

## RGT12-42

12V42Ah(20hr)

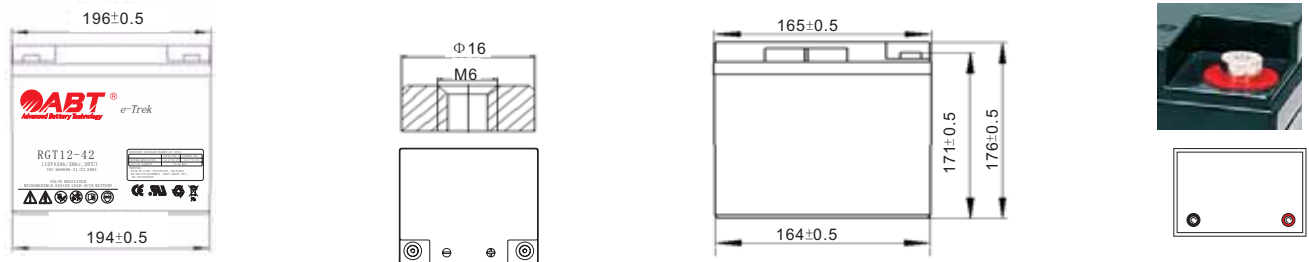
The ABT e-Trek RGT is a Standard Commercial battery according to Eurobat Classification with 8-10 years design life for cyclic application. As with all ABT batteries, all are rechargeable, highly efficient, leakage proof and maintenance free.



### Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity 20°C (68°F)	42Ah @20hr-rate to 1.75V Per cell 39.06Ah @10hr-rate to 1.75V Per cell 35.70Ah @5hr-rate to 1.70V Per cell
Weight	Approx. 13.9kg(30.65lb)
Maximum Discharge Current	400A(5S)
Short circuit current	1600A
Maximum charge current	12.6A(30% of rated capacity)
Internal Resistance	Approx. 7.5 mOhms
Mass Energy(Wh/kg)	36.26
Volumic Energy(Wh/L)	88.55
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 M6 φ 16
Torque strength in Nm	8-10
Container Material	ABS(UL94-HB) Flammability resistance of UL94-V0 can be available upon request.
Handle Type	Incorporated

### Dimensions / Terminal



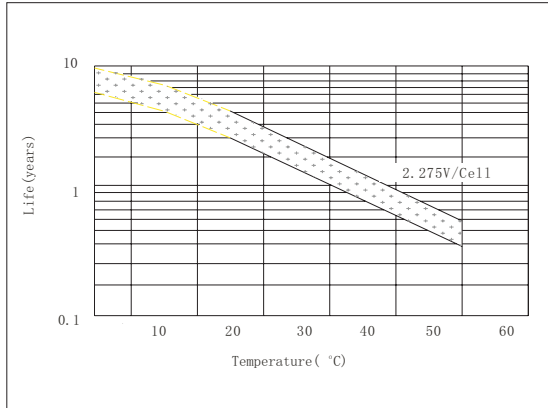
### Constant Current Discharge Data ( Amperes at 20°C / 68°F )

End Volt. Per Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	142.3	98.90	75.79	47.65	27.50	17.99	12.36	9.260	7.560	4.960	4.300	2.440
1.65V	136.7	96.10	72.91	46.21	26.85	17.58	12.06	9.050	7.350	4.850	4.190	2.320
1.70V	130.9	91.71	69.88	44.65	26.11	17.20	11.79	8.820	7.140	4.760	4.080	2.230
1.75V	124.8	86.76	66.90	42.72	25.45	16.73	11.49	8.600	6.930	4.640	3.906	2.100
1.80V	120.3	81.63	63.83	40.39	24.78	16.31	11.14	8.380	6.720	4.540	3.840	2.050

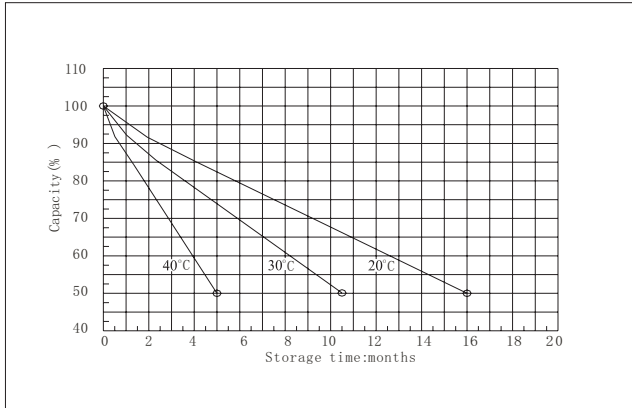
### Constant Power Discharge Data ( Watts per cell at 20°C / 68°F )

End Volt. Per Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	267.3	182.3	137.3	86.79	52.06	33.70	22.91	17.23	13.83	9.270	8.100	4.370
1.65V	256.7	175.8	131.6	84.12	50.60	32.81	22.39	16.85	13.66	9.120	7.890	4.220
1.70V	246.8	168.9	126.8	81.44	49.10	31.97	21.92	16.43	13.33	9.040	7.670	4.130
1.75V	236.0	161.0	122.3	78.91	47.41	31.17	21.41	16.05	13.00	8.820	7.460	3.970
1.80V	224.4	152.3	117.9	76.47	46.00	30.46	20.94	15.68	12.72	8.640	7.280	3.900

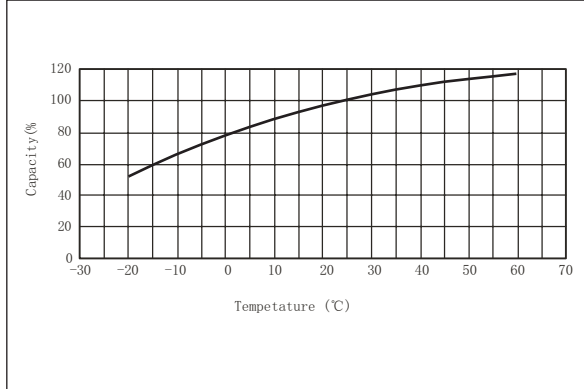
### Trickle (or float) Service Life



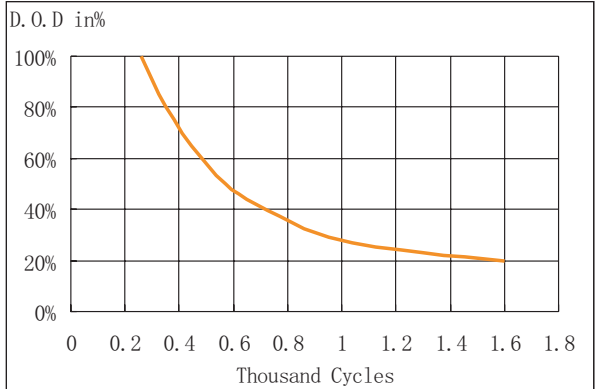
### Capacity Retention Characteristic



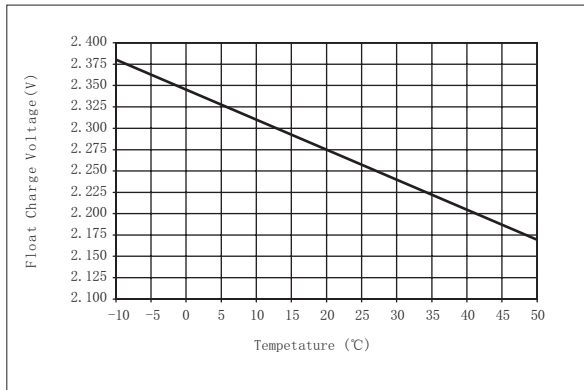
### Capacity and Temperature



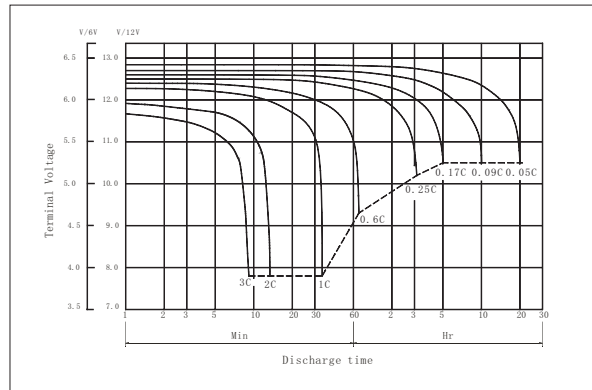
### Cycle Service Life



### 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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