



The FIAMM **SMG** battery of valve regulated lead acid stationary batteries combine the benefits of recombination technology (i.e. virtually no maintenance due to very low gas emissions) plus the advantages of conventional vented batteries with positive tubular plates (i.e. long life and excellent cycling capability).

FIAMM has a program of continuous improvement investing in manufacturing processes, equipment and technology. FIAMM's Standby Battery manufacture conforms to ISO 9001 quality assurance. Our continuous investment in battery technology is reflected by means of premium products that are of the highest quality and reliability. FIAMM **SMG** valve regulated lead acid batteries are the ideal energy source for many different standby applications.

## TECHNICAL FEATURES

- ▶ **Tubular positive plates** incorporating a special grid construction, pressure cast from antimony-free alloy, with highly porous gauntlets that retain the active material
- ▶ **Pasted negative plates** designed to have service lives consistent with the positive plates
- ▶ **Electrolyte** immobilised in a gel structure
- ▶ **Separators** with extremely high porosity and low internal resistance
- ▶ **Containers and lids** made of plastic (ABS) material. ABS flame retardant material according to IEC 707 FV0
- ▶ **Easy installation.**
- ▶ **One way relief valve** opens at low pressure and is fitted with a flame arrestor device
- ▶ **Terminals:** male treated terminal ensure perfect contact and a low resistance with the flexible cable connectors
- ▶ **Post seals:** high integrity post seal design to prevent electrolyte leakage and terminal corrosion
- ▶ **Connectors:** flexible, fully insulated cable connectors screwed to the terminal with an insulated screw having a probe hole on the top for electrical measurement

## APPLICABLE STANDARDS

- ▶ DIN 40742
- ▶ IEC 896 part 2
- ▶ Eurobat Guide - 12 years and longer "long life"



## PRODUCT FEATURES

- ▶ Safe
- ▶ Long life 15 years
- ▶ Versatile
- ▶ Reliable
- ▶ Minimal gassing
- ▶ Front terminal

# 12SMG100/F

08.04

## ELECTRICAL CHARACTERISTICS

- ▶ **NOMINAL VOLTAGE:** 12 V
- ▶ **FLOAT VOLTAGE CHARGE AT 20°C:** 13.38 V/cell
- ▶ **BOOST RECHARGE:** maximum voltage of 2.4 V/cell with the maximum current of  $0.25 \times C_{10}$  (A)
- ▶ **SELF DISCHARGE AT 20°C:** < 2% a month

### 12SMG100/F

BATTERY TYPE	NOMINAL VOLTAGE (V)	NOMINAL CAPACITY (Ah) 10 hours 1.80 Vpc	INTERNAL RESISTANCE (mohm) IEC 896-2	SHORT CIRCUIT CURRENT (A) IEC 896-2	DIMENSIONS (mm)			WEIGHT (kg)
					L	W	H	
12SMG100/F	12	100	4.2	2900	558	126	270	45

### CONSTANT CURRENT DISCHARGE DATA (AMPERES) TO 25°C

MINUTES	60	120	180	240	300	480	600
1.75 Vpc	57.4	35.7	26.3	21.4	17.6	12.8	10.2
1.80 Vpc	54.3	34.7	25.6	21	17.2	12.5	10.0
1.85 Vpc	52.3	33.3	24.2	19.6	15.2	11.1	9.6

### CYCLE LIFE Vs DEPTH OF DISCHARGE AT 25°C

