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RG12180T2 12V 18Ah

RG12180T2 is a general purpose battery up to 5 years in standby service or more than 260 cycles at 100% discharge in cycle service. As with all Baace batteries, all are rechargeable, highly efficient, leak proof and maintenance free.



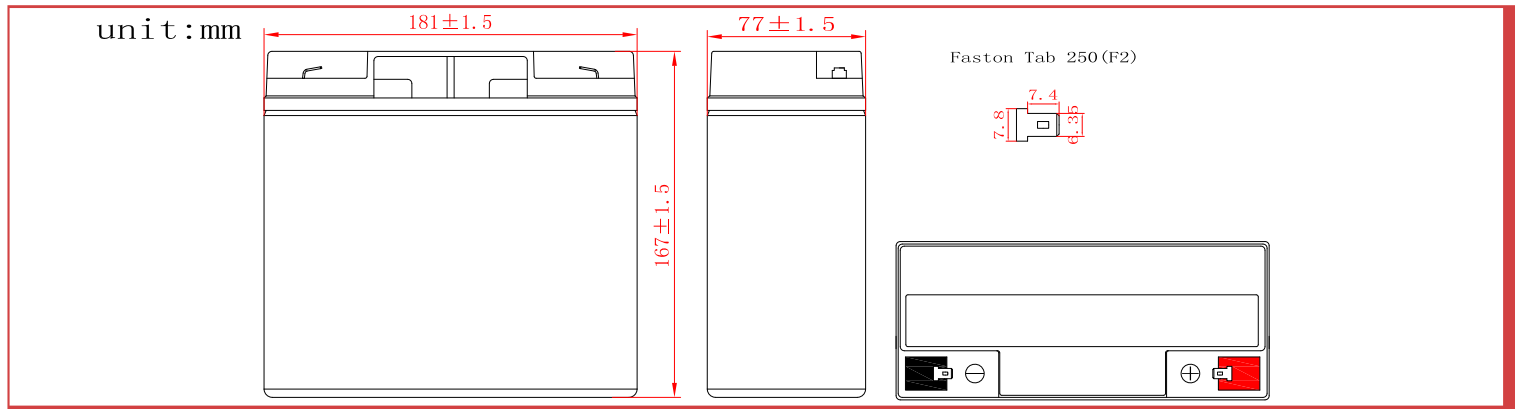
► Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	18Ah @ 20hr-rate to 1.8V per cell @25°C (77°F)
Weight	Approx. 5.15 kg(11.33 lbs)
Maximum Discharge Current	270A(5sec)
Internal Resistance	Approx. 12.5 mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F) Charge: -15°C~40°C (5°F~104°F) Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	5.4A
Equalization and Cycle Service	14.4 to 14.8 VDC/unit Average at 25°C (77°F)
Self Discharge	Raion batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	T2 Faston tab
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.

► Dimensions :

Unit: mm

Overall Height (H)	Container height (h)	Length (L)	Width (W)
167±2	167±2	181±1.5	77±1.5



Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

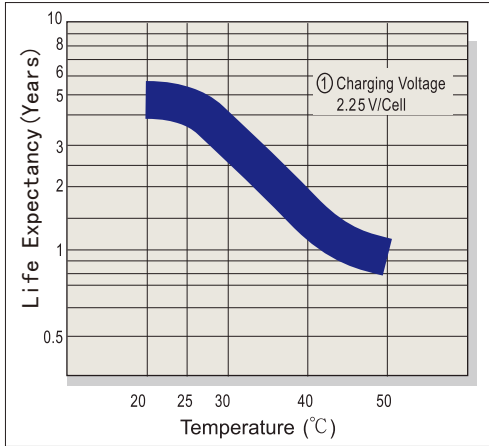
F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	60.5	34.0	19.51	10.79	4.64	3.12	1.749	0.938
1.67V	59.4	33.4	19.40	10.70	4.64	3.11	1.744	0.935
1.7V	57.6	32.4	19.15	10.54	4.60	3.07	1.735	0.929
1.75V	54.6	30.9	18.72	10.27	4.54	3.01	1.720	0.920
1.8V	49.0	28.5	17.96	9.77	4.39	2.90	1.670	0.900
1.85V	38.1	24.1	16.61	8.95	4.07	2.71	1.583	0.865

Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

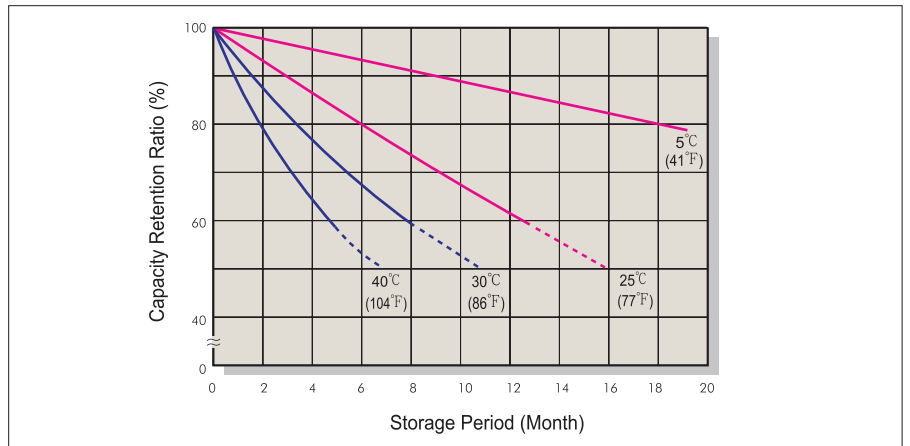
F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	102.6	65.3	37.70	20.50	9.16	6.10	3.44	1.861
1.67V	97.8	61.9	37.53	20.35	9.13	6.09	3.43	1.859
1.7V	91.4	57.9	37.15	20.11	9.05	6.03	3.41	1.848
1.75V	82.6	52.9	36.43	19.74	8.94	5.92	3.37	1.827
1.8V	70.8	46.9	34.97	19.11	8.65	5.72	3.27	1.788
1.85V	55.1	39.4	32.33	17.79	8.10	5.39	3.13	1.725

Ratings presented herein are subject to revision without notice.

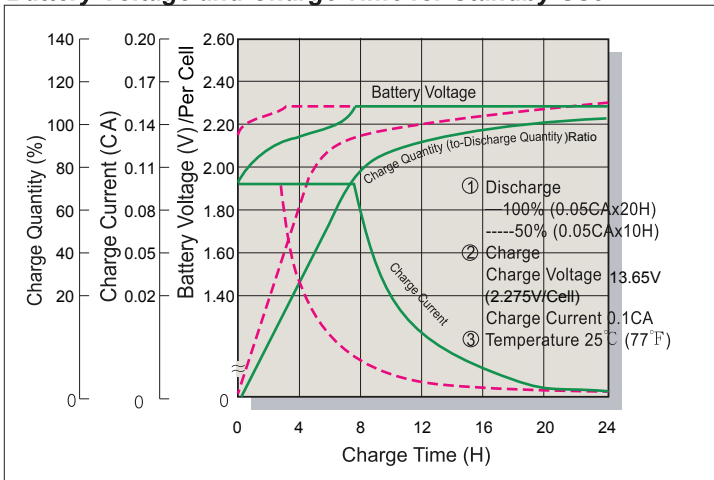
Trickle(or Float)Design Life



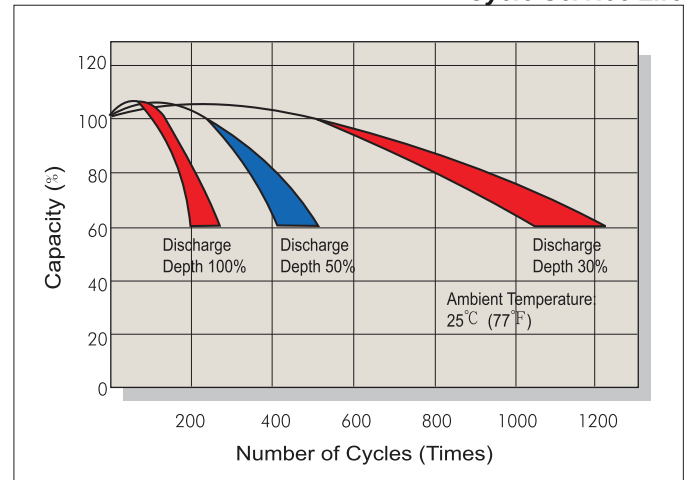
Capacity Retention Characteristic



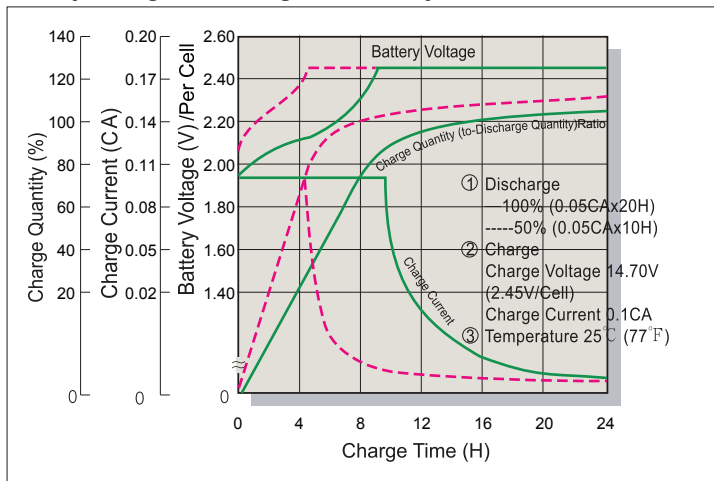
Battery Voltage and Charge Time for Standby Use



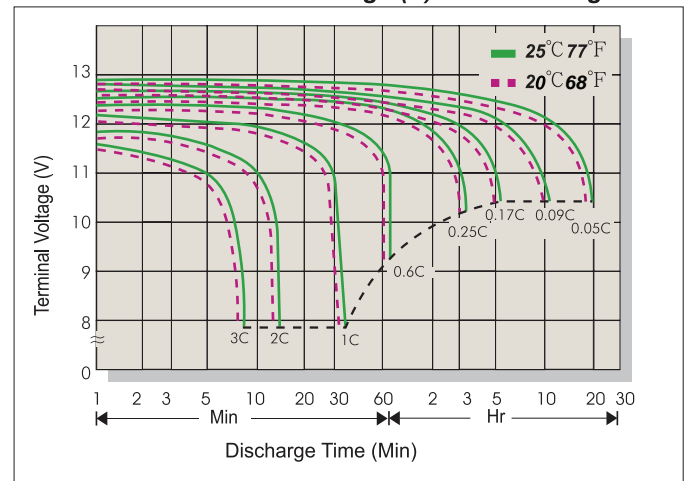
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.3C
Standby	25°C (77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Effect of temperature on capacity (20HR)

Temperature	Dependency of Capacity (20HR)
40 °C	102%
25 °C	100%
0 °C	85%
-15 °C	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%