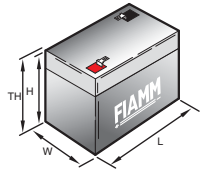


TP*: Terminal Position



- Faston
- Wire + Connector
- Bolt and Nut



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

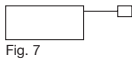


Fig. 7

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
- + More than 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 | 0.315 | 97 | 24 | 52 | 59 | 0 ÷ 40 | -20 ÷ 50 | -20 ÷ 50 | 5 | Faston 4.8 |
| FG10301 | ● | 6 | 3.0 | 2.7 | 2.55 | 1.95 | 0.715 | 134 | 34 | 60 | 67 | | | | 2 | Faston 4.8 |
| FG10381 | | 6 | 3.8 | 2.88 | 2.72 | 2.08 | 0.710 | 66 | 33 | 118 | 125 | | | | 3 | Faston 4.8 |
| FG10451 | | 6 | 4.5 | 3.6 | 3.4 | 2.6 | 0.700 | 70 | 47 | 100 | 106 | | | | 1 | Faston 4.8 |
| FG10721 | | 6 | 7.2 | 6.3 | 5.95 | 4.55 | 1.225 | 151 | 34 | 94 | 100 | | | | 3 | Faston 4.8 |
| FG11201/2 | ● | 6 | 12 | 10.8 | 9.6 | 7.5 | 1.900 | 151 | 50 | 93 | 99 | | | | 2 | Faston 4.8 / 6.3 |
| FG20086 | | 12 | 0.8 | 0.72 | 0.63 | 0.53 | 0.350 | 96 | 25 | 62 | 62 | 0 ÷ 40 | -20 ÷ 50 | -20 ÷ 50 | 7 | Wire+Connector |
| FG20121 | ● | 12 | 1.2 | 1.06 | 0.98 | 0.8 | 0.630 | 97 | 49 | 51 | 57 | | | | 4 | Faston 4.8 |
| FG20121A | ● | 12 | 1.2 | 1.08 | 1.0 | 0.78 | 0.600 | 97 | 43 | 52 | 59 | | | | 4 | Faston 4.8 |
| FG20201 | ● | 12 | 2.0 | 1.83 | 1.65 | 1.37 | 0.930 | 178 | 35 | 60 | 67 | | | | 2 | Faston 4.8 |
| FG20271 | | 12 | 2.7 | 2.43 | 2.25 | 1.76 | 1.130 | 79 | 56 | 99 | 105 | | | | 3 | Faston 4.8 |
| FG20341 | | 12 | 3.4 | 3.0 | 2.9 | 2.2 | 1.410 | 134 | 67 | 60 | 67 | | | | 4 | Faston 4.8 |
| FG20451 | | 12 | 4.5 | 4.1 | 3.8 | 3.0 | 1.580 | 90 | 70 | 101 | 107 | | | | 3 | Faston 4.8 |
| FG20721/2 | ● | 12 | 7.2 | 6.7 | 6.0 | 5.0 | 2.430 | 151 | 65 | 94 | 100 | | | | 4 | Faston 4.8 / 6.3 |
| FG21201/2 | ● | 12 | 12 | 11.3 | 10 | 8.4 | 3.730 | 151 | 98 | 95 | 100 | | | | 4 | Faston 4.8 / 6.3 |
| FG21703 | ● | 12 | 17 | 15.5 | 13.9 | 11.2 | 5.900 | 181 | 76 | 167 | 167 | | | | 6 | Flag Ø5.5 |
| FG21803 | | 12 | 18 | 16.9 | 15 | 12.7 | 5.900 | 181 | 76 | 167 | 167 | | | | 6 | Flag Ø5.5 |
| FG22703 | ● | 12 | 27 | 24.4 | 22.1 | 18.4 | 8.500 | 166 | 175 | 125 | 125 | | | | 0 ÷ 40 | -20 ÷ 50 |
| FG24204 | ● | 12 | 42 | 37.9 | 34.4 | 28.5 | 13.80 | 197 | 165 | 170 | 170 | 6 | Flag Ø6.5 | | | |
| FG27004 | ● | 12 | 70 | 64.4 | 58.5 | 47.4 | 22.60 | 350 | 166 | 174 | 174 | 6 | Flag Ø6.5 | | | |

*TH = total height including terminals

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 |

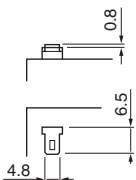
Constant Power discharge table (Watts per bloc)

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

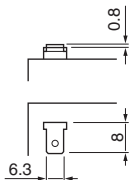
| Model | 5 min | 10 min | 15 min | 20 min | 30 min | 45 min | 1 hour | 2 hours | 3 hours | 5 hours | 10 hours | 20 hours |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|----------|----------|
| FG20451 | 145 | 106 | 80.8 | 66.1 | 47.5 | 35.2 | 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

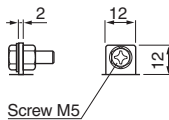
■ Faston 4.8



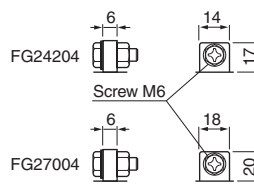
■ Faston 6.3



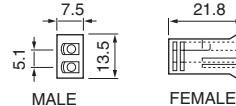
■ Flag Ø5.5



■ 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

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