

## TUBULAR GEL MAINTENANCE FREE BATTERY FOR INVERTER & SOLAR APPLICATION



- Higher Cycle life • Higher Energy density & Fast recovery in deep cycle • Maintenance Free
- High Pressure Die Cast Spine Grids • Proven cycling & deep cycling capabilities

## ABOUT US

The Eastman Global group began its journey in the year 1970 as a bicycle manufacturing and trading company. With over 47 long years of experience, the Eastman group enjoys an image of a strong corporate brand across the globe. The year 2006 became a landmark year when it made an emphatic entry into the power sector and incorporated Eastman Auto & Power Limited. EAPL is at the forefront of adopting the most modern technologies and processes to produce top of the line batteries. Our product portfolio include Tall Tubular Conventional Batteries, VRLA SMF Batteries, Inverter & Solar Products. We now introduce Eastman Automotive Batteries, E-Rickshaw Batteries & Tubular Gel Batteries.

## OUR ACHIEVEMENTS

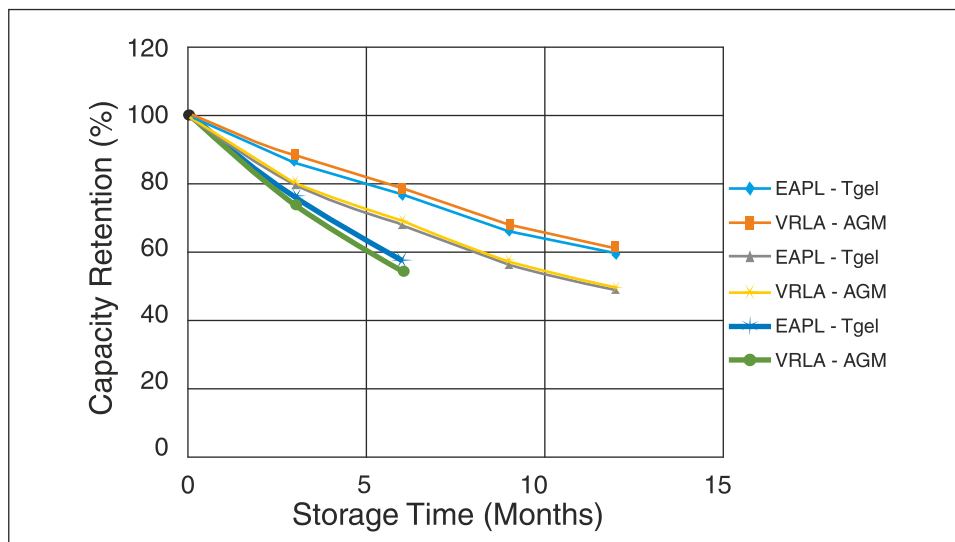


# PRODUCT TECHNOLOGY

## Comparison of Batteries with Different Technologies Available

| S.No. | Features   | AGM VRLA   | Tubular Gel VRLA  |
|-------|--|--|---|
| 1     | Cycle Life at 80% DOD (Normal Environment Condition) | 360 Cycles at an Average Temperature of 25°C   | >2000 Cycles for at 25° C   |
| 2     | Float Life at 35 °C                                  | Poor   | Good  |
| 3     | Acid Stratification                                  | Increases with Increase in Battery Capacity  | No Such stratification  |
| 4     | Performance Under Partial State of Charge            | Satisfactory   | Good  |
| 5     | Stability Against Deep Discharge                     | Poor   | Good Due to Micro Porous Separator  |
| 6     | Acid Dry Out   | More   | No Dry Out, provided control charging available from source   |
| 7     | Thermal Runaway                                      | Present High Internal Recombination and Low Diffusion Resistances  | Not Present Hindered Diffusion by Gel and the Micro Porous Separator                                |
| 8     | Stability of Capacity Over Life                      | Low Dry out increase with battery life which Increases the Inner Resistance and Contracts The AGM due to Lack of Contact | Very Good Gel Remains wet due to small pores, Inner resistance constant, gel creeps to keep contact |

## Capacity Drop In Storage T. Gel Vrla Vs Agm Vrla

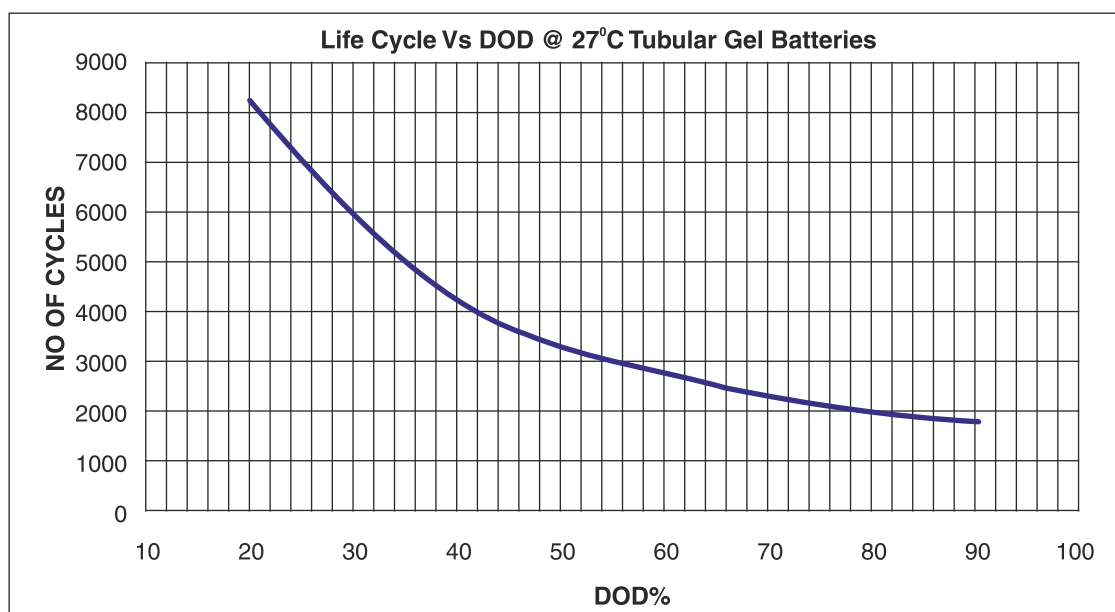


# PRODUCT TECHNOLOGY

## Application chart for Tubular Gel Battery

| S.No. | Description                       | EG115P/E115G | EG165P/E116G | EG225P/E225G |
|-------|-----------------------------------|--------------|--------------|--------------|
| 1.    | Capacity of Battery               | 100          | 150          | 200          |
| 2.    | Rating                            | C10          | C10          | C10          |
| 3.    | Voltage                           | 12V          | 12V          | 12V          |
| 4.    | Suitable for Offline UPS/Home UPS | YES          | YES          | YES          |
| 5.    | Suitable for online UPS           | NO           | NO           | NO           |
| 6.    | Suitable for solar streetlights   | YES          | YES          | YES          |
| 7.    | Suitable for Home solar systems   | YES          | YES          | YES          |
| 8.    | Type                              | TUB-GEL      | TUB-GEL      | TUB-GEL      |
| 9.    | Technology                        | GEL Tech     | GEL Tech     | GEL Tech     |
| 10.   | Category                          | MF Type      | MF Type      | MF Type      |

## Life Cycle Graph



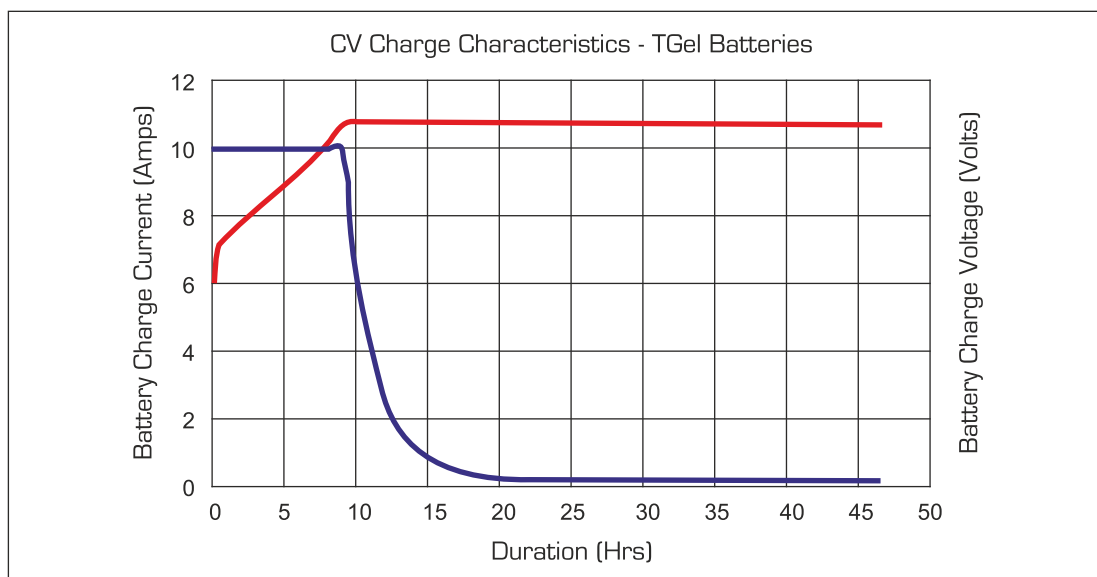
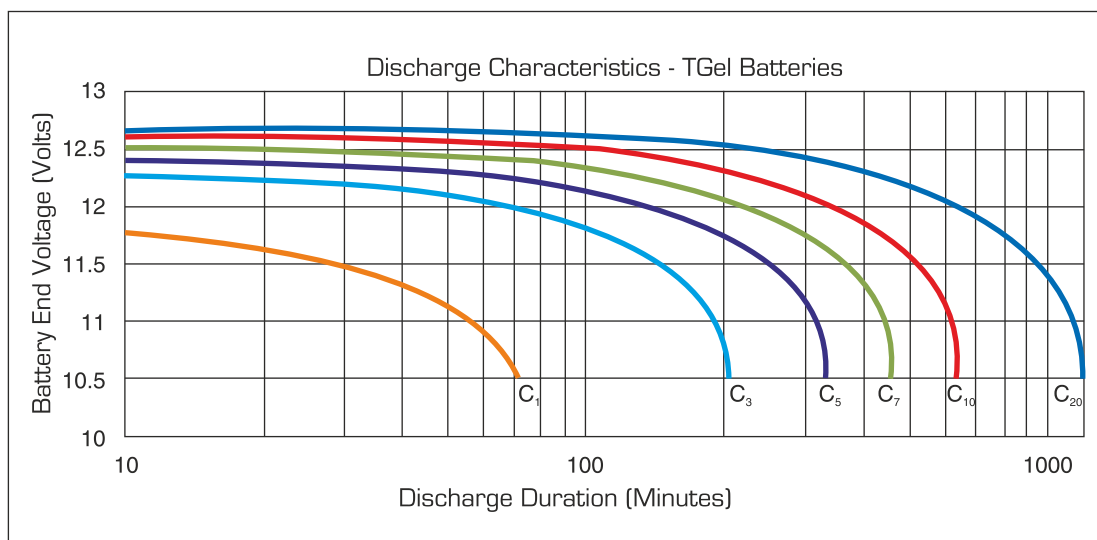
## PRODUCT SERIES



### BATTERY RANGE

| S.No. | Model No | Capacity @ C10 | Dimensions (L X W X H) | Gross Weight (kg $\pm$ 3%) | Filled Weight | Series          |
|-------|----------|----------------|------------------------|----------------------------|---------------|-----------------|
| 1     | E115G    | 100            | 445 X 190 X 406        | 40.0                       | 38.50         | Regular Series  |
| 2     | E165G    | 150            | 445 X 190 X 406        | 50.50                      | 49.00         | Regular Series  |
| 3     | E225G    | 200            | 445 X 190 X 406        | 65.00                      | 63.50         | Regular Series  |
| 4     | EG115P   | 100            | 445 X 190 X 406        | 43.10                      | 41.50         | Platinum Series |
| 5     | EG165P   | 150            | 445 X 190 X 406        | 55.50                      | 54.00         | Platinum Series |
| 6     | EG225P   | 200            | 445 X 190 X 406        | 70.30                      | 68.70         | Platinum Series |

# PRODUCT TECHNOLOGY



# APPLICATION

