



AGM Technology
ABT PowerLine SGP Series

Complying standards:

IEC61056-21/22:2002

JIS C8702-1/2-2009

SGP12-50

12V50Ah(10hr)



ABT PowerLine SGP series is a general purpose battery according to Eurobat Classification with 10 years design life for standby application. As with all ABT batteries, all are rechargeable, highly efficient, leakage proof and maintenance free.

Mechanical Characteristics

	SI Unit	EN Unit
Length	257mm	10.12inch
Width	132mm	5.19inch
Height	193mm	7.60inch
Total Height	198mm	7.79inch
Approx. Weight	16.0kg	35.20lbs

Type of material for container and lids:

ABS Standard (FV0 Optional)

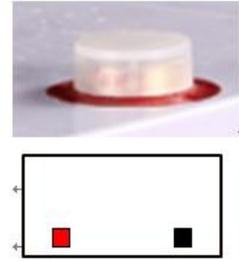
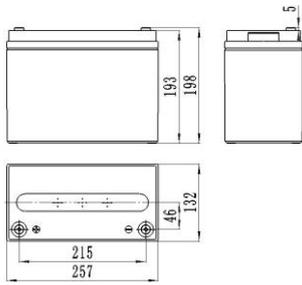
Product Characteristics

- 10 years life expectancy in float service at 68°F (20°C)
- High specific energy
- Good cycling performance and over-discharging recovery performance
- Low rate of self-discharge : ≤2% monthly on average (20°C)
- Usable for vertical or horizontal
- Easy installation and handling
- Safety and reliable leakage-proof performance

Performance Characteristics

- Rated voltage: 12V (6 cells)
- Rated capacity at 68°F(20°C)
 - 20h rate (2.52A, 10.8V) 50.4Ah
 - 10h rate(5.0A, 10.8V) 50.0Ah
 - 1h rate(27.5A, 10.5V) 27.5Ah
- Internal resistance:
 - 7.2mΩ when fully charged at 68°F(20°C)
- Average self-discharge rate:
 - ≤2% per month 68°F(20°C)
- Maximum discharge current:
 - 750A(5s) at 68°F(20°C)
- Working temperature range:
 - Discharge: -15~45°C
 - Charge: -10~45°C
 - Storage: -20~55°C
- Charging method:
 - with constant voltage at 68°F(20°C)
 - Maximum charge current: 15A
 - Temperature compensation: -21mV/°C/piece
 - Cycle use: 14.52 V/ piece
 - Standby use: 13.74 V/ piece

Dimensions/Terminal



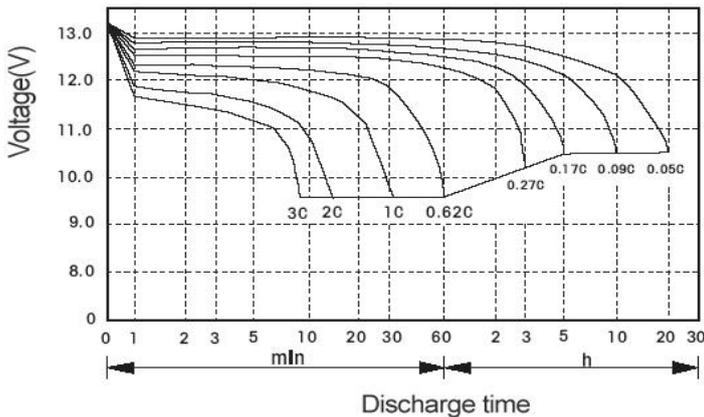
Constant Current Discharge Data (Ampere at 20°C/68 °F)

End Volt	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	5h	10h	20h
1.60	115.0	92.50	75.00	56.00	41.12	29.78	23.67	18.99	13.50	8.927	5.325	2.715
1.65	111.0	88.91	73.13	54.56	40.00	29.09	22.88	18.56	13.25	8.792	5.250	2.675
1.70	106.0	86.45	70.87	53.27	39.01	28.42	22.24	18.13	13.03	8.632	5.170	2.640
1.75	101.3	83.45	68.31	51.74	37.82	27.50	21.57	17.67	12.80	8.500	5.100	2.600
1.80	96.00	79.93	66.24	50.00	36.50	26.38	20.94	17.21	12.50	8.294	5.000	2.520

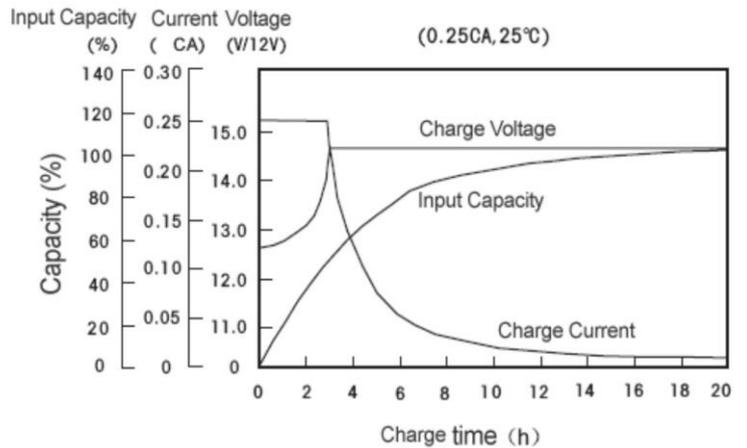
Constant Power Discharge Data (Watts per cell at 20°C/68 °F)

End Volt	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	5h	10h	20h
1.60	206.8	159.5	139.0	111.9	81.50	61.74	48.72	37.75	26.52	18.50	10.92	5.655
1.65	198.9	156.3	135.9	109.2	78.95	59.70	47.63	36.96	25.90	18.20	10.69	5.540
1.70	192.5	153.4	132.3	105.9	77.08	58.03	46.44	35.97	25.31	17.59	10.42	5.435
1.75	186.1	149.6	129.2	102.8	74.60	56.27	45.00	34.58	24.45	16.90	10.25	5.280
1.80	177.4	145.7	125.5	97.83	71.94	54.17	43.50	33.40	23.56	16.50	9.890	5.100

Discharge curve under different discharge rate



Charge capacity vs. charge time



Contact information

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ABT VRLA Battery: Available power range from 26Ah to 3000Ah.

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