



# DC24-12

## DEEP CYCLE MAINTENANCE - FREE SEALED AGM BATTERY

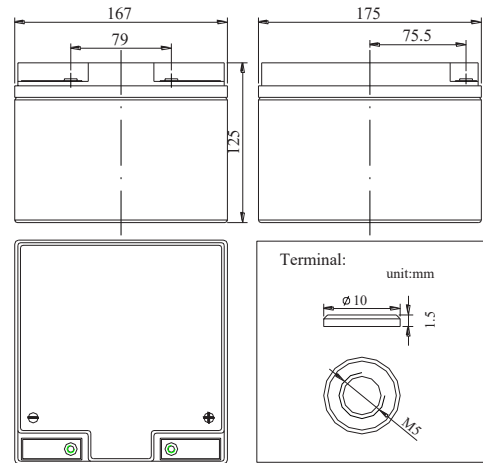
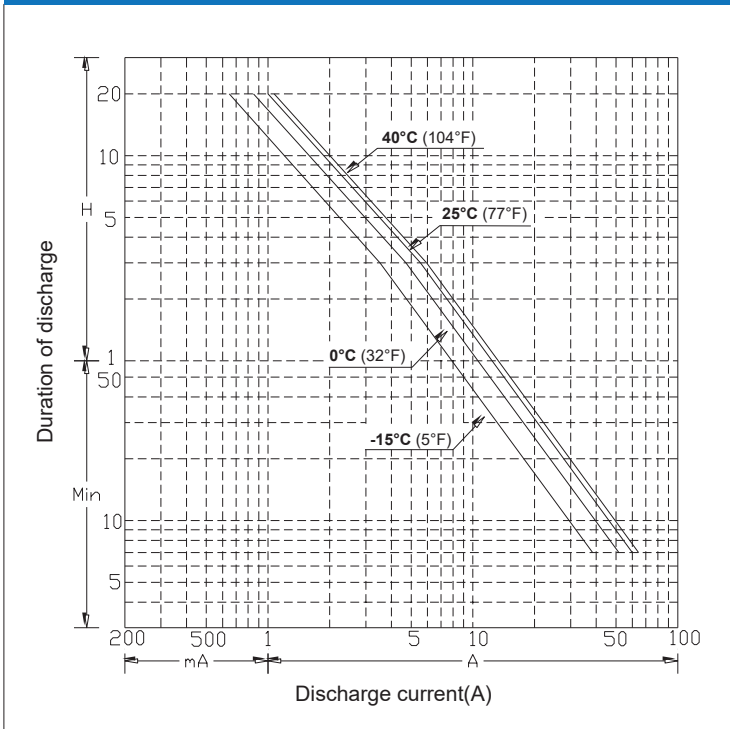
### Electrical Specifications

Nominal Voltage	<b>12V</b>
C20	<b>20Ah</b>
C10	<b>18Ah</b>
C5	<b>16.4Ah</b>
CCA	<b>160A</b>
CA or MCA	<b>195A</b>
HPCA	<b>300A (5sec)</b>
Reserve Capacity @25 amps	<b>23 min</b>
Reserve Capacity @75 amps	-
Recommended Charge Current	<b>4.8A</b>
Maximum Charge Current	<b>8.4A</b>

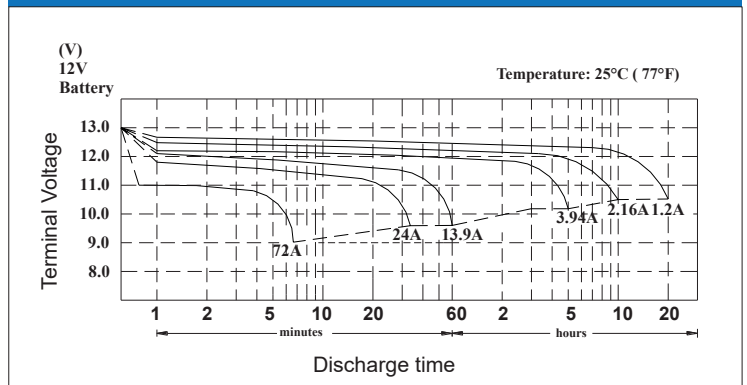
### Mechanical Specifications

Total Height (with terminals)	<b>125 mm (4.92 inch)</b>
Total Height (case only)	<b>125 mm (4.92 inch)</b>
Length	<b>165 mm (6.50 inch)</b>
Width	<b>175 mm (6.93 inch)</b>
Weight (approx.)	<b>9.2 kg (19.62 lbs)</b>
Terminal Type	<b>M5</b>
Battery Case	<b>ABS Plastic (Flame Res. Rating UL94-HB)</b>

### Duration of discharge vs. Discharge current



### Discharge characteristics 25°C (77°F)



### Constant Current Discharge Rating Amperes @ 25°C (77°F)

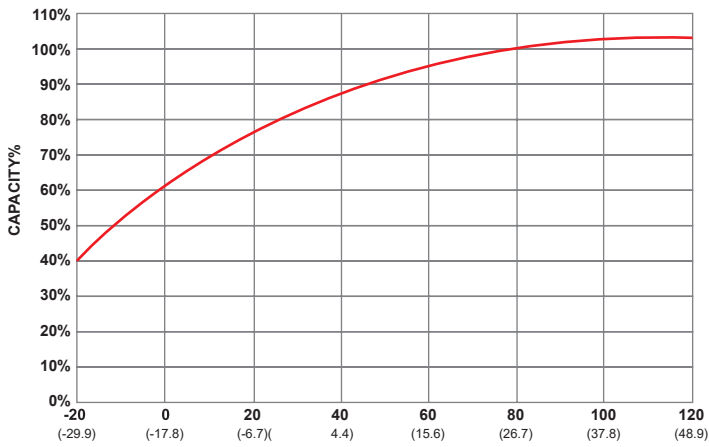
Cut off voltage V/cell 1	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H	24H
1.75V	35	22	17	13.6	7.2	5.4	3.8	2.6	2.16	1.84	1.20	1.00

All listed ratings are @ 100% SoC, T=25°C (77°F), 1.75VPC unless otherwise specified.

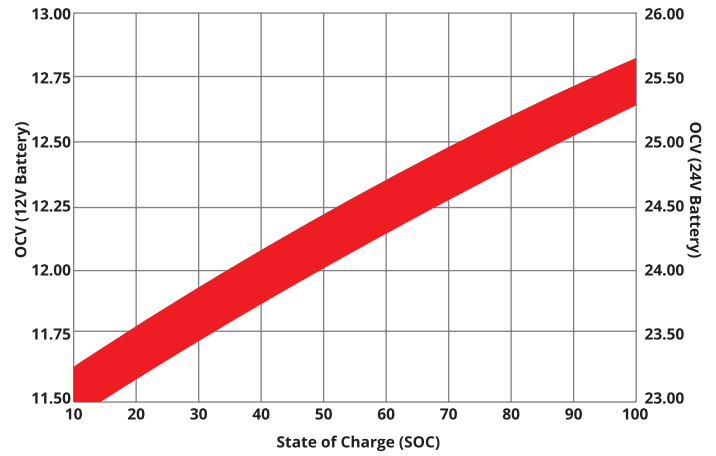
Specifications listed are for estimation purpose only. Battery performance can vary depending on application. Battery design subject to change.



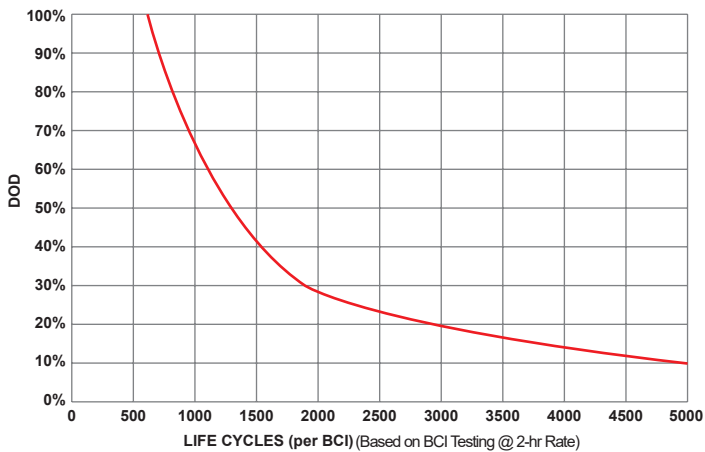
## Temperature vs Capacity



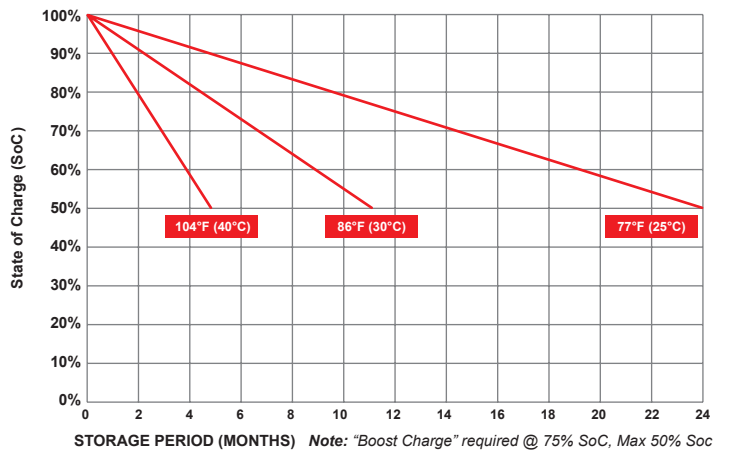
## State of Charge (SOC) vs Open Circuit Voltage (OCV)



## Cycle Life vs Depth of Discharge (DOD)



## Self Discharge vs Time/Temperature



## Temperature Range Specifications

Condition	Recommended	Maximum	Recommended	Maximum
Storage	-15°C to 50°C	-40°C to 71°C	5°F to 122°F	-40°F to 160°F
Operation	-15°C to 40°C	-40°C to 71°C	5°F to 104°F	-40°F to 160°F
Charge with TC*	-15°C to 50°C	-40°C to 71°C	5°F to 122°F	-40°F to 160°F
Charge w/o TC*	0°C to 40°C	-15°C to 50°C	32°F to 104°F	5°F to 122°F

\*TC = Temperature Compensation

## Charge Voltages

Charge Stage	Battery Voltages			
	12V	24V	36V	48V
Bulk	14.7V	29.4V	44.1V	58.8V
Absorption	14.7V	29.4V	44.1V	58.8V
Float	13.6V	27.2V	40.8V	54.6V

TC Factor: (-4mV°C/cell) or (-2mV°F/cell)

## Terminal Torque Specs

Terminal Type	ft-lbs	in-lbs	nm
AP, DT (ap), M6, M6M (Stud), TP07 (AP), TP08 (AP)	4.2 - 0.6	50 - 70	5.6 - 7.9
FR45	6.0 - 7.5	70 - 90	7.9 - 10.1
M8	7.1 - 8.0	85 - 95	9.6 - 10.7
DT (Stud), M10M (Stud)	9.2 - 10.4	110 - 125	12.2 - 14

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