

فرانکلین



Franklin

FRANKLIN TUBULAR BATTERY

(Conventional Battery)

Power That Endures, Performance That Excels

25% EXTRA
PERFORMANCE

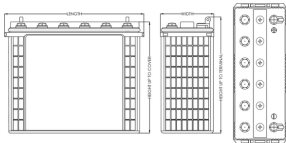
GERMAN
TECHNOLOGY





TUBULAR FOR HOME UPS & SOLAR APPLICATION

- Micro-porous ceramic float-guide vent plug, Environment-friendly, Free from cid Fumes, Indicates water level
- Gravity casted positive spice of 8 mm Pore free and optimized grain leading to less corrosion and high life.
- Optimized pack density: Optimized Alpha to Beta PbO₂ leading to excellent performance and high life.
- Optimized piclling: Optimized porosity leading to excellent capacity performance.
- Special Additive in Negative: Excellent charge acceptance leading to high life in low charging voltage.
- Double layer relaxation charging: Intact of structural integrity of PAM, leading to excellent life during deep cycling.
- Balanced PAM/NAM ratio: Excellent resistance against overcharging and undercharging leading to high life.
- Balanced AM/Acid ration per Ah: Optimized usage of PAM and NAM leading to high life.
- Calcium Alloy for low self discharge, low water loss and fast charge acceptance.





TECHNICAL SPECIFICATIONS FOR TUBULAR BATTERIES

| Model | Nominal Voltage | Rated Capacity 10 Hr @27°C(Ah) | Dimensions in mm (+3mm) | | | Dry Weight | Filled Battery Weight (Kg) (+3%) Gross |
|--------------------|-----------------|--------------------------------|-------------------------|-------|--------|------------|--|
| | | | Length | Width | Height | | |
| HM50AH 12V @ C10 | 12 | 50 | 409 | 173 | 275 | 14.800 | 23.50 |
| HM70AH 12 V @ C10 | 12 | 70 | 409 | 173 | 275 | 17.400 | 28.00 |
| HM100AH 12 V @ C10 | 12 | 100 | 502 | 190 | 410 | 22.800 | 50.00 |
| HM150AH 12 V @ C10 | 12 | 150 | 502 | 190 | 410 | 28.400 | 57.00 |
| HM200AH 12 V @ C10 | 12 | 200 | 502 | 190 | 410 | 31.600 | 64.50 |
| HM240AH 12 V @ C10 | 12 | 240 | 502 | 190 | 410 | 35.700 | 66.50 |

ELECTRICAL PARAMETERS & CHARGING PROFILE

| Model | C10 @ 10.5V | C7 @ 10.5V | C5 @ 10.5V | C3 @ 10.5V | C1 @ 10.5V | Terminal Type |
|--------------------|-------------|------------|------------|------------|------------|---------------|
| HM50AH 12V @ C10 | 50 | 40 | 32 | 22 | 10 | L |
| HM70AH 12 V @ C10 | 70 | 61 | 50 | 29 | 20 | L |
| HM100AH 12 V @ C10 | 100 | 85 | 69 | 53 | 35 | L |
| HM150AH 12 V @ C10 | 150 | 125 | 124 | 112 | 97 | L |
| HM200AH 12 V @ C10 | 200 | 185 | 170 | 149 | 134 | L |
| HM240AH 12 V @ C10 | 240 | 215 | 197 | 173 | 154 | L |



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HMST-50



HMST-70



HMTT-100



HMTT-150



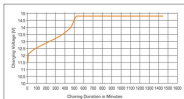
HMTT-200



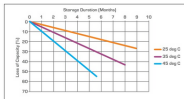
HMTT-240



CHARGING PROFILE



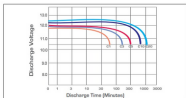
SELF DISCHARGE CHARACTERISTICS @ DIFFERENT TEMPERATURE



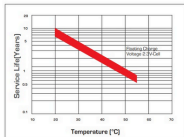
STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE @ 27°C

| State of Charge | Specific Gravity | Voltage |
|-----------------|------------------|---------------|
| 100% | 1.245-1.275 | 12.55V-12.70V |
| 75% | ≤ 1.225 | ≤ 12.4V |
| 50% | ≤ 1.190 | ≤ 12.1V |
| 25% | ≤ 1.155 | ≤ 12.0V |
| 0% | 1.120 | 11.8V |

DISCHARGING CHARACTERISTICS AT VARIOUS RATES @ 27°C



SERVICE (FLOAT) LIFE AND TEMPERATURE



EXPECTED CAPACITY VS TEMPERATURE

