

# SC 90

**SEMI CYCLE BATTERY**  
12V | 90Ah | 500h

M24



## Electrical Specifications

Nominal voltage	12V
Rated capacity	90Ah @ C <sub>100</sub>
Separator	PE
CCA at -18 °C	500A
Cycle Life in Relation to Depth of Discharge	600 Cycles at 30 % DoD
	360 Cycles at 50 % DoD
	250 Cycles at 80 % DoD
	170 Cycles at 100 % DoD

## Discharge Specifications

Capacity C <sub>100</sub>	90Ah
Capacity C <sub>20</sub>	80Ah
Capacity C <sub>10</sub>	75Ah
Capacity C <sub>5</sub>	60Ah
Max. Discharge Current	800A (5 Seconds)

## Charge Specifications

Maximum Charge Current	25A
Float Charge Voltage	2.23V to 2.25V @ 25°C Temp. Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.23V to 2.25V @ 25°C Temp. Compensation: -3mV/°C/Cell

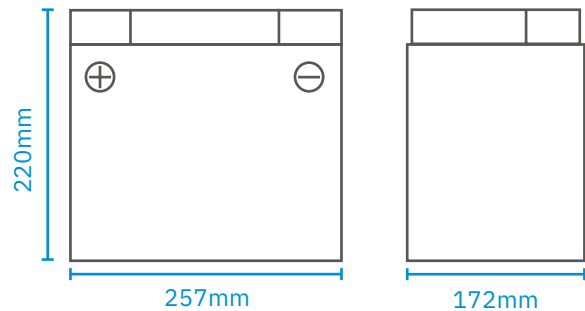
## Mechanical Specifications

Measurements (L × W × H)	257 × 172 × 220mm
Approx. Weight	19.20kg
Terminal Type	Marine Twin
Hold-Down	B1
Case Material	PP
Lid Material	PP
Water consumption	W4
Charge Retention	C2
Vibration Resistance	V2
Endurance Level	E1

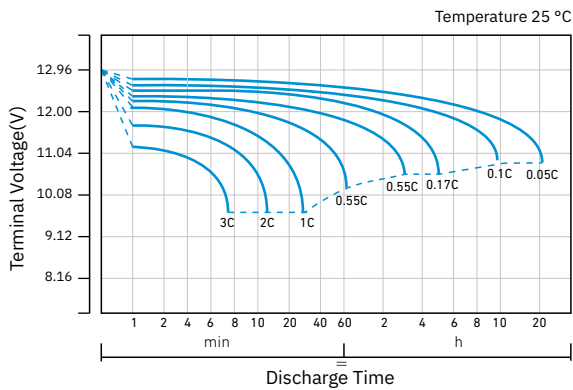
## Temperature Specifications

Discharge Temperature	-15 to 50°C
Charge Temperature	0 to 40°C
Storage Temperature	-15 to 50°C
Normal Operating Temperature	25 ± 5°C

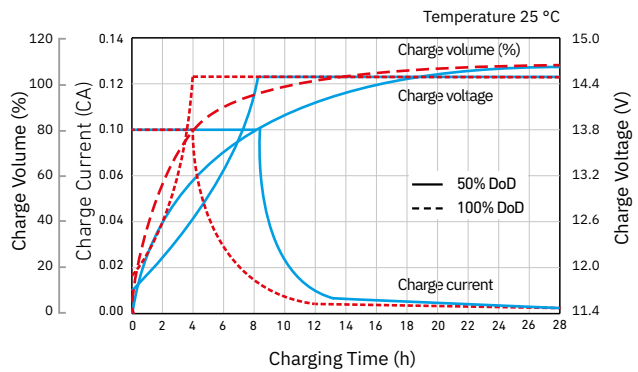
## Measurements



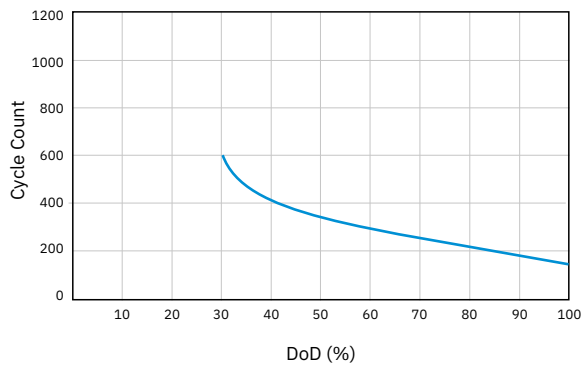
Discharge Characteristics Curve



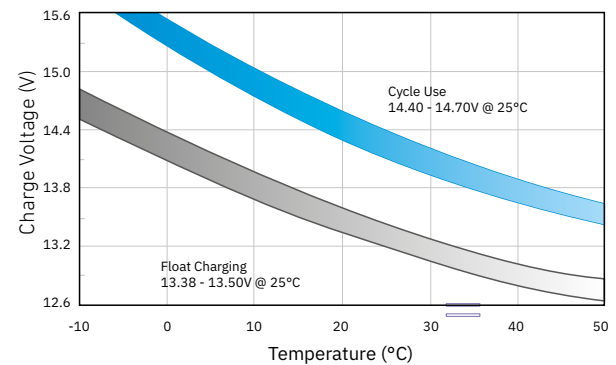
Charge Characteristics Curve For Cycle Use (IU)



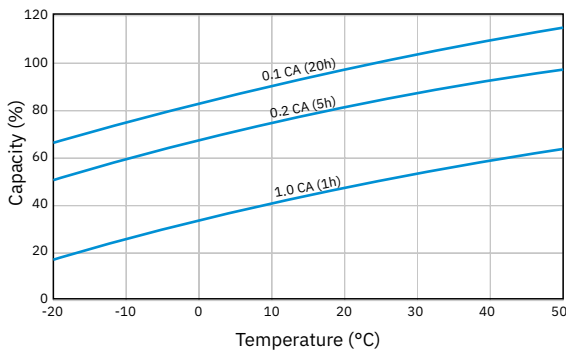
Relationship of Cycle Life and DoD



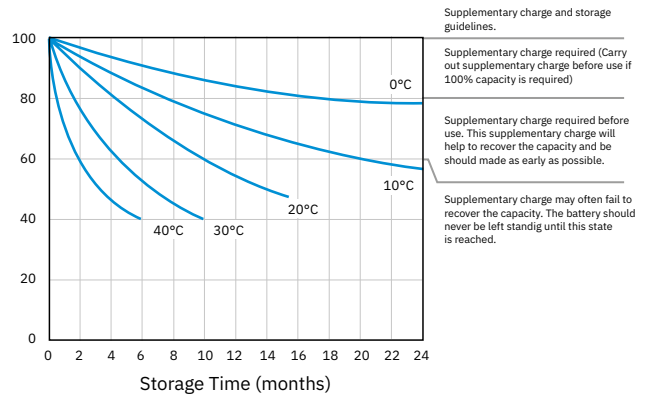
Relationship of Charge Voltage and Temperature



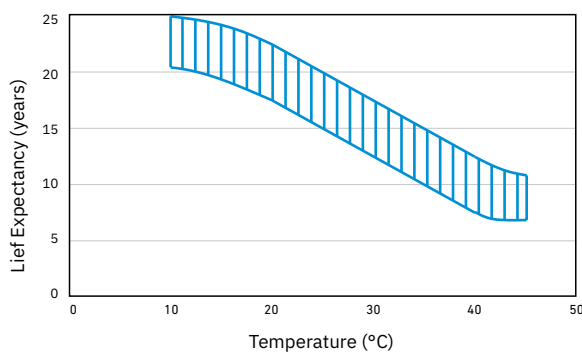
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long-Term Life



Relationship of OCV and State of Charge

