



LOW MAINTENANCE
TUBULAR
BATTERY FOR
SOLAR PV
APPLICATION



INDUSTRIAL

For over 60 years, Exide Industries Ltd., has pioneered battery technology in India. It is the only company in South and South East Asia which designs and manufactures lead acid batteries from 7Ah to 20400Ah. Exide offers the latest series of tubular batteries, manufactured in its state-of-the-art ISO 9001 : 2008, ISO 14001: 2004 certified factories to meet the growing demand both in domestic and export market. Exide 12V and 6V low maintenance Tubular battery for Solar photovoltaic application comes with high quality TORR Tubular plate and its performance characteristics conform to IS 13369 : 1992 with latest amendments.

PRODUCT FEATURES

- Available in SOLA-TUBULAR range
- PPCP Container
- Tubular Positive Plates
- Pasted Negative Plates
- High tensile, acid resistant Polyester Gauntlets
- High porosity Envelope Separators
- Microporous Ceramic Vent Plug
- Heavy duty Terminal
- Low resistance Fasteners.

TORR TUBULAR TECHNOLOGY

Exide Tubular Batteries have the spines or the positive plate support cast at high pressure (100 Bar) in imported HADI machine which ensures void free structure and consistent grain orientation and can protect the plate support from anodic corrosion. This in turn ensures higher reliability and longer life. Exide Torr Tubular

plates are also cast with low antimony content which reduces the topping up frequency, making the battery low maintenance type. This also keeps the float charging current at a lower value, thus minimises the total energy requirement needed to keep the battery in charged condition during standby float application.

APPLICATION : ● SOLAR HOME LIGHTING ● SOLAR STREET LIGHTING ● SOLAR PHOTOVOLTAIC POWER PLANTS ● TRAFFIC SIGNALLING

Benefits

- Specially designed for arduous SPV application.
- Manufacturing with TORR Tubular Technology which stands for reliable and consistent performance.
- Designed to operate in partial state of charge condition.
- Ideally designed for cyclic application.
- Superior voltage and energy output profile.
- Excellent charging efficiency :
 - ◆ AH efficiency - In excess of 90%
 - ◆ WH efficiency - In excess of 80%

- Service life comparable with the best of the international brands.
- Designed cycle life at C10 discharge at 25°C :
 - ◆ 1500 cycles to 80% DOD
 - ◆ 3000 cycles to 50% DOD
 - ◆ 5000 cycles to 20% DOD
- Supplied in factory charged condition - ensures optimal quality and ready to us.
- Ultra low maintenance
- Low rate of self discharge
- 6V mono-blocks are supplied with MS Cabinet (fitted suitable exhaust system) or MS Stand (knock down condition) in 48V configuration - ideally designed for outdoor application.

Charging Characteristics of Solar Batteries:

Model of Operation	Voltage Setting per mono-block unit for ambient temperature 25-30°C		Current Settings
	12V mono-block	6V mono-block	
Float Voltage	13.7V ± 0.1V	6.85V ± 0.1V	Maximum - 20% of battery Ah capacity Minimum - 10% of battery Ah capacity
Bulk Voltage	14.5V ± 0.1V	7.25V ± 0.1V	
Low Voltage Disconnect	11.1V ± 0.1V	5.55V ± 0.1V	

Temperature Compensation : (reference 25°C)

Float : -18mV/°C/12Vunit

Cyclic : -30mV/°C/12Vunit

Technical Data

Type of Battery	Nominal Voltage	Capacity @C10 to 1.80 v.p.c at 27°C	Cell Weight		Overall Dimension			Container Type
			Without Acid ± 5%	With Acid ± 5%	Length ± 5	Width ± 5	Height* ± 5	
			(Kg)	(Kg)	(mm)	(mm)	(mm)	
6LMS20L	12	20	12.0	18.0	260	172	240	PPCP
6LMS40	12	40	12.0	23.5	410	176	282	PPCP
6LMS40L	12	40	14.0	26.5	410	176	282	PPCP
6LMS75	12	75	20.0	32.0	410	176	282	PPCP
6LMS75L	12	75	22.5	42.5	530	220	287	PPCP
6LMS100L	12	100	30.0	57.0	500	187	416	PPCP
6LMS120L	12	120	31.4	48.5	530	220	287	PPCP
6LMS150L	12	150	44.0	66.3	500	187	416	PPCP
3LMS200L	6	200	44.7	69.0	500	187	416	PPCP
3LMS300	6	300	44.0	66.3	500	187	416	PPCP

*Height upto Terminal Top