0.88
	W	609.00	427.50	314.20	215.20	110.30	67.20	50.63	39.11	34.05	22.50	18.75	10.20
11.10	A	48.00	34.20	23.40	18.00	9.15	5.63	4.13	3.30	2.80	1.92	1.58	0.86
	W	588.70	413.20	299.30	213.80	108.80	66.70	49.13	39.00	33.30	21.75	18.37	10.13

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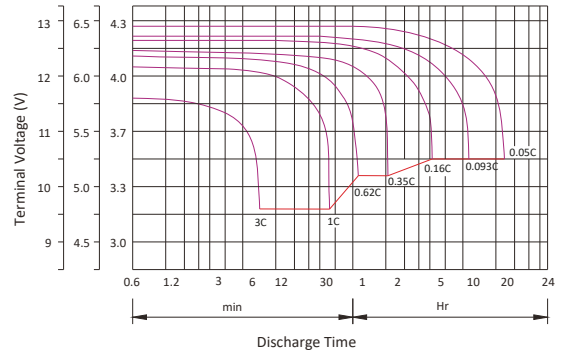
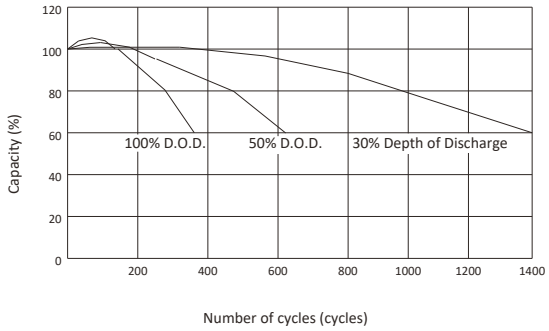
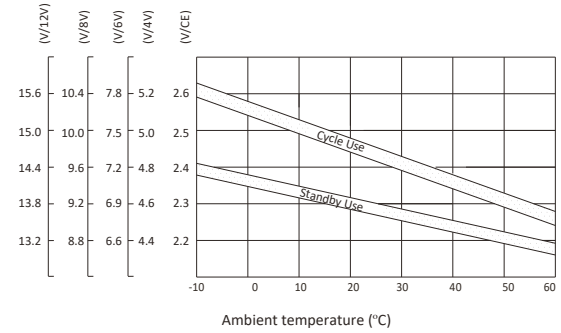
Discharge characteristic Curve



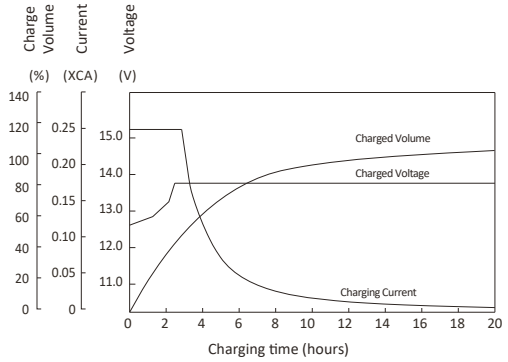
Cycle service life in relation to depth of discharge



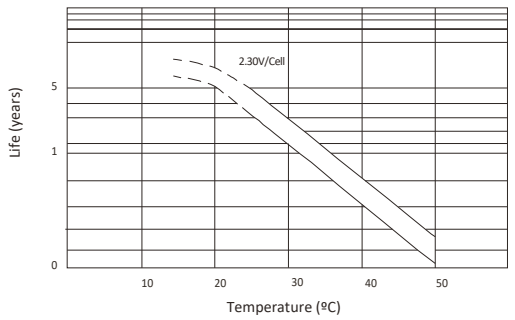
Relationship between charging voltage and temperature



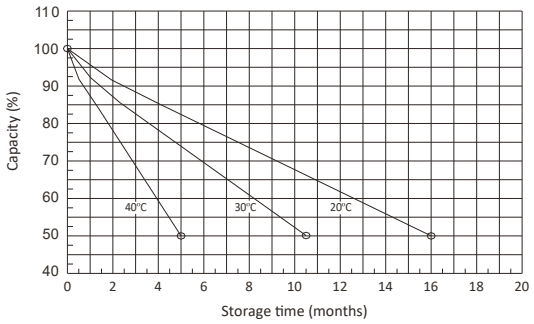
Constant voltage charging characteristic (0.25CA, at 25ºC)



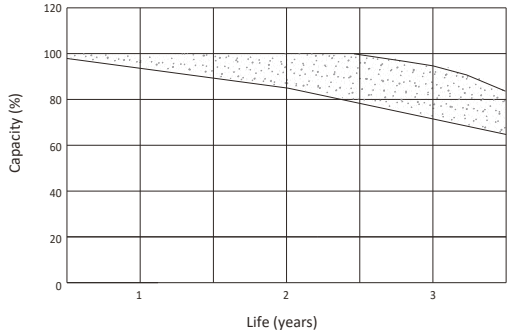
Temperature effects on float life



Self-discharge characteristic

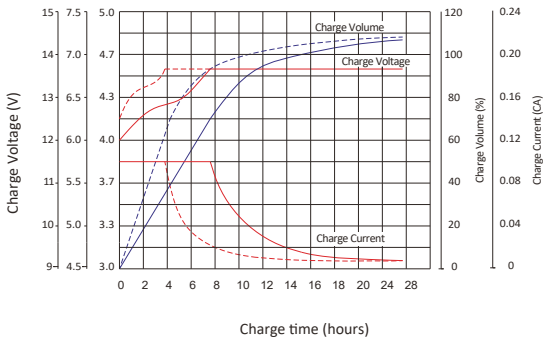


Life characteristics of standby use*



*Testing conditions:
Floating voltage 2.27 to 2.30V Cell
Ambient temperature 25ºC

Charge characteristic Curve for standby use**



**Discharge
100% (0.05CA 20h)
50% (0.05CA 10h)

Charge
Charge Voltage 2.275V/C
Charge Current 0.1CA

Temperature 25ºC

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