

AGM TECHNOLOGY
ABT SunwindSWP Series

SWP12-170

12V 170Ah(10hr)

Complying standards:
IEC61427-2005,

Medium cyclic Performance

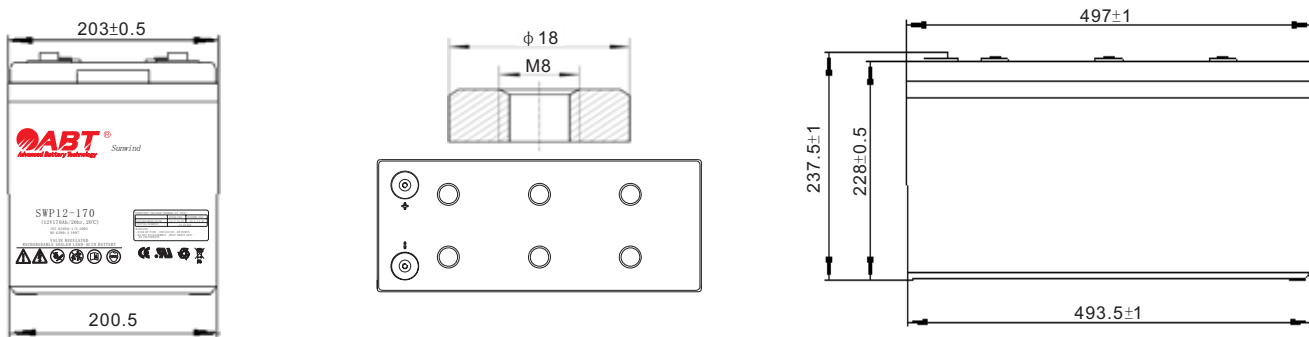
ABT Sunwind SWP Series is a general purpose battery according to Eurobat Classification with 10 years design life for renewable application. As with all ABT batteries, all are rechargeable, highly efficient, leakage proof and maintenance free.



Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity 20°C (68°F)	175Ah @20hr-rate to 1.80V Per cell 170Ah @10hr-rate to 1.80V Per cell 102Ah @1hr-rate to 1.70V Per cell
Weight	Approx. 58.6kg(129.2lbs)
Maximum Discharge Current	510A (3 min)
Short circuit current	3750A
Maximum charge current	34.0A(20% of rated capacity)
Internal Resistance	Approx. 3.20 mOhms
Mass Energy(Wh/kg)	34.8
Volumic energy(Wh/L)	88.7
Operating Temperature Range	Discharge -20~60°C; Charge -10~60°C; Storage -20~60°C
Nominal Operating Temperature Range	20°C±3 °C (68°F±5 °F)
Float Charging Voltage	13.5 t o 13.8 VDC/unit Average at 20°C(68°F)
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 20°C(68°F)
Self Discharge	ABT batteries can be stored for more than 6 months at 20°C(68°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	Insert thread and bolt M8 X ϕ 18
Torque strength in Nm	12~16
Container Material	ABS(UL94-HB) Flammability resistance of UL94-V0 can be available upon request.
Hand Type	Rope
Flame arrestor	Yes

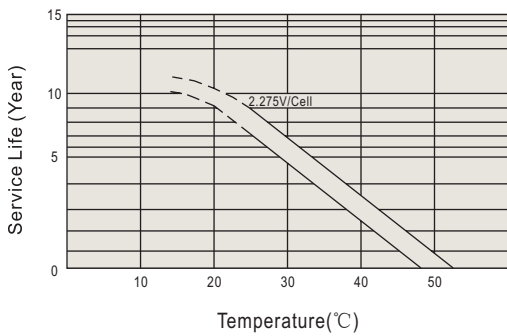
Dimensions / Terminal



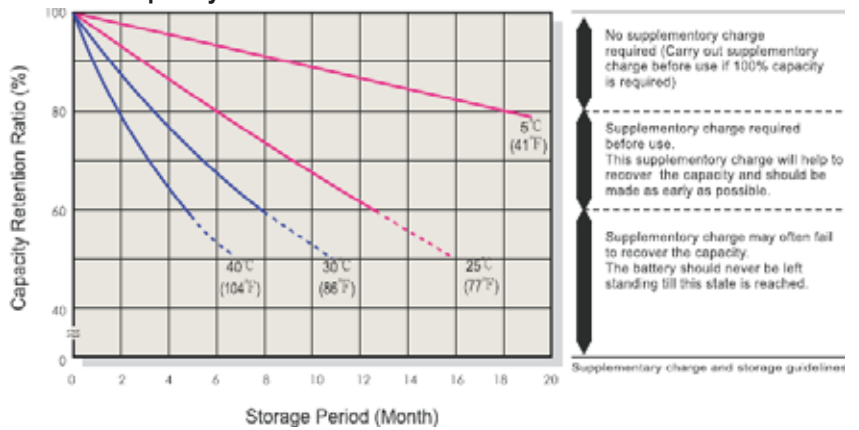
Capacities C₁-C₁₂₀ (20°C)

C ₁	C ₅	C ₁₀	C ₂₀	C ₁₀₀	C ₁₂₀
1.65Vpc	1.75Vpc	1.80Vpc	1.80Vpc	1.85Vpc	1.85Vpc
102	136	170	175	187	190.4

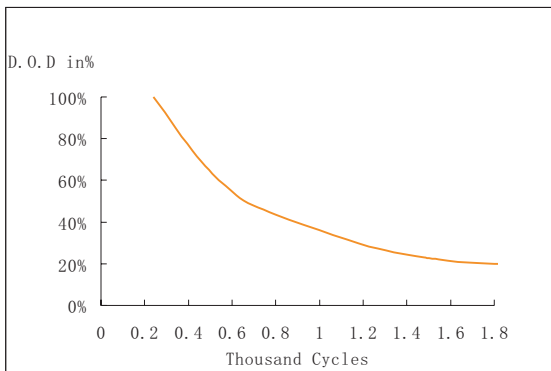
Trickle (or float) Service Life



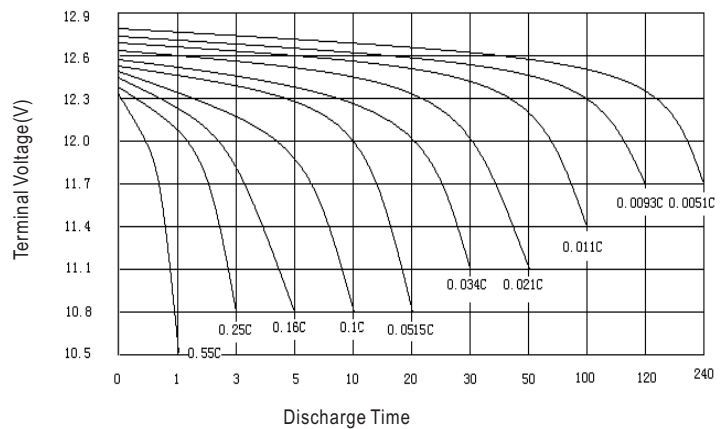
Capacity Retention Characteristic



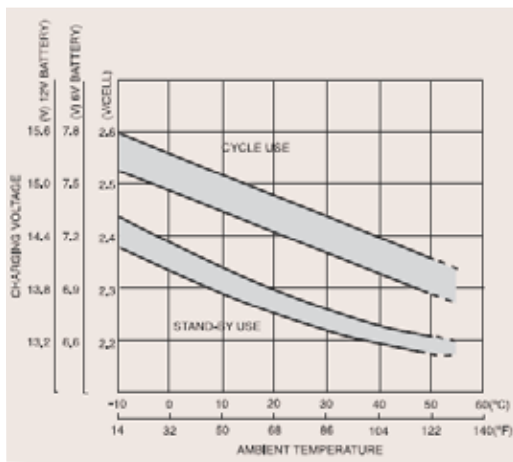
Cycle vs depth of discharge



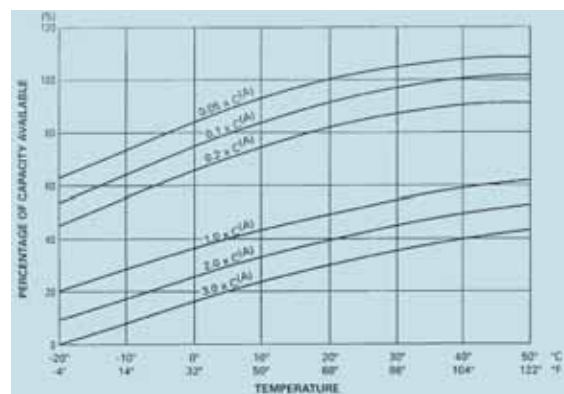
Terminal Voltage(V) and Discharge Time(20°C68°F)



Charge Voltage depend on the temperature



Capacity depend on the temperature



Charging Procedures

Application	Charge Voltage(V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Ranges	
Cycle Use	20°C(68°F)	2.40	2.40~2.50	0.2C
Standby	20°C(68°F)	2.26	2.25~2.30	0.2C

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.85	1.80	1.70	1.60
Discharge Current(A)	0.05C>(A)	0.05C<(A)<0.25C	0.25C<(A)<1.0C	(A)>1.0C

Contact information

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ABT VRLA Battery: Available Power Range From 7Ah to 3000Ah

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