

STATIONARY BATTERIES LEAD ACID

TECHNOLOGY
NOMINAL VOLTAGE
CAPACITY
LIFE TIME

SERIES SMG OPZV

VRLA GEL
2 Vdc, 12 Vdc
100 Ah to 3640 Ah
18 YEARS / 15 YEARS

The 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 2V cells and 12V blocks. The 2V 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 chargedischarge 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 2V cell range can be installed horizontally in dedicated racks saving valuable space. The range is fully eco-friendly with all components being fully recyclable. 12V Front Terminal design permits an easy installation.



TECHNICAL FEATURES

- 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 ensure 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).
- The unique FIAMM terminal design of the 2V cell permits pillar growth during cell life without leakage.
- This 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 2V cells and 15 years for 12V batteries.
- Low self-discharge allows 6 months shelf life.

APPLICABLE STANDARDS

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

ALBAT provide completely Design by your technical request, Production, Assembly and Service in warranty and after-warranty period.

The production process is in accordance with the standards ISO 9001:2008 and ISO 14001:2004. All products are in compliance with IEC and EN standards.

SERIES SMG OPZV

FIAMM PARTNER

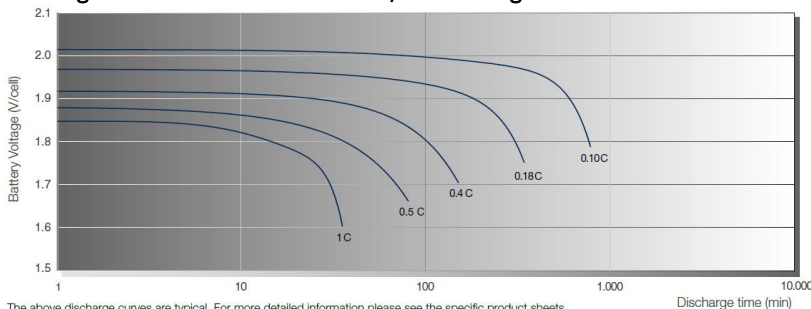
Technical specification

Model	Model by DIN 40742	Capacity Ah 10 hrs to 1,8Vpc at 20°C	Short circuit current A IEC 60896 21-22	Internal resistance mΩ IEC 60896 21-22	Dimensions mm			Weight Kg
					L	W	H	
SMG 220	4 OPzV 200	220	2700	0,74	103	206	407	20
SMG 275	5 OPzV 250	275	3520	0,592	124	206	407	23
SMG 330	6 OPzV 300	330	4100	0,493	145	206	407	27
SMG 380	5 OPzV 350	380	3350	0,607	124	206	523	29
SMG 460	6 OPzV 420	460	3990	0,502	145	206	523	35
SMG 530	7 OPzV 490	530	4640	0,436	166	206	523	39
SMG 720	6 OPzV 600	720	6220	0,321	145	206	698	50
SMG 960	8 OPzV 800	960	7120	0,284	210	191	700	67
SMG 1200	10 OPzV 1000	1200	8820	0,227	210	233	700	82
SMG 1440	12 OPzV 1200	1440	10530	0,19	210	275	700	96
SMG 1680	12 OPzV 1500	1680	11730	0,17	210	275	849	115
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	153
SMG 2520	18 OPzV 2250	2520	17700	0,11	212	487	826	174
SMG 2800	20 OPzV 2500	2800	20050	0,10	212	487	826	197
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	230
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

Electrical characteristics

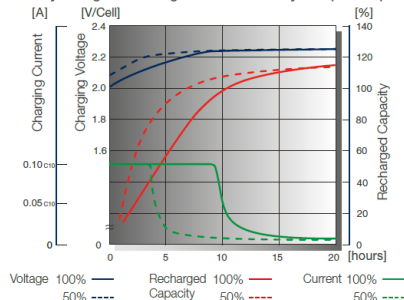
- Nominal voltage: 2 V
- Float voltage at 20°C: 2,25 V/cell
- Boost charge: 2,4 V/cell
- Float voltage compensation with temperature: -2,5 mV/cell/°C
- Self-discharge at 20°C: <2%/month

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

