



General VRLA Battery

6FM45G (12V45Ah)

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)

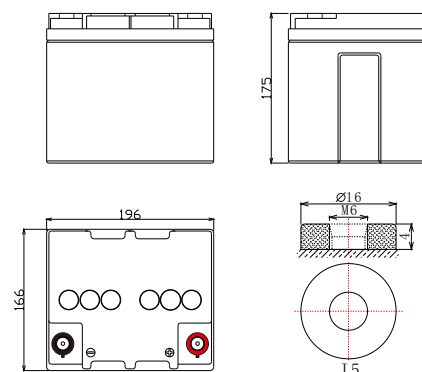
Applications

- 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	12V (6cells)
Capacity	@25°C
10hr Rate (4.50A)	45.0Ah @ to 1.75V/cell
5hr Rate (8.50A)	40.5Ah @ to 1.70V/cell
3hr Rate (11.2 A)	33.7 Ah @ to 1.60V/cell
Weight	Approx (13.7±3%)kg (30.20lbs)
Internal Resistance	Approx 7.00mΩ fully charged @25°C
Maximum Discharge Current	225A(3sec)
Terminal	I5
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	196mm	7.72inch
Width	166mm	6.54inch
Height	175mm	6.89inch
Total height	175mm	6.89inch

Battery use

Cycle use

1. Limit the initial charging current to no more than 11.25A
2. Keep charging voltage at 14.4-15.0V/unit.and continue charging at least 3 hours after the charging current reduces to 0.9A 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 11.25A
2. Keep charging voltage at 13.5-13.8V/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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 KY-IOP-LW12-45 B0. May 2023

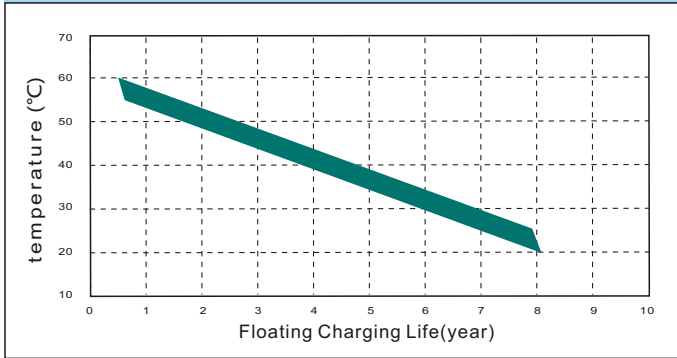
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Floating Charging Life VS Temperature



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
9.60	121.5	103.5	78.8	46.4	25.2	15.5	11.42	7.86	5.25	4.57	2.35
9.90	117.9	100.4	77.2	45.4	24.7	15.5	11.36	7.82	5.23	4.55	2.34
10.2	115.4	98.3	75.6	44.5	24.2	15.3	11.25	7.74	5.21	4.53	2.33
10.5	108.7	95.2	73.2	43.1	23.4	15.1	11.14	7.66	5.19	4.51	2.32
10.8	99.6	92.4	71.8	42.3	23.0	15.0	11.03	7.59	5.18	4.50	2.32

Constant power discharge characteristic (W,25°C)

F.V/TIME	5min	10min	15min	30min	60min	90min	2h	3h	5h	10h	20h
9.60	1312	1130	898	520	287	180	134.3	92.9	63.0	54.5	28.2
9.90	1273	1096	847	510	282	179	133.6	92.4	62.7	54.3	28.1
10.2	1247	1074	830	499	276	177	132.3	91.5	62.5	54.1	28.0
10.5	1174	1040	804	484	267	175	131.0	90.6	62.3	53.9	27.9
10.8	1076	1009	789	474	262	174	129.7	89.7	62.1	53.7	27.8



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