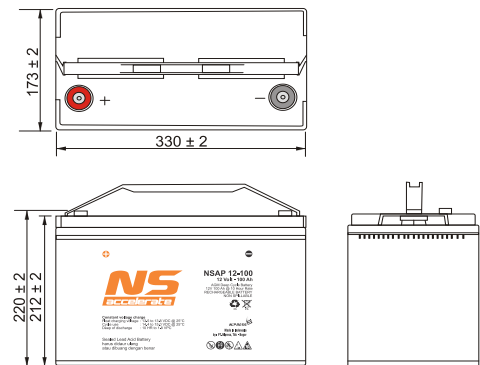
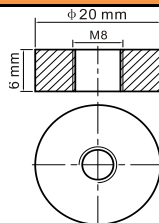


**TECHNICAL SHEET**
**NSAP 12-100**

**NSAP 12-100** is a top terminal battery with AGM technology is specially designed for Telecommunication use with over 10 years design life at 25 °C. NSAP type also comply with IEC 60896-21/22, standard battery for Stationary Lead Acid batteries. The adoption of centralized venting system make sure the battery can be installed in any location and guarantees high security and reliability.

**VIEW**

**DIMENSIONS**

**TERMINAL SIZE**

**WEIGHT AND DIMENSION**

Battery Weight	: Approximate	30.4 Kg
Length	: 330 ± 2	mm
Width	: 173 ± 2	mm
Height	: 212 ± 2	mm
Total Height	: 220 ± 2	mm

**PERFORMANCE**

Nominal Voltage	: 12 V
Capacity 10 h (C <sub>10</sub> )	: 100 Ah
Max Discharge Current	: 1200 A (5 sec)
Internal Resistance	: Approx. 4.9 m Ω
Normal Operating Temp. Range	: 25°C ± 5°C
Float charging Voltage	: 13.5 to 13.8 VDC/unit@25°C
Recommended maximum charging current limit	: 30 A
Equalization and Cycle Service	: 14.4 to 15.0 VDC/unit@25°C
Self Discharge	: Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.

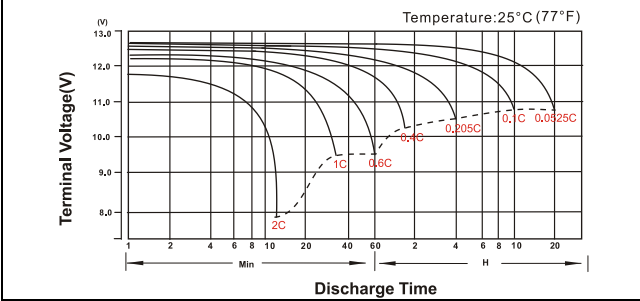
**COVER AND CONTAINER**

Material	: A.B.S. UL94-HB, UL94-V0 Optional.
Type	: NSAP 12-100
Terminal	: T11

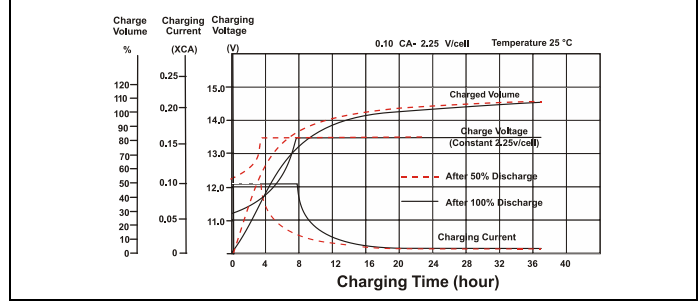
**OTHER**

Operating Temperature Range	-15°C to 50°C	Discharge
	0°C to 40°C	Charge
	-15°C to 40°C	Storage

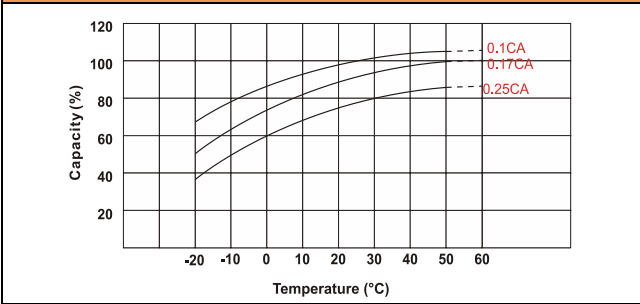
**Discharge Characteristic Curve**



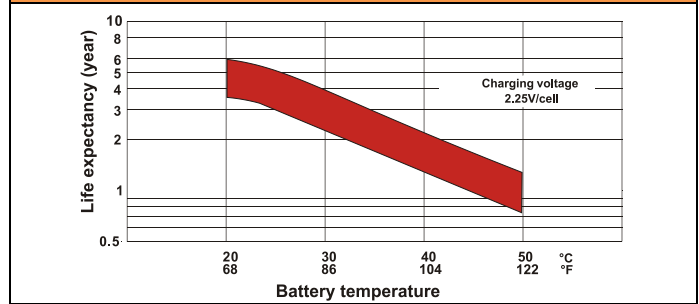
**Float Charging Characteristics**



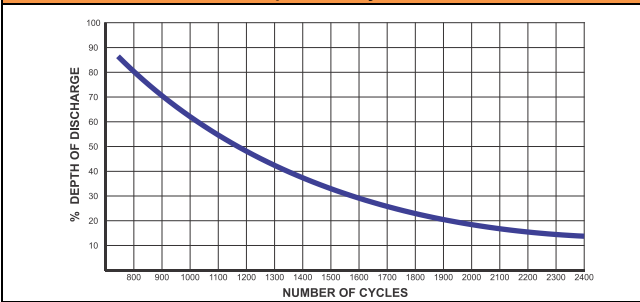
**Temperature Effects in Relation of Battery Capacity**



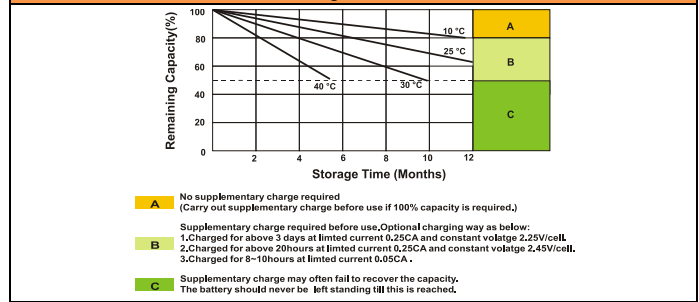
**Effect of Temperature on Long Term Float Life**



**Graphic Life Cycle**



**Self Discharge Characteristics**



**Constan Current Discharge (Amperes) at 25 °C**

F.V/Time	5 min	10 min	15min	20min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85 V/cell	173.60	146.40	130.20	115.30	87.50	65.20	52.40	31.30	23.50	19.20	16.40	14.40	11.60	9.65	5.13
1.80 V/cell	210.00	167.60	143.70	123.50	92.10	68.70	55.10	33.10	24.60	20.20	17.20	15.00	12.00	10.00	5.20
1.75 V/cell	237.00	186.30	154.00	130.80	96.50	71.30	57.10	34.40	25.40	20.70	17.60	15.30	12.20	10.10	5.29
1.70 V/cell	261.60	199.50	165.10	138.90	101.80	74.60	59.50	35.30	26.00	21.20	17.90	15.60	12.40	10.20	5.34
1.67 V/cell	291.70	215.10	178.50	146.60	106.70	77.40	61.90	36.30	26.70	21.70	18.30	15.90	12.60	10.30	5.40
1.60 V/cell	330.80	232.50	188.50	154.30	112.30	80.50	63.80	37.50	27.60	22.20	18.60	16.20	12.70	10.50	5.45

**Constant Power Discharge (Watt/cell) at 25 °C**

F.V/Time	5 min	10 min	15min	20min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85 V/cell	322.50	274.90	247.10	220.50	168.50	126.40	102.20	60.80	45.70	37.50	32.20	28.20	22.90	19.10	10.20
1.80 V/cell	386.40	312.20	271.00	235.10	176.80	132.70	107.20	63.80	47.70	39.20	33.60	29.40	23.70	19.80	10.30
1.75 V/cell	431.30	344.90	288.70	247.80	184.30	137.30	110.80	66.00	49.10	40.10	34.30	29.90	24.00	19.90	10.40
1.70 V/cell	470.90	366.50	307.70	261.80	193.60	143.00	115.00	67.60	50.10	41.00	34.80	30.40	24.30	20.10	10.50
1.67 V/cell	519.30	391.40	330.20	274.50	201.90	147.70	119.10	69.20	51.30	41.80	35.30	30.80	24.60	20.30	10.60
1.60 V/cell	578.90	418.20	345.10	286.60	211.10	152.90	122.40	71.10	52.70	42.60	35.90	31.30	24.80	20.50	10.70

All mentioned values are average values ( Tolerance ± 2 %)