

**RELICELL<sup>®</sup>**  
Reliable Energy Storage

# TUBULAR GEL

MAINTENANCE-FREE, LONG-LIFE LEAD ACID BATTERY



# Relicell TUBULAR GEL Series

## Description

Relicell Tubular GEL batteries are sealed maintenance free batteries with tubular positive plates and pasted negative plates, with a special gel electrolyte made by mixing acid with pyrogenic silica. The tubular spines are casted at 150 bar pressure thereby ensuring high compression and packing of lead, that gives it very good capability to withstand deep cycle applications and provides superior performance and reliability even in adverse climatic conditions.

## Features

- Design life of 15 years at 27° C.
- Tubular positive plate cast at 150 bar pressure for enhanced battery life.
- Specially designed lead alloy to provide increased corrosion resistance.
- Microporous synthetic separators provide low electrical resistance.
- Cycle life of 1500 cycles at 80% DoD.
- Very low thermal runaway effect due to silica gel composition.
- Excellent Partial state of charge (PSOC) performance.
- Completely leak proof and maintenance free.
- High impact ABS for 12V batteries and FR Grade PPCP for 2V cells.

## Applications



Solar and wind energy storage



Solar street and traffic light



UPS with long backup



Radar and satellite stations



Tele-communications power supply



Home inverter



Power station systems and power plants



Medical equipments



Electric and recreational vehicles



Golf carts



Marine boats and equipments

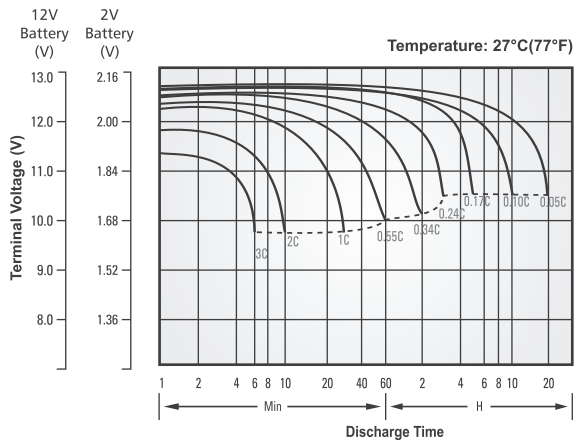


Railway signalling systems

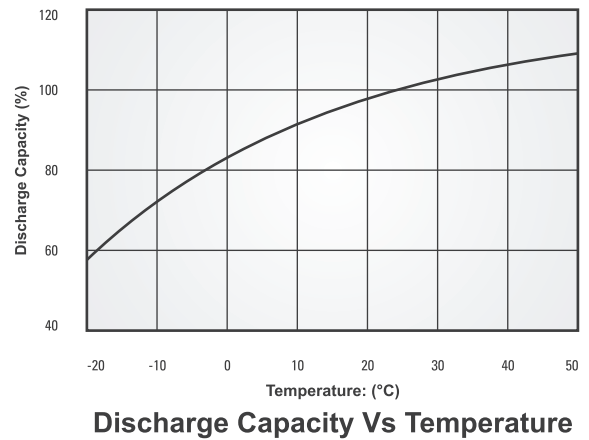
The Tubular Gel batteries are available in 2V and 12V configurations with capacities ranging from 40AH To 5000AH

# Electrical Performance

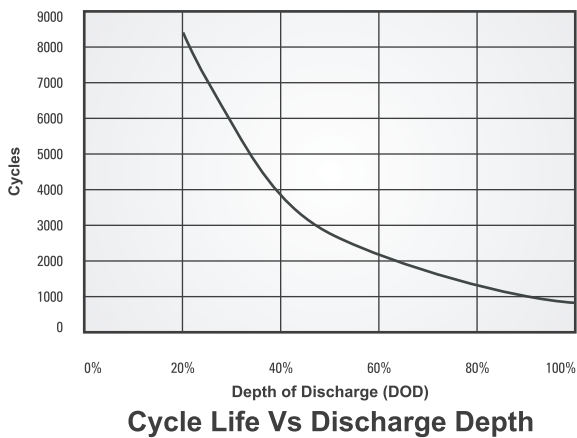
## Discharge Characteristics



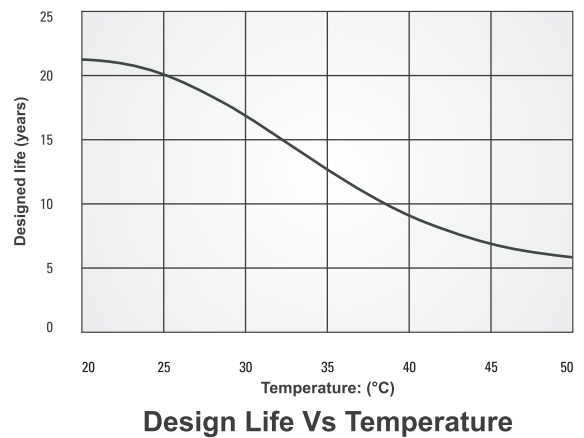
## Effect of Temperature on Capacity



## Cycle Life in Relation to Depth of Discharge

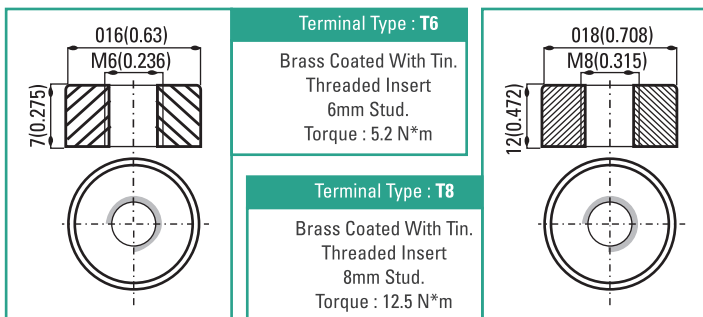


## Float Life in Relation to Temperature

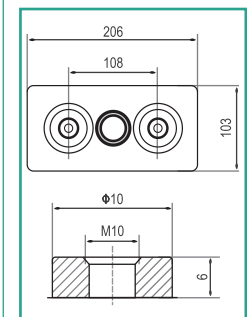


# Battery Terminal Options

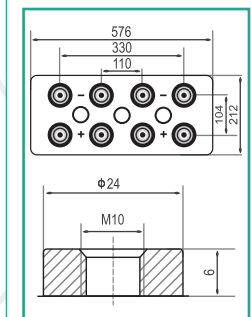
### For 12V



### For 2V(SGT2100 To SGT2420)



### For 2V(SGT2500 Onwards)



# General Technical Particulars of TUBULAR GEL Battery Models

Model	Capacity (AH) @ 27°C					Dimensions (mm) +/- 3mm				Normal Charging Current (A)	Short Circuit Current (A)	Internal Resistance (mΩ)	Battery Weight (kg) +/- 3%	Terminal Type
	20 hr 10.5V	10 hr 10.5V	5 hr 10.5V	3 hr 10.2V	1 hr 10.2V	Length	Width	Height	Total Height					
<b>12V Batteries</b>														
SGT1240	44.00	40.00	34.00	30.00	20.00	347	167	190	190	4.00	532.00	14.50	17.50	T6
SGT1260	66.00	60.00	51.00	45.00	30.00	330	173	220	225	6.00	798.00	13.00	26.50	T6
SGT1275	82.00	75.00	63.75	56.25	37.50	405	173	236	236	7.50	997.50	12.90	29.00	T8
SGT12100	110.00	100.00	85.00	75.00	50.00	486	170	239	239	10.00	1330.00	9.50	42.00	T8
SGT12125	135.00	125.00	106.25	93.75	62.50	486	170	239	239	12.50	1662.50	7.10	49.00	T8
SGT12150	165.00	150.00	127.50	112.50	75.00	522	238	219	225	15.00	1995.00	5.20	58.00	T8
SGT12180	198.00	180.00	153.00	135.00	90.00	522	238	219	225	18.00	2394.00	3.30	62.00	T8
<b>2V Cells</b>														
SGT2100	120.00	100.00	85.00	75.00	50.00	70	202	356	388	10.00	1200.00	1.39	9.50	T10
SGT2160	192.00	160.00	136.00	120.00	80.00	70	202	356	388	16.00	1840.00	0.87	12.00	T10
SGT2240	288.00	240.00	204.00	180.00	120.00	85	202	380	412	24.00	2760.00	0.58	16.00	T10
SGT2300	360.00	300.00	255.00	225.00	150.00	103	202	380	412	30.00	2850.00	0.46	20.50	T10
SGT2360	432.00	360.00	306.00	270.00	180.00	140	202	380	412	36.00	3420.00	0.39	25.50	T10
SGT2420	504.00	420.00	357.00	315.00	210.00	140	202	380	412	42.00	3780.00	0.33	27.90	T10
SGT2500	600.00	500.00	425.00	375.00	250.00	195	202	380	412	50.00	4000.00	0.28	37.60	T10
SGT2600	720.00	600.00	510.00	450.00	300.00	195	202	380	412	60.00	4500.00	0.23	40.40	T10
SGT2800	960.00	800.00	680.00	600.00	400.00	232	202	490	522	80.00	6000.00	0.17	58.40	T10
SGT2900	1080.00	900.00	765.00	675.00	450.00	232	202	490	522	90.00	6750.00	0.15	61.90	T10
SGT21000	1200.00	1000.00	850.00	750.00	500.00	232	202	490	522	100.00	7500.00	0.14	65.40	T10
SGT21250	1500.00	1250.00	1062.50	937.50	625.00	232	202	490	522	125.00	8750.00	0.11	79.50	T10
SGT22000	2400.00	2000.00	1700.00	1500.00	1000.00	464	202	490	522	200.00	12000.00	0.07	130.80	T10
SGT23000	3600.00	3000.00	2550.00	2250.00	1500.00	696	202	490	522	300.00	18000.00	0.05	196.20	T10
SGT24000	4800.00	4000.00	3400.00	3000.00	2000.00	928	202	490	522	400.00	24000.00	0.03	261.60	T10
SGT25000	6000.00	5000.00	4250.00	3750.00	2500.00	928	202	490	522	500.00	30000.00	0.03	318.00	T10

\* Specifications are under continuous improvement. Subject to change without notice.

## COMPLIED STANDARDS



**IEC 60896-21/22**  
**IEC 61427 – 2005**  
**IS 15549:2005**  
**BS 6290 Part IV**

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