

# SLC SERIES

GENERAL PURPOSE BATTERIES

## DATASHEET

# SLC 100-12S

12V 100AH



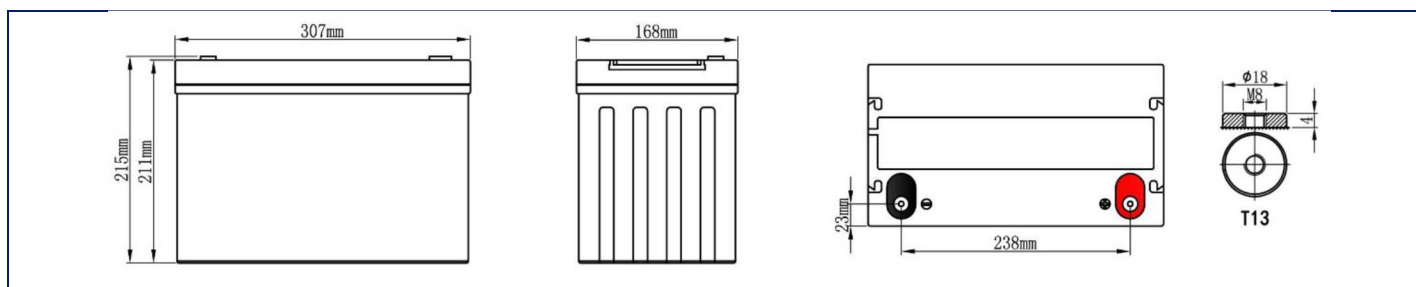
**AGM SEALED VRLA BATTERY**

**EUROBAT 2022 CLASSIFICATION: 10-12 Years – Long Life**

**Designed in accordance with IEC 60896-21/22**

## SPECIFICATIONS

Nominal Voltage	Nominal Capacity	Dimension ±3mm				Weight ±2%	Max Discharge Current (5s)	Internal Resistance	Standard Terminal	Container Material
		L	W	H	TH					
12V	100AH	307mm	168mm	211mm	215mm	26,5kg	1.100A	≈5.8 mΩ	M8	ABS



## CONSTANT-VOLTAGE CHARGE

Rated Capacity	
20 hour rate (5.0A)	100.0AH
10 hour rate (9.6A)	96.0AH
5 hour rate (16.5A)	82.5AH
3 hour rate (24.4A)	73.2AH
1 hour rate (60.0A)	60.0AH
Capacity affected by temperature	
40°C (104°F)	103%
25°C (77°C)	100%
0°C (32°F)	86%

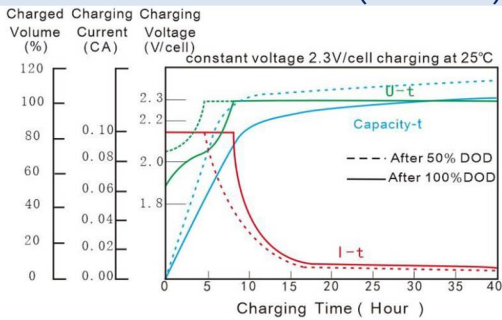
Cycle Application
1. Limit initial current less than 22.5A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).
3. Hold at 14.1V to 14.4V until current drop to under 0.54A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby Service
1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 22.5A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -18mV/°C.

Nominal Operating Temp. Range
25±3°C (77±5°F)

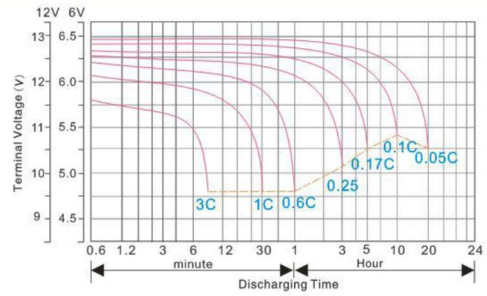
Operating Temperature		
Discharge: -15÷50°C	Charge: 0÷40°C	Storage: -15÷40°C

NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

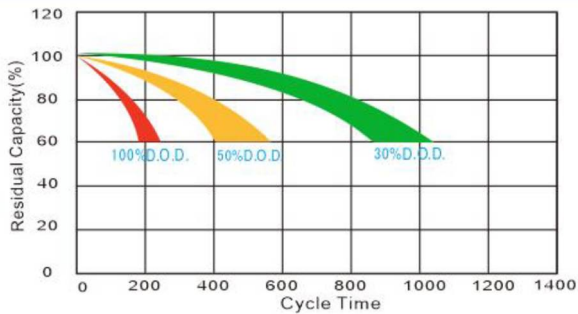
## CHARGE CHARACTERISTICS (25°C/77°F)



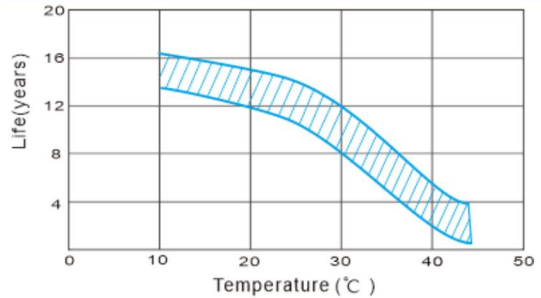
## DISCHARGE CHARACTERISTIC (25°C/77°F)



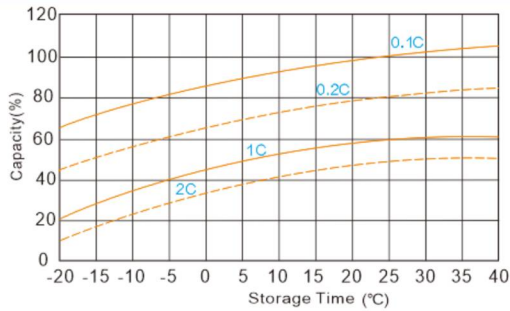
## CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



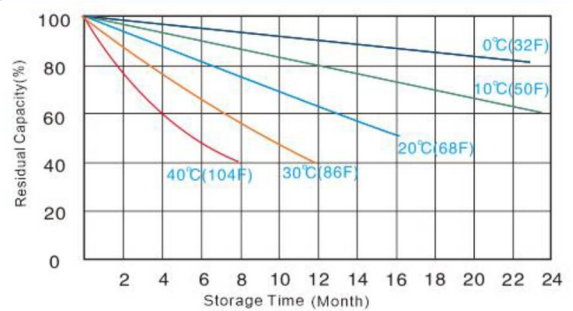
## TEMPERATURE VS FLOAT LIFE



## CAPACITY CURVE AT DIFFERENT TEMPERATURE



## SELF DISCHARGE CHARACTERISTICS



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

End Voltage (V)	10 min	15 min	30 min	45 min	1 h	1,5 h	2 h	3 h	5 h	8 h	10 h	20 h
9.6V	221	175	98	85	58	45.5	38.5	23.6	16.5	11.31	9.46	4.92
9.9V	211	167	94	82	57	44.5	37.5	23.2	16.1	11.11	9.36	4.87
10.2V	201	159	89	79	55	43.6	36.6	22.7	15.8	10.91	9.27	4.82
10.5V	191	150	85	77	54	42.7	35.8	22.3	15.5	10.61	9.18	4.78
10.8V	182	143	81	74	53	41.8	34.8	21.8	15.0	10.50	9.09	4.73

## Constant Power Discharge (Watts) at 25°C (77°F)

End Voltage (V)	10 min	15 min	30 min	45 min	1 h	1,5 h	2 h	3 h	5 h	8 h	10 h	20 h
9.6V	2467	2044	1266	887	737	538	403	300	194	146	113	61.0
9.9V	2350	1947	1205	856	720	524	393	293	189	143	112	60.5
10.2V	2238	1854	1147	828	702	512	383	286	185	141	111	59.8
10.5V	2132	1766	1093	800	685	499	374	278	180	138	110	59.2
10.8V	2030	1682	1041	773	669	487	365	272	176	135	109	58.7