



FUJIAN YAHENG POWER TECHNOLOGY GROUP CO.,LTD

GEL 6FM45D 12V45AH



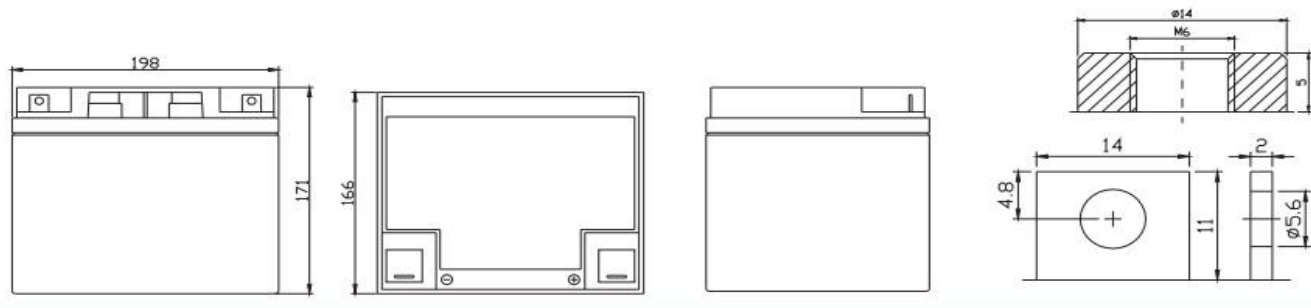
6FM45D is a deep cycle purpose GEL battery . with specially designed for frequent cyclic discharge usage. By using strong grid and specific paste plate, the battery offers 50% more cyclic life than the standby series. It is applicable for power tools, solar & wind energy, telecom system, etc..

Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	45AH@20hr-rate to 1.75V per cell @ 25°C
Weight	Approx. 14.2kg (Tolerance±3%)
Max. Discharge Current	450A(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	13.5A
Equalization and Cycle service	14.4 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 at25°C. Please charge batteries before using.
Terminal	Terminal F14/ L14
Container Material	A.B.S. UL94-HB, Flammability resistance of UL94-V2 can be avail upon request

Dimensions

Unit: mm Dimension: 198(L)×166(W)×171(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	150.8	111.0	86.54	52.74	29.25	17.49	12.08	10.01	8.424	5.745	4.773	2.547
10.0V	146.4	105.6	84.76	51.83	29.12	17.36	12.03	9.960	8.374	5.707	4.727	2.500
10.2V	142.1	101.9	83.43	50.87	28.85	17.23	11.94	9.913	8.325	5.661	4.681	2.454
10.5V	127.6	94.03	79.44	50.48	28.58	17.10	11.89	9.821	8.226	5.614	4.635	2.408
10.8V	115.2	85.74	73.23	49.62	27.90	16.79	11.57	9.589	8.077	5.520	4.589	2.361
11.1V	98.32	76.63	65.68	46.46	26.51	16.05	11.06	9.126	7.730	5.286	4.451	2.222

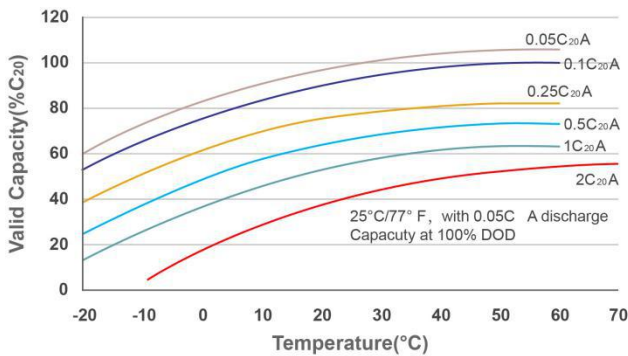
Constant Power Discharge Characteristics: W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	1591	1182	943.4	591.8	338.0	206.2	143.7	119.3	100.5	68.71	57.03	30.53
10.0V	1559	1146	928.3	584.5	337.2	205.1	143.8	119.1	100.2	68.37	56.67	30.00
10.2V	1542	1116	917.8	580.4	334.6	203.8	143.2	118.9	99.90	67.93	56.17	29.45
10.5V	1403	1039	875.5	576.4	331.6	202.4	142.6	117.7	98.71	67.37	55.62	28.89
10.8V	1278	957.8	809.2	567.1	325.5	199.8	138.7	115.1	96.93	66.24	55.07	28.34
11.1V	1123	865.9	728.4	534.2	311.5	192.4	132.7	109.5	92.76	63.44	53.42	26.67

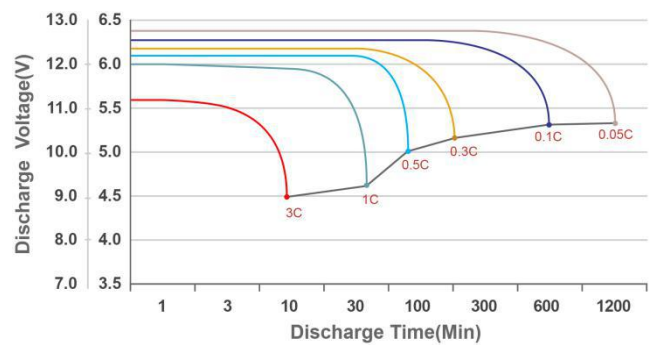


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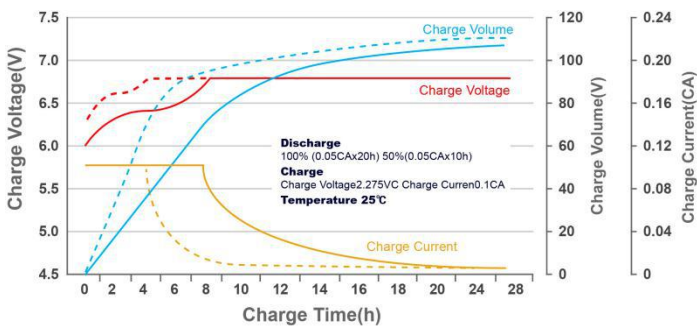
Temperature and Valid Capacity



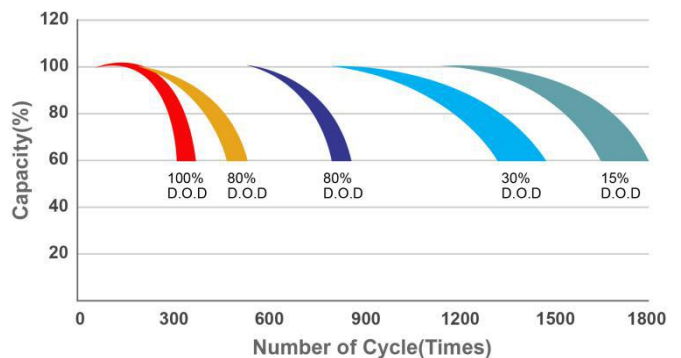
Discharge Characteristics at Various Rates @25°C/77



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)	$A \leq 0.2C$	$0.2C \leq A \leq 1.0C$	$\geq 1.0C$

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

Charging Method:

Constant Voltage	$-0.2C*2h + 2.4-2.45V/cell*24h$, 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.

Contact us:

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