SGL-SGH
range

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 ± 0.01 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 896 part 1

PRODUCT FEATURES

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

Standby Batteries

SGL-SGH range

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CELL TYPE	EQUIVALENT DIN TYPE	NOMINAL CAPACITY in Ah at 20°C				DIMENSIONI			WEIGHT (kg)		Electrolyte volume (Litres)
		10 hrs rate to 1.80 VPC	5 hrs rate to 1.80 VPC	3 hrs rate to 1.80 VPC	1 hrs rate to 1.70 VPC	Lenght	Width	Height (Total)	with electrolyte	without electrolyte	
SGL 7D	3 GroE 75	75	66	60	45	153	182	413	17.5	10.9	5.4
SGL 9D	4 GroE 100	100	88	80	60	153	182	413	19.7	13.3	5.2
SGL 11D	5 GroE 125	125	110	100	75	153	182	413	21.9	15.7	5.1
SGL 13D	6 GroE 150	150	132	120	90	153	182	413	24.1	18.1	4.9
SGL 15D	7 GroE 175	175	154	140	105	153	182	413	26.3	20.5	4.8
SGL 17D	8 GroE 200	200	176	160	120	228	182	413	33.2	23.8	7.7
SGL 19D	9 GroE 225	225	198	180	135	228	182	413	35.4	26.2	7.5
SGL 21D	10 GroE 250	250	220	200	150	228	182	413	37.6	28.6	7.4
SGL 23D	11 GroE 275	275	242	220	165	228	182	413	39.8	31.0	7.2
SGL 25D	12 GroE 300	300	264	240	180	228	182	413	42.0	33.4	7.0
SGL 27D	13 GroE 325	325	286	260	195	340	182	413	52.5	38.4	11.6
SGL 29D	14 GroE 350	350	308	280	210	340	182	413	54.6	40.8	11.3
SGL 31D	15 GroE 375	375	330	300	225	340	182	413	56.7	43.2	11.1
SGL 33D	16 GroE 400	400	352	320	240	340	182	413	58.9	45.6	10.9
SGL 35D	17 GroE 425	425	374	340	255	340	182	413	61.0	48.0	10.6
SGL 37D	18 GroE 450	450	396	360	270	340	182	413	63.0	50.4	10.3
SGH 11D	5 GroE 500	500	440	400	300	328	268	605	96	64	26.6
SGH 13D	6 GroE 600	600	528	480	360	328	268	605	106	73	26.4
SGH 15D	7 GroE 700	700	616	560	420	328	268	605	114	82	26.2
SGH 17D	8 GroE 800	800	704	640	480	328	268	605	123	92	25.4
SGH 19D	9 GroE 900	900	792	720	540	328	268	605	132	102	24.6
SGH 21D	10 GroE 1000	1000	880	800	600	328	268	605	141	112	23.8
SGH 23D	11 GroE 1100	1100	968	880	660	328	268	605	150	122	23.0
SGH 25D	12 GroE 1200	1200	1056	960	720	328	348	605	174	135	32.0
SGH 27D	13 GroE 1300	1300	1144	1040	782	328	348	605	182	144	31.1
SGH 29D	14 GroE 1400	1400	1232	1120	840	328	348	605	191	154	30.3
SGH 31D	15 GroE 1500	1500	1320	1200	900	328	348	605	199	163	29.5
SGH 33D	16 GroE 1600	1600	1408	1280	960	328	438	605	225	176	40.2
SGH 35D	17 GroE 1700	1700	1496	1360	1020	328	438	605	234	186	39.3
SGH 37D	18 GroE 1800	1800	1584	1440	1080	328	438	605	242	195	38.5
SGH 39D	19 GroE 1900	1900	1672	1520	1140	328	438	605	251	205	37.7
SGH 41D	20 GroE 2000	2000	1760	1600	1200	328	438	605	259	214	36.9
SGH 43D	21 GroE 2100	2100	1848	1680	1260	328	529	605	295	237	47.5
SGH 45D	22 GroE 2200	2200	1936	1760	1320	328	529	605	303	246	46.7
SGH 47D	23 GroE 2300	2300	2024	1840	1380	328	529	605	312	256	45.5
SGH 49D	24 GroE 2400	2400	2112	1920	1440	328	529	605	320	265	45.1
SGH 51D	25 GroE 2500	2500	2200	2000	1500	328	574	605	337	278	48.4
SGH 53D	26 GroE 2600	2600	2288	2080	1560	328	574	605	346	288	47.5

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 x C10 (A)
- **MAXIMUM SHORT CIRCUIT CURRENT:** for fully charged cells and without the voltage losses associated with connectors, SGL cells = 20 x C_{10} (A), SGH cells = 16 x C_{10} (A)
- **INTERNAL RESISTANCE:** SGL cells = 0.1 x $1/C_{10}$ Ohm; SGH cells = 0.13 x $1/C_{10}$ Ohm

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