



712080 – 6FM80DC



712080 is a deep cycle purpose battery, with specially designed for frequent cyclic discharge usage.

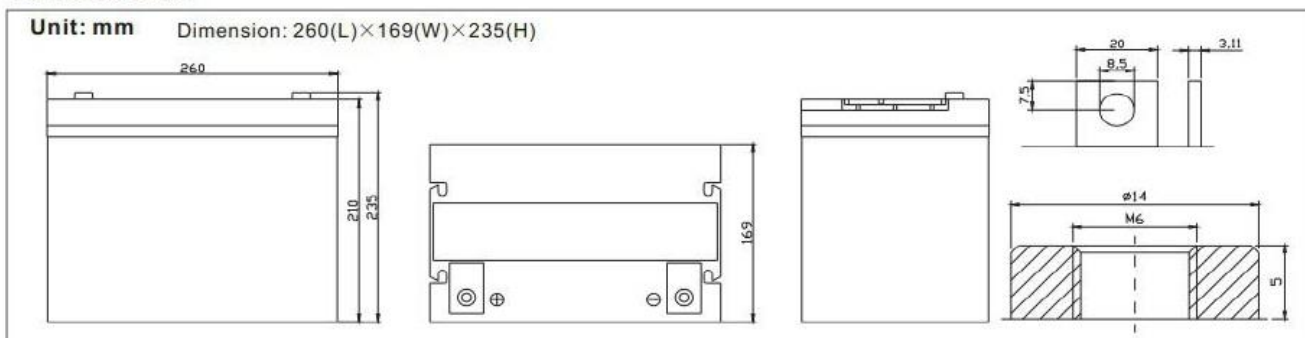
By using strong grid and specific paste plate, the battery offers 50% more cyclic life than the standby series.

It is applicable for power tools, solar & wind energy, telecom system, etc..

Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	85AH/20hr, 80AH/10hr, 75AH/5hr – rate to 1.75V per cell @ 25°C
Weight	Approx. 26.0kg
Max. Discharge Current	750A (5sec)
Internal Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25±5°C
Float Charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging	22.5A
Equalization and Cycle service	14.4 to 14.8 VDC/unit Average at 25°C
Self Discharge	Can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal M6
Container Material	A.B.S. UL94-HB, Flammability resistance of UL94-V2 can be avail upon request

Dimensions



Constant Current Discharge Characteristics: A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	251.3	185.0	144.2	87.89	48.75	29.15	20.13	16.68	14.04	9.59	7.95	4.24
10.0V	244.0	176.0	141.3	86.38	48.53	28.93	20.05	16.60	13.96	9.51	7.88	4.17
10.5V	212.6	156.7	132.4	84.14	47.63	28.50	19.82	16.37	13.71	9.36	7.73	4.01
10.8V	191.9	142.9	122.0	82.70	46.50	27.98	19.28	15.98	13.46	9.20	7.65	3.94
11.1V	163.9	127.7	109.5	77.43	44.18	26.74	18.43	15.21	12.88	8.81	7.42	3.70

Constant Power Discharge Characteristics: W(25°C)

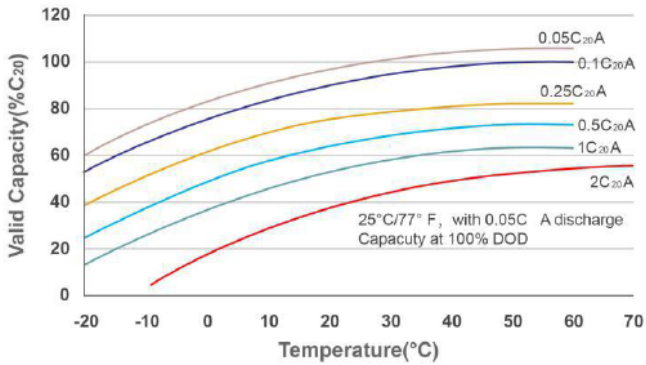
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	2651	1970	1572	986.3	563.3	343.6	293.6	198.8	167.5	114	95.1	50.9
10.0V	2599	1910	1547	974.2	562.0	341.8	239.7	198.5	167.1	113	94.5	50.0
10.5V	2339	1732	1459	960.6	552.6	337.3	237.7	196.2	164.5	112	92.7	48.2
10.8V	2130	1596	1349	945.2	542.4	333.0	231.2	191.8	161.5	110	91.8	47.2
11.1V	1871	1443	1214	890.3	519.2	320.6	221.2	182.5	154.6	105	89.03	44.5



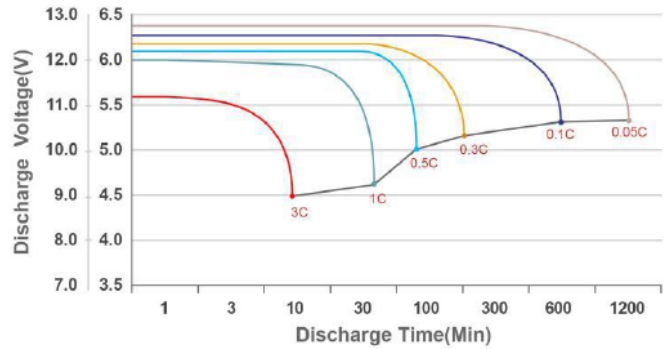
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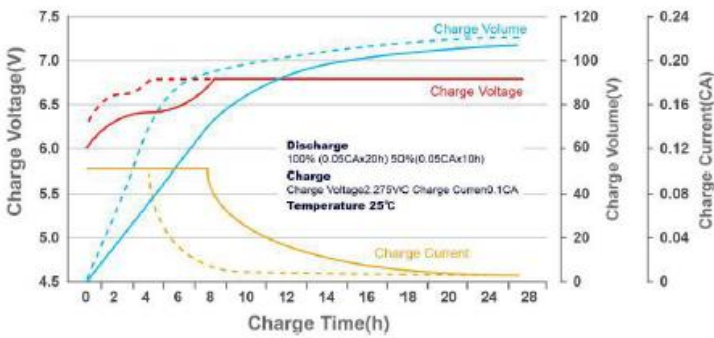
Temperature and Valid Capacity



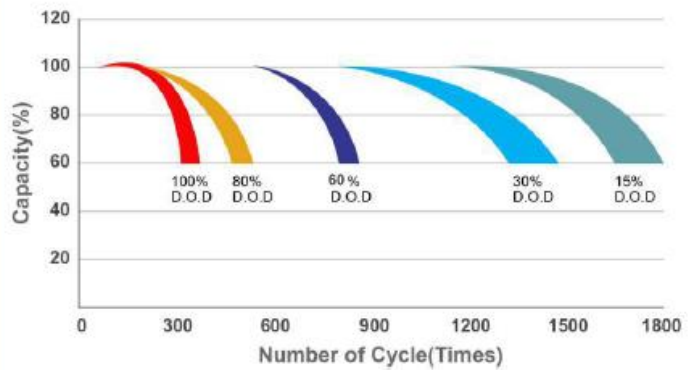
Discharge Characteristics at Various Rates @25°C/77



Charge characteristic curve for standby use



Life characteristics of cyclic use



Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.75V	1.60V
Discharge Current (A)	A ≤ 0.2C	0.2C ≤ A ≤ 1.0C	≥ 1.0C

Charge the batteries at least once every six months, if they are stored at 25°C

Charging Method:

Constant Voltage	-0.2C*2h+2.4-2.45V/cell*24h, Max.Current 0.3CA
Constant Current	-0.2C*2h+0.1CA*12h
Fast	-0.2C*2h+0.3CA*4.0h

Maintenance & Cautions

Float Service

- ※ Every month, recommend inspection every battery voltage
 - ※ Every three months, recommend equalization charge for one time.
- Equalization charge method:
- Discharge: 100% rate capacity discharge.
- Charge: Max. Current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h
- ※ Effect of temperature on float charge voltage: -3mV/Cell.
 - ※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.