OPzV series

2V Tubular Gel Battery

AGG OPzV Series is traditional Tubular Gel type Battery. It utilizes tubular positive plate and fumed silica Gel electrolyte to provide excellent deep cyclic performance, fast recovery performance and high reliability. OPzV Series is designed mainly for cyclic applications at harsh working conditions, such as renewable energy storage, power utilities, telecom cyclic use, etc.

Renewable Energy | Telecom | UPS | Utility

Features and Benefits

- 20 years design life at floating condition
- Tubular positive plate and fumed silica gel enables excellent deep cycle performance
- Low density electrolyte reduce corrosion and enables long service life
- Excellent deep discharge recovery capability
- Reliable maintenance-free and leakage-free construction
- Wide operating temperature range from -40°C to 60°C
- Low self-discharge rate and long shelf life (1 year at 25°C)
- DIN standard compliance

Design life >20 year - Very Long Life | Tubular Plate | Gel — Fumed Silica Gel | Recyclable | Maintenance free (no topping up)

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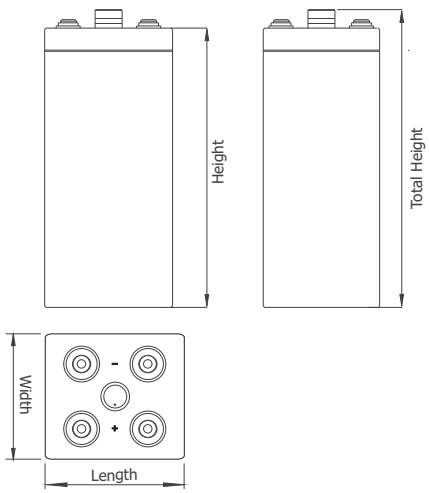
Electrical Specifications

Model	Number of cells	Nominal Voltage (V)	Capacity (25℃)						IR	Short Circuit Current	Maximum Current	
			C_{10} @1.80 V/cell	C_8 @1.75 V/cell	C_3 @1.70 V/cell	C_1 @1.60 V/cell	C_{100} @1.85 V/cell	C_{120} @1.85 V/cell			Charge	Discharge (5 sec)
			(Ah)						(mΩ)	(A)	(A)	
2OPzV100	1	2	100	100	82.5	54.5	127	129	1.98	1200	25	600
3OPzV150	1	2	150	150	124	82	191	193	1.48	1700	30	1000
4OPzV200	1	2	200	200	165	109	255	258	0.98	1800	50	1000
5OPzV250	1	2	250	250	206	137	323	326	0.80	2300	62.5	1000
6OPzV300	1	2	300	300	247	164	387	392	0.70	2600	75	1500
5OPzV350	1	2	350	350	284	191	452	457	0.60	2850	87.5	1500
6OPzV420	1	2	420	420	339	230	542	545	0.52	3400	105	1500
7OPzV500	1	2	500	500	414	273	635	641	0.51	4000	125	2000
6OPzV600	1	2	600	600	495	328	760	769	0.45	4200	150	2000
8OPzV800	1	2	800	788	651	431	1020	1032	0.32	5300	200	2000
10OPzV1000	1	2	1000	984	810	533	1275	1290	0.28	6400	250	2500
12OPzV1200	1	2	1200	1176	954	640	1520	1542	0.26	7400	300	2500
12OPzV1500	1	2	1500	1472	1191	795	1900	1910	0.20	8200	375	3000
16OPzV2000	1	2	2000	1960	1587	1061	2535	2545	0.18	10300	500	3000
20OPzV2500	1	2	2500	2448	2022	1326	3160	3188	0.17	13500	625	4000
24OPzV3000	1	2	3000	2944	2427	1591	3780	3800	0.16	15000	750	4000

Physical Specifications

Model	Dimension (mm)				Weight (kg)	Terminal	
	Length	Width	Height	Total Height		Type	Torque (N.m)
2OPzV100	103	206	354	390	13.5	F-M8	10-12
3OPzV150	103	206	354	390	15.4	F-M8	10-12
4OPzV200	103	206	354	390	17.3	F-M8	10-12
5OPzV250	124	206	354	390	20.7	F-M8	10-12
6OPzV300	145	206	354	390	24.4	F-M8	10-12
5OPzV350	124	206	471	506	27.5	F-M8	10-12
6OPzV420	145	206	471	506	32.5	F-M8	10-12
7OPzV500	166	206	471	506	37.3	F-M8	10-12
6OPzV600	145	206	646	681	44.2	F-M8	10-12
8OPzV800	191	210	646	681	60	F-M8	10-12
10OPzV1000	233	210	646	681	71.5	F-M8	10-12
12OPzV1200	275	210	646	681	87	F-M8	10-12
12OPzV1500	275	210	796	831	107	F-M8	10-12
16OPzV2000	399	212	772	807	147	F-M8	10-12
20OPzV2500	487	212	772	807	185	F-M8	10-12
24OPzV3000	576	212	772	807	216	F-M8	10-12



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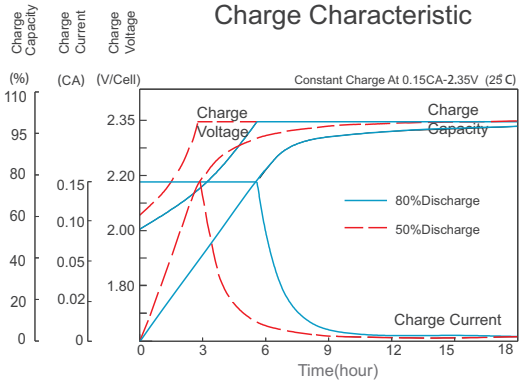
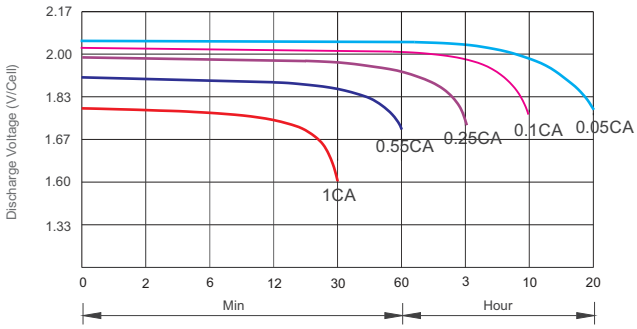
Charge/Discharge Characteristics

Charge Characteristic



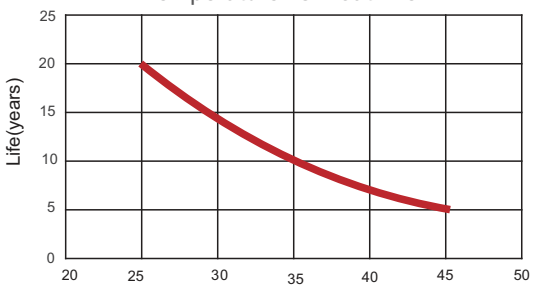
Discharge Characteristic (25℃)



*Float voltage: 2.23V/cell, Equalization voltage: 2.35V/cell @25℃

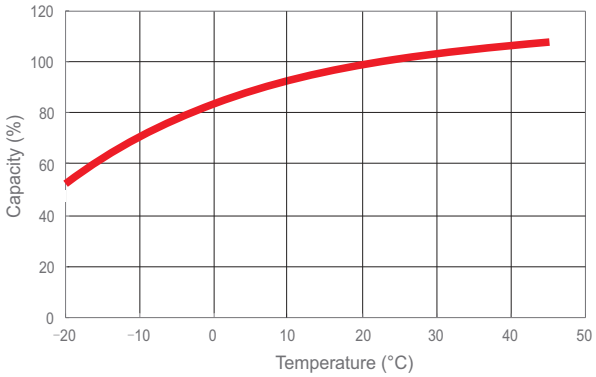
Temperature Characteristics

Temperature vs Float Life



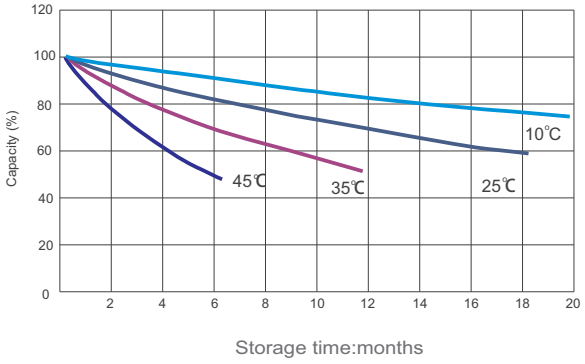
TemperatureRange		
Discharge	Charge	Storage
-40℃ to +60℃	-30℃ to +55℃	-20℃ to +45℃

Capacity vs Temperature



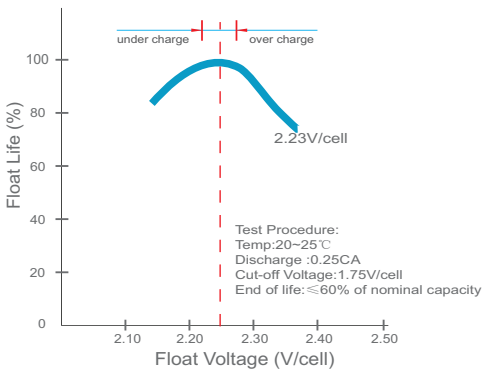
Self Discharge Characteristics

Self discharge characteristics



Stationary/ Floating Characteristics

Float voltage vs Float life



Standards Compliance

IEC60896-21/-22 DIN40742

OPzV Series - EN-H -03(Ver3.0, 2018) Subject to revision without prior notice. E.&O.E.