

# MGF Series

## 6MGF-200 12V200Ah



MGF series gel batteries utilize advanced battery technology. MGF has good cyclic performance and high reliability. It is the economical choice for solar photovoltaic street lights, garden and lawn lamps, traffic lights, warning lights and other energy storage systems.

### Benefits

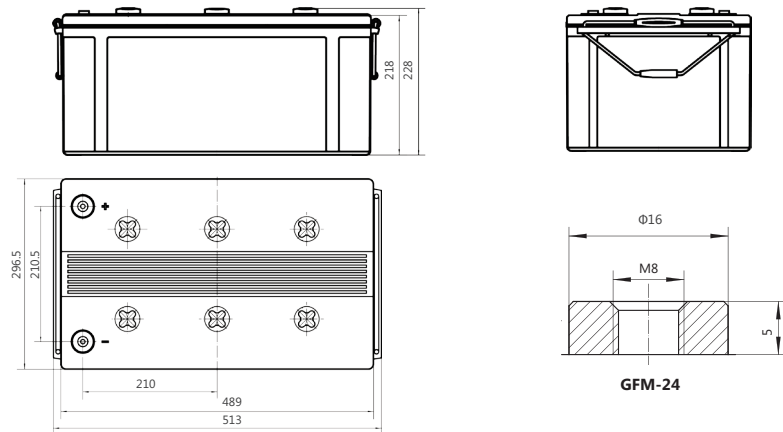
- Long life according to EUROBAT Classification
- High discharge performance
- High gas recombination efficiency
- Maximum charge efficiency
- GEL state electrolyte prevents leakage and layering
- Low resistance PVC or PF micro-porous separator ensure low self-discharge rate
- Easy installation and handling



### Applications

- Telecommunications
- Emergency power
- Energy storage systems
- UPS units
- Electrical Power plants and substation

### Drawing



### Standards

- IEC 60896-21/22
- IEC 61427
- DIN 43539-T5
- EUROBAT guide

### Specifications

Battery Model	6MGF-200			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10HR (20A, 1.80V)	5HR (34A, 1.80V)	3HR (50A, 1.80V)	1HR(108A, 1.80V)
	200	170	150	108
Dimensions (mm)	Length	Width	Height	Total Height
	513	296.5	218	228
Approx. Weight (kg)	75.5			
Reference Internal Resistance (mΩ)	3.11 ( fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	1702			
Self-Discharge (25°C)	≤ 2% per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.33 (-3.5mV/°C/cell), max charge current: 30A		2.22 (-3.5mV/°C/cell)	
Short Circuit Current (A)	3050			

## Discharge Data

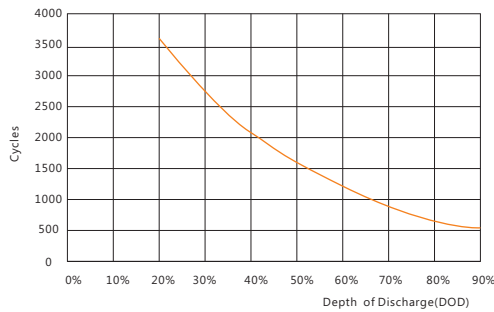
Constant Current Discharge Data (25°C, A)

End Voltage (V/cell)	min			h														
	15	30	45	1	1.5	2	3	4	5	6	8	10	20	24	48	100	120	240
1.60	312	200	140	118	89.8	70.1	54.7	43.8	37.2	33.9	26.3	21.9	11.3	9.52	4.74	2.28	2.18	1.14
1.65	303	196	137	116	88.0	68.7	53.6	42.9	36.5	33.3	25.8	21.5	11.0	9.34	4.64	2.26	2.16	1.12
1.70	293	192	134	113	86.3	67.4	52.5	42.1	35.8	32.6	25.2	21.0	10.8	9.16	4.58	2.24	2.14	1.10
1.75	285	188	131	111	84.5	66.0	51.4	41.2	35.0	31.9	24.7	20.6	10.6	8.98	4.50	2.22	2.12	1.08
1.80	271	183	127	108	82.0	64.0	50.0	40.0	34.0	31.0	24.0	20.0	10.4	8.80	4.44	2.20	2.10	1.06

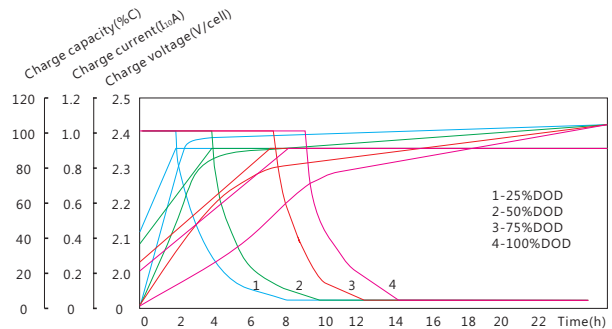
Constant Power Discharge Data (25°C, W/cell)

End Voltage (V/cell)	min			h														
	15	30	45	1	1.5	2	3	4	5	6	8	10	20	24	48	100	120	240
1.60	543	350	244	208	158	123	97.9	79.7	68.1	61.7	48.4	40.7	21.7	18.5	9.29	4.54	4.36	2.30
1.65	533	347	242	206	158	123	97.6	79.0	67.5	61.5	47.9	40.6	21.4	18.3	9.19	4.52	4.34	2.27
1.70	522	344	240	204	156	123	96.6	77.8	66.9	61.3	47.7	40.4	21.2	18.2	9.11	4.50	4.32	2.24
1.75	515	342	239	202	156	122	95.7	77.1	66.2	61.0	47.5	40.2	20.9	18.0	9.00	4.48	4.30	2.21
1.80	503	338	236	200	154	122	95.0	76.4	65.6	60.5	47.0	39.6	20.8	17.7	8.92	4.47	4.28	2.18

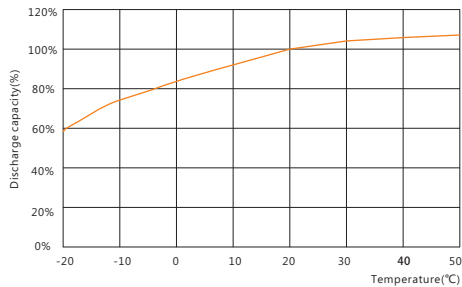
## Performance Curve



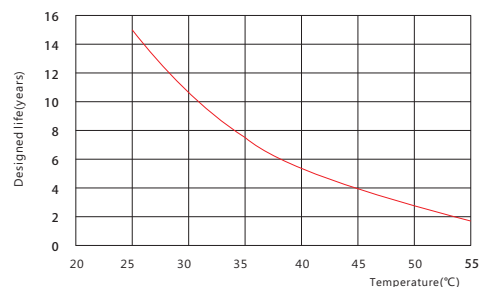
Cycle life vs. discharge depth



Charge vs. discharge depth



Capacity vs. temperature



Design life vs. temperature

