DC40-12 DATA SHEET



DC40-12

40AH@20HR
12-Volt

DEEP CYCLE

Maintenance-Free
Sealed AGM Battery

Nominal Specifications

Battery Model	DC40-12	Rated Capacity	40AH/20HR

Mechanical Specifications

Group Size	U1L	
Overall Height (H)	174±2mm	6.85″
Container Height (h)	174±2mm	6.85″
Length	198±2mm	7.80″
Width	166±2mm	6.54″
Weight	Approx.13.6kg	29.98lbs.
Terminal Type	M6- Button Terminal	
Terminal Torque	5.6-7.9 N.m	
Container Material	ABS：Standard（UL 94-HB）	

Electrical Specifications

C100	44AH
C20	40AH
C10	36AH
C5	32.8AH
CCA	275A
CA or MCA	325A
HPCA	380A
Max. Discharge Current	600A (5s)
Internal Resistance	7.0mΩ

Reserve Capacity

Reserve @25 AMPS	53 Minutes
Reserve @75 AMPS	9 Minutes

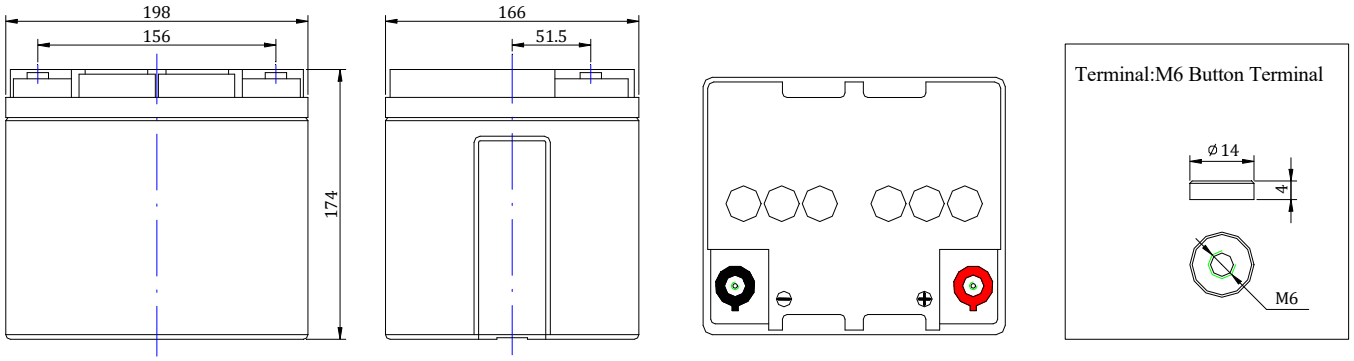
Temperature Range Specifications

Operating Temperature Range	Discharge : -15℃ ~+ 50℃ (5℉~122℉)
	Charge: 0℃ ~ +40℃ (32℉~104℉)
	Storage: -15℃ ~ +40℃ (5℉~104℉)
Recommended Operating Temperature Range	+74℉(23℃) to +80℉(27℃)
Self-Discharge	Less than 10% after 90 days, can be stored up to 6 months at 25℃ (77℉);Fully recharging is required before usage, For higher temperatures the time interval will be shorter.

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)	10A	
Charging Temperature Compensation	Cycle use	-4mV/cell/℃
	Float use	-3mV/cell/℃

BATTERY & TERMINAL DIMENSIONS (All units shown in mm)



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

Constant Current Discharge Rating Amperes @ 77℉(25℃)

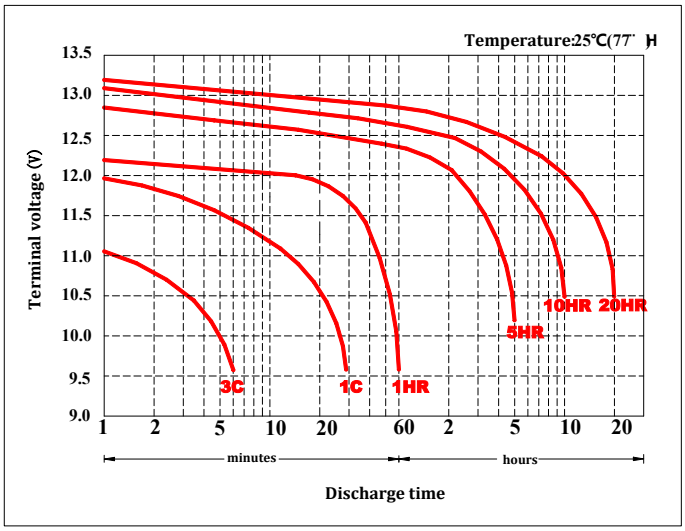
Cut off voltage V/cell	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H
1.75V	60	38	28	22.7	12.0	9.1	6.3	4.4	3.60	3.07	2.00

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

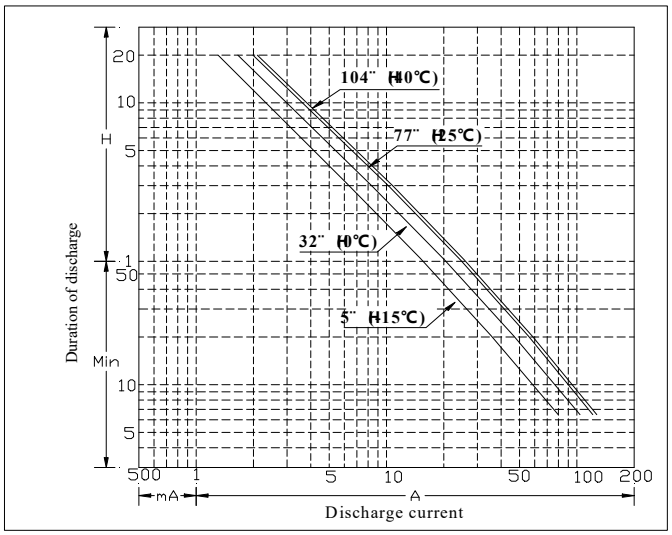
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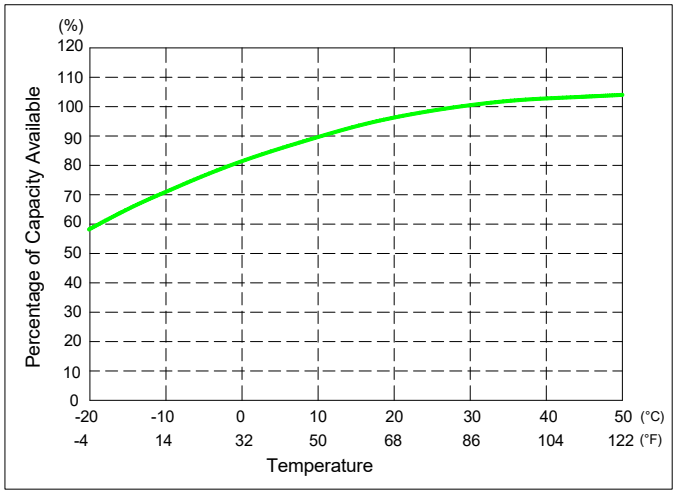
Terminal Voltage(V) and Discharge Time



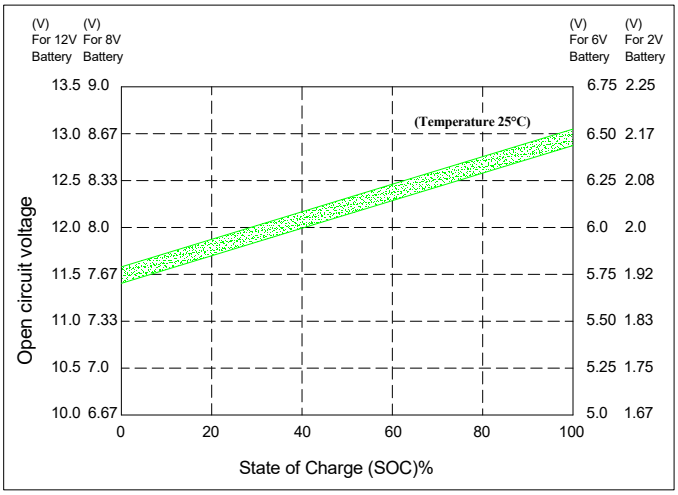
Duration of discharge vs. Discharge current



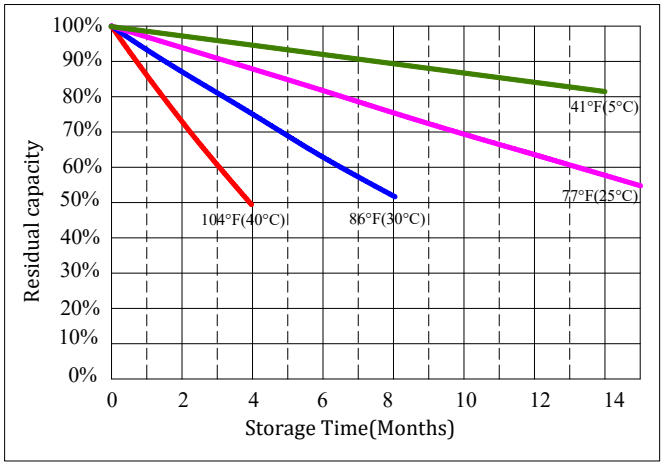
Percent Capacity vs. Temperature



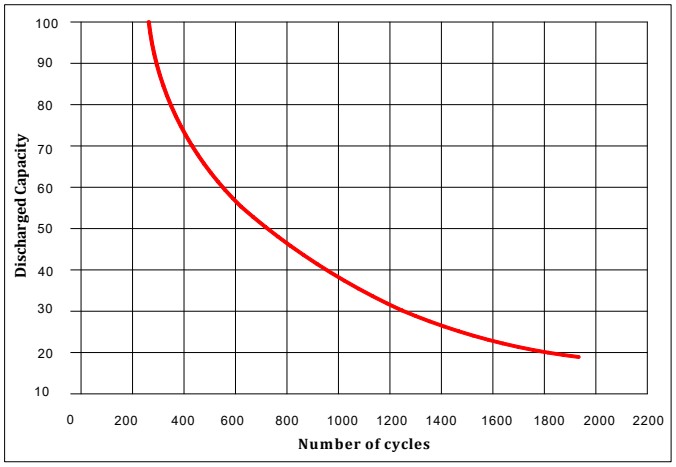
State of Charge(SOC) vs Open Circuit



Capacity Retention Characteristic



Cycle Life vs. Depth of Discharge(DOD)



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