Eastman
ENERGY UNLIMITED

The WISE Choice

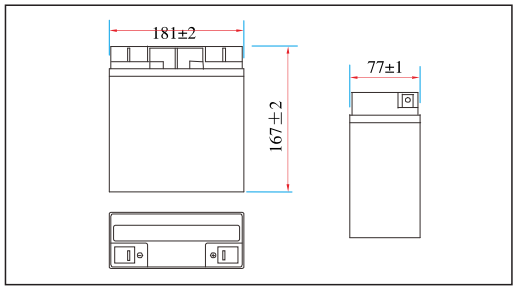
SEALED MAINTENANCE FREE
VRLA BATTERY
EM18VB - 12V18Ah

Applications

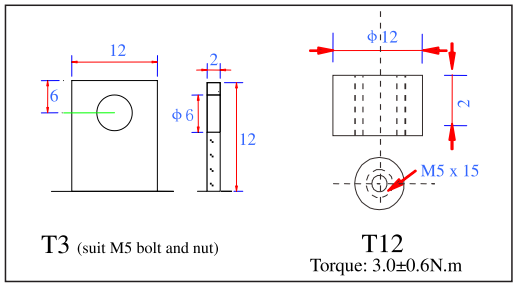
Specifications

Nominal voltage		12V (6 cells per unit)
Rated capacity (20HR)		18Ah/10.5V
Dimensions	Length	181±2mm (7.13inch)
	Width	77±1mm (3.03inch)
	Height	167±2mm (6.57inch)
	Total height	167±2mm (6.57inch)
Approx. weight		5.70kg (12.5lbs) ±4%

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25°C)	20HR (10.5V)	18Ah
	10HR (10.5V)	17.7Ah
	1HR (9.60V)	12Ah
Terminal type		T3/T12
Internal resistance (Fully charged, 25°C)		Approx. 12mΩ
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 months	Remaining capacity: 91%
	6 months	Remaining capacity: 82%
	12 months	Remaining capacity: 65%
Nominal operating temperature		25°C± 3°C (77°F± 5°F)
Operating temperature range	Discharge	- 15°C~ 50°C (5°F ~ 122°F)
	Charge	- 10°C~ 50°C (14°F ~ 122°F)
	Storage	- 20°C~ 50°C (-4°F ~ 122°F)
Float charging voltage (25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C/Block
Cyclic charging voltage (25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C/Block
Maximum charging current		6A
Maximum discharge current		300A (5 sec.)
Design life	5 years for floating (25°C)	
	Eurobat (20°C): 3-5 years, standard commercial.	

EM18VB - 12V18Ah

Unique Features

- ✓ Longer shelf life
- ✓ No water topping up throughout the life
- ✓ Good cycling performance
- ✓ AGM Technology for efficient Gas Recombination

- Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper

- Constant current discharge characteristics unit: Ampere/Block (at 25°C, 77°F)

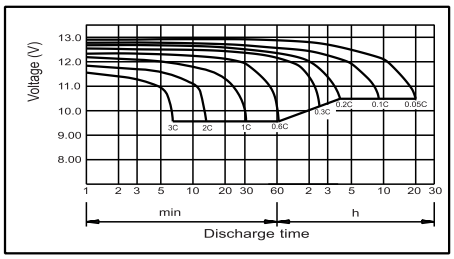
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	@C10	@20h
9.60V	76.4	48.4	37.8	21.3	13.1	7.17	4.96	4.10	3.49	1.79	1.02
9.90V	74.1	46.9	36.9	20.9	12.9	7.12	4.93	4.08	3.47	1.79	1.01
10.2V	71.1	45.0	35.5	20.2	12.6	7.06	4.89	4.05	3.44	1.78	1.01
10.5V	68.0	43.1	34.3	19.7	12.3	6.95	4.86	4.02	3.42	1.77	1.00
10.8V	64.2	40.7	32.5	19.0	11.9	6.78	4.71	3.90	3.32	1.73	0.98

- Constant power discharge characteristics unit: Watt/Block (at 25°C, 77°F)

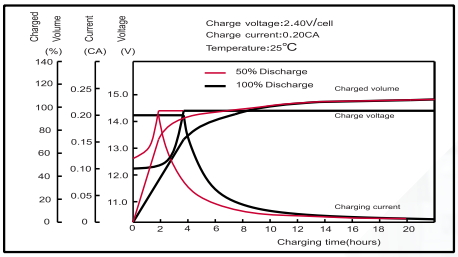
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	@C10	@C20
9.60V	853	546	431	244	152	83.8	58.9	48.8	41.7	22.7	12.2
9.90V	827	530	421	239	149	83.3	58.5	48.5	41.4	22.6	12.1
10.2V	793	508	405	232	146	82.6	58.1	48.2	41.1	22.5	12.1
10.5V	759	486	391	226	143	81.4	57.7	47.9	40.8	22.4	12.0
10.8V	716	459	371	218	138	79.3	56.0	46.4	39.6	21.9	11.8

Note: The above characteristics data can be obtained within three charge or discharge cycles.

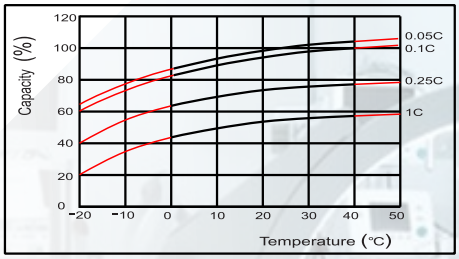
- Discharge characteristics(25°C)



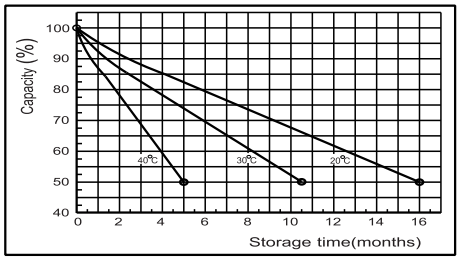
- Charging characteristics (25°C)



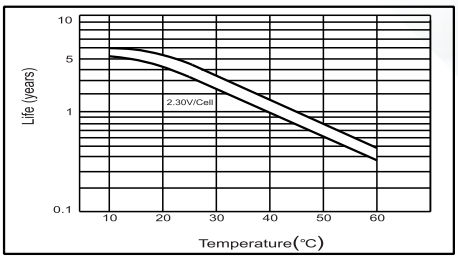
- Effect of temperature on capacity



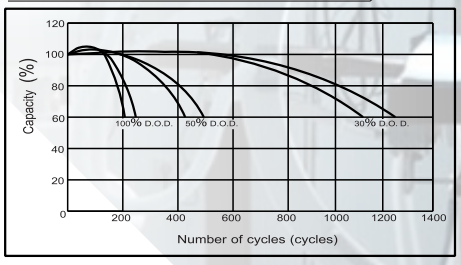
- Self-discharge characteristics



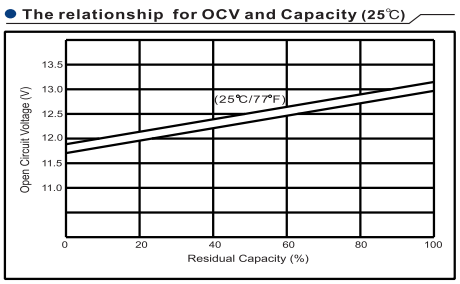
- Floating life on temperature



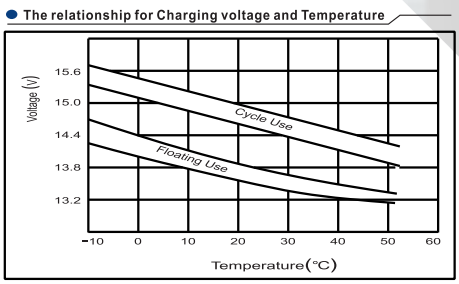
- Cycle life on D.O.D(25°C)



- The relationship for OCV and Capacity (25°C)



- The relationship for Charging voltage and Temperature



Certification

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