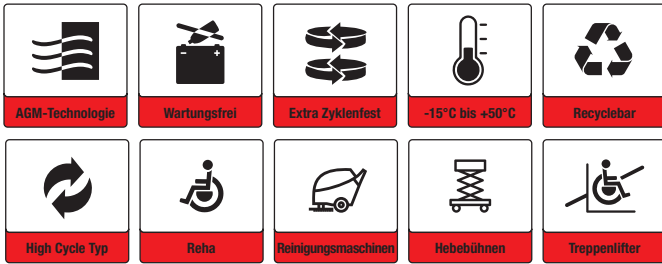


+max-

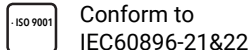
MB12-23HC(12V23Ah)



Applications

- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys and golf cart
- Portable apparatus, lights and instruments;
- Electric toys
- Illumination light
- Fire alarms
- Portable power
- Wheelchairs
- Medical equipments

Certificates



Specifications

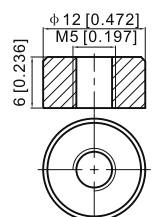
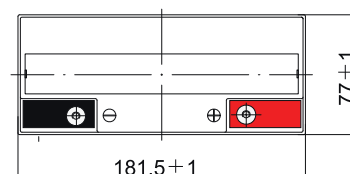
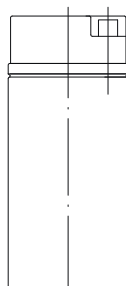
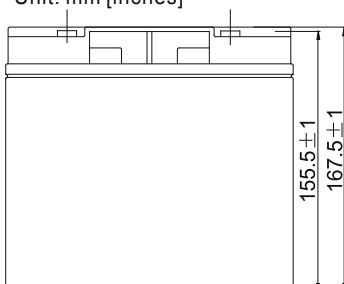
Nominal Voltage	12V
Nominal Capacity	22.6Ah (C ₂₀ * 1.65V/cell)
Approx. Weight	6.00Kg
Terminal	T12
Container Material	ABS
Rated Capacity (25°C)	22.6Ah/1.13A, 20hr, 1.65V/cell 20.8Ah/2.08A, 10hr, 1.65V/cell 18.0Ah/3.6A, 5hr, 1.70V/cell 16.35Ah/5.45A, 3hr, 1.70V/cell 12.9Ah/12.9A, 1hr, 1.60V/cell
Max. Discharge Current	300A (5s)
Internal Resistance	Approx. 15.0mΩ
Operating Temp. Range	Discharge: -15~50°C Charge: 0~40°C Storage: -15~40°C

Nominal Oper. Temp. R.	25±3°C
Cycle Use	Initial Charging Current less than 6.2A. Voltage 14.4V~15.0V at 25°C. Temperature Coefficient -30mV/°C.
Standby Use	No limit on Initial Charging Current. Voltage 13.5V~13.8V at 25°C(77°F) Temp. Coefficient -20mV/°C
Capacity affected by Temp.	40°C 103% 25°C 100% 0°C 86%
Self Discharge	MB batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.

Dimensions

■ T12 Terminal

Unit: mm [inches]



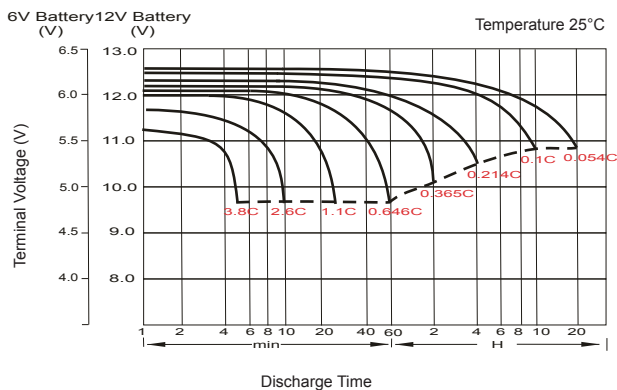
Constant Current Discharge (Amperes) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	29.3	24.6	21.5	15.5	12.3	9.99	6.2	4.84	3.92	3.18	2.78	2.27	1.89	1.06
1.80V/cell	37.4	29.8	25.5	18.3	14.3	11.2	6.77	5.2	4.18	3.42	2.98	2.4	2.0	1.08
1.75V/cell	41.1	32.5	27.4	19.0	14.9	11.7	7.02	5.3	4.28	3.51	3.06	2.45	2.02	1.09
1.70V/cell	44.8	34.7	28.8	19.8	15.4	12.1	7.3	5.45	4.39	3.6	3.12	2.48	2.04	1.12
1.65V/cell	48.4	36.9	30.6	20.8	15.8	12.5	7.5	5.68	4.54	3.7	3.19	2.52	2.08	1.13
1.60V/cell	52.5	39.5	32.6	22.0	16.5	12.9	7.76	5.85	4.68	3.82	3.26	2.54	2.1	1.14

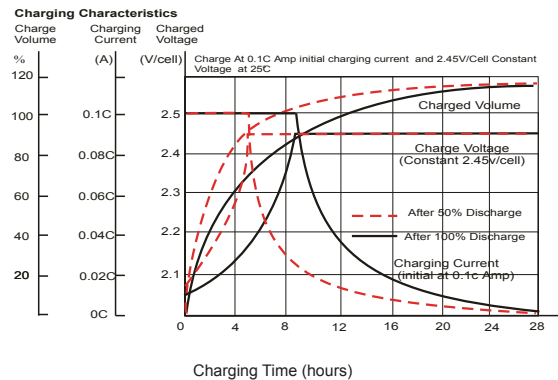
Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	54.6	46.5	41.0	29.8	23.8	19.4	12.1	9.45	7.67	6.25	5.49	4.48	3.74	2.13
1.80V/cell	68.9	55.3	47.8	34.7	27.5	21.6	13.1	10.1	8.15	6.69	5.86	4.75	3.96	2.14
1.75V/cell	74.8	59.8	51.0	35.9	28.4	22.5	13.6	10.3	8.32	6.86	6.01	4.83	4.00	2.16
1.70V/cell	80.3	63.4	53.3	37.2	29.4	23.1	14.1	10.5	8.52	7.01	6.13	4.89	4.03	2.20
1.65V/cell	86.1	67.0	56.3	39.0	30.0	23.8	14.4	11.0	8.79	7.20	6.26	4.96	4.11	2.22
1.60V/cell	91.9	70.8	59.4	40.8	31.0	24.5	14.8	11.2	9.03	7.40	6.38	5.00	4.15	2.23

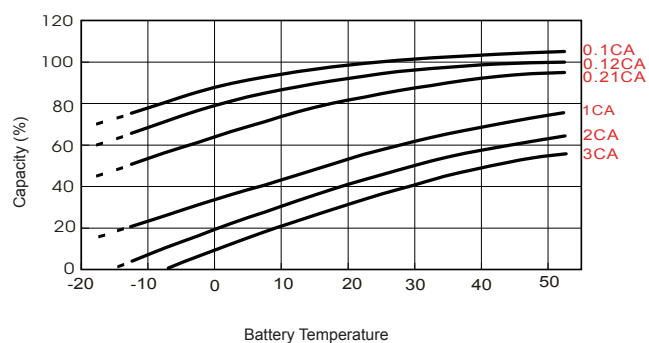
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge

