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 | 135Ah capacity | AGM tech | Enhanced deep cycling

ISO9001 ISO14001

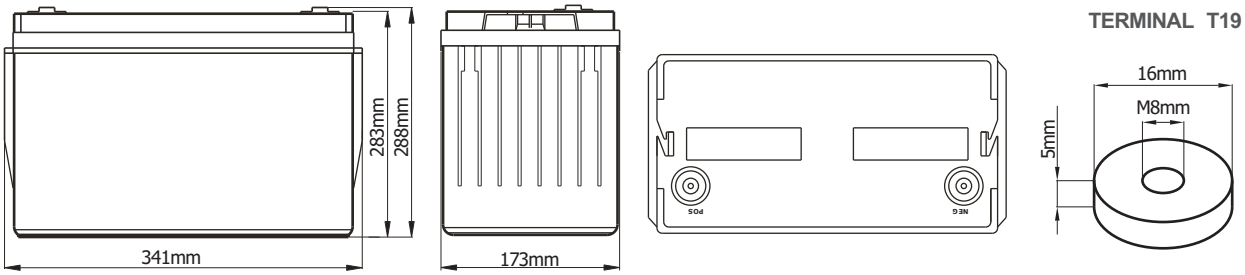
CE

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

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)

BATTERY DIMENSIONS



BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)

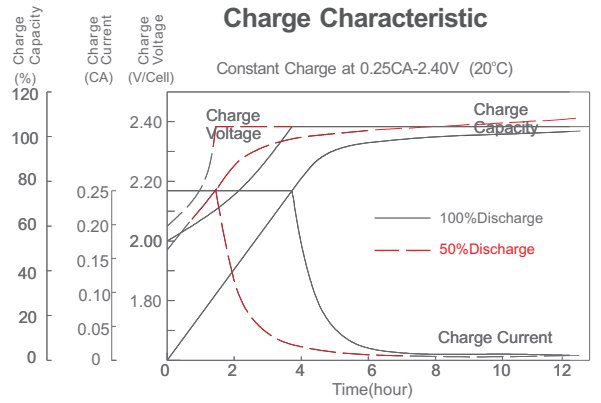
F.V/Time	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	287	237	146	89.4	52.5	37.9	30.5	25.4	17.3	14.3	7.71
1.67V	264	223	139	87.1	51.6	37.4	30.1	25.1	17.1	14.1	7.53
1.70V	240	211	134	85.1	50.9	37.0	29.8	24.9	16.9	14.0	7.36
1.75V	223	196	130	83.3	50.0	36.4	29.5	24.5	16.7	13.8	7.22
1.80V	203	183	124	80.6	48.9	35.7	28.8	23.9	16.3	13.5	7.08
1.85V	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)

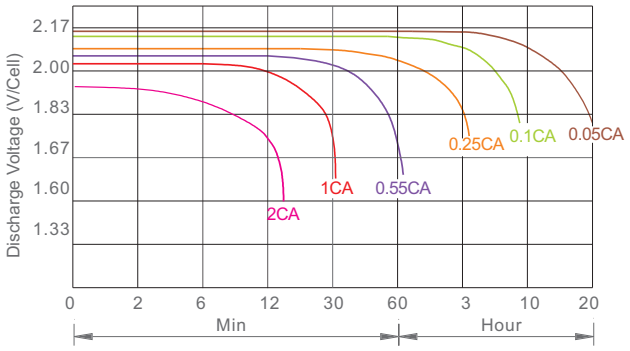
F.V/Time	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	516	432	270	167	98.5	71.5	57.8	48.4	33.3	27.6	15.0
1.67V	480	410	259	163	97.4	71.1	57.4	48.1	33.1	27.5	14.7
1.70V	441	391	251	161	96.9	70.8	57.3	48.0	32.9	27.3	14.5
1.75V	414	367	245	159	96.0	70.2	57.1	47.8	32.7	27.1	14.3
1.80V	381	345	236	155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

CHARACTERISTICS

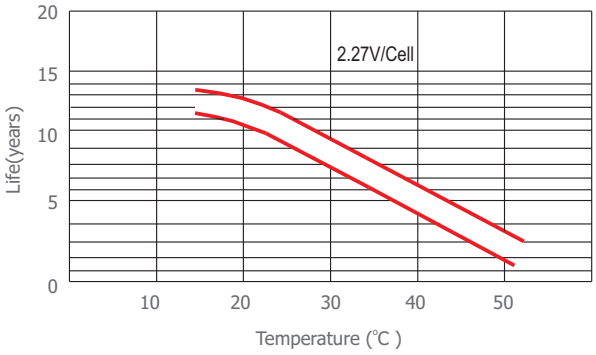
Charge Characteristic



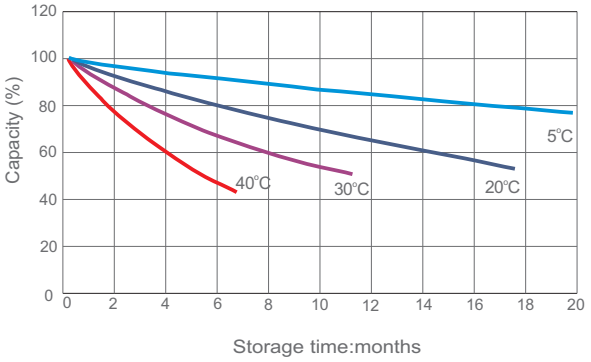
Discharge Characteristic (20°C)



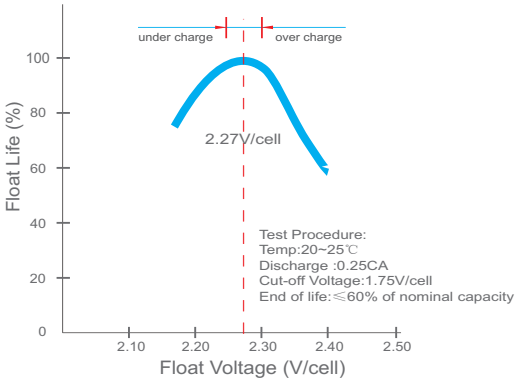
Temperature vs Float Life



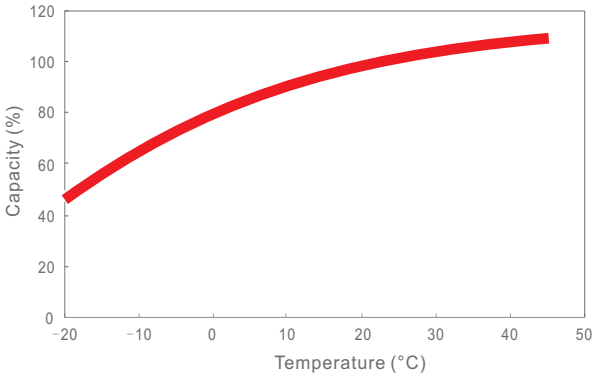
Self discharge characteristics



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