

## NPDC12550

Classic Range



### Applications

- > Electric vehicle / Golf trolley and golf cart
- > Lawn mowers / Wheelchairs
- > Electric toys/ Electric tools
- > Lawn mowers / Sweeper
- > illumination light
- > Other general purpose

### General Features

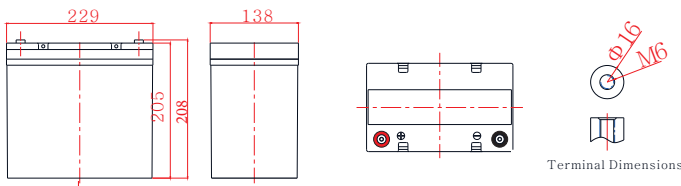
- > Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- > Relatively rich electrolyte, high temperature and low temperature performance is superior
- > Long cycle life, excellent deep cycle discharge ability
- > Excellent charge acceptance ability
- > Precision sealing technology
- > Long life

### Specification

Nominal Voltage	12V
Nominal Capacity	55Ah
Design life	10 years
Terminal	M6
Approx. Weight	Approx 16.5kg (36.4lbs)
Container Material	ABS
Rated Capacity	<b>55.0Ah</b> 20Hour Rate (2.75A to 10.5V)
	<b>42.6Ah</b> 3Hour Rate (14.2A to 10.5V)
	<b>36.0Ah</b> 1Hour Rate (36.0A to 9.60V)
Internal resistance	Full charged at 25°C: 12.0 mΩ
Max. Discharge Current	660A(5S)
Operating Temperature	Discharge: -40 ~60°C(-40~ 140°F)
	Charge: -20 ~50°C(-4~ 122°F)
	Storage: -20 ~50°C(-4~ 122°F)
Charge current:	Max. 13.8A ; Recom.5.5A
Charge Method (25 °C)	Float Charge:13.5-13.8V,recom.13.5V(-18mV/ °C)
	Equalize charge:13.8-14.1V,recom.14.1V(-24mV/ °C)
	Cycle charge:14.4-15.0V,recom.14.4V(-30mV/ °C)
Self discharge	3% of capacity declined per month at 25°C



Dimension: 229(L)×138(W) ×205(H)×208(TH) Unit: mm



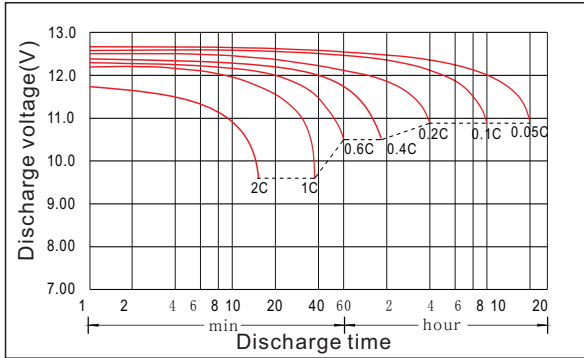
### Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	140	105	69.0	36.0	20.6	15.0	12.1	10.2	6.75	5.48	2.92
1.65V	133	96.5	65.4	33.8	19.8	14.6	11.7	10.0	6.64	5.39	2.88
1.70V	126	89.9	63.5	32.6	19.4	14.4	11.1	9.90	6.54	5.31	2.81
1.75V	119	83.6	62.0	31.5	19.0	14.2	10.9	9.48	6.37	5.18	2.75
1.80V	113	77.8	59.9	30.5	18.4	13.4	10.7	9.12	6.20	5.12	2.64

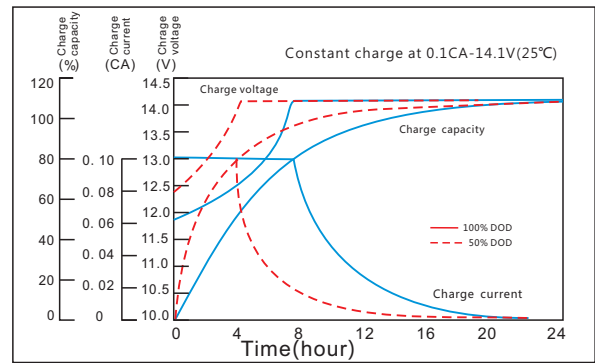
### Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	252	193	116	66.2	38.5	28.3	22.8	19.4	12.7	10.6	5.82
1.65V	237	180	115	61.8	37.0	27.5	22.0	18.9	12.5	10.4	5.63
1.70V	231	172	116	59.9	36.4	27.1	20.9	18.4	12.4	10.3	5.58
1.75V	224	167	115	58.2	35.5	26.9	20.6	18.1	11.9	10.1	5.50
1.80V	216	159	113	57.3	35.3	26.0	20.4	17.6	11.5	9.88	5.46

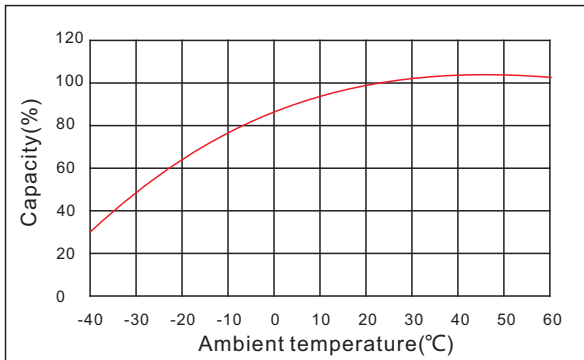
Discharge characteristic



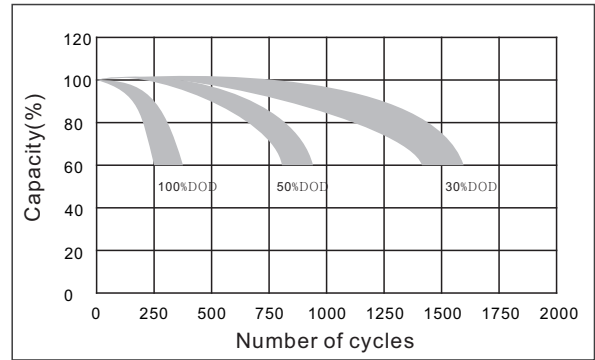
Charging characteristic



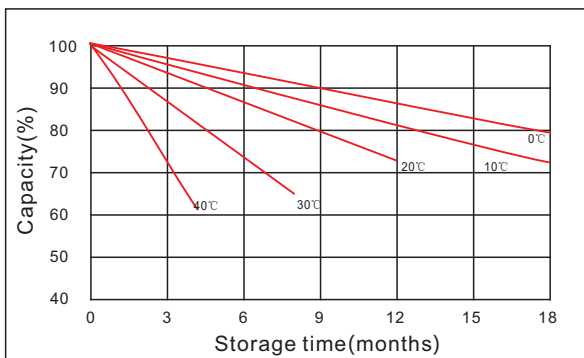
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

