

FIAMM

Industrial Batteries

ENDURLITE

SGL-SGH

series



FIAMM's **SGL-SGH** battery range can be used in standby mode for duties requiring high performance and deep discharge. The SGL-SGH battery range is specially designed to ensure the highest reliability for special application such as switchgears, power stations, etc... Its extra thick pure lead planté plates and a high reliability post seal guarantee a long life even in the worst operating conditions. The life of this range can get to 25 years in float operation and benign temperature environment.

FIAMM has a program of continuous improvement investing in manufacturing processes, equipment and technology.

FIAMM's Standby Battery manufacture is in compliance with ISO 9001 and ISO 14001 quality assurance. Our continuous investment in battery technology is reflected by means of premium products that are of the highest quality and reliability.

FIAMM's **SGL-SGH** pure lead planté vented lead acid batteries are the ideal energy source for many different standby applications.

Technical Features

Positive plates are planté type, cast from pure lead to ensure there is no fall-off in capacity throughout their long life

Negative plates are of rugged pasted grid construction with a service life compatible with the positive plates

Separators are microporous, giving maximum electrolyte utilisation

Cell containers are moulded from high quality transparent SAN (styrene acrylonitrile)

Vent plugs cells incorporate flame retardant ceramic plugs that filter out any drops of electrolyte from the escaping gases preventing any errant spark or flame from entering the battery

Terminals: female threaded terminals (M10) ensure perfect contact and a low resistance with the flexible cable connectors

Post seals: high integrity post seal design to avoid electrolyte leakage and terminal corrosion

Electrolyte: it consists of diluted sulphuric acid with a specific gravity of $1.22 \pm 0.01 \text{ Kg/dm}^3$ at 20°C

Connectors: flexible, fully insulated cable connectors screwed to the terminal with an insulated screw having a probe hole on the top for electrical measurement

Applicable Standards

DIN 40738

IEC 60896 part 11

BS 6290 part 2

Product Features

- + The best reliability in the lead-acid batteries technologies
- + Very long life
- + High performance

Standby Products



SGL-SGH series

DIN 40738 STANDARD		CELL TYPE	CAPACITY (AH) at 20°C				WEIGHT (kg)		ELECTROLYTE	DIMENSIONS (mm)		
Type	Nominal Capacity 10 hrs, 1.80 VPC		10 hrs rate to 1.80	5 hrs rate to 1.80	3 hrs rate to 1.80	1 hr rate to 1.70	with electrolyte	without electrolyte	(Litres)	Length	Width	Height
3 GroE 75	75	SGL 7D	79	66	60	45	17.5	10.9	5.4	182	153	415
4 GroE 100	100	SGL 9D	105	88	80	60	19.7	13.3	5.2	182	153	415
5 GroE 125	125	SGL 11D	131	110	100	75	21.9	15.7	5.1	182	153	415
6 GroE 150	150	SGL 13D	155	132	120	90	24.1	18.1	4.9	182	153	415
7 GroE 175	175	SGL 15D	183	154	140	105	26.3	20.5	4.8	182	153	415
8 GroE 200	200	SGL 17D	209	176	160	120	33.2	23.8	7.7	182	228	415
9 GroE 225	225	SGL 19D	235	198	180	135	35.4	26.2	7.5	182	228	415
10 GroE 250	250	SGL 21D	261	220	200	150	37.6	28.6	7.4	182	228	415
11 GroE 275	275	SGL 23D	287	242	220	165	39.8	31.0	7.2	182	228	415
12 GroE 300	300	SGL 25D	314	264	240	180	42.0	33.4	7.0	182	228	415
13 GroE 325	325	SGL 27D	340	286	260	195	52.5	38.4	11.6	182	340	415
14 GroE 350	350	SGL 29D	366	308	280	210	54.6	40.8	11.3	182	340	415
15 GroE 375	375	SGL 31D	392	330	300	225	56.7	43.2	11.1	182	340	415
16 GroE 400	400	SGL 33D	418	352	320	240	58.9	45.6	10.9	182	340	415
17 GroE 425	425	SGL 35D	444	374	340	255	61.0	48.0	10.6	182	340	415
18 GroE 450	450	SGL 37D	470	396	360	270	63.0	50.4	10.3	182	340	415
5 GroE 500	500	SGH 11D	550	440	400	300	96	64	26.6	328	268	607
6 GroE 600	600	SGH 13D	660	528	480	360	106	73	26.4	328	268	607
7 GroE 700	700	SGH 15D	770	616	560	420	114	82	26.2	328	268	607
8 GroE 800	800	SGH 17D	880	704	640	480	123	92	25.4	328	268	607
9 GroE 900	900	SGH 19D	990	792	720	540	132	102	24.6	328	268	607
10 GroE 1000	1000	SGH 21D	1100	880	800	600	141	112	23.8	328	268	607
11 GroE 1100	1100	SGH 23D	1210	968	880	660	150	122	23.0	328	268	607
12 GroE 1200	1200	SGH 25D	1320	1056	960	720	174	135	32.0	328	348	607
13 GroE 1300	1300	SGH 27D	1430	1144	1040	782	182	144	31.1	328	348	607
14 GroE 1400	1400	SGH 29D	1540	1232	1120	840	191	154	30.3	328	348	607
15 GroE 1500	1500	SGH 31D	1650	1320	1200	900	199	163	29.5	328	348	607
16 GroE 1600	1600	SGH 33D	1760	1408	1280	960	225	176	40.2	328	438	607
17 GroE 1700	1700	SGH 35D	1870	1496	1360	1020	234	186	39.3	328	438	607
18 GroE 1800	1800	SGH 37D	1980	1584	1440	1080	242	195	38.5	328	438	607
19 GroE 1900	1900	SGH 39D	2090	1672	1520	1140	251	205	37.7	328	438	607
20 GroE 2000	2000	SGH 41D	2200	1760	1600	1200	259	214	36.9	328	438	607
21 GroE 2100	2100	SGH 43D	2310	1848	1680	1260	295	237	47.5	328	529	607
22 GroE 2200	2200	SGH 45D	2420	1936	1760	1320	303	246	46.7	328	529	607
23 GroE 2300	2300	SGH 47D	2530	2024	1840	1380	312	256	45.5	328	529	607
24 GroE 2400	2400	SGH 49D	2640	2112	1920	1440	320	265	45.1	328	529	607
25 GroE 2500	2500	SGH 51D	2750	2200	2000	1500	337	278	48.4	328	574	607
26 GroE 2600	2600	SGH 53D	2860	2288	2080	1560	346	288	47.5	328	574	607

Electrical Characteristics

- ✦ NOMINAL VOLTAGE: 2 V/cell
- ✦ FLOAT VOLTAGE CHARGE AT 20°C: 2.23 V/cell
- ✦ BOOST CHARGE: 2.4 V/cell with a maximum current of $0.15 \times C_{10}$ (A)
- ✦ INTERNAL RESISTANCE: SGL cells = $0.1 \times 1/C_{10}$ Ohm; SGH cells = $0.13 \times 1/C_{10}$ Ohm
- ✦ MAXIMUM SHORT CIRCUIT CURRENT: for fully charged cells and without the voltage losses associated with connectors, SGL cells = $20 \times C_{10}$ (A), SGH cells = $16 \times C_{10}$ (A)

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