

## DURATION SERIES VRLA BATTERY

By combining up-to-date DCP-II formula in the positive plates and enhanced electrolyte for VRLA, BSB created an innovative range of DC batteries. This range features deep cycling use with higher cyclic life when compared with the standard Duration range. This series is highly suited to cyclic applications such as outdoor applications, small RE systems and electric vehicles.

**12 V** voltage    **135Ah** capacity    **AGM** tech    **Enhanced deep cycling**



### TECHNICAL SPECIFICATIONS

Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	12 Years
Nominal Capacity (20°C)	135 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L341mm x W173mm x H288mm
Approx. Weight	40.3 kg (88.7 lbs)
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.0038 Ohm (fully charged @ 20°C)
Max. Charge Current	33.75A
Max. Discharge Current (5S)	1000 A
Short Circuit Current	3150 A
Self Discharge	Approx. 3% per month @ 20°C
Ambient Temperature	Discharge: -20~60°C Charge: -20~60°C Storage: -20~45°C
Float Charge Voltage (20~25°C)	13.6-13.8V (-3mV/ cell/ °C)
Equalize and cycle Use Charge Voltage (20~25°C)	14.4-14.8V (-5mV/ cell / °C)
Container Material	ABS (UL94-V0 optional)



ISO9001

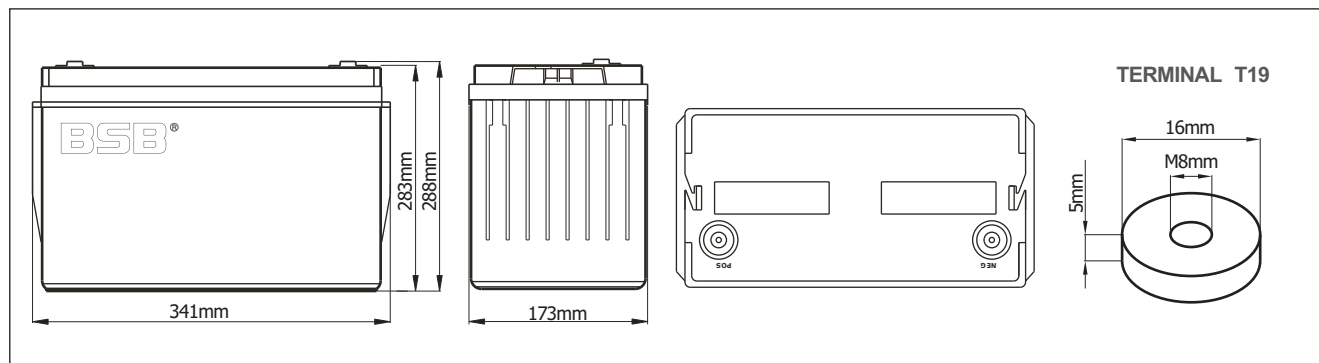
ISO14001



#### Complied standards

- IEC 60896-21/22
- UL1989
- JIS C8704
- GB/T19638

### BATTERY DIMENSIONS

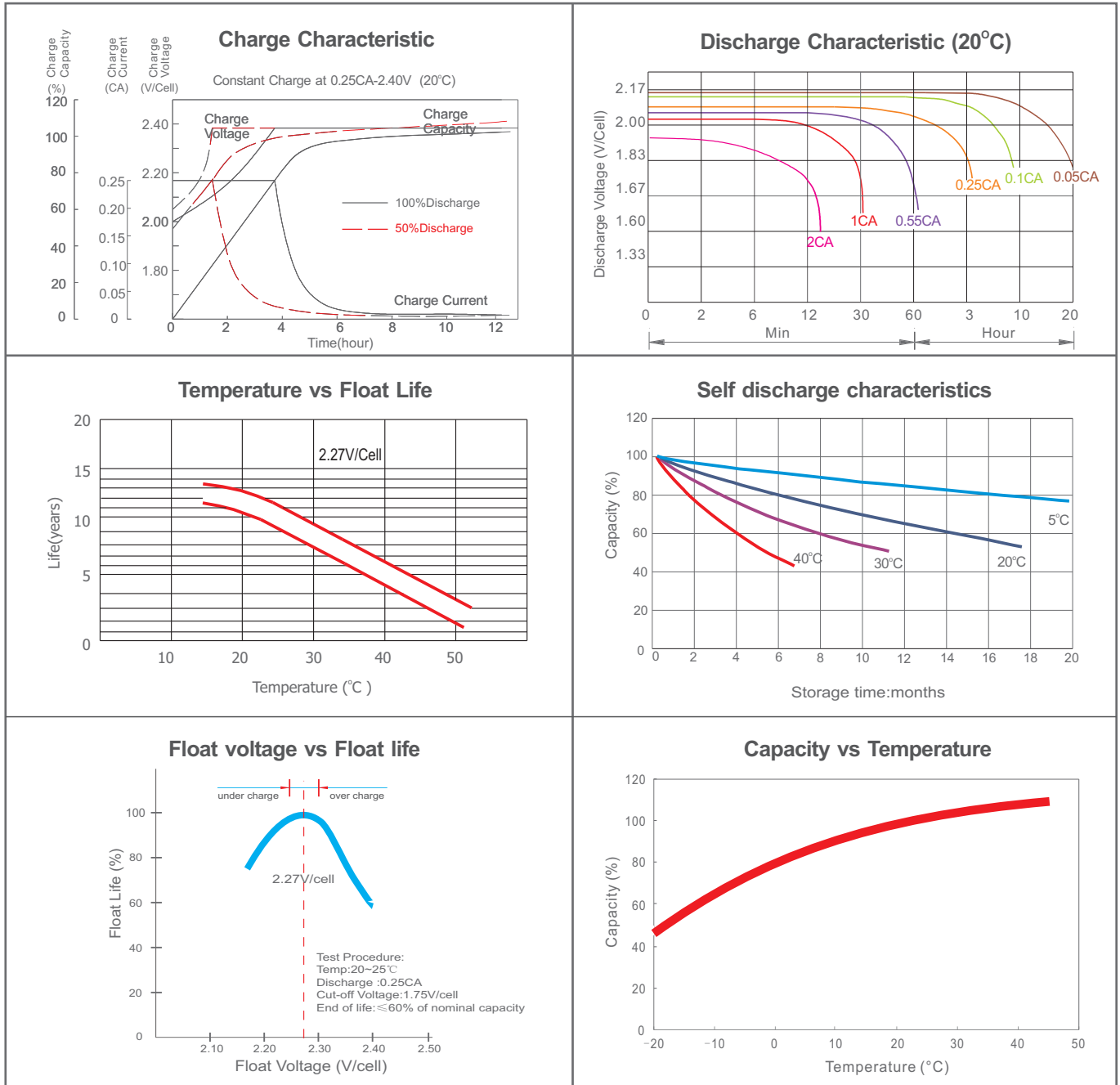


### BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)											
F.V/Tim e	10 m in	15 m in	30 m in	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
1.60 V	287	237	146	89.4	52.5	37.9	30.5	25.4	17.3	14.3	7.71
1.67 V	264	223	139	87.1	51.6	37.4	30.1	25.1	17.1	14.1	7.53
1.70 V	240	211	134	85.1	50.9	37.0	29.8	24.9	16.9	14.0	7.36
1.75 V	223	196	130	83.3	50.0	36.4	29.5	24.5	16.7	13.8	7.22
1.80 V	203	183	124	80.6	48.9	35.7	28.8	23.9	16.3	13.5	7.08
1.85 V	183	166	117	77.1	47.0	34.5	27.9	23.4	15.9	13.1	6.92

Constant Power Discharge Characteristics: W/cell (25°C)											
F.V/Tim e	10 m in	15 m in	30 m in	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
1.60 V	516	432	270	167	98.5	71.5	57.8	48.4	33.3	27.6	15.0
1.67 V	480	410	259	163	97.4	71.1	57.4	48.1	33.1	27.5	14.7
1.70 V	441	391	251	161	96.9	70.8	57.3	48.0	32.9	27.3	14.5
1.75 V	414	367	245	159	96.0	70.2	57.1	47.8	32.7	27.1	14.3
1.80 V	381	345	236	155	94.8	69.5	56.3	47.0	32.2	26.8	14.2
1.85 V	347	318	225	150	92.0	67.8	55.1	46.3	31.7	26.3	13.9

## CHARACTERISTICS



## FINAL VOLTAGE SETTINGS RECOMMENDED ACCORDING TO THE DISCHARGE CURRENT

Discharge Current I (A)	$I \leq 0.08C$	$0.08C \leq I < 0.2C$	$0.2C \leq I < 0.6C$	$0.6C \leq I < 1.0C$	$I \geq 1.0C$
Final of Voltage	$\geq 1.85V_{pc}$	$\geq 1.80V_{pc}$	$\geq 1.75V_{pc}$	$\geq 1.70V_{pc}$	$\geq 1.60V_{pc}$

## HEADQUARTERS AND SUBSIDIARIES

BSB Power Company Limited (HQ)  
 BSB Power Europe (France)  
 BSB Power Malaysia Sdn. Bhd  
 PT. BSB Indonesia  
 BSB Power (Thailand) Co., Ltd  
 BSB Power Company Pakistan Ltd

