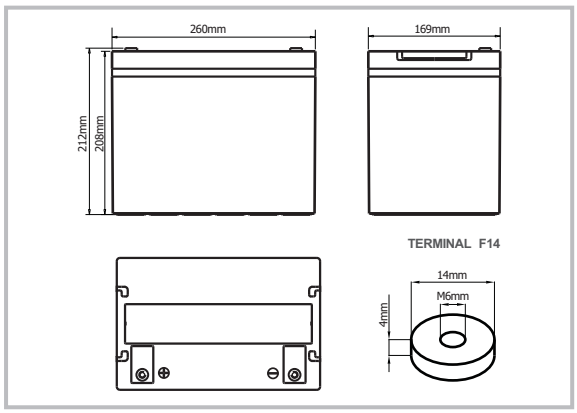
HXG12-75 (12V75Ah)

HXG DEEP CYCLE GEL VRLA BATTERY

HXG Series, with its proprietary grid alloy and paste formulation, provides superior performance in both high cycling and floating applications. By combining the newly developed Nano Gel electrolyte with high density paste, the HXG series offers high recharge efficiency at very low charge current. The acid stratification is highly reduced by adding Nano Gel. It is suitable for off-grid photovoltaic, wind or hydro power application.

BATTERY DIMENSIONS



TECHNICAL SPECIFICATIONS

Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	12 Years
Nominal Capacity (20°C)	75 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L260mm x W169mm x H212mm
Approx. Weight	22.5 kg (49.6 lbs)
Terminal Type	Female Copper Insert M6 (torque:6~7N.m)
Internal Resistance	Approx. 0.0055 Ohm (fully charged @ 20°C)
Max. Charge Current	22.5A
Max. Discharge Current (5S)	675 A
Short Circuit Current	2180 A
Self Discharge	Approx. 3% per month @ 20°C
Ambient Temperature	Discharge: -15~50°C Charge: -15~40°C Storage: -15~40°C
Float Charge Voltage (20~25°C)	13.6-13.8V (-3mV/ cell/ °C)
Equalize and cycle Use Charge Voltage (20~25°C)	14.4-14.8V (-5mV/ cell / °C)
Container Material	ABS (UL94-V0 optional)

ISO9001 ISO14001

Complied standards

- IEC 60896-21/22
- UL1989
- JIS C8704
- GB/T19639

BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)

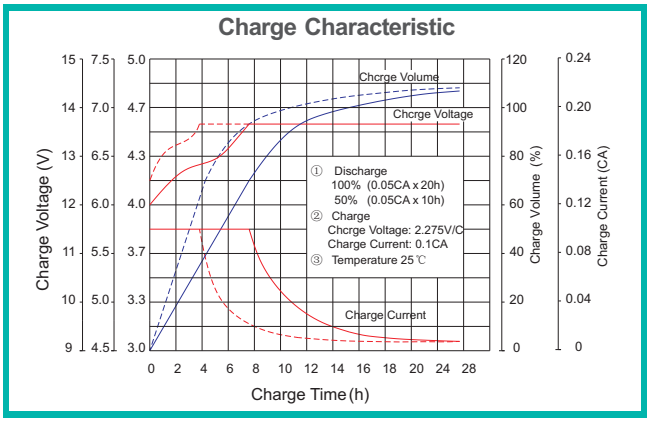
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	225	166	137	84.5	50.7	29.4	21.3	16.9	14.1	9.64	7.95	4.28
1.67V	201	153	129	80.7	49.4	28.9	21.0	16.7	13.9	9.51	7.85	4.19
1.70V	179	139	122	77.7	48.2	28.5	20.8	16.6	13.8	9.39	7.76	4.09
1.75V	156	129	113	75.0	47.2	28.1	20.4	16.4	13.6	9.26	7.65	4.01
1.80V	138	117	106	71.7	45.7	27.5	20.0	16.0	13.3	9.05	7.50	3.94
1.85V	118	106	96.3	67.7	43.7	26.4	19.4	15.5	13.0	8.85	7.31	3.84

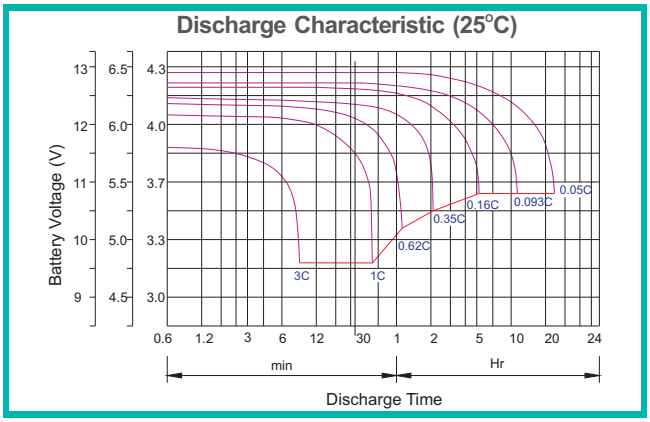
Constant Power Discharge Characteristics: W/cell (25°C)

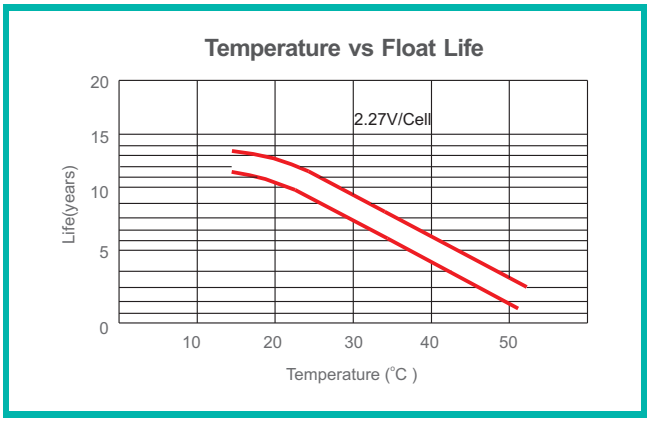
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	396	298	250	156	94.5	55.3	40.1	32.1	26.9	18.5	15.4	8.31
1.67V	358	278	237	150	92.6	54.7	39.9	31.9	26.7	18.4	15.3	8.18
1.70V	323	255	226	145	91.0	54.4	39.7	31.8	26.6	18.3	15.2	8.06
1.75V	285	240	212	142	89.9	53.9	39.4	31.7	26.5	18.2	15.1	7.95
1.80V	255	220	200	137	87.7	53.2	39.0	31.3	26.1	17.9	14.9	7.86
1.85V	222	201	184	130	84.8	51.6	38.1	30.6	25.7	17.6	14.6	7.73

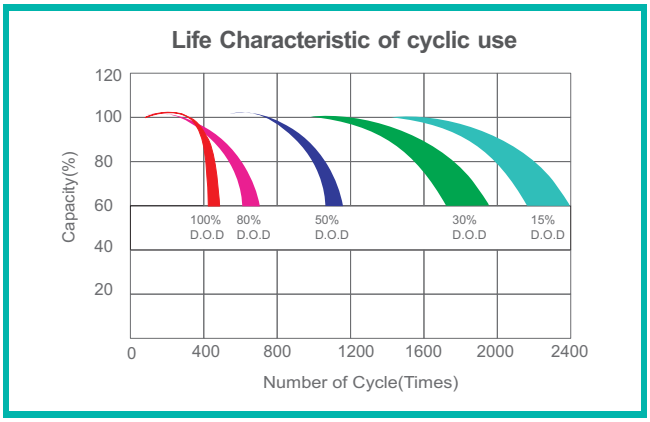
HXG12-75(12V75Ah)

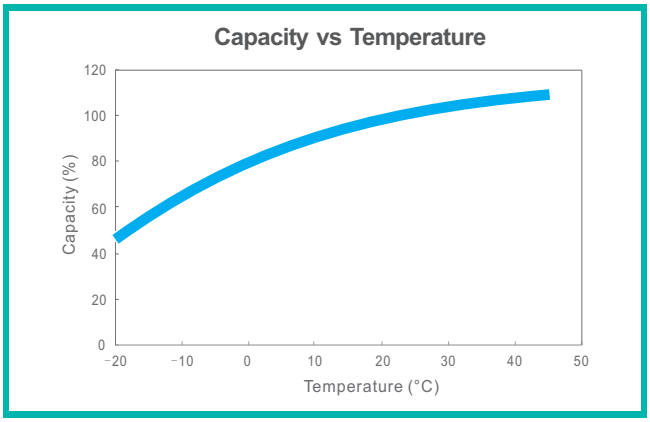
CHARACTERISTICS











Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.80V	1.75V	1.70V	1.60V
Discharge Current I /A	I<0.2C	0.2C≤I<0.6C	0.6C≤I<1.0C	I≥1.0C

Charge the batteries at least once every six months, if they are stored at 25℃.

Charging Method:

Constant Voltage	0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.25CA
Constant Current	0.2Cx2h+0.1CAx12h
Fast	0.2Cx2h+0.3CAx4.0h

Maintenance & Cautions

Cycle service
※ Avoid battery over discharge, especially battery sereis connection use.
※ Charged with recommend voltage, ensure battery can be full recharged.
In general, recharge capacity should be 1.1-1.15 times discharge capacity.
※ Effect of temperature on cycle charge voltage: -5mV/ ℃/Cell.
※ There are a number of factors that will affect the length of cyclic service.
The most significant are depth of discharge, ambient temperature,
discharge rate, and the battery recharge mode.
Generally specking, the most important factors is depth of discharge.

Weida Power Company Limited
www.weidaenergy.com
Address: Huaxiang Road, Xingtai Development Zone, Changtai,Zhang Zhou City, Fujian Province, China.
Email: info@weidaenergy.com