

AGM TECHNOLOGY  
ABT e-Trek RGT Series

**Complying standards:**  
IEC 61056-1/2-2002  
JIS C8702-1/2-2009

## RGT12-33

12V33Ah(20hr)

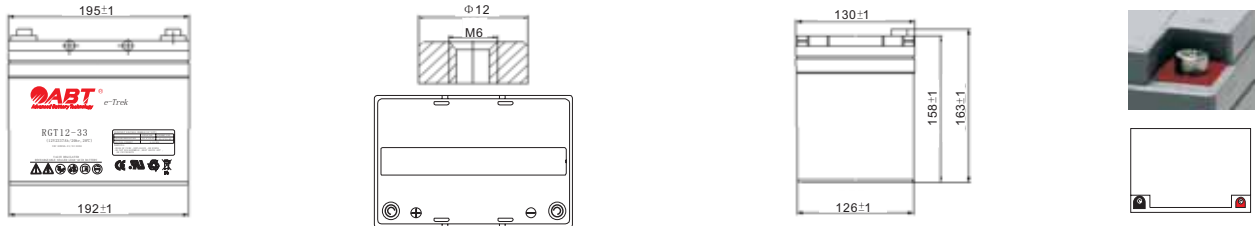
The ABT e-Trek RGT is a Standard Commercial battery according to Eurobat Classification with 8-10 years design life for cyclic application. As with all ABT batteries, all are rechargeable, highly efficient, leakage proof and maintenance free.



### Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity 20°C (68°F)	33Ah @20hr-rate to 1.75V Per cell 30.67Ah @10hr-rate to 1.75V Per cell 28.05Ah @5hr-rate to 1.70V Per cell
Weight	Approx .11.5kg(25.36lb)
Maximum Discharge Current	429A(5s)
Short circuit current	1300A
Maximum charge current	9.9A(30% of rated capacity)
Internal Resistance	Approx. 9 mOhms
Mass Energy(Wh/kg)	34.43
Volumic Energy(Wh/L)	98.87
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 to 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 M6 φ 12
Torque strength in Nm	3-4
Container Material	ABS(UL94-HB) Flammability resistance of UL94-V0 can be available upon request.
Handle Type	Plastic

### Dimensions / Terminal



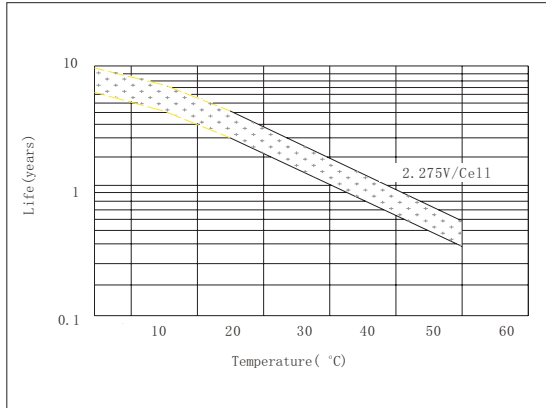
### Constant Current Discharge Data (Amperes at 20°C / 68°F)

End Volt. Per Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	109.0	74.90	60.40	39.91	22.90	13.85	10.06	7.276	5.940	4.069	3.358	1.787
1.65V	104.0	70.55	58.37	39.26	22.32	13.46	9.702	7.077	5.780	3.964	3.257	1.750
1.70V	97.80	67.30	56.85	38.73	21.76	13.17	9.388	6.905	5.610	3.857	3.172	1.706
1.75V	87.00	64.66	54.02	37.94	21.12	12.90	9.009	6.731	5.450	3.752	3.067	1.650
1.80V	77.50	62.39	52.03	36.30	20.41	12.58	8.680	6.527	5.280	3.620	2.958	1.608

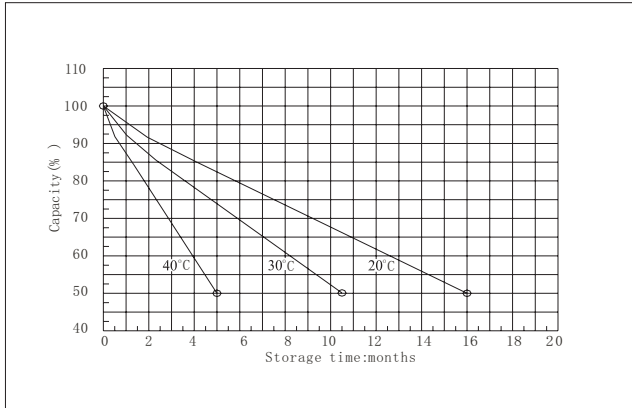
### Constant Power Discharge Data (Watts per cell at 20°C / 68°F)

End Volt. Per Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	184.5	128.0	100.6	69.58	39.63	23.49	16.31	13.06	10.94	7.284	6.018	3.380
1.65V	180.6	126.5	99.22	68.09	39.18	23.14	16.13	12.96	10.83	7.242	5.982	3.367
1.70V	172.0	121.5	97.62	67.54	38.75	22.82	15.98	12.86	10.59	7.206	5.946	3.353
1.75V	159.0	117.6	94.00	66.41	38.28	22.50	15.83	12.78	10.21	7.170	5.900	3.337
1.80V	143.0	114.0	92.99	65.90	37.20	22.16	15.66	12.67	9.931	7.133	5.850	3.317

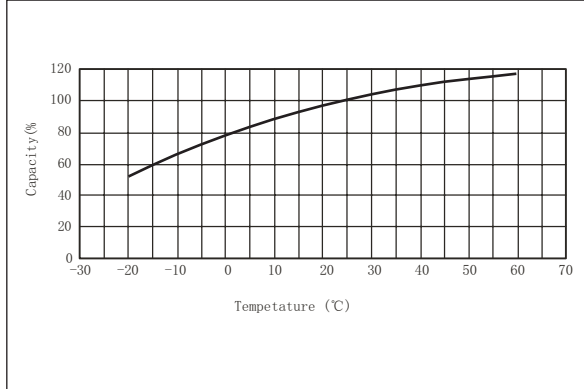
### Trickle (or float) Service Life



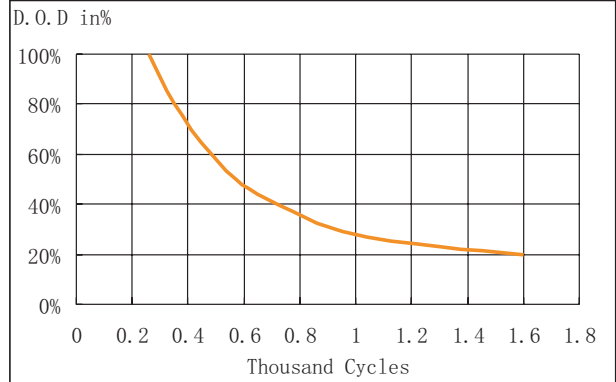
### Capacity Retention Characteristic



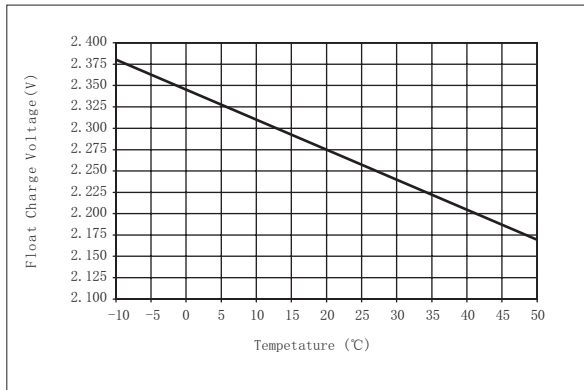
### Capacity and Temperature



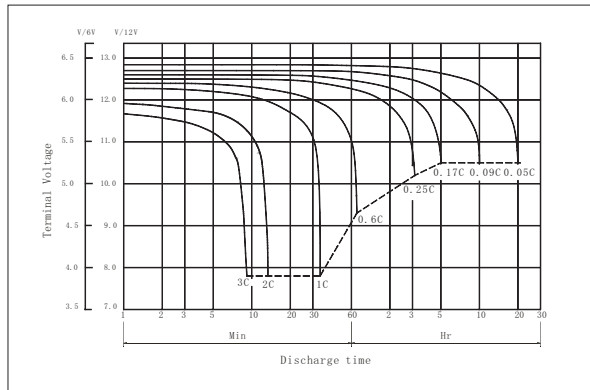
### Cycle Service Life



### Float Charge Voltage and Temperature



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



### Charging Procedures

Application	Charge Voltage(V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Ranges	
Cycle Use	20°C(68°F)	2.45	2.40~2.50	0.3C
Standby	20°C(68°F)	2.275	2.25~2.30	0.3C

### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.40
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(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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