

FIAMM

Reserve
Power Solutions

FGL

series



Applications and Key Benefits

- + Designed to achieve optimal performance and to protect from power disturbances
- Ideal for:
 - Emergency lighting
 - Signaling
 - Security & alarm systems
 - Industry & process control
 - UPS application
 - Minor traction
 - Renewable energy storage
- + Optimized for discharge up to 20 hours
- + 10 year 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)				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*	
12FGL17**	12	17	15.5	14	12	5.95	181	76	167	167	Round M5
12FGL27	12	27	24	22	18	9.00	166	175	125	125	Round M5
12FGL33	12	33	30	27	22	11.5	196	130	159	164	Round M6
12FGL42	12	42	38	34	29	13.8	197	165	170	170	Round M6
12FGL55	12	55	50	45	37	18.2	229	138	207	212	Round M6
12FGL70	12	70	63	58	49	22.4	272	166	191	195	Round M6
12FGL70/L	12	70	62	57	48	22.6	350	166	175	175	Round M6
12FGL80	12	80	73	67	54	25.3	259	168	208	213	Round M8
12FGL100	12	100	94	85	71	32.0	329	172	214	221	Round M6
12FGL120	12	120	112	102	85	37.7	407	173	220	225	Round M8
12FGL150	12	150	141	127	106	44.6	483	170	220	220	Round M8
12FGL205	12	205	190	172	142	62.9	500	226	235	235	Round M8

*TH = total height including terminals

** model made in ABS IEC 707 FV0 flame retardant plastics

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:** threaded inserts provide high conductivity, retain required torque values and allow for easy installation
- **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
- **Flame arrestors** prevent any errant spark or flame from entering the battery
- **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

Constant Current discharge table (Amperes)

Final Voltage: 1.67 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
12FGL17	54.5	36.8	27.9	22.7	16.9	12.6	10.2	5.92	4.35	2.89	1.60	0.88
12FGL27	86.5	61.7	47.8	39.4	29.4	21.4	17.0	9.59	6.88	4.52	2.51	1.38
12FGL33	106	75.4	58.5	48.1	35.9	26.1	20.7	11.7	8.40	5.52	3.07	1.69
12FGL42	141	98.2	75.3	61.2	45.9	33.4	26.2	14.5	10.5	6.96	3.88	2.15
12FGL55	163	122	97.2	80.3	60.2	44.0	34.7	19.4	13.9	9.14	5.09	2.81
12FGL70	195	150	120	100	75.5	55.1	43.7	24.5	17.7	11.6	6.47	3.59
12FGL70/L	191	147	118	98.4	74.0	54.0	42.8	24.0	17.3	11.4	6.34	3.52
12FGL80	243	181	143	119	89.8	65.4	51.5	28.7	20.4	13.3	7.58	4.05
12FGL100	309	230	184	152	113	81.6	64.5	35.9	25.5	16.7	9.45	5.07
12FGL120	389	284	224	185	135	98.1	77.3	43.1	30.6	20.1	11.4	6.08
12FGL150	455	334	267	221	165	121	96.4	53.8	38.3	25.1	14.2	7.60
12FGL205	617	454	358	296	220	162	129	73.6	52.2	34.1	19.3	10.3

Constant Power discharge table (Watts per bloc)

Final Voltage: 1.67 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
12FGL17	547	381	294	244	185	140	115	67.7	50.3	33.6	18.7	10.3
12FGL27	868	637	504	423	321	238	192	110	79.3	52.5	29.2	16.2
12FGL33	1061	779	617	517	393	291	235	134	96.9	64.1	35.7	19.8
12FGL42	1418	1011	794	657	502	372	296	166	121	80.9	45.2	25.1
12FGL55	1639	1268	1023	862	659	492	393	221	160	106	59.3	32.9
12FGL70	1960	1545	1281	1076	826	614	493	281	204	135	75.4	41.9
12FGL70/L	1921	1514	1255	1054	810	602	483	275	200	133	73.9	41.1
12FGL80	2552	1935	1553	1295	988	725	575	324	231	152	87.1	46.8
12FGL100	3240	2462	1988	1657	1240	906	718	405	289	190	109	58.5
12FGL120	4085	3045	2422	2011	1494	1087	862	486	347	229	131	70.2
12FGL150	4772	3586	2900	2408	1820	1346	1075	607	434	286	163	87.7
12FGL205	6477	4862	3875	3231	2426	1796	1444	830	593	391	223	120

Electrical Characteristics

Recharge methods:

- standby use: 13.50 - 13.80 V/bloc
- initial charge current: 0.20 - 0.25 C₂₀

Operating temperature ranges:

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

Applicable Standards

- IEC 60896 Part 21 - VRLA methods of testing
- IEC 60896 Part 22 - VRLA requirements
- UL Recognized
- Eurobat "High Performance" - 10-12 years

FIAMM Manufacturing

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