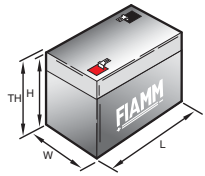


### TP\*: Terminal Position



- Faston
- Wire + Connector
- Bolt and Nut



Fig. 1



Fig. 2



Fig. 3



Fig. 4

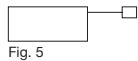


Fig. 5



Fig. 6



Fig. 7

### Applications and Key Benefits

- + General purpose batteries, designed to achieve optimal performance and to protect from power disturbances  
Ideal for:
  - Emergency lighting
  - Signaling
  - Security & alarm systems
  - UPS application
  - Leisure & toys
  - Minor traction & medical equipment
  - Renewable energy storage
- + 6V and 12V monoblocs
- + Optimized for discharge up to 20 hours
- + 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     | VdS | Nominal voltage (V) | Capacity (Ah)                  |                                |                               |                                 | Weight (kg) | Dimensions (mm) |     |     |     | Temp. (°C) |                  |          | TP* | Terminal Type    |
|-----------|-----|---------------------|--------------------------------|--------------------------------|-------------------------------|---------------------------------|-------------|-----------------|-----|-----|-----|------------|------------------|----------|-----|------------------|
|           |     |                     | Discharge 20 h rate 1.75V/cell | Discharge 10 h rate 1.75V/cell | Discharge 5 h rate 1.70V/cell | Discharge 1.5 h rate 1.60V/cell |             | L               | W   | H   | TH* | Charge     | Discharge        | Storage  |     |                  |
| FG10121   |     | 6                   | 1.2                            | 1.08                           | 1.00                          | 0.78                            | 0.30        | 97              | 24  | 52  | 59  | 0 ÷ 40     | -20 ÷ 50         | -20 ÷ 50 | 2   | Faston 4.8       |
| FG10301   | •   | 6                   | 3.0                            | 2.7                            | 2.55                          | 1.95                            | 0.62        | 134             | 34  | 60  | 67  |            |                  |          | 2   | Faston 4.8       |
| FG10381   |     | 6                   | 3.8                            | 2.88                           | 2.72                          | 2.08                            | 0.71        | 66              | 33  | 118 | 125 |            |                  |          | 7   | Faston 4.8       |
| FG10451   |     | 6                   | 4.5                            | 3.6                            | 3.4                           | 2.6                             | 0.74        | 70              | 47  | 100 | 106 |            |                  |          | 1   | Faston 4.8       |
| FG10721   |     | 6                   | 7.2                            | 6.3                            | 5.95                          | 4.55                            | 1.15        | 151             | 34  | 94  | 100 |            |                  |          | 2   | Faston 4.8       |
| FG11201/2 | •   | 6                   | 12                             | 10.8                           | 9.6                           | 7.5                             | 1.76        | 151             | 50  | 93  | 99  | 2          | Faston 4.8 / 6.3 |          |     |                  |
| FG20086   |     | 12                  | 0.8                            | 0.72                           | 0.63                          | 0.53                            | 0.35        | 96              | 25  | 62  | 62  | 0 ÷ 40     | -20 ÷ 50         | -20 ÷ 50 | 5   | Wire+Connector   |
| FG20121   | •   | 12                  | 1.2                            | 1.06                           | 0.98                          | 0.8                             | 0.57        | 97              | 49  | 51  | 57  |            |                  |          | 4   | Faston 4.8       |
| FG20121A  | •   | 12                  | 1.2                            | 1.08                           | 1.0                           | 0.78                            | 0.52        | 97              | 43  | 52  | 59  |            |                  |          | 4   | Faston 4.8       |
| FG20201   | •   | 12                  | 2.0                            | 1.83                           | 1.65                          | 1.37                            | 0.80        | 178             | 35  | 60  | 67  |            |                  |          | 2   | Faston 4.8       |
| FG20271   |     | 12                  | 2.7                            | 2.43                           | 2.25                          | 1.76                            | 1.06        | 79              | 56  | 99  | 105 |            |                  |          | 3   | Faston 4.8       |
| FG20341   |     | 12                  | 3.4                            | 3.0                            | 2.9                           | 2.2                             | 1.24        | 134             | 67  | 60  | 67  |            |                  |          | 4   | Faston 4.8       |
| FG20451   |     | 12                  | 4.5                            | 4.1                            | 3.8                           | 3.0                             | 1.48        | 90              | 70  | 101 | 107 |            |                  |          | 3   | Faston 4.8       |
| FG20721/2 | •   | 12                  | 7.2                            | 6.7                            | 6.0                           | 5.0                             | 2.43        | 151             | 65  | 94  | 100 |            |                  |          | 4   | Faston 4.8 / 6.3 |
| FG21201/2 | •   | 12                  | 12                             | 11.3                           | 10                            | 8.4                             | 3.73        | 151             | 98  | 95  | 100 |            |                  |          | 4   | Faston 4.8 / 6.3 |
| FG21703   | •   | 12                  | 17                             | 15.5                           | 13.9                          | 11.2                            | 5.90        | 181             | 76  | 167 | 167 |            |                  |          | 6   | Flag Ø5.5        |
| FG21803   |     | 12                  | 18                             | 16.9                           | 15                            | 12.7                            | 5.80        | 181             | 76  | 167 | 167 |            |                  |          | 6   | Flag Ø5.5        |
| FG22703   | •   | 12                  | 27                             | 24.4                           | 22.1                          | 18.4                            | 9.00        | 166             | 175 | 125 | 125 | 0 ÷ 40     | -20 ÷ 50         | -20 ÷ 50 | 6   | Flag Ø5.5        |
| FG24204   | •   | 12                  | 42                             | 37.9                           | 34.4                          | 28.5                            | 13.8        | 197             | 165 | 170 | 170 |            |                  |          | 6   | Flag Ø6.5        |
| FG27004   | •   | 12                  | 70                             | 64.4                           | 58.5                          | 47.4                            | 22.6        | 350             | 166 | 174 | 174 |            |                  |          | 6   | Flag Ø6.5        |

\*TH = total height including terminals

# FG series

## Constant Current discharge table (Amperes)

Final Voltage: 1.65 V/cell - Temperature: 25°C

| Model     | 5 min | 10 min | 15 min | 20 min | 30 min | 45 min | 1 hour | 2 hours | 3 hours | 5 hours | 10 hours | 20 hours |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|----------|----------|
| FG20451   | 14.4  | 10.1   | 7.61   | 6.13   | 4.33   | 3.15   | 2.50   | 1.50    | 1.10    | 0.74    | 0.42     | 0.23     |
| FG20721   | 27.1  | 18.3   | 13.8   | 11.1   | 8.11   | 5.91   | 4.73   | 2.66    | 1.88    | 1.21    | 0.67     | 0.37     |
| FG20722   | 30.1  | 21.2   | 16.2   | 12.8   | 9.13   | 6.41   | 4.97   | 2.67    | 1.88    | 1.21    | 0.67     | 0.37     |
| FG21201/2 | 38    | 26.9   | 20.7   | 16.7   | 12.5   | 9.21   | 7.42   | 4.23    | 3.14    | 2.02    | 1.12     | 0.62     |
| FG21803   | 58.3  | 39.3   | 29.7   | 24.1   | 17.9   | 13.3   | 10.8   | 6.28    | 4.61    | 3.06    | 1.7      | 0.93     |
| FG22703   | 84.5  | 60.6   | 47.7   | 39.4   | 28.7   | 21.1   | 17.6   | 9.68    | 6.93    | 4.54    | 2.53     | 1.39     |
| FG24204   | 146   | 101    | 76.5   | 62.7   | 46.9   | 34     | 26.7   | 14.6    | 10.5    | 6.97    | 3.87     | 2.16     |
| FG27004   | 224   | 164    | 126    | 102    | 76.1   | 55.5   | 43.6   | 24.5    | 17.7    | 11.7    | 6.49     | 3.58     |

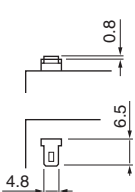
## Constant Power discharge table (Watts per bloc)

Final Voltage: 1.65 V/cell - Temperature: 25°C

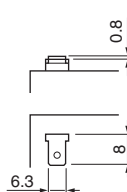
| Model     | 5 min | 10 min | 15 min | 20 min | 30 min | 45 min | 1 hour | 2 hours | 3 hours | 5 hours | 10 hours | 20 hours |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|----------|----------|
| FG20451   | 145   | 106    | 80.8   | 66.1   | 47.5   | 35.2   | 28.2   | 17.1    | 12.7    | 8.65    | 4.90     | 2.71     |
| FG20721   | 272   | 189    | 146    | 119    | 88.8   | 65.9   | 53.3   | 30.5    | 21.7    | 14.1    | 7.84     | 4.34     |
| FG20722   | 302   | 219    | 170    | 138    | 99.9   | 71.5   | 56.1   | 30.6    | 21.7    | 14.0    | 7.84     | 0.72     |
| FG21201/2 | 382   | 278    | 218    | 179    | 137    | 103    | 83.8   | 48.4    | 36.2    | 23.4    | 13.1     | 7.23     |
| FG21803   | 585   | 406    | 313    | 258    | 196    | 148    | 122    | 71.8    | 53.1    | 35.5    | 19.8     | 10.9     |
| FG22703   | 848   | 626    | 503    | 423    | 314    | 235    | 199    | 111     | 79.9    | 52.7    | 29.4     | 16.3     |
| FG24204   | 1469  | 1040   | 806    | 673    | 513    | 379    | 301    | 167     | 121     | 81      | 45.1     | 25.2     |
| FG27004   | 2250  | 1688   | 1322   | 1100   | 833    | 619    | 492    | 281     | 204     | 136     | 75.6     | 41.8     |

## Terminal Type

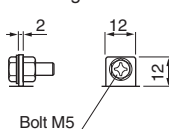
■ Faston 4.8



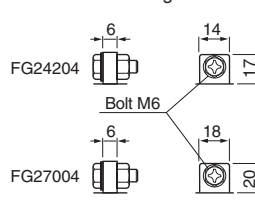
■ Faston 6.3



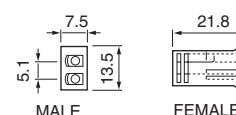
■ Flag Ø5.5



■ Flag Ø6.5



■ Wire+Connector



## 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, wire+connector or flag 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

## FIAMM Manufacturing

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

FIAMM S.p.A.  
Industrial Batteries

dealer:

SINPEC UPS di Pecoraro Lino  
Registered Office: Via G. Deledda, 11/7  
33082 AZZANO DECIMO (PN) IT  
Commercial Office and Branch: Via Villafranca,60  
33083 TAIEDO DI CHIONS (PN) IT  
P.IVA: IT 01752340933 R.E.A.101809  
mail: info@sinpec.eu tel. +39 0434 1696583

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Industrial Batteries