

Tubular Gel Technology
OPzV Series

5 OPzV350
2V350Ah(10hr)

Complying standards:

IEC60896-21/22: 2004 IEC61427-2014
YD/T1360-2005 DIN43539-T5
DIN40742:1999 GB/T 22473-2008



The ABT OPzV series are valve regulated lead-acid cells which use a combination of tubular positive plate woven gauntlets, pasted negative plate design, and special GEL electrolyte filling techniques, which assure the long life and excellent reliability of the battery. This series is widely used for large range of applications including telecommunication, power generating stations and distribution systems, power supply system, energy storage, UPS system, railway, airport and seaport signaling, emergency lighting, solar and it's suitable for harsh environment and poor power supply condition.

Mechanical Characteristics

	SI Unit	EN Unit
Length	124mm	4.88inch
Width	206mm	8.11inch
Height	471mm	18.54inch
Total Height	503.5mm	19.82inch
Approx. Weight	27.5kg	60.5lbs

Type of material for container and lids:
ABS Standard (FV0 Optional)

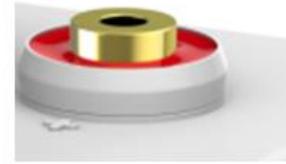
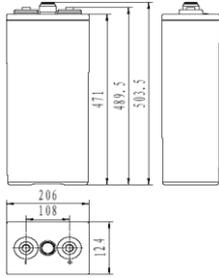
Product Characteristics

- Design life: 20 years at 68°F (20°C)
- Very long life according to EUROBAT Classification
- Up to 1500 deep discharge cycles
- High discharge performance
- High gas recombination efficiency
- Maximum charge efficiency
- GEL state electrolyte prevents leakage and layering
- Low resistance PVC-SiO₂ micro-porous separator ensure Low self-discharge rate
- Easy installation vertical or horizontal

Performance Characteristics

- Rated voltage: 2V (1 Cell)
- Rated capacity at 68°F(20°C)
 - 10h rate (35A, 1.80V) 350Ah
 - 5h rate (59.5A, 1.80V) 297.5Ah
 - 1h rate (175A, 1.80V) 175Ah
- Internal resistance:
 - 0.58mΩ when fully charged at 68°F(20°C)
- Average self-discharge rate:
 - ≤3% per month 68°F(20°C)
- Maximum discharge current:
 - 2116A(3s) at 68°F(20°C)
- Working temperature range:
 - Discharge: -25~60°C
 - Charge: -10~60°C
 - Storage: -25~60°C
- Charging method:
 - with constant voltage at 68°F(20°C)
 - Maximum charge current:70A
 - Temperature compensation: -3.5mV/°C/piece
 - Cycle use: 2.37V/ piece
 - Standby use: 2.27V/ piece

Dimensions/Terminal



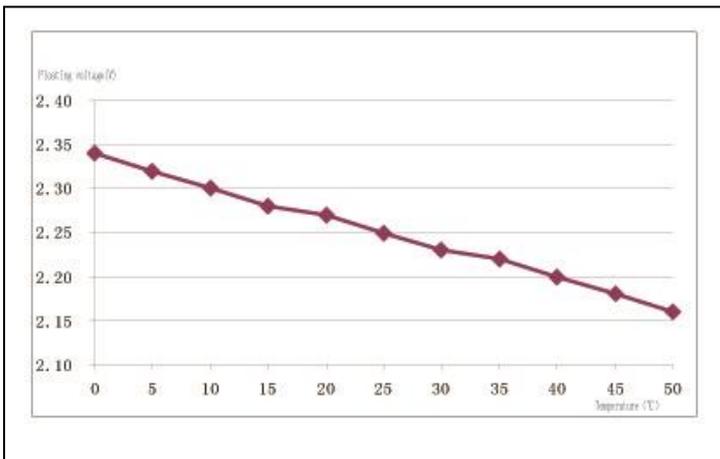
Constant Current Discharge Data (Ampere at 20°C/68 °F)

End Volt	5min	10min	15min	20min	30min	1h	2h	3h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.65	487	453	413	359	290	202	133.2	103.0	70.9	60.1	45.5	36.7	20.0	17.20	9.45	4.89	4.10	2.10
1.70	450	423	384	341	279	193	129.5	97.5	67.1	56.7	44.6	36.2	19.7	16.74	9.32	4.85	4.07	2.06
1.75	423	404	371	322	261	184	127.0	92.4	63.6	54.6	42.8	35.6	19.4	16.42	9.21	4.80	4.03	2.03
1.80	398	386	356	309	249	175	121.0	87.5	59.5	50.9	41.2	35.0	18.9	16.14	9.10	4.75	3.99	2.01
1.85	381	360	336	293	230	167	115	82.8	57.1	49.1	39.0	34.1	18.3	15.6	8.97	4.67	3.93	1.98

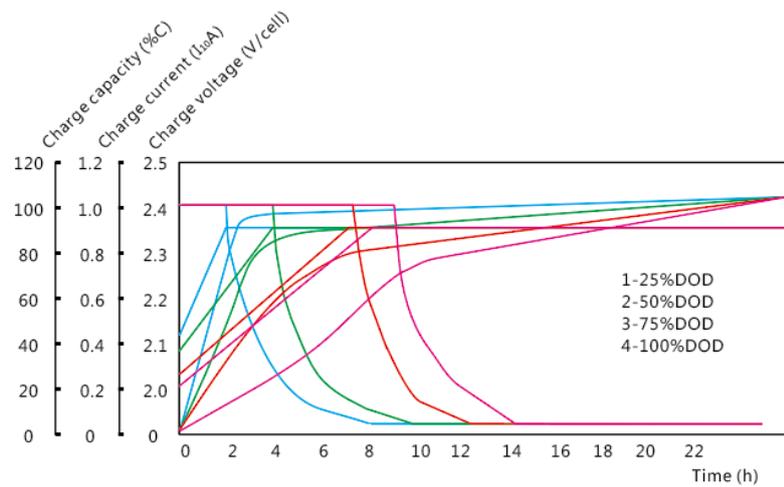
Constant Power Discharge Data (Watts per cell at 20°C/68 °F)

End Volt	5min	10min	15min	20min	30min	1h	2h	3h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.65	864	777	703	632	528	356.5	230.1	172.4	140.8	119.2	95.8	77.3	41.1	34.50	19.00	9.85	8.25	4.25
1.70	822	758	669	615	506	339.5	221.4	166.3	135.8	115.0	92.5	76.3	40.3	33.60	18.60	9.75	8.16	4.15
1.75	752	699	623	566	489	329.3	216.1	162.8	132.5	111.7	90.0	73.5	39.7	33.00	18.45	9.65	8.07	4.08
1.80	694	633	562	514	449	315.7	210.0	160.1	123.3	104.2	86.7	71.8	38.9	32.20	18.20	9.50	8.00	4.02
1.85	639	553	504	458	399	305.6	202.1	153.1	112.5	99.2	80.4	67.8	37.7	31.40	17.95	9.35	7.92	3.97

Floating Charge Voltage vs. Temperature



Cycle charge characteristic curve (at 20°C/68 °F)



Contact information

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

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