

TECHNICAL DATA SHEET OF 12V 18Ah (FGH 21803)

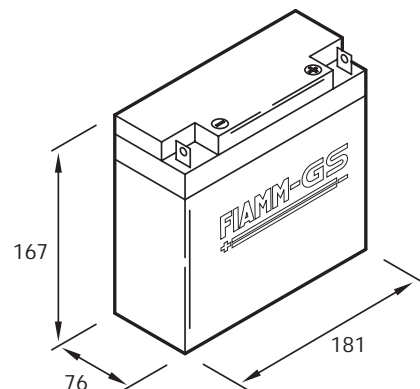
FIAMM-GS

High discharge battery - 570W/10 minutes

SHORT DESCRIPTION

The FIAMM-GS Super Power Battery FGH 21803 model is a VRLA battery (Valve Regulated Lead Acid) which has been specifically designed to guarantee higher power outputs during fast discharge applications. When compared with the standard FIAMM-GS battery model, having the same dimensions, model FG21803 (12V18Ah), the Super Power Battery has been electrically modified through the use of additional plates. More precisely, whereas the FG21803 model has 42 plates, the Super Power Battery has 54 plates. As the individual surface area of the distinct plates remains more or less constant, the 54 plates of the Super Power Battery clearly offer a greater total surface area, thereby permitting greater contact between the active matter and the electrolyte. This increased contact surface more readily permits the electrochemical reactions which are needed to create electrical current.

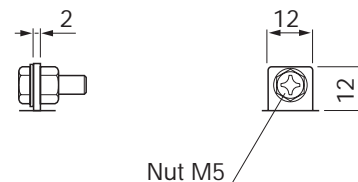
Battery dimensions (mm)



Performance Specification for battery type FGH 21803

Terminal type (mm)

Nominal Voltage	12 Volts
Nominal Capacity at 20 hours rate	18Ah
Dimension (mm)	Length=181, Width=76, Height=167
Weight	6,2 kg
Energy Density	91Wh/l
Specific Energy	33,9Wh/kg
Internal Resistance (Fully charged battery)	7,5 mΩ
Maximum short-duration discharge current	270 A
Recommended charging tension (temperature=20°C)	13,5-13,8 V
Thermal compensation factor	-18mV/°C
Maximum charging current	4,5 A
Terminals	Bolt and Nut M5
Vibration Test	
(2000 cycles/minute, 2,55 mm excursion, 2 hours) ___ No loss in capacity or performance	
Shelf life - % of nominal capacity at 20°C	
1 month	97%
3 months	91%
6 months	83%
Storage temperature	-20°C to 40°C
Operative temperature Range	
Charge	0° C to 40°C
Discharge	-20°C to 50°C
Case material	Acrylonitrile-Butadiene-Styrene
	According to UL-94 HB



Constant Power Discharge Table (Watt)

Time	5'	7'	10'	15'	20'	30'	45'	60'
1,8V/Cell	684	596	497	397	327	254	192	156
1,75V/Cell	735	633	521	412	337	261	196	159
1,7V/Cell	790	671	547	428	348	267	200	162
1,65V/Cell	820	690	558	434	351	268	200	162
1,6V/Cell	850	710	570	440	355	270	202	163