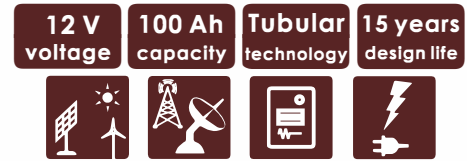


**TUBULAR GEL SERIES VRLA BATTERY**

**TG SERIES**

BSB TG batteries are designed to meet the requirements of heavy duty applications in high temperature. This series is highly suited for renewable energy and telecommunication systems where reliability and performance are the priorities.

The TG batteries benefit from an optimized tubular plates and gelled electrolyte which offer both a longer float life and deep cycle life. Because of the compact design, this series can be easily installed in any environment and is maintenance free.



The image shown above may differ from the actual product appearance.

**GENERAL FEATURES**

- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94 V0, optional).
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Super long service life.
- Lowest self discharge characteristic.
- Super reliability.

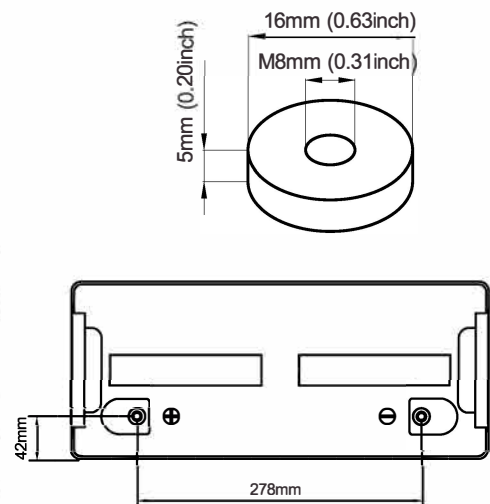
**CONSTRUCTION**

- Positive ..... Lead dioxide
- Negative ..... Lead
- Container ..... ABS
- Cover ..... ABS
- Sealant ..... Epoxy Resin
- Safety valve ..... EPDM
- Terminal ..... Copper
- Electrolyte ..... Nano gel

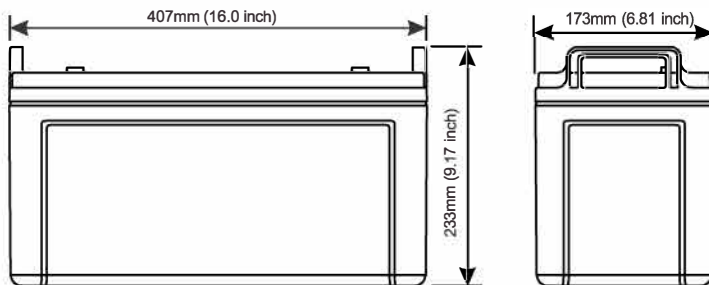
**COMPLIED STANDARDS**

- IEC 60896-21/22
- IEC 61427
- UL1989
- BS6290 Part 4

**TERMINAL DIMENSIONS**



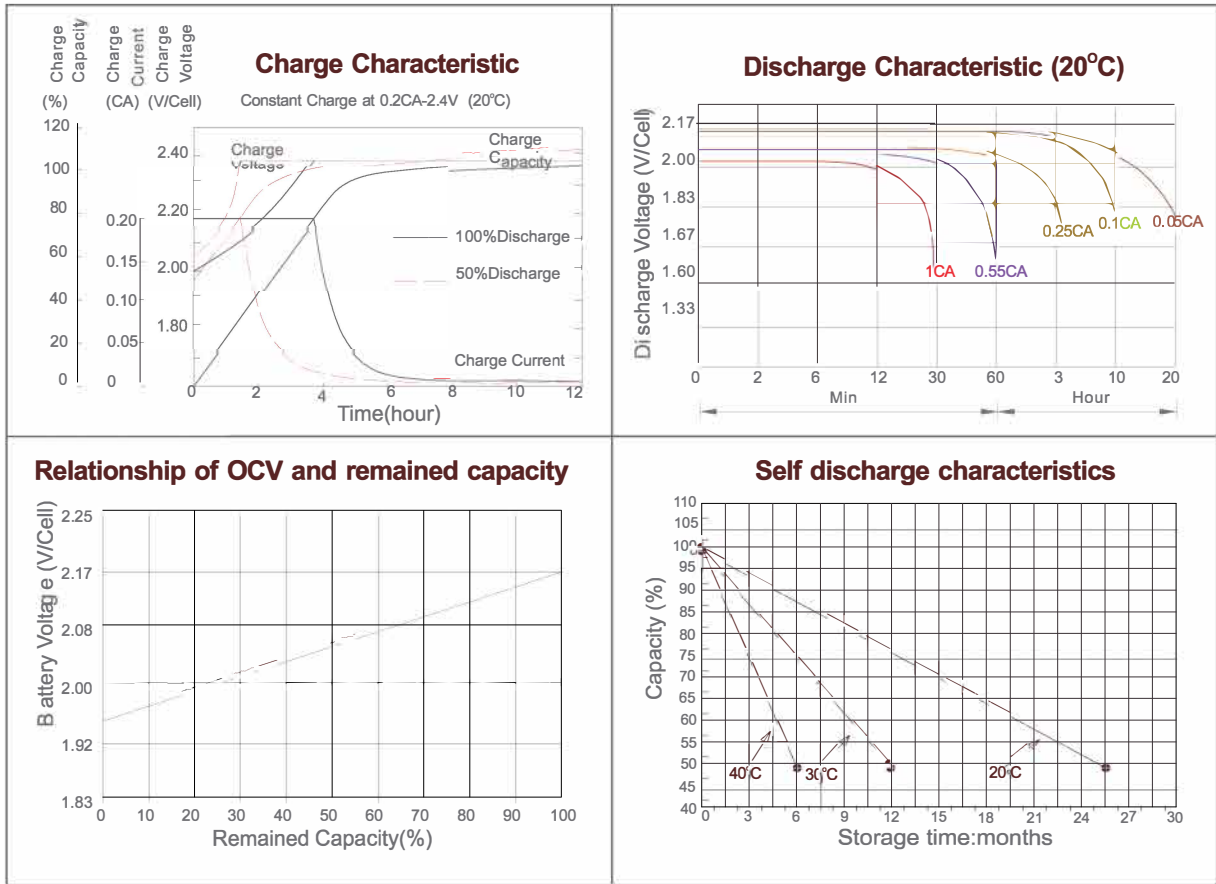
**BATTERY DIMENSIONS**



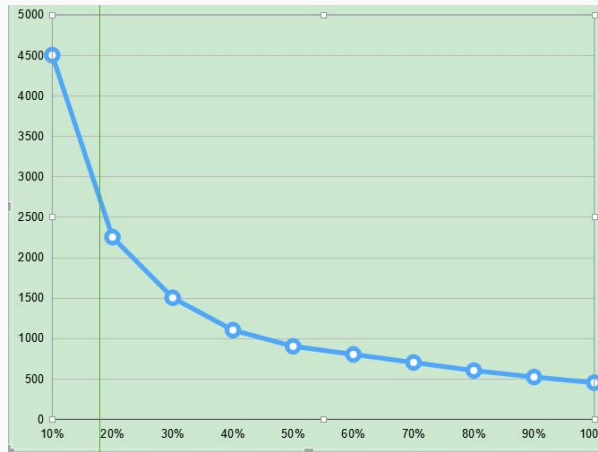
**TECHNICAL SPECIFICATIONS**

<b>Battery Model</b>	TG 12-100			
<b>Designed Floating Life(20°C)</b>	15 Years			
<b>Capacity(20°C)</b>	20HR(5.35A,1.80V)	10HR(10A,1.80V)	5HR(17.2A,1.80V)	1HR(54.3A,1.80V)
	107 Ah	100 Ah	86 Ah	54.3 Ah
<b>Dimensions</b>	Length	Width	Height	Total Height
	407mm (16.0 inch)	173mm (6.81 inch)	208mm (8.19 inch)	233mm (9.17 inch)
<b>Approx. Weight</b>	35.5 kg (78.3 lbs)			
<b>Terminal Type &amp; Torque</b>	Female Φ16-M8 / 12 Nm			
<b>Internal Resistance</b>	Full charged at 20°C: 0.008 Ohm			
<b>Max. Charge Current</b>	20A			
<b>Max. Discharge Current(5S)</b>	500A			
<b>Short Circuit Current</b>	1350A			
<b>Self Discharge</b>	2% of capacity declined per month at 20°C			
<b>Ambient Temperature</b>	Storage:15~25°C	Charge:-15~60°C	Discharge:-15~60°C	
<b>Charge Voltage(20°C)</b>	Cycle use:14.1V-14.4V (-30mV/ °C)		Float use:13.5-13.7V (-18mV/ °C)	
<b>Capacity Affected by Temp.(10HR)</b>	40°C	20°C	0°C	-15°C
	106%	100%	85%	65%

**TUBULAR GEL SERIES VRLA BATTERY**



**Depth of Discharge**



**Constant current discharge ratings at 20°C (unit: ampere)**

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	100h
1.70V	62.0	38.2	27.9	22.8	19.6	17.2	13.9	11.4	9.82	6.05	5.24	2.72	1.37
1.75V	60.0	37.5	27.6	22.6	19.2	16.8	13.8	11.2	9.63	5.96	5.14	2.66	1.35
1.80V	57.0	36.4	26.9	22.0	18.8	16.5	13.5	11.0	9.45	5.85	5.04	2.60	1.32
1.85V	55.1	35.5	25.6	21.0	18.2	16.2	12.7	10.8	9.25	5.81	4.94	2.56	1.29
1.90V	50.9	31.5	22.5	18.9	16.6	15.0	11.6	10.0	8.59	5.57	4.59	2.38	1.20

**Constant power discharge ratings at 20°C (unit: watts per cell)**

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h	48h	100h
1.70V	114	70.9	53.2	45.0	42.0	35.8	28.5	23.9	20.5	13.1	10.9	5.67	2.86
1.75V	111	69.5	53.1	44.3	40.9	34.0	28.1	22.7	19.4	12.8	10.4	5.38	2.72
1.80V	108	69.2	52.5	43.6	39.9	33.2	27.1	22.1	19.0	12.3	10.1	5.25	2.65
1.85V	106	68.5	52.1	42.7	38.9	32.5	26.6	21.7	18.6	12.1	9.93	5.15	2.60
1.90V	96.1	63.0	49.1	40.6	37.2	30.4	24.8	20.2	17.4	11.2	9.28	4.81	2.43