

## DURATION SERIES VRLA BATTERY

By combining a newly developed corrosion resistance alloy and advanced curing process, bosfa created a range of long life batteries - Duration range. The range features top termination and offers 12 years design life. This battery series is highly suited to UPS systems, switchgear, CATV and telecommunication systems applications.



### TECHNICAL SPECIFICATIONS

Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	12 Years
Nominal Capacity (20°C)	150 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L485mm x W172mm x H240mm
Approx. Weight	41.0 kg (90.4 lbs)
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.0035 Ohm (fully charged @ 20°C)
Max. Charge Current	37.5A
Max. Discharge Current (5S)	1000 A
Short Circuit Current	3400 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

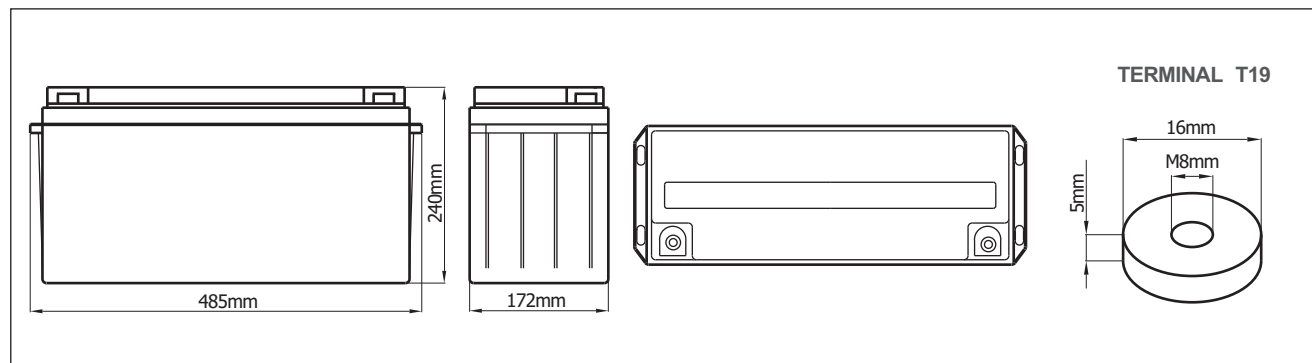
ISO14001



### Complied standards

- IEC 60896-21/22
- JIS C8704
- GB/T19639

### BATTERY DIMENSIONS

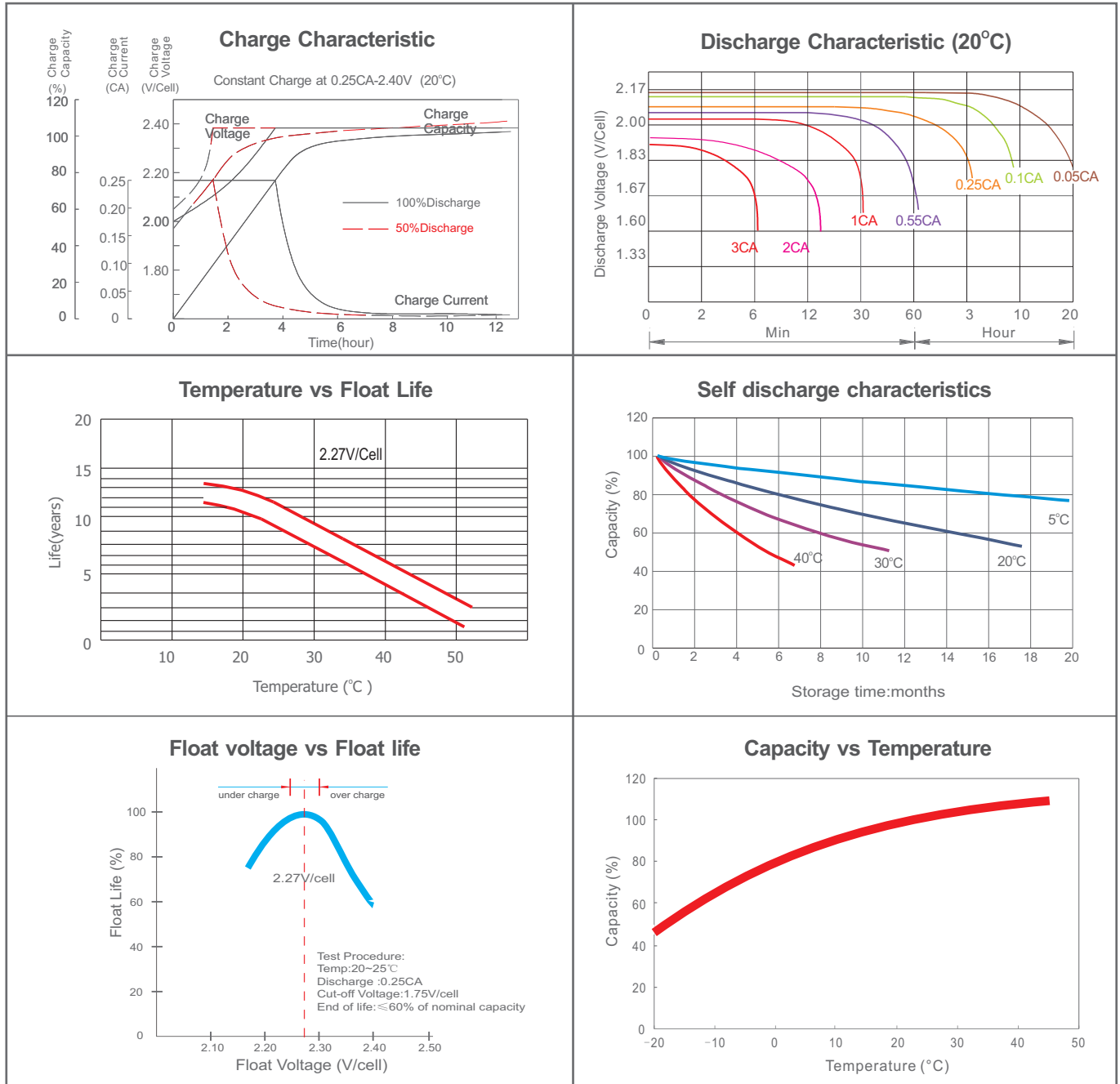


### BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)												
F.V/Time	5 m in	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
1.60V	450	332	274	169	101	58.9	42.5	33.9	28.2	19.3	15.9	8.57
1.67V	402	306	258	161	98.7	57.9	42.0	33.4	27.8	19.0	15.7	8.37
1.70V	358	278	244	155	96.4	57.1	41.5	33.1	27.6	18.8	15.5	8.18
1.75V	312	258	227	150	94.5	56.1	40.9	32.7	27.3	18.5	15.3	8.03
1.80V	276	235	211	143	91.4	54.9	40.1	32.0	26.6	18.1	15.0	7.87
1.85V	236	211	193	135	87.4	52.8	38.8	31.1	26.0	17.7	14.6	7.69

Constant Power Discharge Characteristics: W/cell (25°C)												
F.V/Time	5 m in	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
1.60V	792	597	500	312	189	111	80.2	64.2	53.7	37.0	30.7	16.6
1.67V	716	556	475	300	185	110	79.8	63.8	53.5	36.8	30.5	16.4
1.70V	647	510	453	291	182	109	79.4	63.6	53.3	36.6	30.4	16.1
1.75V	570	479	425	283	180	108	78.8	63.4	53.1	36.4	30.2	15.9
1.80V	510	441	400	273	175	106	78.0	62.5	52.2	35.8	29.8	15.7
1.85V	444	402	368	260	170	103	76.1	61.2	51.4	35.3	29.2	15.5

**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	$\geq 1.85V_{pc}$	$\geq 1.80V_{pc}$	$\geq 1.75V_{pc}$	$\geq 1.70V_{pc}$	$\geq 1.60V_{pc}$