



GERMANY TECHNOLOGY
24 OPzS 3000
(2V-3350AH @ C10)

HIGH PERFORMANCE



Specifications:

Very high operational reliability under rough operating conditions.

Low maintenance due to reduced antimony in the alloy and high electrolyte reserve.

20 years at 20°C (80% remaining capacity from C10).

Also designed for cyclic applications.

Also available in dry charged condition with separate electrolyte.

Low gassing due to PbSb1.6SnSe alloy (EN 50272-2).

Conforms to DIN 40 736 and DIN 40 737 T3.

Electrolyte: diluted sulphuric acid dN = 1.25 kg/l.

Optimized plate design produces increased capacities compared to DIN.

Completely recyclable.

Applications

Telecommunications

Emergency lighting

Microwave radio systems

Power generation plants

Photovoltaics

Innovative Features

- ◆ Tubular positive plates: Robust tubular plates consisting of a lead antimony alloy, optimized for high corrosion resistances.
- ◆ Pasted negative plates: Grid plate construction consisting of low antimony with long-life expander material.
- ◆ Separators: Microporous and robust, for electrical separation of the positive and negative plates and optimized for low internal resistance.
- ◆ Container: High impact, transparent SAN (Styrol-Acryl-Nitril).
- ◆ Safety Vents: 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.
- ◆ Poles: Screw connection for easy and safe assembly and maintenance-free connection with excellent conductivity.
- ◆ Post seals: Extremely high integrity post seal design to prevent electrolyte leakage and terminal corrosion.
- ◆ Connectors: Flexible, fully insulated cable connectors screwed to the terminal with an insulated screw having a probe hole on the top for electrical measurement.

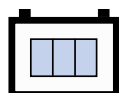
**PROVEN HIGH RELIABILITY ENERGY
STORAGE FOR CRITICAL APPLICATION**

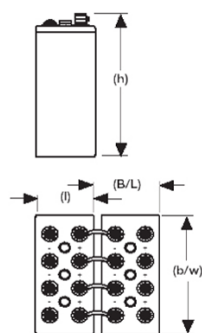
Standard and Compliance

DIN 40736 part 1

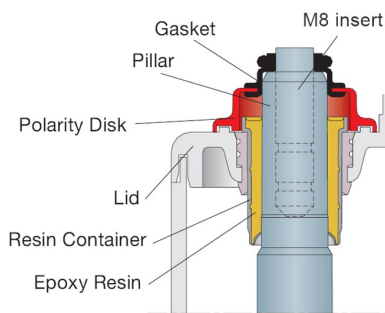
DIN 40737 part 2

IEC 896 part 1

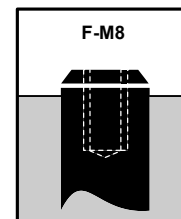




Dimension figure



High Reliability Post Seal



16 Nm

Container: SAN (acrylonitrile polystyrene),
UL 94 V-0 standard

Tubular OPzS Range Electrical Specifications & Dimensions

Part number	DIN Type	Nom. Voltage (V)	C8 AH to 1.75VPC	C10 AH to 1.80VPC	C100 AH to 1.80VPC	Outline Dimensions (mm)				Weight With acid (kg)	Acid Weight (kg)	Pole Pairs	Internal Resist. acc. to IEC 896-2 mOhms	Short Circuit Current	Terminal
						Length (l)	Width (b/w)	Height (h)	Installed Length (B/L)						
2TS243000	24 OPzS 3000	2	3352	3350	4404	215	580	815	225	230	63.0	4	0.24	18600	F-M8

Acid density $d_N = 1.250 \text{ kg/l}$

Tubular OPzS Range Discharge Data Amperes at 20°C

End Point Volts/Cell	Discharge Time in Minutes					Discharge Time in hours								
	5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
1.90	1026	1021	998	969	923	799	728	658	555	481	432	323	277	149
1.87	1133	1128	1099	1067	1012	871	790	711	596	514	459	343	293	158
1.85	1240	1235	1200	1165	1100	942	852	764	636	546	486	362	308	167
1.83	1390	1380	1345	1300	1220	1030	924	825	675	575	510	375	319	174
1.80	1620	1605	1555	1500	1400	1160	1035	911	737	622	546	395	335	184
1.75	2000	1970	1900	1810	1675	1360	1190	1030	814	681	593	419	350	192
1.70	2375	2330	2230	2115	1930	1540	1325	1130	871	723	626	462	358	197
1.65	2755	2690	2555	2415	2175	1710	1435	1205	911	753	650	439	362	199

Tubular OPzS Range Discharge Data Watts at 20°C

End Point Volts/Cell	Discharge Time in Minutes					Discharge Time in hours								
	5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
1.90	1605	1605	1575	1535	1480	1315	1220	1125	977	869	795	604	528	282
1.87	2020	2010	1965	1905	1700	1580	1445	1310	1110	969	876	661	572	311
1.85	2295	2285	2225	2165	2045	1755	1595	1435	1205	1035	931	700	601	329
1.83	2540	2525	2470	2390	2250	1905	1715	1535	1270	1085	972	722	619	341
1.80	2915	2895	2815	2730	2555	2125	1905	1685	1380	1170	1035	756	647	359
1.75	3500	3465	3355	3220	2990	2435	2140	1870	1500	1260	1115	796	670	372
1.70	4045	3995	3835	3670	3370	2705	2345	2015	1585	1320	1160	816	684	381
1.65	4555	4490	4290	4105	3730	2960	2505	2125	1640	1370	1200	825	688	384

Long Duration Discharge Capacity (Ah) at 20°C

Part No.	DIN Type	End Point Volts/Cell	C ₂₄	C ₄₈	C ₇₂	C ₉₆	C ₁₀₀	C ₁₂₀	C ₂₄₀
2TS243000	24 OPzS 3000	1.85	3708	4141	4326	4347	4360	4378	4460
		1.80	3745	4182	4369	4390	4404	4422	4505

Actual battery performance data may be +/-5% of figures shown above.

