



SMG OPzV

Applications and Key Benefits

- + OPzV cells - 200Ah to 3000Ah nominal capacity
ideal for:
 - Telecom BTS
 - Emergency lighting and Security
 - Trains, Railway and Airports
 - Power plants and power distribution control and monitoring systems
- + Tubular positive plates
- + Electrolyte immobilized in gel
- + Excellent cycling performance, also at elevated temperature
- + Deep discharge proof
- + 18 years design life
- + Minimal gassing
- + Non-spillable
- + Maintenance free without topping-up
- + 100% Recyclable



Applicable Standards

- DIN 40742 - specification OPzV cells
- DIN 43539T5 - deep DOD cycling and deep discharge recovery
- IEC 60896 Part 21 - VRLA methods of testing
- IEC 60896 Part 22 - VRLA requirements
- Eurobat "Long Life" - 12 years and longer

FIAMM Manufacturing

- ISO 9001 Quality Management System
- ISO 14001 Environmental Management System
- OHSAS 18001 Workplace Safety and Health

Technical Features

- Tubular positive plates, pressure cast from high tin / low calcium alloy
- Electrolyte immobilized in gel structure
- Highly porous gauntlets retain the active material
- Pasted negative plates designed to have service lives consistent with the positive plates
- Separators with extremely high porosity and low internal resistance
- Standard ABS plastic
(Optional flame retardant plastics ABS IEC 707 FV0 and UL 94 V0 with LOI greater than 28%)
- Container and lid designed for unsurpassed mechanical strength made of thick walled plastics
- Threaded female M10 terminal posts guarantee highest conductivity, maximum torque retention and easy installation
- High integrity post seal design to prevent electrolyte leakage and terminal corrosion
- Flame arrestors prevent sparks or flames from entering the battery
- Cells equipped with one-way safety valves to allow excess gas to escape when overcharging
- < 2% self-discharge per month at 20°C allows 6 months shelf life
- Installation in vertical or horizontal position
- Flexible, fully insulated cable connectors with insulated screw with probe hole on the top for electrical measurement

FIAMM SMG OPzV range

DIN 40742	MODEL	CAPACITY (Ah) at 20 °C	SHORTCIRCUIT CURRENT (A)	INTERNAL RESISTANCE (mohm)	WEIGHT (kg)	DIMENSIONS (mm)		
Type		10 hrs to 1.80 VPC	IEC 60896 21-22	IEC 60896 21-22		Length	Width	Height
4 OPzV 200	SMG 200	200	2200	0.93	16.8	206	103	388
5 OPzV 250	SMG 250	250	2700	0.74	20	206	124	388
6 OPzV 300	SMG 300	300	3500	0.58	23	206	145	388
5 OPzV 350	SMG 350	350	3600	0.56	26	206	124	504
6 OPzV 420	SMG 420	420	3900	0.52	31	206	145	504
7 OPzV 490	SMG 490	490	4000	0.51	35	206	166	504
6 OPzV 600	SMG 600	600	4200	0.48	43	206	145	679
8 OPzV 800	SMG 800	800	5100	0.40	59	191	210	679
10 OPzV 1000	SMG 1000	1000	6300	0.32	72	233	210	679
12 OPzV 1200	SMG 1200	1200	7600	0.27	84	275	210	679
12 OPzV 1500	SMG 1500	1500	9500	0.216	103	275	210	829
16 OPzV 2000	SMG 2000	2000	12000	0.162	137	397	212	805
20 OPzV 2500	SMG 2500	2500	15000	0.129	171	487	212	805
24 OPzV 3000	SMG 3000	3000	18000	0.108	206	576	212	805

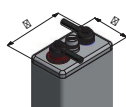
Note: dimension may have a natural tolerance of ± 2 mm.

Electrical Characteristics

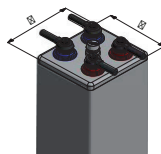
- ✚ FLOAT VOLTAGE CHARGE AT 20 °C : 2.25 V/cell
- ✚ BOOST CHARGE : 2.4 V/cell
- ✚ MAXIMUM CHARGE CURRENT : 0.25 C_{10A} (i.e.:for a 100Ah cell maximum charge current is 25 Amps)
- ✚ FLOAT VOLTAGE TEMPERATURE COMPENSATION : - 2.5mV/°C/cell
- ✚ SELF-DISCHARGE AT 20 °C : < 2% / month
- ✚ WARNING: in order for the warranty to be valid in all critical , frequent discharge and hybrid applications, please coordinate with Fiamm Group to clarify required operating and charging settings

Dimensions

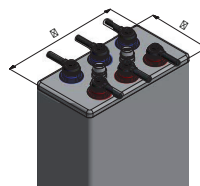
4 OPzV 200
5 OPzV 250
6 OPzV 300
5 OPzV 350
6 OPzV 420
7 OPzV 490
6 OPzV 600



8 OPzV 800
10 OPzV 1000
12 OPzV 1200
12 OPzV 1500



16 OPzV 2000



20 OPzV 2500
24 OPzV 3000

