



DC38-12

38AH@20HR

12-Volt

DEEP CYCLE

Maintenance-Free
Sealed AGM Battery

Nominal Specifications

Battery Model	DC38-12	Rated Capacity	38AH/20HR
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Mechanical Specifications

Group Size	U1L	
Overall Height (H)	170±2mm	6.69"
Container Height (h)	170±2mm	6.69"
Length	198±2mm	7.80"
Width	166±2mm	6.54"
Weight	Approx.13.5kg	29.76lbs.
Terminal Type	M6- Button Terminal	
Terminal Torque	5.6-7.9 N.m	
Container Material	ABS: Standard (UL 94-HB)	

Temperature Range Specifications

Operating Temperature Range	Discharge : -15°C ~+ 50°C (5°F~122°F)
	Charge: -15°C ~ +40°C (5°F~104°F)
	Storage: -15°C ~ +40°C (5°F~104°F)
Recommended Operating Temperature Range	+74°F (23°C) to +80°F (27°C)
Self-Discharge	Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F); Fully recharging is required before usage, For higher temperatures the time interval will be shorter.

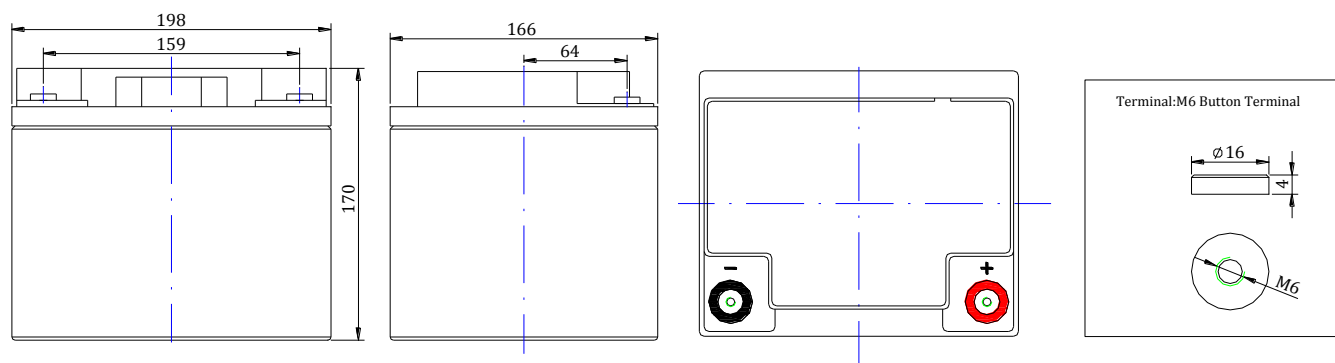
Electrical Specifications

C100	42AH
C20	38AH
C10	34.2AH
C5	31AH
CCA	265A
CA or MCA	315A
HPCA	375A
Max. Discharge Current	600A (5s)
Internal Resistance	7.0mΩ
Reserve Capacity	
Reserve @25 AMPS	52 Minutes
Reserve @75 AMPS	7 Minutes

Charge Voltages

Float Charging Voltage	13.5 to 13.8 VDC/unit@ (25°C)	
Equalization and Cycle Service Charging Voltage	14.3 to 14.5 VDC/unit @ (25°C)	
Maximum Charge Current(A)	9.5A	
Charging Temperature Compensation	Cycle use	-4mV/cell/°C
	Float use	-3mV/cell/°C

BATTERY & TERMINAL DIMENSIONS (All units shown in mm)



Battery bank spacing required 12.5mm (1/2"inch) minimum

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

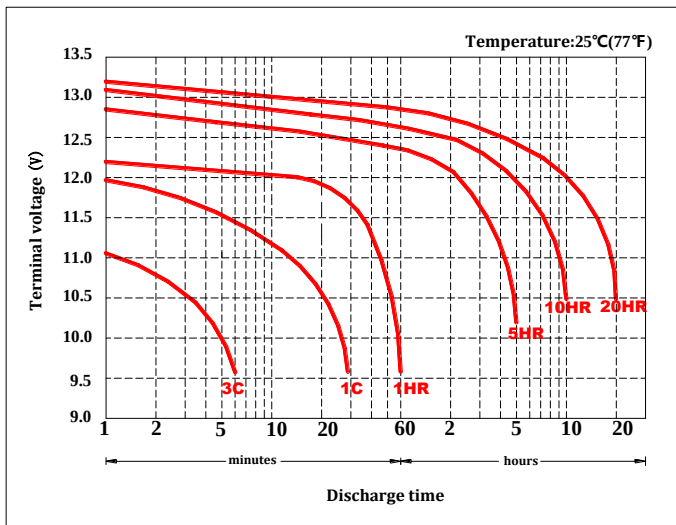
Cut off voltage V/cell	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H
1.75V	58	36	27	21.6	11.4	8.6	6.0	4.1	3.42	2.91	1.90

Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

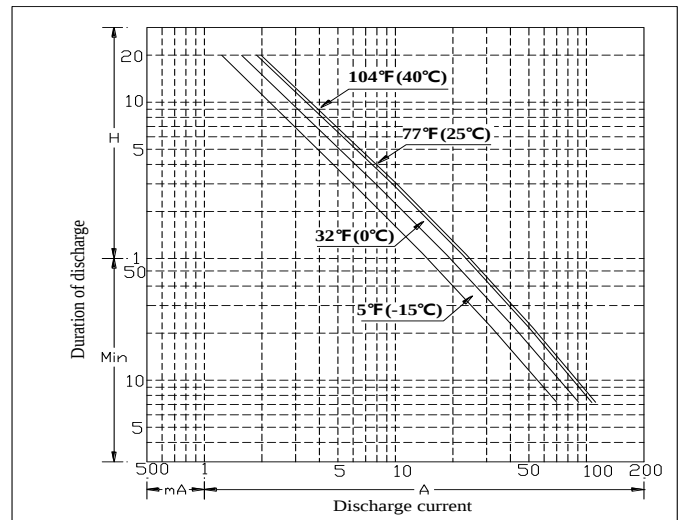


DC38-12 DATA SHEET

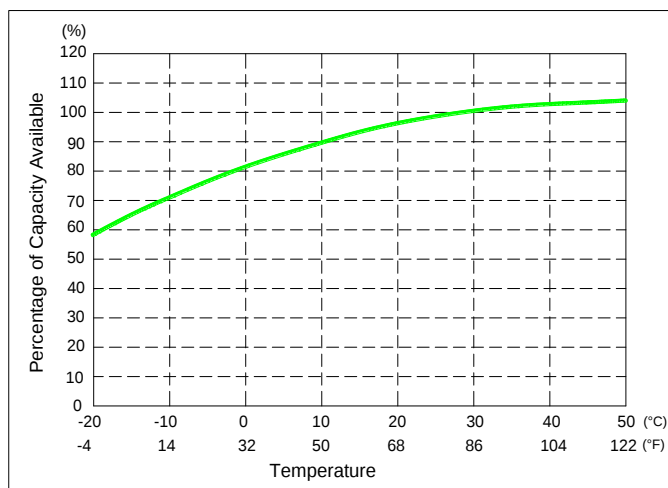
Terminal Voltage(V) and Discharge Time



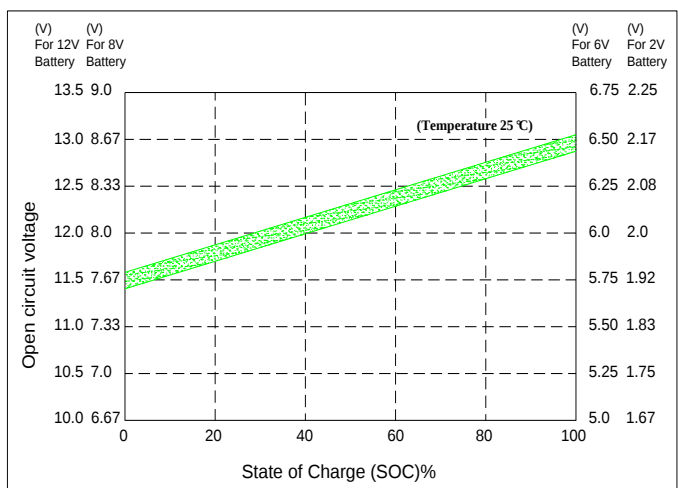
Duration of discharge vs. Discharge current



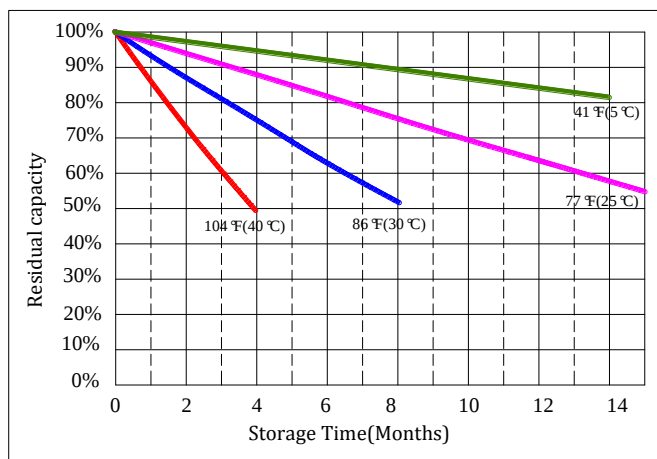
Percent Capacity vs. Temperature



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



Capacity Retention Characteristic



Cycle Life vs. Depth of Discharge(DOD)

