

## Applications and Key Benefits

- + Designed to achieve optimal performance and to protect from power disturbances

Ideal for:

- Emergency power supply systems
  - Signaling
  - Security & alarm systems
  - Industry & process controls
  - UPS application
  - Unstable grid & off-grid installation
  - Leisure & toys
  - Minor traction & medical equipment
  - Renewable energy storage
- + 6V and 12V monoblocs
  - + VRLA AGM and gas recombination technology with 99% internal recombination
  - + Non-spillable and maintenance free
  - + < 2% self-discharge per month at 20°C allows 6 months shelf life
  - + Non-hazardous for air/sea/rail/road transportation
  - + 100% Recyclable

### FG series



### FGL series



### FGH series



### FGHL series



### FGC series



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## Applicable Standards

- IEC 60896 Part 21 - VRLA methods of testing
- IEC 60896 Part 22 - VRLA requirements
- UL Recognized
- BS 6290 Part 4 - specifications for VRLA classification (for FGHL series)
- FG - FGH - FGC: Eurobat "Standard Commercial" - 3-5 years
- FGL - FGHL: Eurobat "High Performance" - 10-12 years

## FIAMM Manufacturing

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

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## FG series general use - 5 years design life

| Model     | VdS | Nominal voltage (V) | Capacity (Ah)                 | Weight (kg) | Dimensions (mm) |    |     |     | Terminal Type    |
|-----------|-----|---------------------|-------------------------------|-------------|-----------------|----|-----|-----|------------------|
|           |     |                     | Discharge 20h rate 1.75V/cell |             | L               | W  | H   | TH* |                  |
| FG10121   |     | 6                   | 1.2                           | 0.30        | 97              | 24 | 52  | 59  | Faston 4.8       |
| FG10301   | •   | 6                   | 3.0                           | 0.62        | 134             | 34 | 60  | 67  | Faston 4.8       |
| FG10381   |     | 6                   | 3.8                           | 0.71        | 66              | 33 | 118 | 125 | Faston 4.8       |
| FG10451   |     | 6                   | 4.5                           | 0.74        | 70              | 47 | 100 | 106 | Faston 4.8       |
| FG10721   |     | 6                   | 7.2                           | 1.15        | 151             | 34 | 94  | 100 | Faston 4.8       |
| FG11201/2 | •   | 6                   | 12                            | 1.76        | 151             | 50 | 93  | 99  | Faston 4.8 / 6.3 |

|           |   |    |     |      |     |     |     |     |                  |
|-----------|---|----|-----|------|-----|-----|-----|-----|------------------|
| FG20086   |   | 12 | 0.8 | 0.35 | 96  | 25  | 62  | 62  | Wire+Connector   |
| FG20121   | • | 12 | 1.2 | 0.57 | 97  | 49  | 51  | 57  | Faston 4.8       |
| FG20121A  | • | 12 | 1.2 | 0.52 | 97  | 43  | 52  | 59  | Faston 4.8       |
| FG20201   | • | 12 | 2.0 | 0.80 | 178 | 35  | 60  | 67  | Faston 4.8       |
| FG20271   |   | 12 | 2.7 | 1.06 | 79  | 56  | 99  | 105 | Faston 4.8       |
| FG20341   |   | 12 | 3.4 | 1.24 | 134 | 67  | 60  | 67  | Faston 4.8       |
| FG20451   |   | 12 | 4.5 | 1.48 | 90  | 70  | 101 | 107 | Faston 4.8       |
| FG20721/2 | • | 12 | 7.2 | 2.43 | 151 | 65  | 94  | 100 | Faston 4.8 / 6.3 |
| FG21201/2 | • | 12 | 12  | 3.73 | 151 | 98  | 95  | 100 | Faston 4.8 / 6.3 |
| FG21703   | • | 12 | 17  | 5.90 | 181 | 76  | 167 | 167 | Flag Ø5.5        |
| FG21803   |   | 12 | 18  | 5.80 | 181 | 76  | 167 | 167 | Flag Ø5.5        |
| FG22703   | • | 12 | 27  | 9.00 | 166 | 175 | 125 | 125 | Flag Ø5.5        |
| FG24204   | • | 12 | 42  | 13.8 | 197 | 165 | 170 | 170 | Flag Ø6.5        |
| FG27004   | • | 12 | 70  | 22.6 | 350 | 166 | 174 | 174 | Flag Ø6.5        |

## FGL series general use - 10 years design life

| Model     | Nominal voltage (V) | Capacity (Ah)                  | Weight (kg) | Dimensions (mm) |     |     |     | Terminal Type |
|-----------|---------------------|--------------------------------|-------------|-----------------|-----|-----|-----|---------------|
|           |                     | Discharge 20 h rate 1.75V/cell |             | L               | W   | H   | TH* |               |
| 12FGL17   | 12                  | 17                             | 5.95        | 181             | 76  | 167 | 167 | Round M5      |
| 12FGL27   | 12                  | 27                             | 9.00        | 166             | 175 | 125 | 125 | Round M5      |
| 12FGL33   | 12                  | 33                             | 11.5        | 196             | 130 | 159 | 164 | Round M6      |
| 12FGL42   | 12                  | 42                             | 13.8        | 197             | 165 | 170 | 170 | Round M6      |
| 12FGL55   | 12                  | 55                             | 18.2        | 229             | 138 | 207 | 212 | Round M6      |
| 12FGL70   | 12                  | 70                             | 23.2        | 272             | 166 | 191 | 195 | Round M6      |
| 12FGL70/L | 12                  | 70                             | 22.6        | 350             | 166 | 175 | 175 | Round M6      |
| 12FGL80   | 12                  | 80                             | 27.0        | 259             | 168 | 208 | 213 | Round M8      |
| 12FGL100  | 12                  | 100                            | 32.5        | 329             | 172 | 214 | 221 | Round M6      |
| 12FGL120  | 12                  | 120                            | 39.5        | 407             | 173 | 220 | 225 | Round M8      |
| 12FGL150  | 12                  | 150                            | 47.5        | 483             | 170 | 220 | 220 | Round M8      |
| 12FGL205  | 12                  | 205                            | 66.0        | 500             | 226 | 235 | 235 | Round M8      |

\*TH = total height including terminals

## FGH series high rate discharge - 5 years design life

| Model       | Nominal voltage (V) | Capacity (Ah)                 | Weight (kg) | Dimensions (mm) |    |     |     | Terminal Type |
|-------------|---------------------|-------------------------------|-------------|-----------------|----|-----|-----|---------------|
|             |                     | Discharge 20h rate 1.75V/cell |             | L               | W  | H   | TH* |               |
| 12FGH23slim | 12                  | 5.0                           | 2.10        | 151             | 51 | 95  | 101 | Faston 4.8    |
| 12FGH23     | 12                  | 5.0                           | 1.90        | 90              | 70 | 101 | 107 | Faston 6.3    |
| 12FGH36     | 12                  | 9.0                           | 2.80        | 151             | 65 | 94  | 100 | Faston 6.3    |
| 12FGH50     | 12                  | 12                            | 4.20        | 151             | 98 | 95  | 100 | Faston 6.3    |
| 12FGH65     | 12                  | 18                            | 6.00        | 181             | 76 | 167 | 167 | Flag Ø5.5     |

## FGHL series high rate discharge - 10 years design life

| Model    | Nominal voltage (V) | Capacity (Ah)                 | Weight (kg) | Dimensions (mm) |    |     |     | Terminal Type |
|----------|---------------------|-------------------------------|-------------|-----------------|----|-----|-----|---------------|
|          |                     | Discharge 20h rate 1.75V/cell |             | L               | W  | H   | TH* |               |
| 12FGHL22 | 12                  | 5.0                           | 1.90        | 90              | 70 | 101 | 107 | Faston 6.3    |
| 12FGHL28 | 12                  | 7.2                           | 2.65        | 151             | 65 | 94  | 100 | Faston 6.3    |
| 12FGHL34 | 12                  | 9.0                           | 2.85        | 151             | 65 | 94  | 100 | Faston 6.3    |
| 12FGHL48 | 12                  | 12                            | 4.20        | 151             | 98 | 95  | 100 | Faston 6.3    |

## FGC series cyclic use - 5 years design life

| Model    | Nominal voltage (V) | Capacity (Ah)                 | Weight (kg) | Dimensions (mm) |     |     |     | Terminal Type |
|----------|---------------------|-------------------------------|-------------|-----------------|-----|-----|-----|---------------|
|          |                     | Discharge 20h rate 1.75V/cell |             | L               | W   | H   | TH* |               |
| FGC21202 | 12                  | 12                            | 4.15        | 151             | 98  | 95  | 100 | Faston 6.3    |
| FGC21803 | 12                  | 18                            | 5.35        | 181             | 76  | 166 | 166 | Flag Ø5.5     |
| FGC22703 | 12                  | 27                            | 8.10        | 166             | 175 | 125 | 125 | Flag Ø5.5     |
| FGC23505 | 12                  | 35                            | 12.2        | 196             | 132 | 169 | 169 | Round M5      |
| FGC24207 | 12                  | 42                            | 13.0        | 195             | 165 | 165 | 170 | Round M6      |

### Electrical Characteristics

#### Recharge methods:

- standby use: 13.50 - 13.80 V/bloc
- cyclic use: 14.40 - 15.00 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