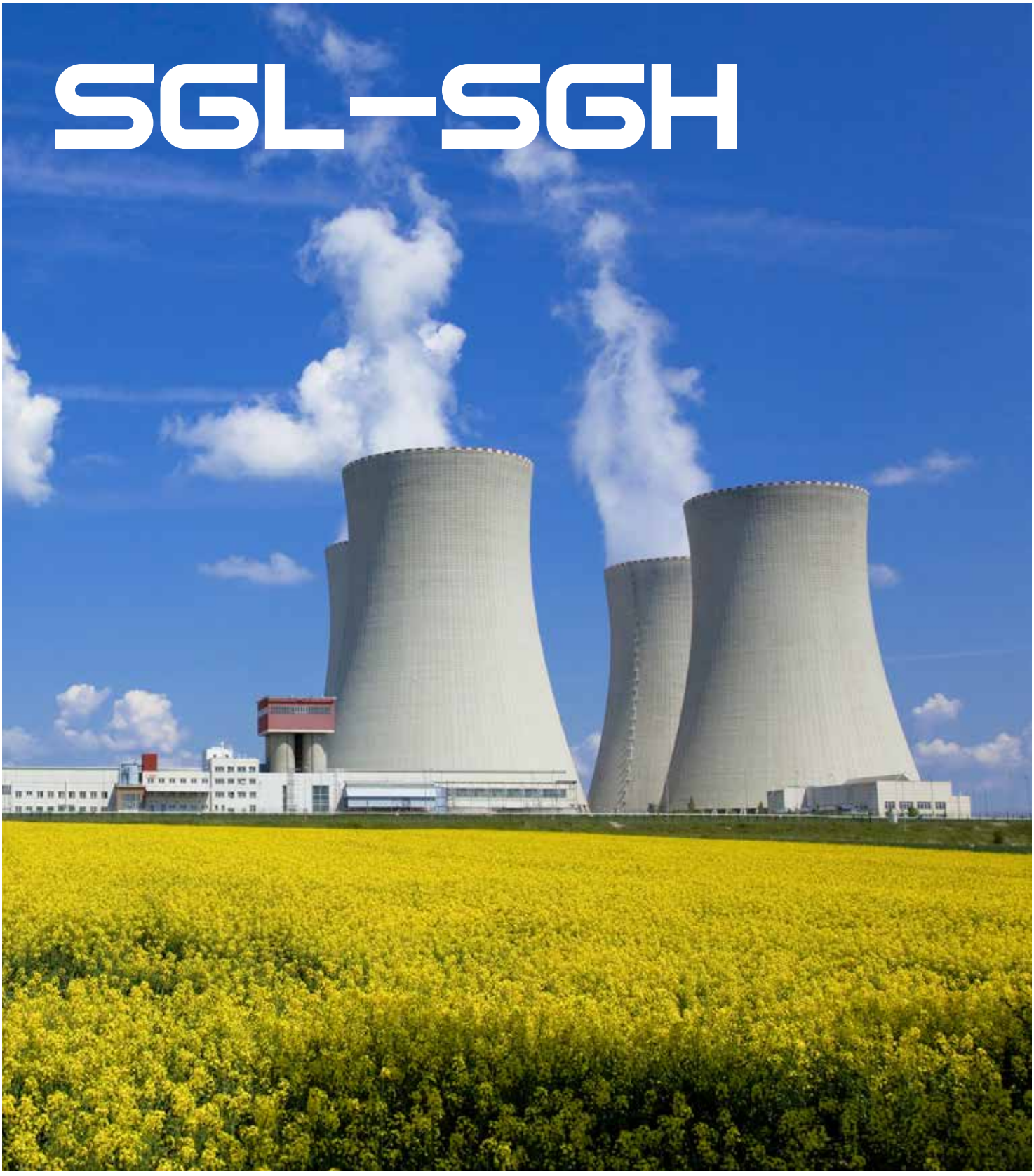
SGL-SGH



SGL-SGH Battery Range

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THE SGL-SGH BATTERY SERIES THE REFERENCE RANGE IN TERMS OF GROE VENTED BATTERIES FOR FIAMM AND DESIGNED TO MEET DIN 40738 NORM.

SGL SGH CELLS DIFFERENTIATE FROM TRADITIONAL FLOODED BATTERIES THROUGH PLANTÉ POSITIVE PURE LEAD PLATE WHICH BRINGS A UNIQUE LAMINATE DESIGN. THE ROBUST DESIGN IS CONSTRUCTED TO PROVIDE A DEEP DISCHARGE AND HIGH RATE PERFORMANCES WITH AN UNSURPASSED DESIGN LIFE OF 25 YEARS. THE PURE LEAD POSITIVE ALLOY PLATE GRANTS A VERY LOW WATER CONSUMPTION THAT MEANS LIMITED MAINTENANCE DURING PRODUCT LIFE (SINGLE TOPPING UP IN 3 YEARS IN FLOAT CONDITIONS); THE DESIGN IS OPTIMIZED TO LIMIT THE SELF-DISCHARGE DURING THE STORAGE PERIOD. THE RANGE IS FULLY ECO-FRIENDLY WITH ALL COMPONENTS BEING FULLY RECYCLABLE.

MAIN APPLICATIONS:


INDUSTRIAL UPS


UTILITIES AND INDUSTRY

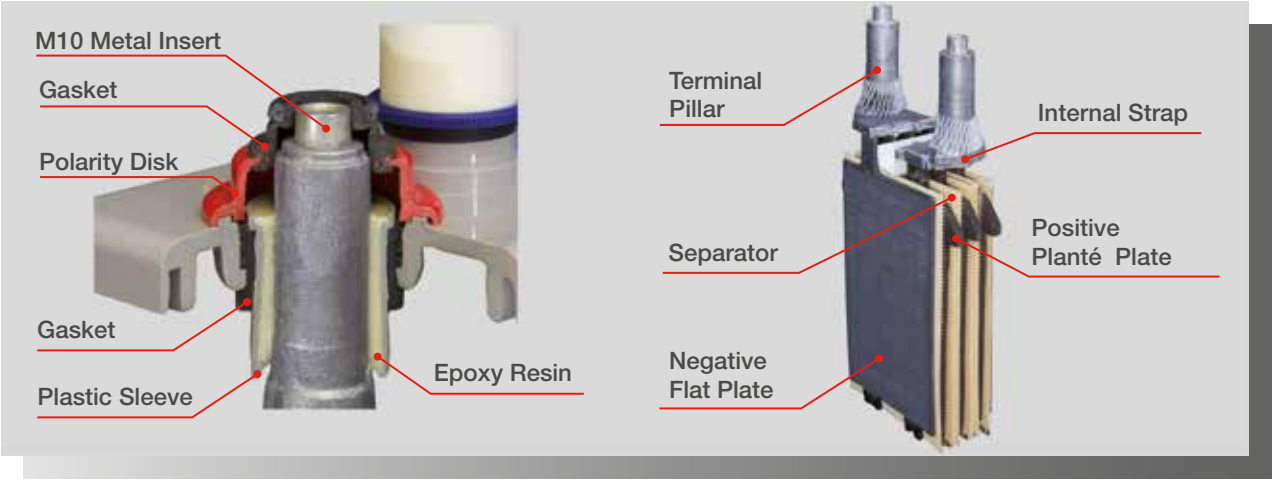

OIL & GAS

SPECIFICATIONS

The positive Planté plate is composed of 99.9% pure lead resulting in low capacity loss during life and excellent corrosion resistance
A complimentary and robust negative flat plate compriding of an armoured grid provides high reliability
Electrolyte: sulphuric acid electrolyte with low specific gravity of 1.22 kg/l at 20°C
Low internal resistant due to high porosity separators material
Transparent SAN box provides an immediate inspection of electrolyte level
The lid is composed of ABS plastic with a handy service hole to permit a quick and easy measurements of the electrolyte density
The vent plug is made of porous flameproof material for a superior safety
A long shelf life of up to six months is possible without recharge (<2% discharge per month)
The metallic threaded insert on terminals ensures the highest conductivity and provides maximum torque retention and easy installation*
Flexible connections ensure a safe link between terminals*
The connecting bolt is fully insulated but with probe hole on the top to grant electrical measurements*

* SGL SGH range is available also with flat pillars. This version uses rigid connection and standard stainless steel screws.

TECHNOLOGY



THE CELL CONSTRUCTION PERMITS PLATE GROWTH DURING CELL LIFE WITHOUT LEAKAGE; IN FACT POSITIVE PLATES ARE SUSPENDED STANDING ON INTERNAL BOX BACKINGS. THIS TECHNICAL FEATURE ALLOWS THE POSITIVE PLATE GROWTH WITHOUT ANY MECHANICAL STRESS ON THE LID FOR ALL PRODUCT LIFE.

THE SGL SGH RANGE DESIGN LIFE IS 25 YEARS THANKS TO HIGH RELIABILITY AND ROBUST COMPONENTS MANUFACTURE. LOW SELF-DISCHARGE ALLOWS TILL 6 MONTHS WITHOUT RECHARGE IN OPEN CIRCUIT CONDITION. ALL SGL SGH MODELS ARE AVAILABLE IN A DRY CHARGE VERSION.

CELL TYPE	REFERENCE DIN 40738	NOMINAL CAPACITY (Ah) 10 H to 1.8VPC at 20°C	SHORT CIRCUIT CURRENT (A) IEC 60896-11	INTERNAL RESISTANCE (mOhm) IEC 60896-11	NOMINAL DIMENSION (mm) Lenght	Width	Height	ELECTROLYTE QUANTITY (liters)	TYPICAL WEIGHT (with electrolyte) (kg)
SGL 7	3 GroE 75	79	1630	1,216	182	153	415	5.4	17.5
SGL 9	4 GroE 100	105	2160	0,915	182	153	415	5.2	19.7
SGL 11	5 GroE 125	131	2700	0,733	182	153	415	5.1	21.9
SGL 13	6 GroE 150	155	3190	0,620	182	153	415	4.9	24.1
SGL 15	7 GroE 175	183	3770	0,525	182	153	415	4.8	26.3
SGL 17	8 GroE 200	209	4300	0,460	182	228	415	7.7	33.2
SGL 19	9 GroE 225	235	4840	0,409	182	228	415	7.5	35.4
SGL 21	10 GroE 250	261	5380	0,368	182	228	415	7.4	37.6
SGL 23	11 GroE 275	287	5910	0,335	182	228	415	7.2	39.8
SGL 25	12 GroE 300	314	6470	0,306	182	228	415	7.0	42.0
SGL 27	13 GroE 325	340	7000	0,283	182	340	415	11.6	52.5
SGL 29	14 GroE 350	366	7540	0,263	182	340	415	11.3	54.6
SGL 31	15 GroE 375	392	8070	0,245	182	340	415	11.1	56.7
SGL 33	16 GroE 400	418	8610	0,230	182	340	415	10.9	58.9
SGL 35	17 GroE 425	444	9150	0,216	182	340	415	10.6	61.0
SGL 37	18 GroE 450	470	9680	0,204	182	340	415	10.3	63.0
SGH 11	5 GroE 500	550	8800	0.236	328	268	607	26.6	96
SGH 13	6 GroE 600	660	10560	0.197	328	268	607	26.4	106
SGH 15	7 GroE 700	770	12320	0.169	328	268	607	26.2	114
SGH 17	8 GroE 800	880	14080	0.148	328	268	607	25.4	123
SGH 19	9 GroE 900	990	15840	0.131	328	268	607	24.6	132
SGH 21	10 GroE 1000	1100	17600	0.118	328	268	607	23.8	141
SGH 23	11 GroE 1100	1210	19360	0.107	328	268	607	23.0	150
SGH 25	12 GroE 1200	1320	21120	0.098	328	348	607	32.0	174
SGH 27	13 GroE 1300	1430	22880	0.091	328	348	607	31.1	182
SGH 29	14 GroE 1400	1540	24640	0.084	328	348	607	30.3	191
SGH 31	15 GroE 1500	1650	26400	0.079	328	348	607	29.5	199
SGH 33	16 GroE 1600	1760	28160	0.074	328	438	607	40.2	225
SGH 35	17 GroE 1700	1870	29920	0.070	328	438	607	39.3	234
SGH 37	18 GroE 1800	1980	31680	0.066	328	438	607	38.5	242
SGH 39	19 GroE 1900	2090	33440	0.062	328	438	607	37.7	251
SGH 41	20 GroE 2000	2200	35200	0.059	328	438	607	36.9	259
SGH 43	21 GroE 2100	2310	36960	0.056	328	529	607	47.5	295
SGH 45	22 GroE 2200	2420	38720	0.054	328	529	607	46.7	303
SGH 47	23 GroE 2300	2530	40480	0.051	328	529	607	45.5	312
SGH 49	24 GroE 2400	2640	42240	0.049	328	529	607	45.1	320
SGH 51	25 GroE 2500	2750	44000	0.047	328	574	607	48.4	337
SGH 53	26 GroE 2600	2860	45760	0.045	328	574	607	47.5	346

ELECTRICAL CHARACTERISTICS

Float Voltage: 2.23 V/cell at 20°C
Boost Voltage: 2.40 V/cell
Float Voltage Compensation with Temperature: -2.5 mV/cell/°C
Self-Discharge at 20°C: <2%/month

STANDARDS

DIN 40738 – specification GroE cell
IEC 60896 Part 11 – vented types requirements & tests
BS 6290 part 2 – British Standard Planté specifi cation
UK National Grid (with optional nut & bolt terminals)

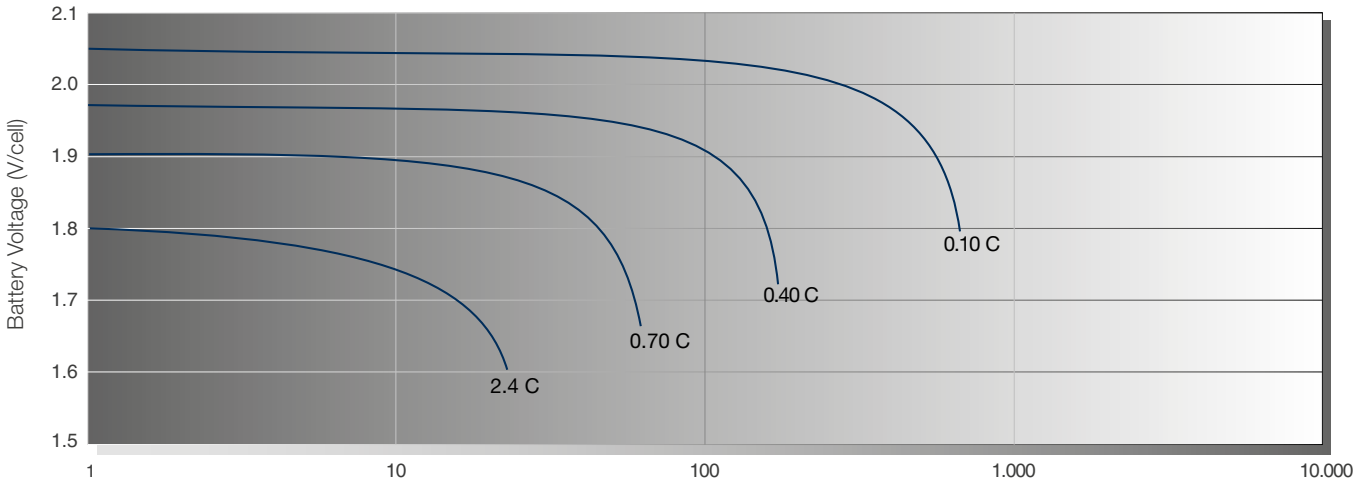
CERTIFICATIONS

ISO 9001
Quality Management System
ISO 14001
Environmental Management System
ISO 45001
Workplace Safety & Health

ACCESSORIES

Recombination plug
Filtering plugs to DIN standard
Racks for battery installation (standard and anti-seismic)
Monitoring system

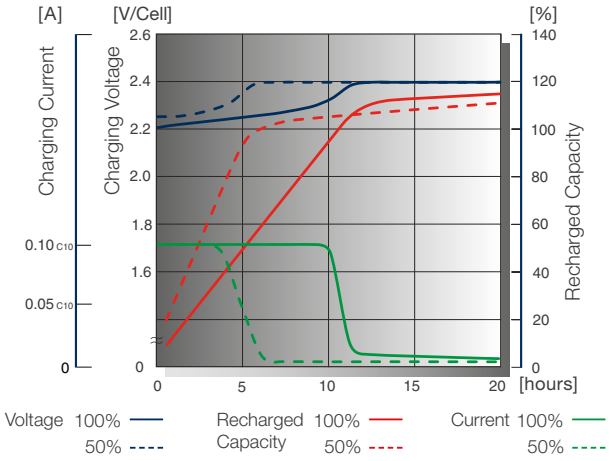
DISCHARGE CURVES at different current / final voltage (at 20°C)



The above discharge curves are typical. For more detailed information please see the specific product sheets.

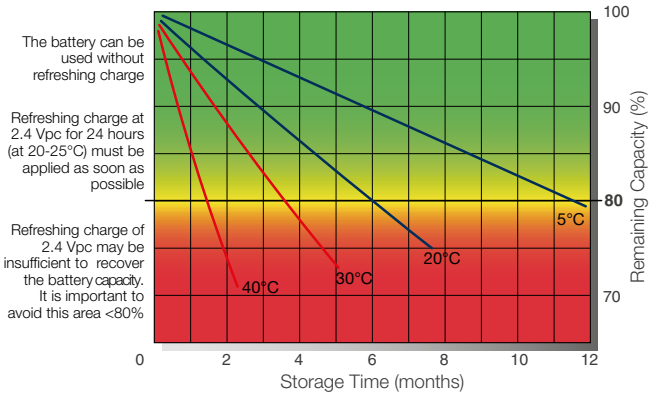
TYPICAL CHARGE CURVES

Battery Voltage and Charge Time for Standby Use (at 20°C)



STORAGE

Capacity loss during storage at various temperatures



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