

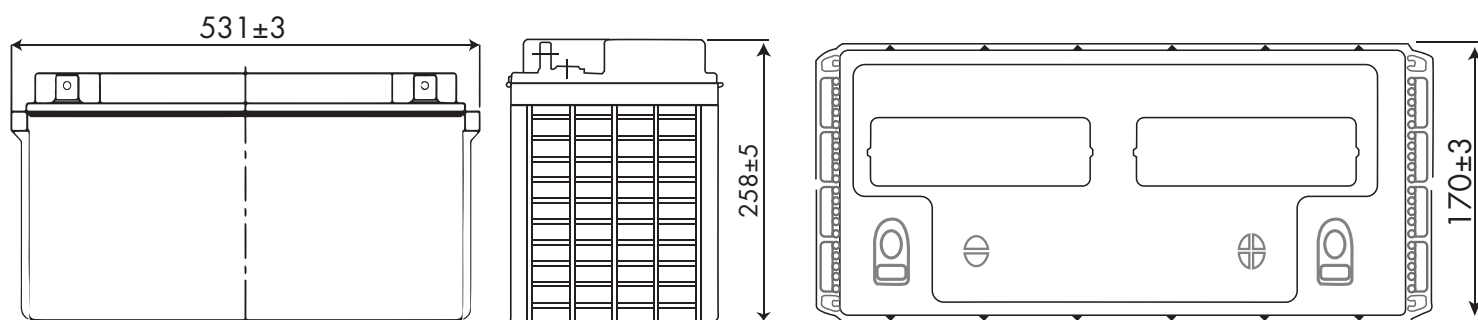


SOLATRON

TECHNICAL DATA SHEET FOR 6SGL 100 (12V 100AH) TUBULAR GEL VRLA SEALED MAINTENANCE FREE BATTERY

Manufactured by Exide Industries Limited, India

BATTERY OUTLINE & DIMENSIONS



TECHNICAL SPECIFICATIONS

DESCRIPTION	PARTICULARS
MODEL	6SGL 100
TYPE OF BATTERY	TUBULAR GEL VRLA SEALED MAINTENANCE FREE BATTERY
Nominal Voltage	12V
Declared C10 Capacity at 27°C up to 1.75 ECV	100 Ah
Standards to which battery is manufactured	12V Gel range meets IS15549, IEC 60896 - 21 & 22, BS 6290 - PART IV, IEEE 1188/1189
Expected life of battery under normal operation & maintenance conditions	Design life in ideal float condition is 10 years
Loss in capacity in 28 days due to self discharge	<5 % per month
Ampere Hour Efficiency	> 95%
Watt Hour Efficiency	> 85%
Recommended Re-Charging rate during operation at 27°C - 30°C:	a) Bulk Voltage 14.7 ± 0.1 V b) Float Voltage 13.7 ± 0.1 V c) Low Voltage disconnect 11.4 ± 0.1 V
Type of plate	
Positive Plates	Robust tubular plates consisting of a lead calcium alloy, optimized for high corrosion resistance. Purity of lead - 99.99% Alloy: Lead-Tin-Calcium (PbSnCa)
Negative Plates	Grid plate construction consisting of lead calcium alloy. Alloy: Lead-Calcium (PbCa)
Type of Electrolyte	Gelled H₂SO₄
Separators	Microporous and robust PVC Silica, for electrical separation of the positive and negative plates and optimized for low internal resistance
Type of Vent and Filling Plugs	Self sealing vent valves
Material of Container & Cover	Polypropelene co polymer
Sealing Method	Heat Sealed
Recommended Storage life of Battery (Dry shelf life)	6 Months
Operating temperature range	-20 deg C to +55 deg C
OCV at 100% SOC	>12.9 Volt/Battery
Allowable charging current	0.2C Charging
No. of charge-discharge cycles that the battery can give during its entire life:	at 20% DOD 6000 cycles at 50% DOD 2200 cycles at 80% DOD 1200 cycles

SPECIFICATION CHART

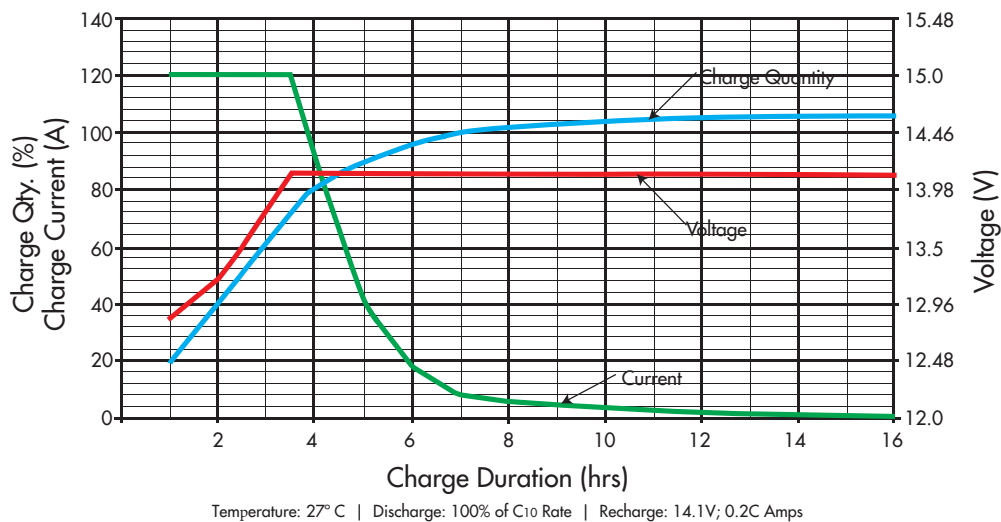
Battery Type	Nominal Voltage (V)	Rated C10 Capacity at 27°C (Ah)	Dimensions (in mm)				Weight (Kg) +/-5%	Max. Discharge Current
			10hr 1.75 Vpc	Overall Height +/-5	'H' +/-5	'L' +/-3		
6SGL 100	12	100	258	258	531	170	44	600

CONSTANT CURRENT DISCHARGE IN AMPS

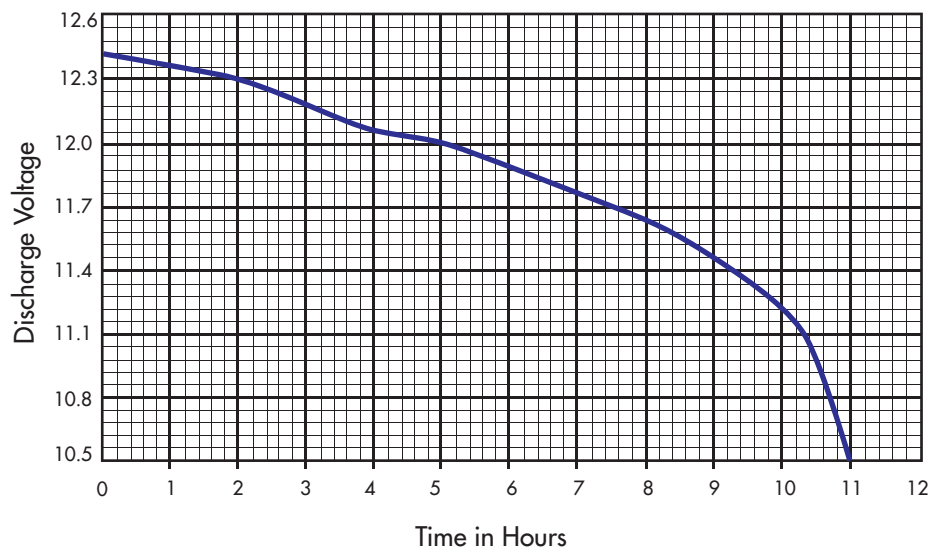
End Cell Voltage	30 Min	45 Min	1Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	7 Hr	8 Hr	9 Hr	10 Hr
1.90	33.3	30.8	27.1	21.3	17.9	15.5	13.7	11.9	10.9	10.4	9.8	9.4
1.85	46.3	42.6	35.4	26	21	18	15.5	13.7	12.4	11.6	10.8	10
1.80	58.6	50	43.2	30.3	23.6	19.6	16.9	15.3	13.8	12.5	11.5	10.4
1.75	69.4	56.7	50	33.3	25.4	20.6	17.7	15.9	14.5	13	12	10.6

CHARACTERISTIC CURVES

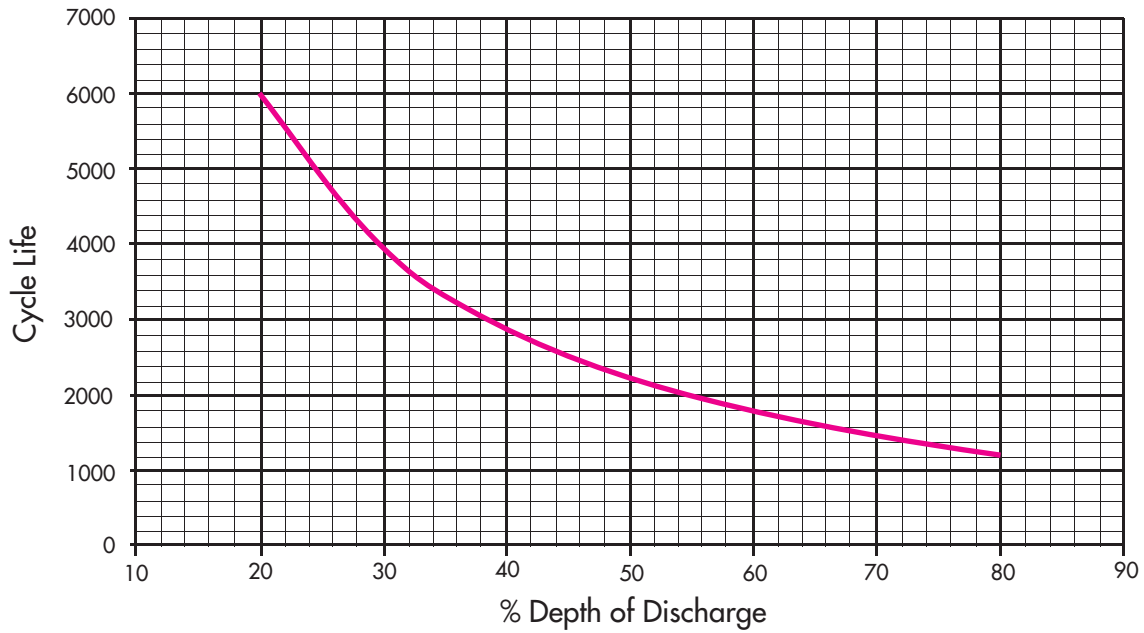
RECHARGE CHARACTERISTICS



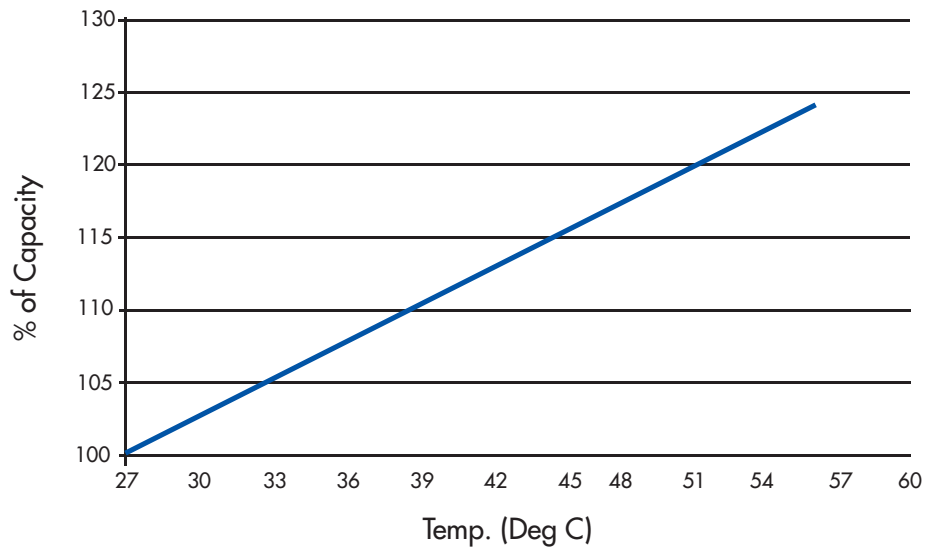
DISCHARGE CHARACTERISTICS



DOD Vs CYCLE LIFE OF 12V GEL AT 27° C



TEMPERATURE Vs CAPACITY



Technical specifications are subject to change without prior notice.
Battery image shown is indicative and may vary from the actual.