Vectronic VRLA Battery

(General purpose)
VDJW12-9.0 (12V9Ah)

VRLA Battery

Specifications

Rated Voltage		12V
Nominal Capacity(3C ≥ 7min, 1.60V/cell)		9.0Ah
Dimension	Length	151±2mm (5.94 inches)
	Width	65±1mm (2.56 inches)
	Container Height	93.5±1mm (3.68 inches)
	Total Height	99.5±1mm (3.92 inches)
Approx Weight		2.45kg (5.40 lbs)
Terminal		T1/T2
Container Material		ABS
Rated Capacity(25℃)	8.00 Ah	C20(0.400A,1.75V/cell)
	7.57 Ah	C10(0.757A,1.75V/cell)
	6.90 Ah	C5(1.38A,1.75V/cell)
	6.12 Ah	C3(2.04A,1.75V/cell)
	5.72 Ah	C1(5.72A,1.60V/cell)
5S Max. Discharge Current		120A (5s)
Internal Resistance(25℃)		Approx 18mΩ
Operating Temp. Range	Discharge	-20 ~ 55℃ (-4 ~ 131℉)
	Charge	-20 ~ 40℃ (-4 ~ 104℉)
	Storage	-15 ~ 50℃ (5 ~ 122℉)
Nominal Operating Temp. Range		25±3℃ (77±5℉)
Max.Charging Current(25℃)		2.40A

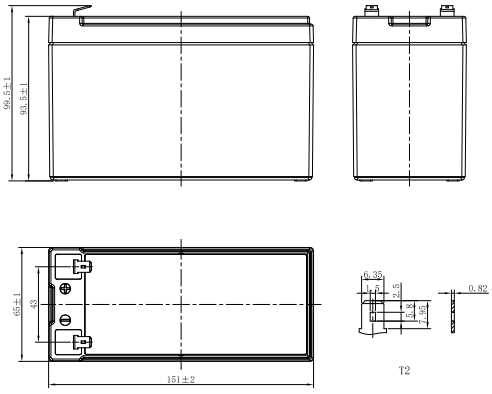
Charge voltage(25℃)	Charge voltage	Temp. Coefficient
Float	2.25~2.30V/cell	-3mV/℃
Equalization	2.35~2.40V/cell	-4mV/℃
Cycle	2.35~2.40V/cell	-5mV/℃

Effect of temp. to Capacity	
40℃ (104℉)	103%
25℃ (77℉)	100%
0℃ (32℉)	86%

Self Discharge	≤3% @ 25℃



Layout



(A)25℃ Constant Current Discharge

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	29.4	19.4	14.9	11.9	8.79	6.39	5.17	3.70	2.84	1.98	1.57	1.34	1.15	0.90	0.739	0.391
1.80V/cell	31.6	20.6	15.7	12.4	9.06	6.56	5.30	3.78	2.89	2.01	1.60	1.36	1.17	0.92	0.749	0.396
1.75V/cell	33.3	21.4	16.2	12.8	9.30	6.70	5.41	3.85	2.95	2.04	1.62	1.38	1.18	0.93	0.757	0.400
1.70V/cell	34.9	22.3	16.7	13.1	9.54	6.85	5.51	3.92	2.99	2.07	1.64	1.40	1.19	0.94	0.764	0.403
1.67V/cell	36.1	22.9	17.1	13.4	9.70	6.96	5.59	3.97	3.02	2.09	1.66	1.41	1.20	0.94	0.770	0.406
1.60V/cell	38.3	23.8	17.7	13.8	10.0	7.14	5.72	4.05	3.08	2.13	1.69	1.43	1.22	0.96	0.780	0.411

(W/cell) 25℃ Constant Power Discharge

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	55.6	36.9	28.6	23.0	17.0	12.4	10.1	7.23	5.56	3.88	3.10	2.65	2.27	1.79	1.47	0.782
1.80V/cell	59.2	38.9	29.8	23.8	17.4	12.7	10.3	7.36	5.65	3.94	3.14	2.68	2.30	1.82	1.49	0.791
1.75V/cell	61.7	40.1	30.6	24.3	17.8	12.9	10.5	7.47	5.74	3.99	3.18	2.71	2.33	1.84	1.50	0.800
1.70V/cell	64.0	41.5	31.5	24.9	18.2	13.2	10.6	7.58	5.81	4.04	3.22	2.74	2.35	1.85	1.52	0.807
1.67V/cell	65.7	42.4	32.1	25.4	18.5	13.3	10.8	7.66	5.86	4.08	3.24	2.76	2.37	1.87	1.53	0.813
1.60V/cell	68.3	43.6	33.0	26.0	18.9	13.6	10.9	7.79	5.96	4.14	3.29	2.80	2.40	1.89	1.54	0.822

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(General purpose)
VDJW12-9.0 (12V9Ah)

VRLA Battery

Applications

- Telecommunications
- UPS, Data Center
- Energy Storage, Electric Systems
- Emergency Lighting, Security
- Medical, Electronic Equipment

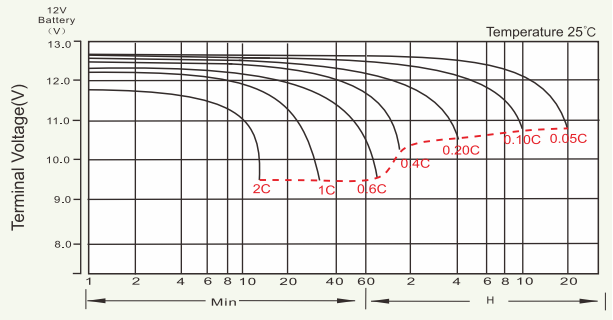
General Features

- Under 25℃, the designed floating life is up to 5 years.
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance.

Standards

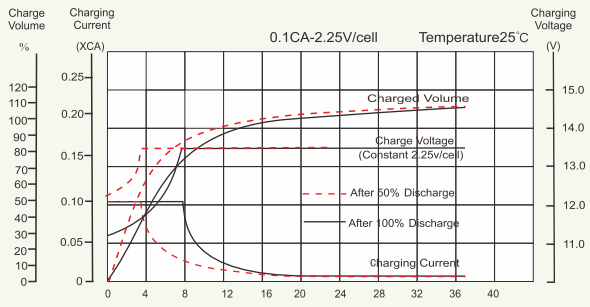
- Compliance with IEC 61056,GB/T19639

Discharge Characteristics



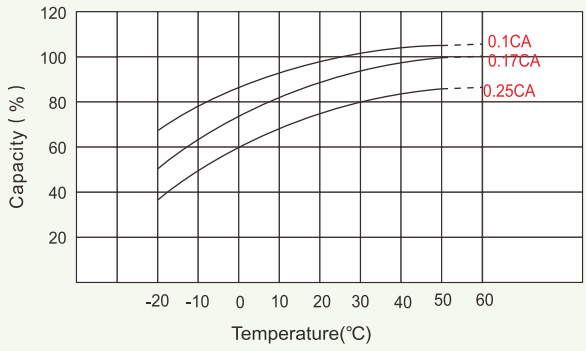
Discharge Time

Float Charging Characteristics

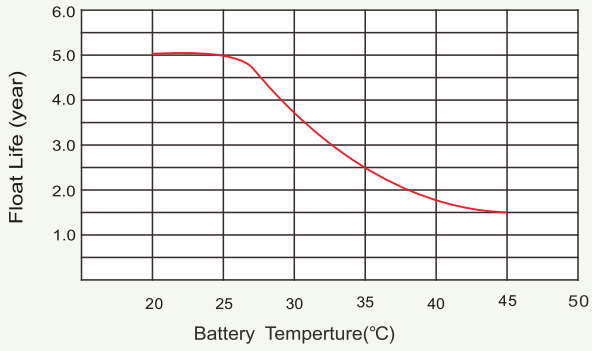


Charging Time(hours)

Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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Vectronic

Due to product improvement, above specifications are subject to change without prior notice.

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