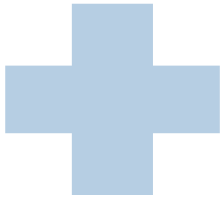
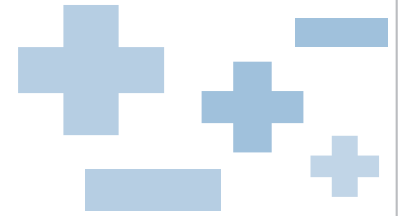


# FIAMM

Industrial Batteries

# FGHL

series



### Applications and Key Benefits

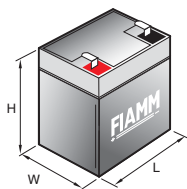
- + Designed to achieve optimal performance and to protect from power disturbances
- Ideal for:
  - High rate discharge UPS application
  - Emergency power supply systems
  - IT network operations & data centers
  - Security & alarm systems
- + 12V monoblocs
- + Excellent performance for high rate discharge
- + 10 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*	
12FGHL22	12	5.0	1.90	90	70	101	107	55.2
12FGHL28	12	7.2	2.65	151	65	94	100	51.0
12FGHL34	12	9.0	2.85	151	65	94	100	33.6
12FGHL48	12	12	4.20	151	98	95	100	27.5

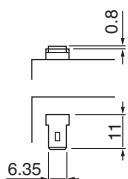
\*TH = total height including terminals

### Terminal Type

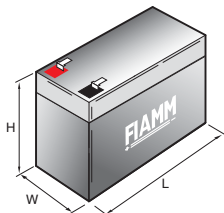
12FGHL22



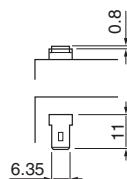
■ Faston 6.3



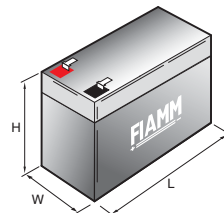
12FGHL28



■ Faston 6.3



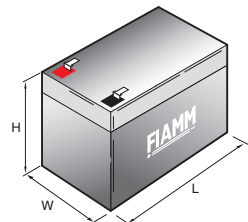
12FGHL34



■ Faston 6.3



12FGHL48



■ Faston 6.3





## 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
12FGHL22	1.6 V/Cell	235	170	126	102	75.2	54.9	43.9
	1.67 V/Cell	230	164	125	101	74.7	54.8	43.8
	1.7 V/Cell	223	160	123	99	74.1	54.5	43.6
	1.8 V/Cell	200	146	114	95	71.8	51.7	41.3
12FGHL28	1.6 V/Cell	308	210	160	131	94.8	70.2	56.8
	1.67 V/Cell	295	204	157	128	93.3	69.3	56.0
	1.7 V/Cell	287	201	155	127	92.8	69.0	55.8
	1.8 V/Cell	264	191	150	124	90.7	67.6	54.7
12FGHL34	1.6 V/Cell	377	264	201	163	119	85.2	63.4
	1.67 V/Cell	374	262	199	161	118	84.7	62.9
	1.7 V/Cell	371	260	197	160	117	84.2	62.5
	1.8 V/Cell	356	248	188	154	114	82.1	60.8
12FGHL48	1.6 V/Cell	486	341	260	210	154	110	81.8
	1.67 V/Cell	483	338	257	208	153	109	81.3
	1.7 V/Cell	479	336	254	206	152	109	80.8
	1.8 V/Cell	460	321	243	199	147	106	78.5

## 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 terminals
- **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 IEC 707 FV0 and UL 94 V0 (LOI greater than 28%) flame retardant plastics
- **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
- BS 6290 Part 4 - specifications for VRLA classification
- UL Recognized
- Eurobat "High Performance" - 10-12 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