



### FEATURES



Compact size ideal for any type of use.

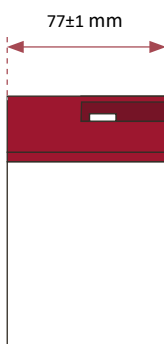
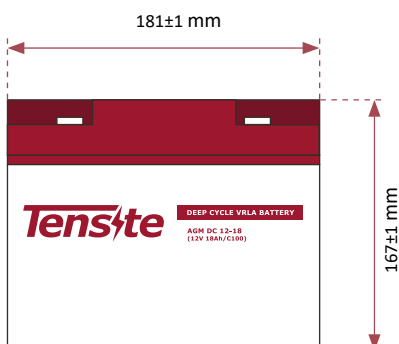


High performance due to its deep discharge life cycle.

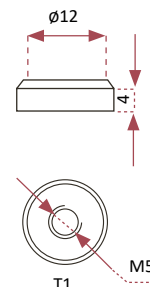


Designed for photovoltaic installations.

### DIMENSIONS



\* Stainless steel connection screws, included in packaging.



### DEEP CYCLE BATTERY AGM 12V 18 AH

#### DEEP CYCLE SERIES BATTERY

The 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 6 years floating life at 25°C. Meet with IEC, BS, JIS, Eurobat, UL (MH62092) and CE approved.



#### APPLICATION

- Emergency power system.
- Communication equipment.
- Telecommunications systems.
- Uninterruptible power supply.
- Electric wheelchairs.
- Electric toys, cars and motorcycles.
- Electric tools.
- Golf carts and buggies.
- Marine electrical equipment.
- Emergency medical equipment.
- Camping and caravans.
- Solar and wind energy systems.

#### GENERAL FEATURES

- Safety sealing.
- Anti-spill technology.
- High power density.
- Excellent deep discharge recovery.
- Thick plates and highly active materials.
- Longer service life and low self-discharge.

#### TECHNICAL SPECIFICATIONS

BATTERY MODEL	Nominal Voltage		12 V	
	Rated Capacity (20 Hour rate)		18 Ah	
DIMENSIONS	Cells per battery		6	
	Length	Width	Height	Total Height
	181 mm	77 mm	167 mm	167 mm
APPROXIMATE WEIGHT	5,3 kg ± 3%			
CAPACITY @ 25°C (77 °F)	20 hours (0.9 A, 10.5 V)	10 hours (1.66 A, 10.5 V)	5 hours (3.06 A, 10.5 V)	1 hour (1.08 A, 9.6 V)
	18 Ah	16,6 Ah	15,3 Ah	10,8 Ah
MAXIMUM DISCHARGE CURRENT	270 A (5 seconds.)			
INTERNAL RESISTANCE	Fully charged at 25°C: Approximately 10.5 mΩ			
CAPACITY VS TEMPERATURE	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
SELF DISCHARGE @ 25°C	After 3 months in storage		After 6 months	After 12 months
	91%		82%	64%
CHARGE METHOD @ 25°C	Cycle Use		Float Use	
	14,3V / 14,6V (Initial charging current less than 5,4A)		13,7V +2%	

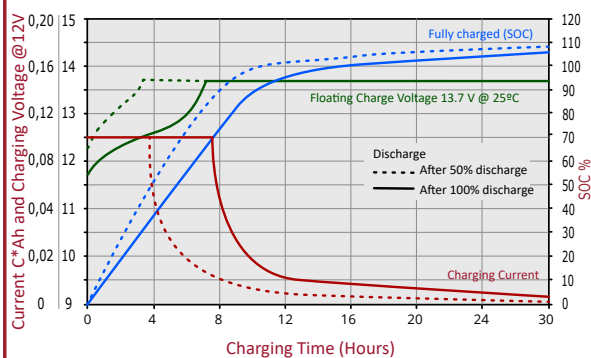
#### BATTERY DISCHARGE TABLE

CONSTANT CURRENT(A) AND CONSTANT POWER (W) DISCHARGE TABLE AT 25°C									
F.V / TIME		10 min	15 min	30 min	1 hr	3 hrs	5 hrs	10hrs	20 hrs
9.60	A	42.50	31.50	20.70	10.80	4.64	3.16	1.70	0.93
	W	480.00	363.00	219.70	124.50	53.63	36.53	19.72	10.80
10.20	A	40.60	28.90	19.70	10.14	4.50	3.10	1.67	0.91
	W	454.50	341.20	218.30	117.00	52.12	35.85	19.35	10.50
10.50	A	38.00	27.00	19.00	9.81	4.42	3.06	1.66	0.90
	W	441.00	326.30	216.00	113.50	51.22	35.63	19.20	10.43
10.80	A	36.30	25.20	18.50	9.48	4.35	2.93	1.61	0.88
	W	427.50	314.20	215.20	110.30	50.63	34.05	18.75	10.20
11.10	A	34.20	23.40	18.00	9.15	4.13	2.80	1.58	0.86
	W	413.20	299.30	213.80	108.80	49.13	33.30	18.37	10.13

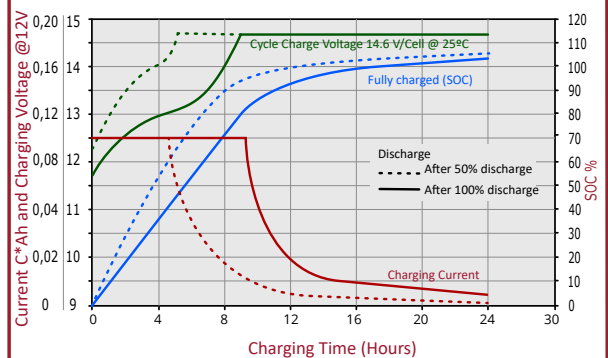
**USE IN FLOTATION:** The battery is connected to the charger continuously, maintaining the charge at 100%, ready for discharge at specific times. This is the case of alarms, UPS systems, backup systems, telecommunications backup.

**USE IN CYCLES:** The battery is charged and discharged, repeating this cycle regularly. This is the case for residential photovoltaic installations (day/night), electric cars and in applications that are consumed when no load is available. The starting of combustion engines would be an application that combines both types of use.

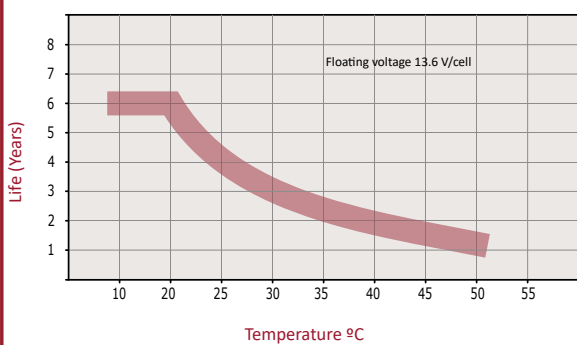
Float Use: Charging Characteristics



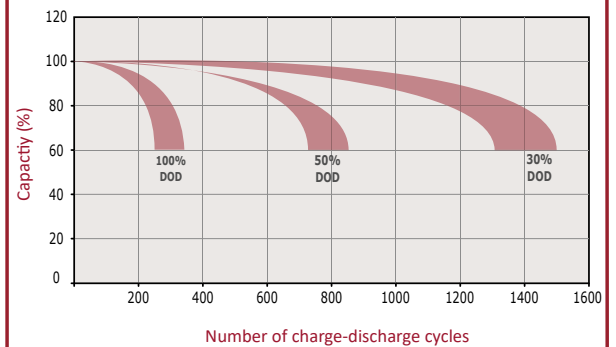
Cycle Use: Charging Characteristics



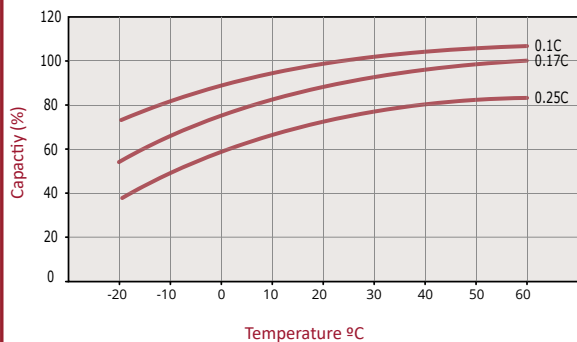
Expected life at Flotation and Temperature



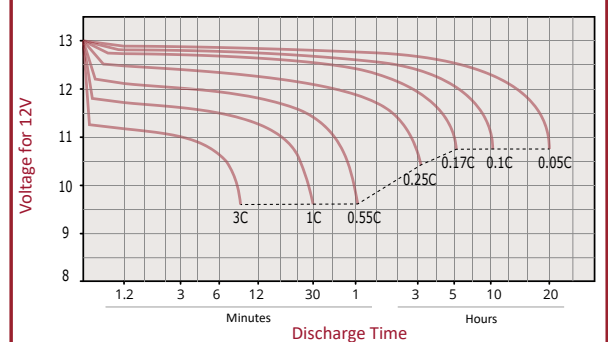
Cycle life in relation to Depth of Discharge



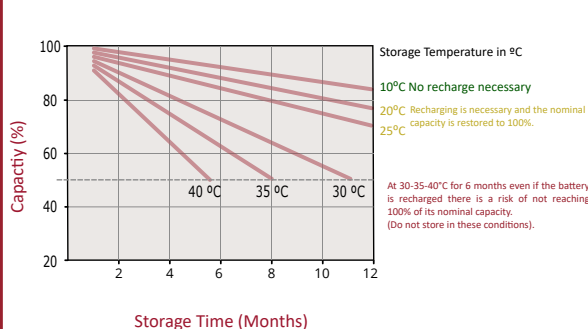
Temperature effects in relation to battery capacity



Discharge Characteristics 25°C (77°F)



Self-Discharge Characteristics with Temperature



Voltage Charge and Temperature

