



FUJIAN YAHENG POWER TECHNOLOGY GROUP CO.,LTD

6FM50 12V50AH



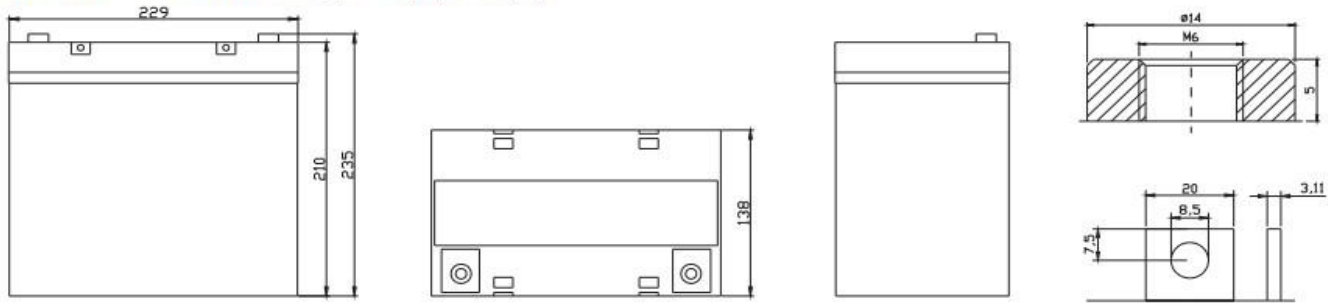
6FM50 is a general purpose battery with 5 years floating design life, meet with IEC, JIS standard. With heavy duty grid thickness plates, special additives, FM series battery have long and reliable standby service life.

Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	50AH@20hr-rate to 1.75V per cell @ 25°C
Weight	Approx. 16.5kg (Tolerance±3%)
Max. Discharge Current	500A(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	15.0A Current Limit
Equalization and Cycle service	14.6 to 14.8 VDC /unit Average at 25°C
Self Discharge	YAHENG Vale Regulated Lead Acid(VRLA) 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 F14/L20
Container Material	A.B.S. UL94-HB, Flammability resistance of UL94-V2 can be avail upon request

Dimensions

Unit: mm Dimension: 229(L)×138(W)×235(H)



Constant Current Discharge Characteristics: A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	184.3	135.7	105.8	64.46	35.75	21.38	14.76	12.23	10.30	7.033	5.333	2.813
10.0V	179.0	129.1	103.6	63.34	35.59	21.22	14.71	12.17	10.24	6.976	5.277	2.756
10.2V	173.7	124.5	101.97	62.17	35.26	21.06	14.59	12.12	10.17	6.919	5.221	2.699
10.5V	155.9	114.9	97.09	61.70	34.93	20.90	14.54	12.00	10.05	6.861	5.165	2.643
10.8V	140.7	104.8	89.50	60.65	34.10	20.52	14.14	11.72	9.872	6.747	5.109	2.586
11.1V	120.2	93.7	80.28	56.78	32.40	19.61	13.52	11.15	9.448	6.461	4.941	2.416

Constant Power Discharge Characteristics: W(25°C)

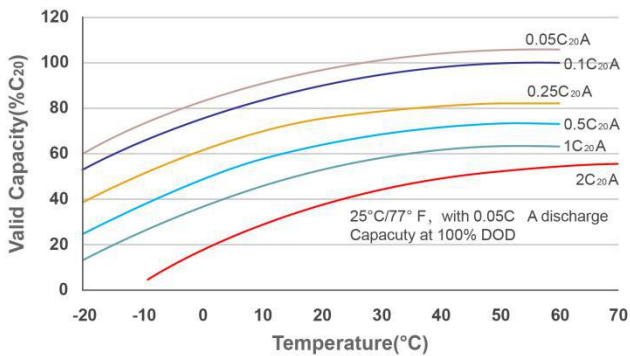
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	1944	1445	1153	723.3	413.1	252.0	175.7	145.8	122.8	83.97	69.71	37.32
10.0V	1906	1401	1135	714.4	412.1	250.7	175.7	145.6	122.5	83.57	69.27	36.67
10.2V	1884	1364	1122	709.4	408.9	249.1	175.0	145.3	122.1	83.02	68.65	35.99
10.5V	1715	1270	1070	704.5	405.3	247.3	174.3	143.9	120.6	82.34	67.98	35.31
10.8V	1562	1171	989.0	693.2	397.8	244.2	169.6	140.6	118.5	80.96	67.31	34.63
11.1V	1372	1058	890.3	652.9	380.8	235.1	162.2	133.8	113.38	77.53	65.29	32.60

All mentioned values are average values.

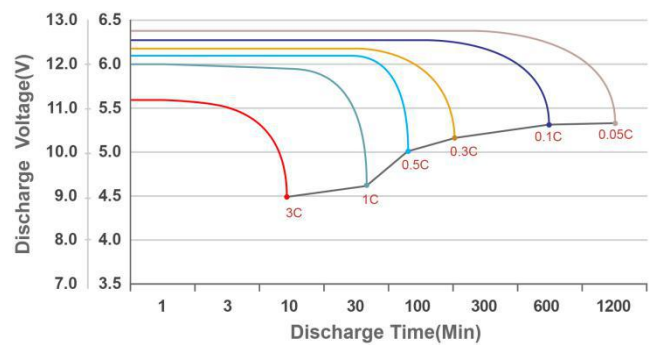


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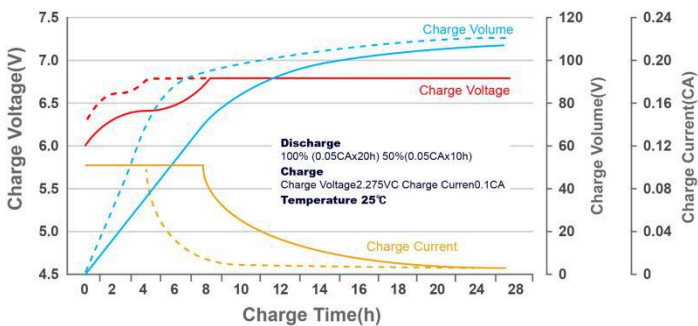
Temperature and Valid Capacity



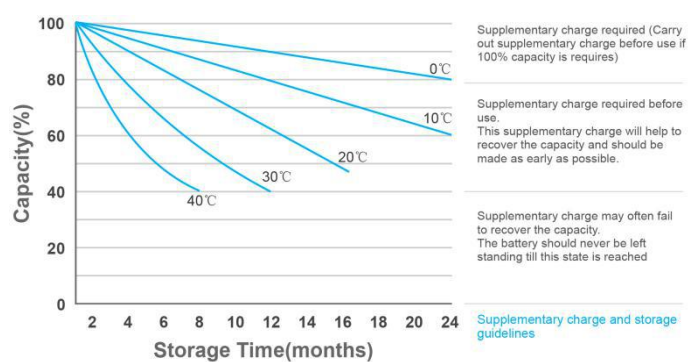
Discharge Characteristics at Various Rates @25°C/77



Charge characteristic curve for standby use



Storage characteristic



Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.75V	1.60V
Discharge Current (A)	$A \leq 0.2C$	$0.2C \leq A \leq 1.0C$	$\geq 1.0C$

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

Charging Method:

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

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.

Contact us:

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