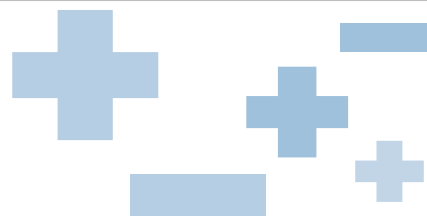


# FIAMM

Reserve  
Power Solutions

# FGH

series



## Applications and Key Benefits

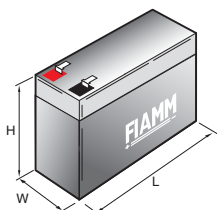
- + Designed to achieve optimal performance and to protect from power disturbances
- Ideal for:
  - High rate discharge UPS application
  - Emergency power supply systems
  - Security & alarm systems
- + 12V monoblocs
- + Excellent performance for high rate discharge
- + 5 years design life in float operation in temperature controlled environment
- + VRLA AGM and gas recombination technology with 99% internal recombination
- + Non-spillable and maintenance free
- + Non-hazardous for air/sea/rail/road transportation
- + 100% Recyclable

| Model       | Nominal voltage (V) | Capacity (Ah)                  | Weight (kg) | Dimensions (mm) |    |     |     | Internal Resistance (mΩ) |
|-------------|---------------------|--------------------------------|-------------|-----------------|----|-----|-----|--------------------------|
|             |                     | Discharge 20 h rate 1.75V/cell |             | L               | W  | H   | TH* |                          |
| 12FGH23slim | 12                  | 5.0                            | 2.10        | 151             | 51 | 95  | 101 | 55.3                     |
| 12FGH23     | 12                  | 5.0                            | 1.90        | 90              | 70 | 101 | 107 | 55.3                     |
| 12FGH36     | 12                  | 9.0                            | 2.80        | 151             | 65 | 94  | 100 | 33.8                     |
| 12FGH50     | 12                  | 12                             | 4.20        | 151             | 98 | 95  | 100 | 27.6                     |
| 12FGH65     | 12                  | 18                             | 6.00        | 181             | 76 | 167 | 167 | 21.5                     |

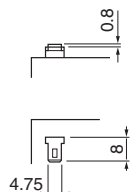
\*TH = total height including terminals

## Terminal Type

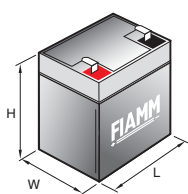
12FGH23slim



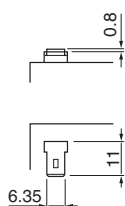
■ Faston 4.8



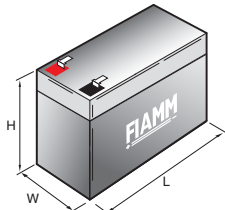
12FGH23



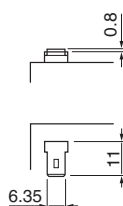
■ Faston 6.3



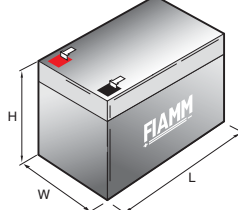
12FGH36



■ Faston 6.3



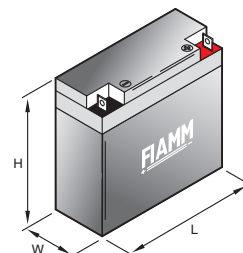
12FGH50



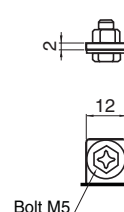
■ Faston 6.3



12FGH65



■ Flag Ø5.5



## Constant Power discharge table (Watts per bloc)

Temperature: 25°C

| Model                  | Final Voltage | 5 min | 10 min | 15 min | 20 min | 30 min | 45 min | 1 hour |
|------------------------|---------------|-------|--------|--------|--------|--------|--------|--------|
| 12FGH23slim<br>12FGH23 | 1.6 V/Cell    | 248   | 179    | 133    | 107    | 79.2   | 57.8   | 46.2   |
|                        | 1.67 V/Cell   | 242   | 173    | 131    | 106    | 78.7   | 57.6   | 46.1   |
|                        | 1.7 V/Cell    | 235   | 169    | 129    | 105    | 78.0   | 57.3   | 45.9   |
|                        | 1.8 V/Cell    | 211   | 154    | 120    | 100    | 75.6   | 54.5   | 43.4   |
| 12FGH36                | 1.6 V/Cell    | 407   | 285    | 217    | 176    | 129    | 92.0   | 68.4   |
|                        | 1.67 V/Cell   | 403   | 283    | 215    | 174    | 128    | 91.5   | 68.0   |
|                        | 1.7 V/Cell    | 400   | 281    | 213    | 173    | 127    | 90.9   | 67.5   |
|                        | 1.8 V/Cell    | 384   | 268    | 203    | 166    | 123    | 88.6   | 65.6   |
| 12FGH50                | 1.6 V/Cell    | 569   | 399    | 304    | 246    | 180    | 128.8  | 89.0   |
|                        | 1.67 V/Cell   | 565   | 396    | 301    | 244    | 179    | 128.0  | 88.4   |
|                        | 1.7 V/Cell    | 560   | 393    | 298    | 242    | 178    | 127.3  | 87.8   |
|                        | 1.8 V/Cell    | 538   | 375    | 284    | 233    | 172    | 124.1  | 85.3   |
| 12FGH65                | 1.6 V/Cell    | 672   | 459    | 350    | 288    | 215    | 160    | 129    |
|                        | 1.67 V/Cell   | 643   | 446    | 342    | 283    | 212    | 158    | 127    |
|                        | 1.7 V/Cell    | 627   | 439    | 339    | 281    | 211    | 157    | 127    |
|                        | 1.8 V/Cell    | 577   | 418    | 327    | 272    | 206    | 154    | 124    |

## Technical Features

- **Grids:** gravity casted grids with high purity lead calcium tin alloy
- **Separators:** electrolyte fully absorbed in glass mat "AGM" separators with extremely high micro porosity
- **Terminal posts:** faston or flag terminals depending on the model
- **Post seals:** high integrity post seal design prevents acid leakage over a wide temperature range
- **One-way safety valves** allow excess gas to escape when overcharging
- **Container and cover:** made of thick walled ABS plastics, designed for unsurpassed mechanical strength
- **Shelf life:** < 2% self-discharge per month at 20°C allows 6 months shelf life

## Applicable Standards

- IEC 60896 Part 21 - VRLA methods of testing
- IEC 60896 Part 22 - VRLA requirements
- UL Recognized
- Eurobat "Standard Commercial" - 3-5 years

## Electrical Characteristics

### Recharge methods:

- standby use: 13.50 - 13.80 V/bloc
- initial charge current: 0.20 - 0.25 C<sub>20</sub>

### Operating temperature ranges:

- recharge: 0° ÷ 40°C
- discharge: -20° ÷ 50°C
- storage: -20° ÷ 50°C

## FIAMM Manufacturing

- ISO 9001 - Quality Management System
- ISO 14001 - Environmental Management System
- OHSAS 18001 - Workplace Safety & Health