

FIAMM

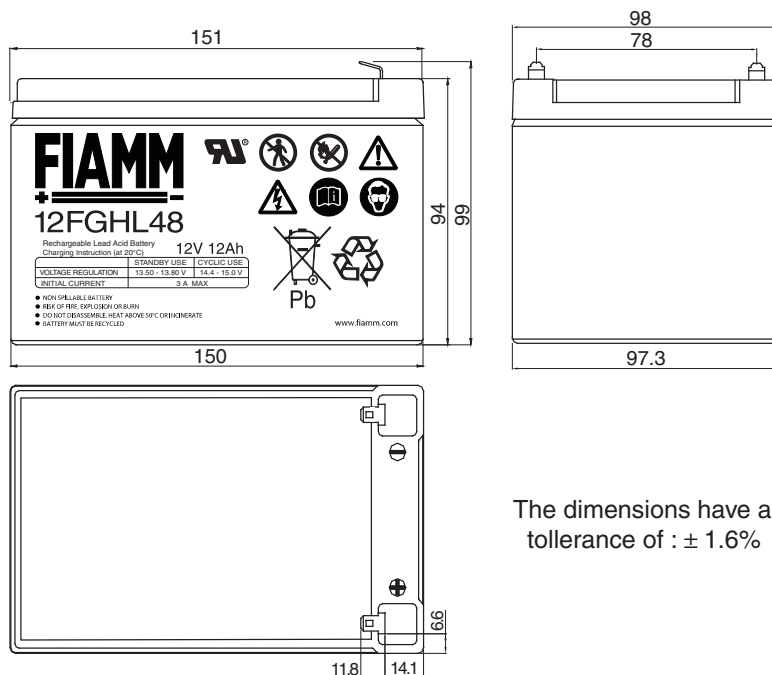
Industrial Batteries

FGHL
series**12FGHL48****12 Volt**
12 Ah

12FGHL48 is specially designed for high efficient discharge application. It is a high power density range with a design life of 10 years. FIAMM is a Manufacturer of VRLA batteries and is supported by a dedicated sales network with market knowledge and experience of small sealed lead acid battery applications.

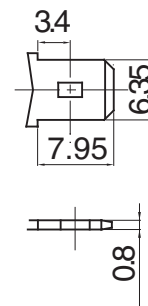
Features

Nominal Voltage	12 Volt
Nominal Capacity	43.3 W @ 15 min-rate to 1.6 Vpc at 25 °C 12.0 Ah 20 hours rate to 1.75 Vpc at 25 °C
Float charging voltage	13.50 - 13.80 V/bloc at 25 °C
Boost charge voltage	14.40 - 15.00 V/bloc at 25 °C
Float voltage compensation	-18mV/°C
Maximum charging current	3.00 A
Case	ABS with HB flammability rate (according UL 94)
Internal resistance	14.8 mΩ in full charged condition
Weight	4.20 kg
Dimensions	L x W x H (TH): 151 x 98 x 94 (99)
Operative temperature range	-20 °C to 50 °C
Shelf life procedures	As batteries lose part of their capacity, during storage, due to self discharge. Fiamm recommends FGH range of batteries can be stored for 6 months at an ambient temperature of 20 and 25 °C (see attached graph on reverse). Longer storage requires a recharge. This should be carried out in line with Fiamm recommended method; 2.4 V/cell for no longer than 24 hours at 20 °C



The dimensions have a tolerance of : $\pm 1.6\%$

Faston 6.3 mm



SSLA Products

12FGHL48 12 Volt 12 Ah

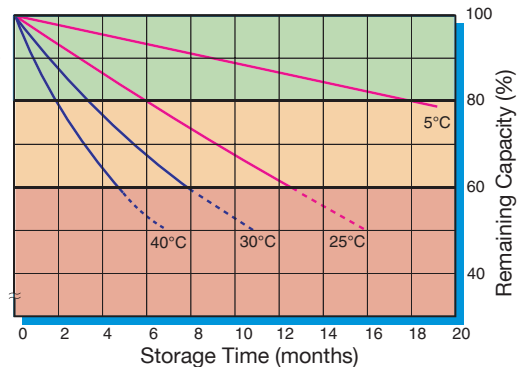


Capacity loss
during storage
at various
temperatures

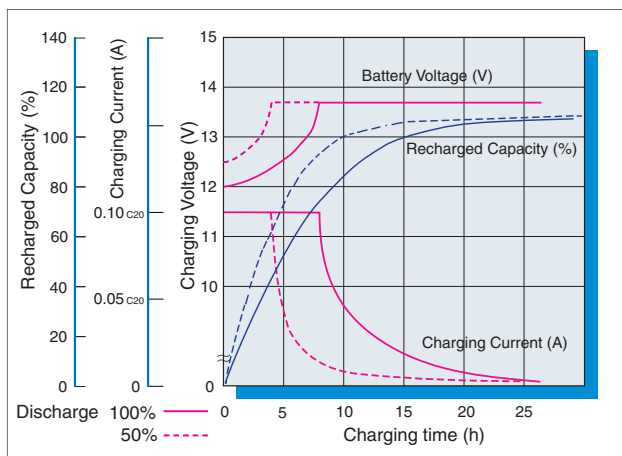
The battery can be used
without refreshing charge

Refreshing charge at 2.4
Vpc for 24 hours (at 20-
25°C) must be applied as
soon as possible.

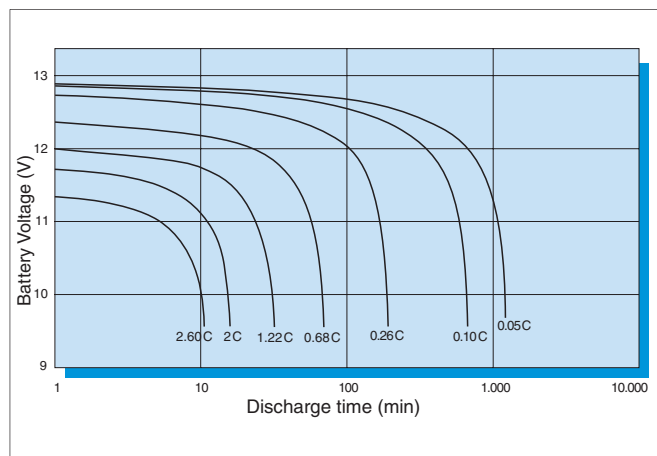
Refreshing charge of 2.4
Vpc may be insufficient to
recover the battery capacity.
It is important to avoid
this area



Battery Voltage and Charge Time for Standby Use (at 25°C)



Discharge curves at different current / final voltage (at 25°C)



Costant Current discharge table (Amperes)

End voltage	5 min	10 min	15 min	20 min	30 min	45 min	1 hour	2 hrs	3 hrs	5 hrs
9.60 V	48.7	33.3	24.8	19.7	14.1	9.89	7.28	3.93	2.76	1.77
9.90 V	48.3	32.9	24.5	19.5	14.0	9.83	7.23	3.90	2.75	1.76
10.02 V	48.0	32.7	24.4	19.4	13.9	9.79	7.20	3.88	2.73	1.75
10.20 V	47.6	32.4	24.0	19.2	13.8	9.73	7.14	3.84	2.70	1.74
10.50 V	46.7	31.7	23.4	18.8	13.6	9.58	7.02	3.74	2.65	1.71
10.80 V	45.3	30.7	22.7	18.3	13.2	9.40	6.89	3.68	2.55	1.63

Costant Power discharge table (Watts per bloc)

End voltage	5 min	10 min	15 min	20 min	30 min	45 min	1 hour	2 hrs	3 hrs	5 hrs
9.60 V	486	341	260	210	154	110	81.8	44.8	31.7	20.5
9.90 V	484	340	258	209	153	110	81.6	44.6	31.6	20.5
10.02 V	483	338	257	208	153	109	81.3	44.4	31.5	20.4
10.20 V	479	336	254	206	152	109	80.8	44.0	31.3	20.3
10.50 V	471	330	249	203	150	108	79.7	43.2	30.8	20.1
10.80 V	460	321	243	199	147	106	78.5	42.7	29.8	19.1