DURATION SERIES VRLA BATTERY

By combining up-to-date DCP-Ⅱ formula in the positive plates and enhanced electrolyte for VRLA, bosfa 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 | 120Ah capacity | AGM tech | Enhanced deep cycling

TECHNICAL SPECIFICATIONS

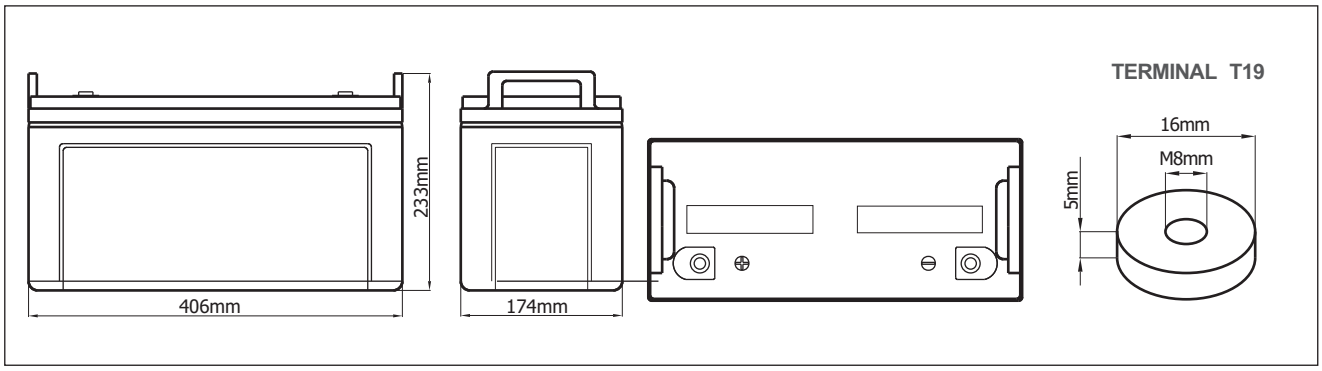
Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	12 Years
Nominal Capacity (20°C)	120 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L406mm x W174mm x H233mm
Approx. Weight	33.0 kg (72.7 lbs)
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.004 Ohm (fully charged @ 20°C)
Max. Charge Current	30A
Max. Discharge Current (5S)	960 A
Short Circuit Current	3000 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

CE

Complied standards
- IEC 60896-21/22
- JIS C8704
- GB/T19638

BATTERY DIMENSIONS



BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)

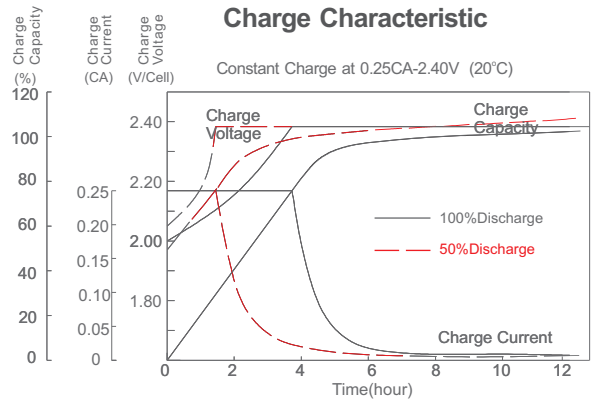
F.V/Time	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	247	204	126	79.5	46.6	33.7	27.1	22.6	15.4	12.7	6.85
1.67V	228	192	120	77.4	45.8	33.3	26.8	22.3	15.2	12.6	6.70
1.70V	207	182	116	75.6	45.2	32.9	26.5	22.1	15.0	12.4	6.54
1.75V	192	169	112	74.1	44.4	32.4	26.2	21.8	14.8	12.2	6.42
1.80V	175	157	107	71.6	43.5	31.7	25.6	21.3	14.5	12.0	6.30
1.85V	158	143	101	68.5	41.8	30.7	24.8	20.8	14.2	11.7	6.15

Constant Power Discharge Characteristics: W/cell (25°C)

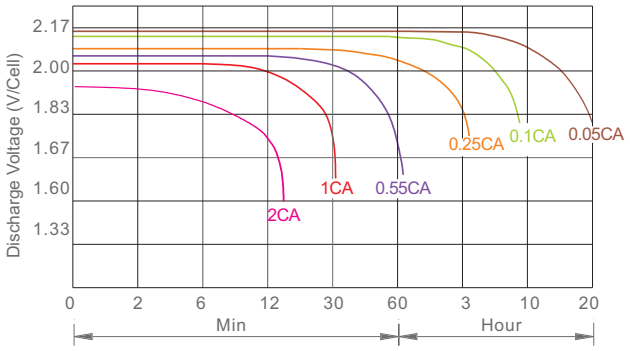
F.V/Time	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	445	373	233	148	87.6	63.6	51.4	43.0	29.6	24.6	13.3
1.67V	414	354	223	145	86.6	63.2	51.0	42.8	29.4	24.4	13.1
1.70V	380	337	217	143	86.1	62.9	50.9	42.7	29.3	24.3	12.9
1.75V	357	316	211	141	85.3	62.4	50.7	42.5	29.1	24.1	12.7
1.80V	328	298	204	138	84.3	61.8	50.0	41.8	28.7	23.8	12.6
1.85V	299	274	194	133	81.7	60.3	49.0	41.1	28.2	23.4	12.4

CHARACTERISTICS

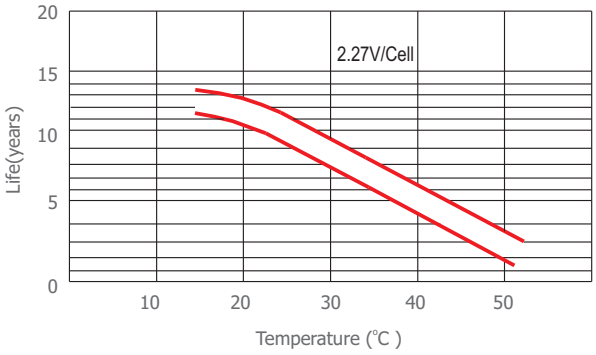
Charge Characteristic



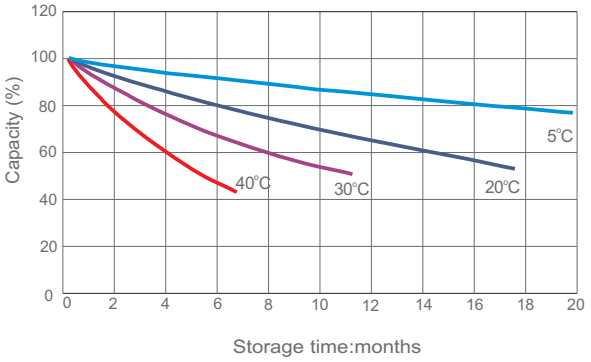
Discharge Characteristic (20°C)



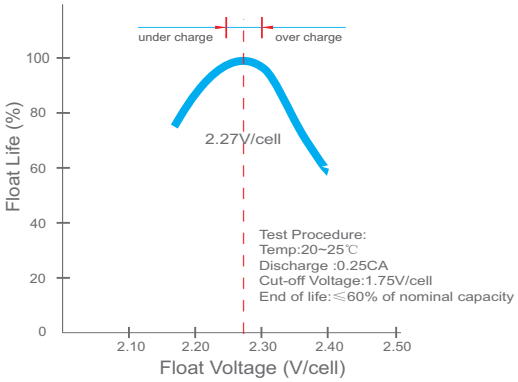
Temperature vs Float Life



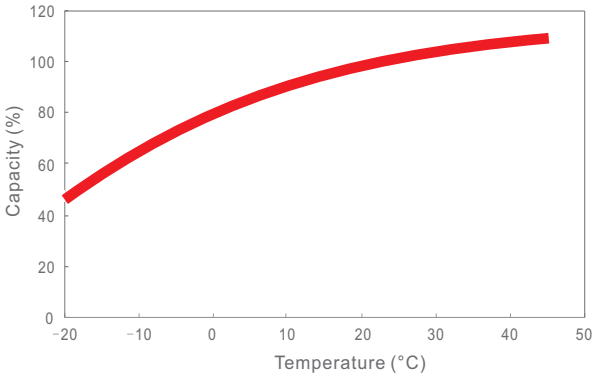
Self discharge characteristics



Float voltage vs Float life



Capacity vs Temperature



FINAL VOLTAGE SETTINGS RECOMMENDED ACCORDING TO THE DISCHARGE CURRENT

Discharge Current I (A)	I ≤0.08C	0.08C≤I<0.2C	0.2C≤I<0.6C	0.6C≤I<1.0C	I≥1.0C
Final of Voltage	≥1.85Vpc	≥1.80Vpc	≥1.75Vpc	≥1.70Vpc	≥1.60Vpc