

# MARINE BATTERIES

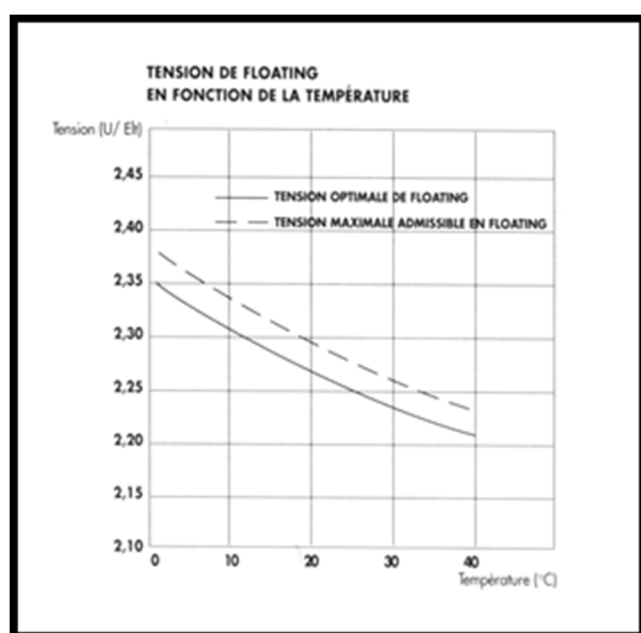
## HM RANGE



HM Marine batteries have been especially designed for motor starting applications and for on-board equipment power supply.

Open lead battery technology.

## BATTERY SETTING



Optimum charge voltage depends on temperature. Typical values are 2.27V/element at 20°C and 2.25V/element at 25°C. For applications with high temperature variations, the adjustment of charge voltage is recommended. When housed in containers, the optimal place for taking the temperature is at 2/3 of the height, with the probe being placed in the centre at this level.

Above 40°C, there is a risk of excessive heat generation. For this reason, rooms must be well ventilated.

## STANDARD RANGE

REFERENCE	ITEM CODE	LENGTH (MM)	WIDTH (MM)	HEIGHT (MM)	WEIGHT (KG)
2HM650	20004303	240	158	390	40
4HM520	20001368	410	167	390	58
6HM250	30003847	333	167	390	45
6HM340	20001369	406	167	390	56
8HM170	20004307	331	167	390	42
8HM225	20001367	410	167	390	54
12HM120	30000828	331	167	390	45

## HM - SPECIFICATION

### Capacity from 105 to 650Ah Element voltage 2, 4, 6, 8 or 12 volts

#### Excellent performances in rapid & slow discharge

- Optimised duty plates
- Electrochemical set with ionic exchange
- Connections via conical terminal RA type

#### Robust

- Heavy-duty oxide plates, constructed with a special alloy limiting corrosion and on-site maintenance
- Resistant housing
- Alloy designed for numerous discharges

#### Security

- Flame proof paracid caps
- Isolated connections
- Can be tilted or jolted without electrolyte spill

#### Easy-to-use

- Long storage of the dry elements
- Easy transport (handles)
- Easy mounting (monobloc)
- Low maintenance (large reserve of electrolyte)

## HM – CHOICE OF BATTERY

This choice depends on the battery use

### 1. On-board lighting – radio –electrical equipment (except thermal motor starting)

Add the consumption of each equipment (each consumption is calculated by multiplying the power by n° of hours used).

Example:

- On-board lighting: 10 bulbs 40W during 6hours= 2400Wh
- Radio: 100W on average during 24h = 2400Wh
- Various equipment: 1000W during 15min  $100 \times 15 / 60 = 250\text{Wh}$

If the battery voltage is 48V, the consumption is  $5050 / 48 = 105\text{Ah}$

A battery must not discharge over 80% of its nominal capacity, the battery capacity must not be inferior to:  
 $105 / 0.8 = 131\text{Ah}$

### 2. Thermal motor starting

The choice of the battery is determined by the value of the inrush current on start-up.

### 3. Mixed use

If the start-up occurs before the on-board equipment consumption, calculate the battery according to N° 1 and check that if it is able to flow the current inrush required at N°2.

If it is not the case, choose the battery in function of N°2.

If the starting occurs after, calculate the battery capacity required for the on-board equipment and motor start up and add the two.