



FIAMM SMG TUBULAR GEL RANGE IS DESIGNED FOR APPLICATIONS WHERE PERFORMANCE AND OPERATING CONDITIONS ARE CRITICAL. THEY ARE MAINTENANCE-FREE AND COMBINE THE BENEFITS OF A GELLED ELECTROLYTE WHICH PROVIDES LONGER LIFE AND A WIDER TEMPERATURE OPERATING RANGE.

The SMG range is made up of 2 V cells and 12 V blocks. The 2 V cells conform to international OPzV standards DIN 40742 norm. The range is constructed to provide a high level of robustness and is designed for applications where charge-discharge cycles have to be guaranteed with reliability. The range is maintenance-free with a low self-discharge characteristic for periods when batteries may be stored or off float charge. The SMG 2 V cell range can be installed horizontally in dedicated racks saving valuable space. The range is fully eco-friendly with all components being fully recyclable. 12 V front terminal design permits an easy installation.

SPECIFICATIONS

- The positive tubular grid is composed of a special alloy (Pb-Sn-Ca) which is die-cast to guarantee high corrosion resistance.
- The electrolyte is immobilized into GEL structure due to a special silica binding addition.
- Separators have extremely high porosity and provides very low internal resistance.
- ABS cases flame retardant and classified to UL94 V0 with LOI >28% standard for 12V and available on request for 2V cells.
- The vent plug comprises an exhaust valve and porous flameproof disc for a superior safety.
- The metallic threaded insert on terminals ensures the highest conductivity and provides maximum torque retention and easy installation.
- The connecting bolt is fully insulated but with probe hole on the top to grant electrical measurements (2V only).

MAIN APPLICATIONS



TELECOMMUNICATION



INDUSTRIAL UPS



UTILITIES & INDUSTRY



RAILWAYS



OIL & GAS



RENEWABLE ENERGY

TECHNOLOGY

The unique Fiamm terminal design of the 2 V cell permits pillar growth during cell life without leakage. These features avoid mechanical stress on the lid of the cell. The gel electrolyte structure slows the drying out of the cell ensuring an 18 year design life for 2 V cells and 15 years for 12 V batteries. Low self-discharge allows 6 months shelf life.

ACCESSORIES

- RVS (remote venting system) only for 12 V
- Racks for battery installation (standard and anti-seismic)
- Cabinets for battery installation
- Battery monitoring systems

STANDARDS

- DIN 40742 – specification OPzV cells (2V)
- DIN 43539T5 – deep discharge
- IEC 60896 Part 21 – VRLA testing methods
- IEC 60896 Part 22 – VRLA requirements
- Eurobat Guide “Very Long Life” >12 years
- UL recognized (12V)

CERTIFICATIONS

- ISO 9001 - Quality Management System
- ISO 14001- Environmental Management System
- ISO 45001 - Occupational Health and Safety Management System

ELECTRICAL CHARACTERISTICS

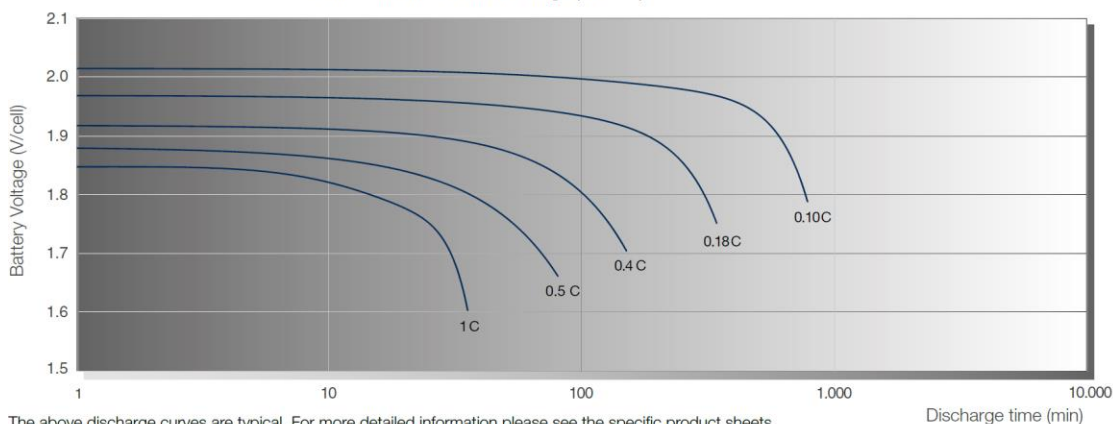
- Float Voltage: 2.25 V/cell at 20°C
- Boost Voltage: 2.40 V/cell
- Float Voltage Compensation with Temperature: -2.5 mV/cell/°C
- Self-Discharge at 20°C: <2%/month



TECHNICAL CHARACTERISTICS

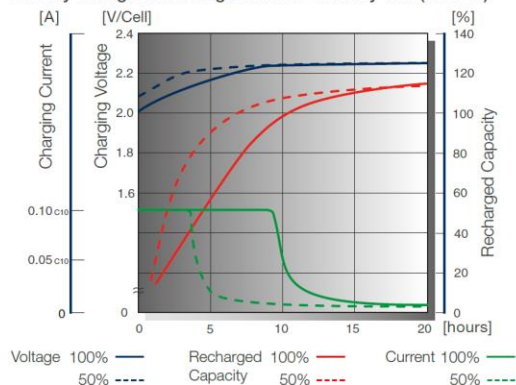
FIAMM SMG								
Battery Type	Reference OPzV DIN 40742	Capacity (Ah) at 20°C 10 hrs to 1,8 VPC	Short Circuit Current (A) IEC 60896-21-22	Internal Resistance (mΩ) IEC 60896-21-22	Dimensions (mm)			Typical Weight (kg)
					Length	Width	Height	
SMG 220	4 OPzV 200	220	2700	0,74	103	206	407	19,0
SMG 275	5 OPzV 250	275	3520	0,592	124	206	407	23,0
SMG 330	6 OPzV 300	330	4100	0,493	145	206	407	26,6
SMG 380	5 OPzV 350	380	3350	0,607	124	206	523	30,0
SMG 460	6 OPzV 420	460	3990	0,502	145	206	523	33,3
SMG 530	7 OPzV 490	530	4640	0,436	166	206	523	39,0
SMG 720	6 OPzV 600	720	6220	0,321	145	206	698	48,5
SMG 960	8 OPzV 800	960	7120	0,284	210	191	700	64,6
SMG 1200	10 OPzV 1000	1200	8820	0,227	210	233	700	80,4
SMG 1440	12 OPzV 1200	1440	10530	0,19	210	275	700	95,1
SMG 1680	12 OPzV 1500	1680	11730	0,17	210	275	849	112
SMG 2005	14 OPzV 1750	2000	13900	0,14	212	399	826	135
SMG 2250	16 OPzV 2000	2250	15810	0,13	212	399	826	151
SMG 2520	18 OPzV 2250	2520	17700	0,11	212	487	826	171
SMG 2800	20 OPzV 2500	2800	20050	0,10	212	487	826	189
SMG 3080	22 OPzV 2750	3080	22055	0,09	212	576	826	208
SMG 3350	24 OPzV 3000	3350	23490	0,09	212	576	826	226
SMG 3640	26 OPzV 3250	3640	25000	0,08	212	576	826	240
12 SMG 100	-	100	1500	7,8	126	558	270	44
12 SMG 130	-	130	1470	8,6	126	558	321	54

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



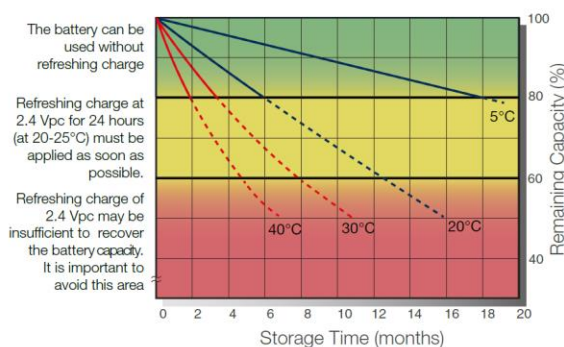
TYPICAL CHARGE CURVES

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



STORAGE

Capacity loss during storage at various temperatures



A2B, s.r.o. reserves the right to change any specifications without prior notice. (74-000092-02)