Vectronic VRLA Battery

(General purpose)
VDJW12-100 (12V100Ah)

VRLA Battery

Specifications

Rated Voltage		12V
Nominal Capacity(C_{20},1.75V/cell)		100Ah
Dimension	Length	330±2mm (13.0 inches)
	Width	173±2mm (6.81 inches)
	Container Height	213±2mm (8.39 inches)
	Total Height	220±2mm (8.66 inches)
Approx Weight		27.8kg (61.3 lbs)
Terminal		M8
Container Material		ABS
Rated Capacity(25℃)	100.0 Ah	C20(5.00A,1.75V/cell)
	90.9 Ah	C10(9.09A,1.75V/cell)
	82.0 Ah	C5(16.4A,1.75V/cell)
	74.7 Ah	C3(24.9A,1.75V/cell)
	57.4 Ah	C1(57.4A,1.60V/cell)
5S Max. Discharge Current		1000A (5s)
Internal Resistance(25℃)		Approx 5.5mΩ
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℃)		30A

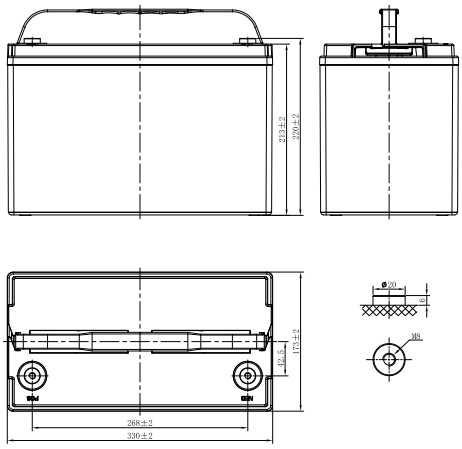
Charge voltage(25℃)		Charge voltage	Temp. Coefficient
	Float	2.25~2.30V/cell	-3mV/℃
	Equalization	2.35~2.40V/cell	-4mV/℃

Effect of temp. to Capacity	
40℃ (104℉)	106%
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	179.8	127.8	115.4	90.8	81.2	59.4	50.3	36.4	30.6	22.5	17.6	15.3	13.5	10.4	8.60	4.78
1.80V/cell	204.4	145.1	130.8	102.6	88.4	62.9	52.1	37.7	31.6	24.4	18.8	16.1	14.5	10.9	9.00	4.95
1.75V/cell	222.1	157.4	141.6	110.8	90.2	65.2	54.6	39.6	33.3	24.9	19.2	16.4	14.6	11.0	9.09	5.00
1.70V/cell	237.4	167.8	150.4	117.5	92.0	66.5	55.7	40.4	34.0	25.3	19.5	16.7	14.7	11.1	9.18	5.05
1.67V/cell	245.7	173.1	154.8	120.7	93.3	67.4	56.6	41.0	34.5	25.6	19.8	17.0	14.7	11.3	9.30	5.11
1.60V/cell	254.4	179.0	159.6	123.8	94.7	68.4	57.4	41.6	35.0	25.8	20.0	17.2	14.9	11.4	9.41	5.18

(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	335.7	240.5	218.6	172.7	155.1	114.1	97.2	70.7	59.6	43.9	34.6	30.1	26.6	20.6	17.1	9.08
1.80V/cell	375.6	269.0	244.5	193.2	167.5	120.1	100.2	72.7	61.2	47.4	36.8	31.6	28.5	21.6	17.9	9.39
1.75V/cell	400.8	287.1	261.0	206.2	169.7	123.7	104.7	76.1	64.2	48.2	37.3	32.0	28.7	21.7	18.0	9.48
1.70V/cell	421.4	301.8	274.3	216.7	171.6	125.3	106.2	77.3	65.2	49.0	37.9	32.4	28.8	22.0	18.2	9.56
1.67V/cell	428.2	306.7	278.8	220.2	172.8	126.5	107.1	78.0	65.9	49.2	38.3	33.0	28.8	22.2	18.4	9.67
1.60V/cell	434.2	311.0	282.7	223.3	173.6	127.1	107.9	78.6	66.4	49.4	38.6	33.3	28.9	22.5	18.6	9.77

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(General purpose)
VDJW12-100 (12V100Ah)

VRLA Battery

Applications

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

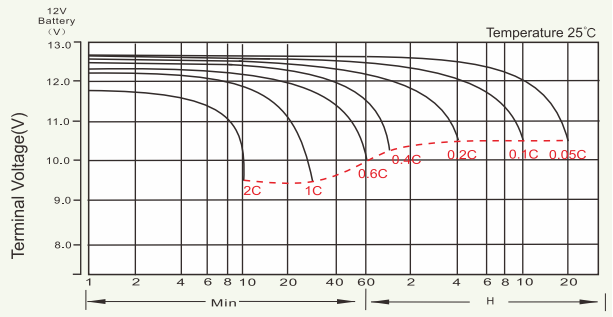
General Features

- Under 25°C, the designed floating life is up to 12 years.
- Self-discharge rate is extremely low
- Wide range of operating temperature
- Good sealing performance
- Good conductivity
- Excellent charge acceptance
- Safe and reliable explosion-proof exhaust system

Standards

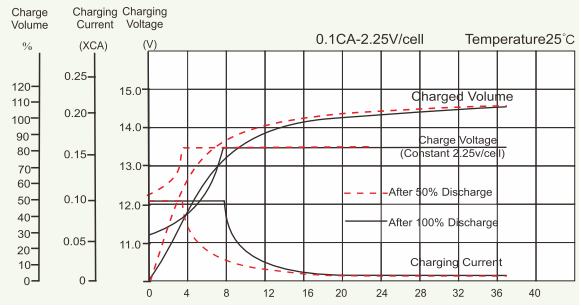
- Compliance with IEC 60896 and YD/T 799 standards
- Manufactured in Leoch®IATF16949, ISO 45001,ISO 9001 and ISO 14001 certified production facilities

Discharge Characteristics



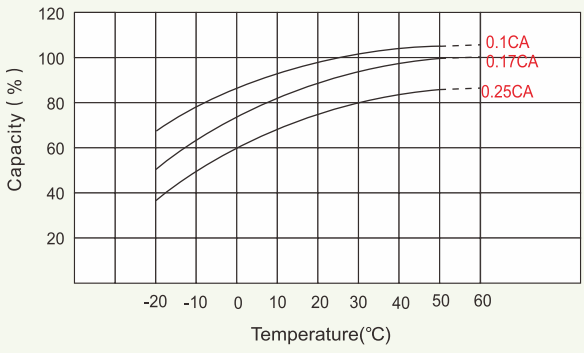
Discharge Time

Float Charging Characteristics

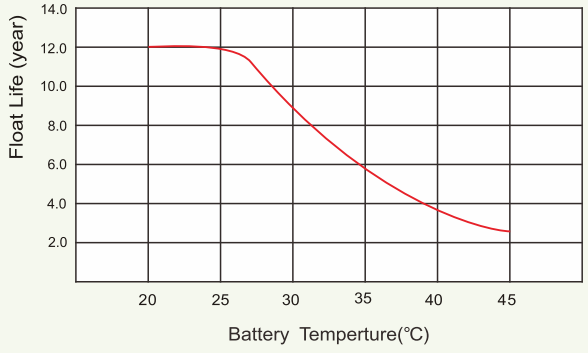


Charging Time(hours)

Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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

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