



General VRLA Battery

3FM42G (6V42Ah)

The LONGWAY General Series middle batteries (more than 24Ah) are designed and developed using AGM technology and valve controlled sealing technology. They can meet conventional performance requirements, with a designed float charging life of over 8 years. The valve controlled non-spillable structure design allows safe use in any direction and is certified by sea and air freight. The battery performance also meets international standards. such as IEC60896-2012, UL1989.etc.



General Feature

- High reliability, safe without leakage, can be used in any position
- Excellent recovery performance after deep discharge
- Environmentally friendly products.
Meet EU battery directive RoHS and REACH standards
- Maintenance free
- Widely applicable temperature range, can be used at -20 °C~60°C
- Low self-discharge rate. The average monthly self-discharge rate of the battery is less than 2.5%
(It is recommended to recharge after storage for 6 months or before use)

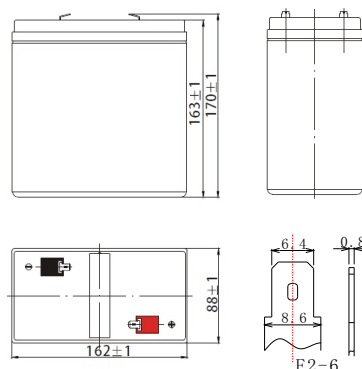
Applications

- Emergency lights; Alarm system
- Electrical test equipment; communication Equipment
- Uninterruptible power supply; Fire & Security
- Electric toys; Control instruments
- Portable Movie & Video lights
- Electric tools; Solar system
- Robots and control machines and other

Performance

Nominal Voltage	6V (3cells)
Capacity	@25°C
10hr Rate (3.90A)	39.0Ah @ to 1.75V/cell
5hr Rate (7.14A)	35.7Ah @ to 1.70V/cell
3hr Rate (10.5 A)	31.5Ah @ to 1.60V/cell
Weight	Approx (5.70±3%)kg (12.57lbs)
Internal Resistance	Approx 4.00mΩ fully charged @25°C
Maximum Discharge Current	210A(3sec)
Terminal	F2-6
Operating Temperature Range	Discharge:-20°C~60°C; Charge:0°C~50°C Storage:-20°C~40°C
Container Material	ABS(UL94 HB)/UL94-V0 Optional

Dimensions



Length	162mm	6.38inch
Width	88mm	3.46inch
Height	163mm	6.42inch
Total height	170mm	6.69inch

Battery use

Cycle use

1. Limit the initial charging current to no more than 10.5A
2. Keep charging voltage at 7.20-7.50V/unit.and continue charging at least 3 hours after the charging current reduces to 0.84A to ensure full charge
3. The compensation coefficient of charging voltage and temperature is -5mv/cell/°C

Float use

1. Limit the initial charging current to no more than 10.5A
2. Keep charging voltage at 6.75-6.90V/unit.When the voltage reaches the constant voltage,the current gradually decreases until the battery is fully charged and continues to charge
3. The compensation coefficient of charging voltage and temperature is -3mv/cell/°C



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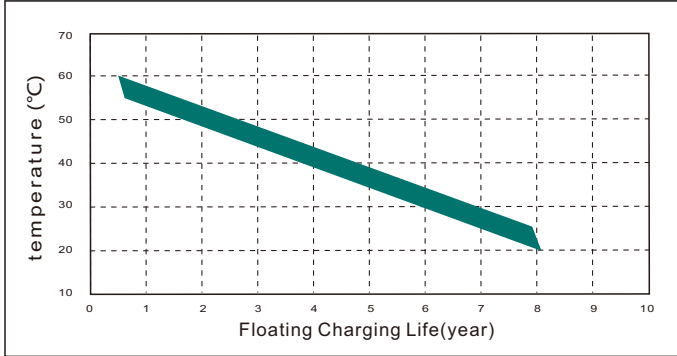
Note: This information usually describes use only and is not intended to make any warranties or promises regarding the battery. Battery specifications and battery design are subject to change without prior notice. Please contact LONGWAY Battery for the latest information.



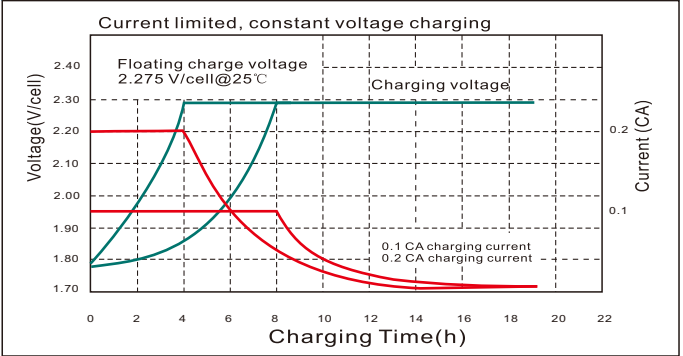
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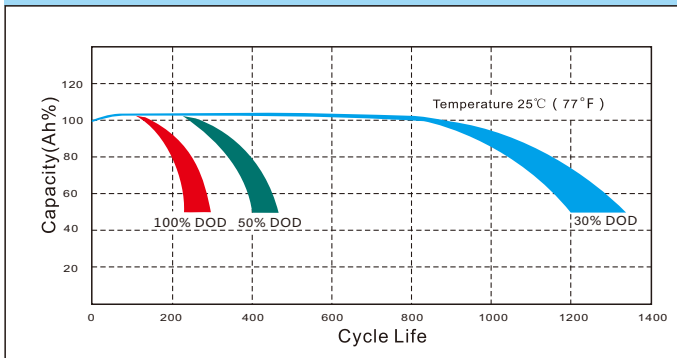
Floating Charging Life VS Temperature



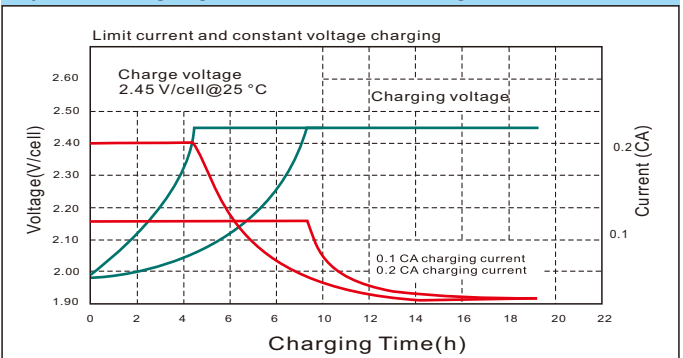
Floating Charging Characteristics Diagram



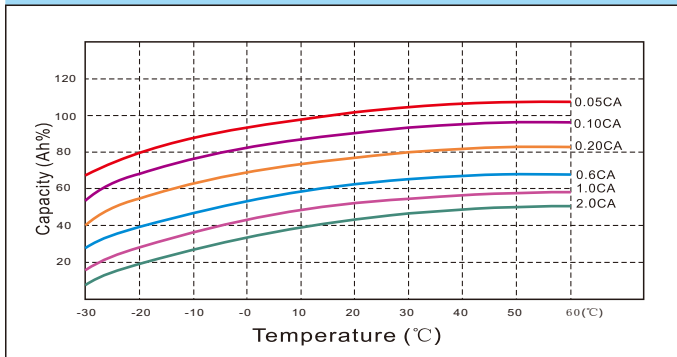
Cycle Life



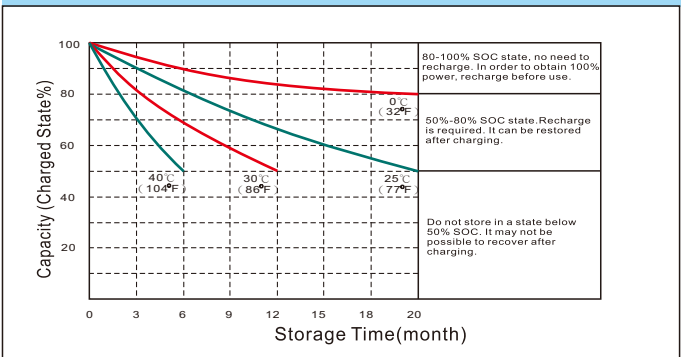
Cycle charging characteristic diagram



Temperature and capacity characteristics



Self-discharge characteristic



Constant current characteristics(A,25°C)

F.V/TIME	5min	10min	15min	30min	60min	90min	2h	3h	5h	10h	20h
4.80	168.0	105.0	84.0	43.3	25.2	15.3	11.72	7.67	4.69	3.96	2.13
4.95	163.0	101.9	81.5	42.0	24.4	15.2	11.61	7.60	4.67	3.95	2.12
5.10	159.6	99.8	80.6	41.5	24.2	15.1	11.55	7.56	4.65	3.93	2.11
5.25	154.6	96.6	77.3	39.8	23.2	15.0	11.43	7.48	4.63	3.91	2.10
5.40	150.0	93.8	76.6	39.5	23.0	14.8	11.32	7.41	4.62	3.91	2.10

Constant power discharge characteristic (W,25°C)

F.V/TIME	5min	10min	15min	30min	60min	90min	2h	3h	5h	10h	20h
4.80	937	592	479	248	146	89.8	69.6	45.8	28.1	23.8	12.8
4.95	909	574	464	240	142	88.9	69.0	45.4	28.0	23.7	12.7
5.10	891	563	460	238	140	88.5	68.6	45.1	27.9	23.6	12.7
5.25	862	545	440	228	134	87.6	67.9	44.7	27.8	23.5	12.6
5.40	837	529	437	226	133	86.7	67.2	44.2	27.7	23.4	12.6



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