



Marstech

SB Series-Battery

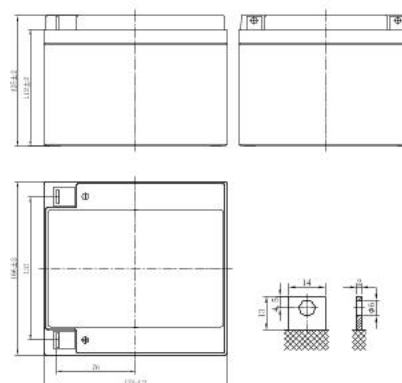
12SB24(12V24Ah)

Specifications of 12SB24

Rated Voltage	12V	
Nominal Capacity (20HR)	24Ah	
Dimension	Length	166±2mm (6.54 inches)
	Width	175±2mm (6.89 inches)
	Container Height	125±2mm (4.92 inches)
	Total Height	125±2mm (4.92 inches)
Approx Weight	7.2kg (15.9lbs)	
Terminal	T3	
Container Material	ABS	
Rated Capacity	24.0 Ah	(1.20A, 20hr, 1.80V/cell, 25°C/77°F)
	22.3 Ah	(2.23A, 10hr, 1.80V/cell, 25°C/77°F)
	20.4 Ah	(4.08A, 5hr, 1.75V/cell, 25°C/77°F)
	18.4 Ah	(6.12A, 3hr, 1.75V/cell, 25°C/77°F)
	15.1 Ah	(15.1A, 1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	360A (5s)	
Internal Resistance(25°C)	Approx 14mΩ	
Operating Temp. Range	Discharge	-15 ~ 50°C (5 ~ 122°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-15 ~ 40°C (5 ~ 104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Cycle Use	Initial Charging Current less than 3.6A.Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Effect of temp. to Capacity	103%	
	40°C (104°F)25°C (77°F)0°C (32°F)	
	100%	
Self Discharge	Marstech series batteries may be stored for up to 6	
	months at 25°C(77°F) and then a freshening charge is	
	86%	
Self Discharge	required.	
	For higher temperatures the time interval will be	
	shorter	



Layout



Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	35.1	29.1	25.1	19.4	14.32	12.07	7.14	5.58	4.54	3.70	3.21	2.59	2.16	1.19
1.80V/cell	44.8	35.1	29.7	22.9	16.7	13.52	7.79	6.01	4.85	3.97	3.45	2.75	2.23	1.20
1.75V/cell	49.3	38.4	32.0	23.8	17.3	14.14	8.08	6.12	4.96	4.08	3.54	2.80	2.29	1.21
1.70V/cell	53.7	41.0	33.6	24.8	18.0	14.59	8.28	6.29	5.09	4.18	3.61	2.84	2.34	1.23
1.65V/cell	58.0	43.6	35.7	26.1	18.4	14.93	8.40	6.56	5.26	4.30	3.69	2.88	2.39	1.25
1.60V/cell	62.9	46.6	38.0	27.6	19.2	15.07	8.76	6.76	5.43	4.44	3.77	2.91	2.41	1.26

Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	64.8	54.3	47.4	37.0	27.5	23.3	13.9	10.9	8.88	7.26	6.32	5.12	4.28	2.35
1.80V/cell	81.9	64.7	55.2	43.0	31.8	25.9	15.0	11.6	9.43	7.76	6.75	5.41	4.41	2.37
1.75V/cell	88.5	69.8	58.8	44.3	32.6	27.0	15.5	11.8	9.60	7.93	6.91	5.49	4.52	2.39
1.70V/cell	94.3	73.4	61.3	45.9	33.8	27.8	15.9	12.1	9.84	8.12	7.04	5.56	4.61	2.44
1.65V/cell	100.8	77.5	64.7	48.0	34.4	28.2	16.0	12.6	10.1	8.32	7.18	5.64	4.70	2.47
1.60V/cell	107.0	81.5	68.1	50.3	35.6	28.3	16.6	12.9	10.4	8.56	7.31	5.68	4.74	2.48



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12SB24(12V24Ah)

Applications

- Telecommunications
- UPS system
- Wind power system
- Engine starting
- Wheelchair, Floor cleaning machines, Golf trolley, Boats

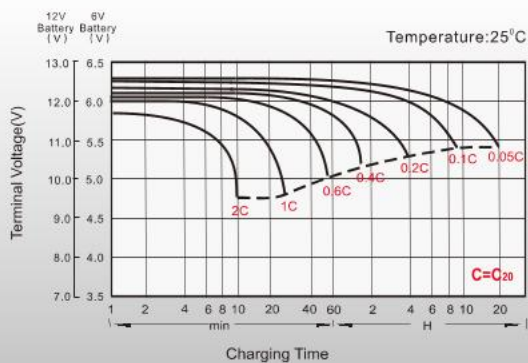
General Features

- Battery design life up to 5 year
- Special plate design guarantees battery floating life more than 1800 times
- High thermal capacity reduce the risk of thermal out of control and drying hard, and the battery can be used in bad environment
- Little water losing, and no electrolyte stratification phenomenon

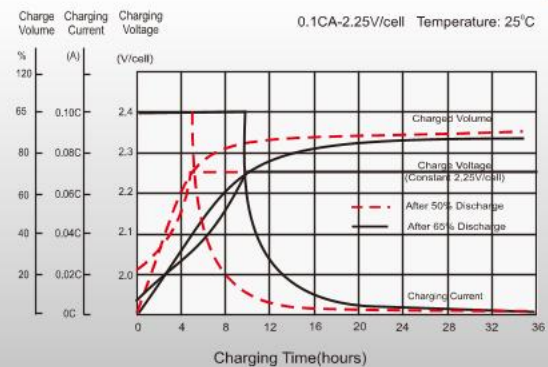
Standards

- IEC 60896 Certified
- Classified as "Long Life"
- ISO 9001 Certified
- Manufactured in standard IATF16949,

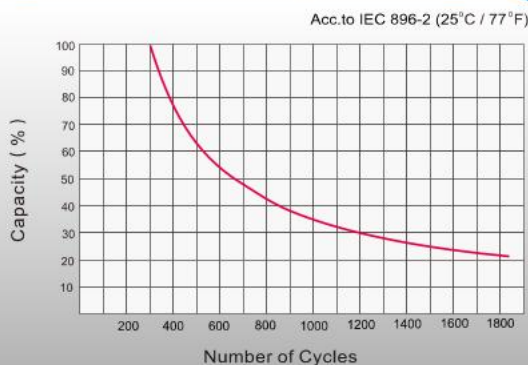
Discharge Characteristics



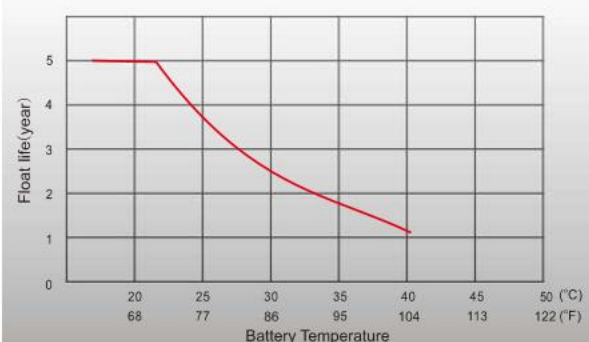
Float Charging Characteristics



Cycle Life in Relation to Depth of Discharge



Float Service Life



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