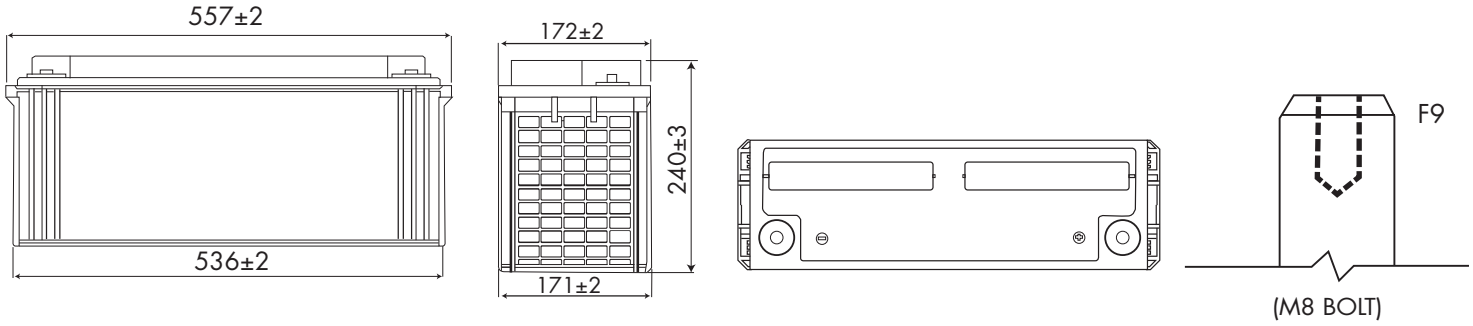
CHADHA POWER

TECHNICAL DATA SHEET FOR NXT 150-12 (12V 150AH)
AGM VRLA SEALED MAINTENANCE FREE BATTERY

BATTERY OUTLINE & DIMENSIONS



CONSTRUCTION

- Positive and negative plates in lead-tin-calcium alloy
- Separator - low resistance micro porous glass fiber
- The electrolyte is absorbed within this material, preventing acid leakage in case of accidental damage
- Terminals with a large surface area with brass insert to provide maximum conductivity
- Self regulating pressure relief valve
- 100% ensured capacity (through Data-logger) during manufacturing
- Stronger, sturdier & attractive packaging
- Specially suited for UPS & Power Application

FEATURES

- Sealed Maintenance Free
- Eco Friendly
- Easy Handling – Easy Installation
- Extended Cycle Life
- Excellent Charge Retention & Recovery
- High Reliability
- Performance Characteristics confirming to JISC8702
- Free from Orientation Constraints
- Minimal Voltage Drop
- Ready To Use
- Low Self Discharge
- Superior High Rate Discharge
- Deep Cycle Application

SPECIFICATION CHART

Battery Type	Nominal Voltage (V)	Rated Capacity (Ah) at 27°C						Dimensions (mm)				Weight (Kg) (±5%)
		20 hr 1.75V/ cell	10 hr 1.75V/ cell	3 hr 1.7V/ cell	1.5 hr 1.7V/ cell	1 hr 1.6V/ cell	30 mins 1.6V/ cell	Overall Height ±3	Height up to lid top ±3	Length ±2	Width ±2	
NXT150-12	12	150.0	136.5	112.5	108.0	90.0	75.0	240.0	240.0	557.0	172.0	45.8

NOTES ON OPERATION

Mode of Operation	Voltage setting per 12V unit for ambient Temp. 20-30°C	Current setting
FLOAT	13.7V +/-0.1V	Maximum: 0.3CA Minimum: 0.1CA
BOOST	14.1V +/-0.1V	
CYCLE	14.7V +/-0.1V	

CONSTANT POWER DISCHARGE RATING IN WATTS PER BATTERY FOR NXT RANGE AT 27°C

	AH	5 min	10 min	15 min	20 min	30 min	60 min
Watt/Battery at 1.60V	150AH	5751	3854	3023	2427	1810	1124
Watt/Battery at 1.70V		5490	3624	2922	2375	1800	1086
Watt/Battery at 1.80V		4961	3485	2715	2237	1688	1023

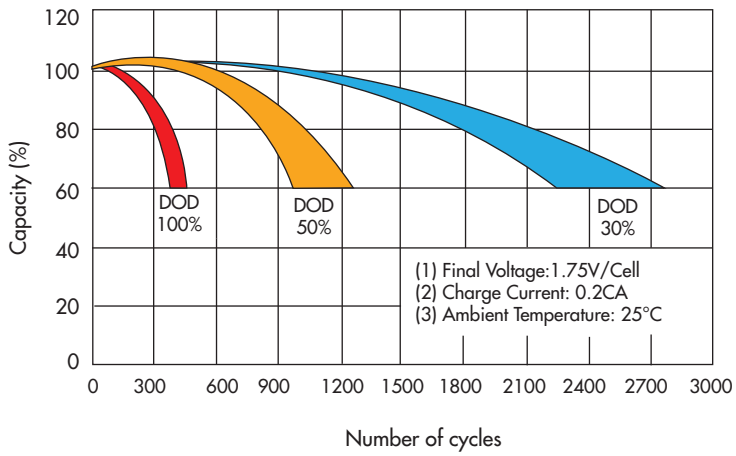
DISCHARGE CURRENT & RECOMMENDED FINAL DISCHARGE VOLTAGE

Discharge Current (A)	Final Discharge Voltage (V/Cell)
0.2 C > (A) or intermittent discharge	1.75
0.2 C< or = (A) < 0.5 C	1.70
0.5 C< or = (A) < 1.0 C	1.55
1.0 C< or = (A)	1.30

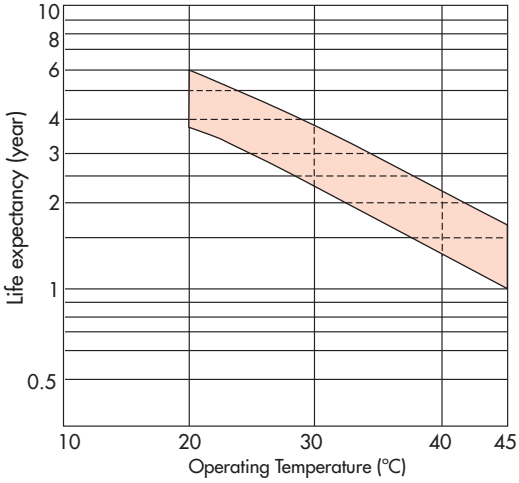
CHARACTERISTIC CURVES

SERVICE LIFE

CYCLE SERVICE LIFE



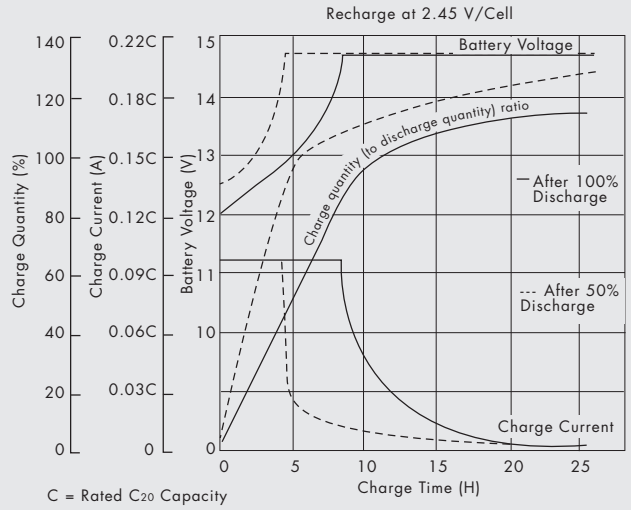
STANDBY USE



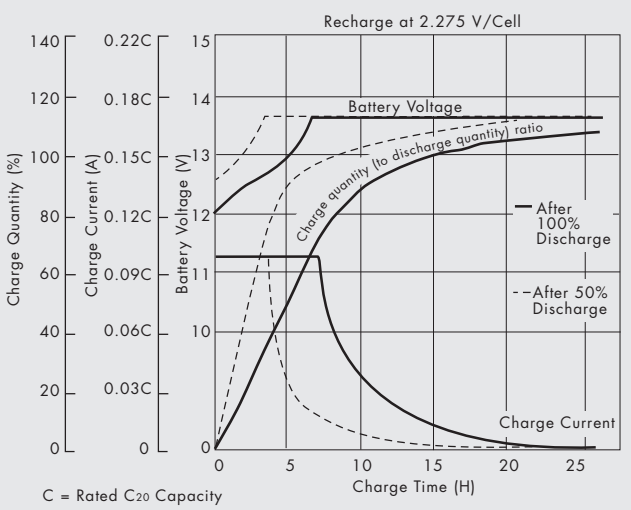
Charge Voltage = 2.275 V/cell

CHARGE CHARACTERISTICS

CYCLIC USE

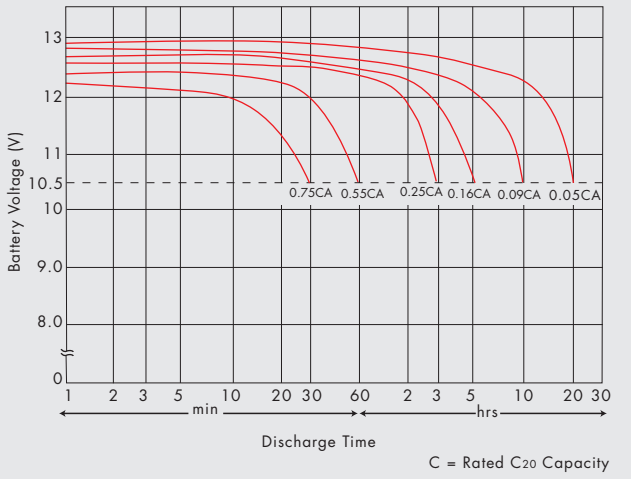


STANDBY USE

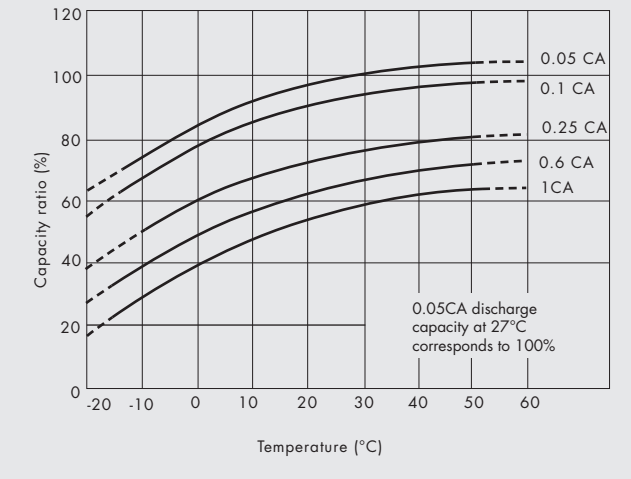


OTHER CURVES

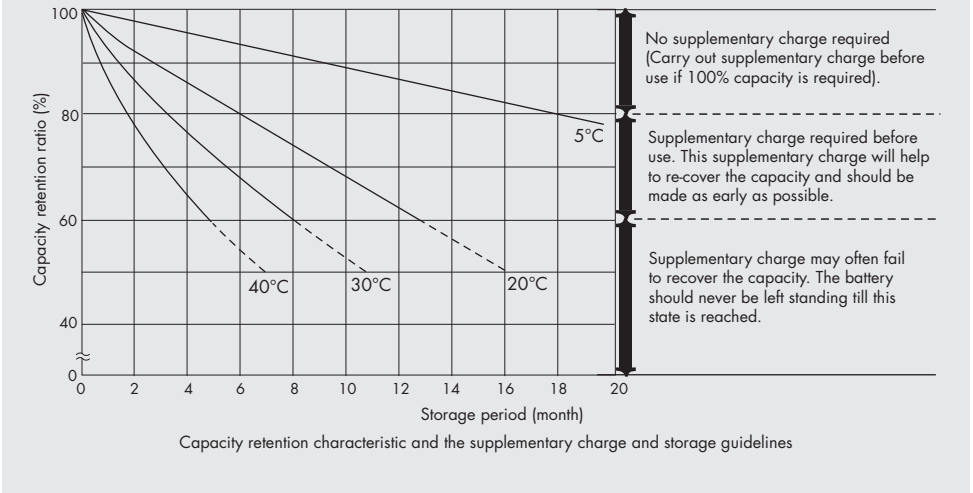
DISCHARGE CHARACTERISTICS



EFFECT OF TEMPERATURE ON CAPACITY



CAPACITY RETENTION



Capacity retention characteristic and the supplementary charge and storage guidelines

PRODUCT DETAILS

AH Efficiency	>90%
WH Efficiency	>80%
Internal Resistance	5 mΩ max at 27°C
Short Circuit Current	3432 Amps
Operating Temperature Range	0°C to 45°C
Self Discharge/Month at 27°C	<3% of Rated Capacity
Material of container	PPCP
Type of +ve & -ve plate	Flat Pasted
Recommended Terminal Torque	12.3 N-m

MAXIMUM DISCHARGE CURRENT FOR VARIOUS DURATION & CUT-OFF VOLTAGE

END VOLTAGE / CELL	TEMP (C)	DISCHARGE TIME												
		10min	15min	20min	30min	1 hr	1.5 hrs	2 hrs	3 hrs	4 hrs	5 hrs	6 hrs	8 hrs	10 hrs
1.80	25	2.0C	1.65C	1.4C	1.1C	0.64C	0.42C	0.36C	0.27C	0.210C	0.17C	0.145C	0.11C	0.090C
	5	1.65C	1.3C	1.1C	0.95C	0.59C	0.34C	0.29C	0.230C	0.182C	0.147C	0.129C	0.098C	0.080C
	-5	1.3C	1.0C	0.86C	0.76C	0.48C	0.28C	0.24C	0.198C	0.154C	0.125C	0.115C	0.087C	0.071C
1.75	25	2.15C	1.72C	1.45C	1.12C	0.65C	0.45C	0.38C	0.28C	0.22C	0.180C	0.15C	0.12C	0.099C
	5	1.72C	1.40C	1.15C	0.97C	0.60C	0.36C	0.30C	0.24C	0.190C	0.150C	0.130C	0.100C	0.088C
	-5	1.45C	1.10C	0.93C	0.81C	0.50C	0.30C	0.25C	0.20C	0.160C	0.130C	0.119C	0.090C	0.078C
1.70	25	2.3C	1.8C	1.5C	1.15C	0.67C	0.48C	0.40C	0.29C	0.230C	0.19C	0.165C	0.13C	0.108C
	5	1.8C	1.5C	1.2C	1.0C	0.62C	0.39C	0.32C	0.250C	0.199C	0.164C	0.143C	0.116C	0.096C
	-5	1.6C	1.2C	1.0C	0.86C	0.53C	0.32C	0.27C	0.213C	0.168C	0.139C	0.123C	0.103C	0.086C
1.65	25	2.35C	1.85C	1.55C	1.2C	0.69C	0.50C	0.41C	0.300C	0.240C	0.200C	0.170C	0.135C	0.110C
	5	1.9C	1.6C	1.3C	1.05C	0.64C	0.40C	0.33C	0.260C	0.208C	0.173C	0.147C	0.120C	0.098C
	-5	1.6C	1.25C	1.05C	0.88C	0.54C	0.34C	0.27C	0.220C	0.176C	0.147C	0.125C	0.107C	0.087C
1.60	25	2.4C	1.9C	1.6C	1.25C	0.7C	0.51C	0.42C	0.310C	0.250C	0.210C	0.180C	0.140C	0.115C
	5	2.0C	1.7C	1.4C	1.10C	0.66C	0.41C	0.34C	0.270C	0.216C	0.182C	0.156C	0.125C	0.102C
	-5	1.65C	1.3C	1.1C	0.9C	0.55C	0.34C	0.28C	0.227C	0.183C	0.154C	0.132C	0.111C	0.091C

*Note: C represents the C20 rated capacity.

Technical specifications are subject to change without prior notice.
Battery image shown is indicative and may vary from the actual.

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