



GERMANY TECHNOLOGY
10 OPzS 1000
(2V-1140AH @ 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.

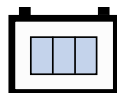
**PROVEN HIGH RELIABILITY ENERGY
STORAGE FOR CRITICAL APPLICATION**

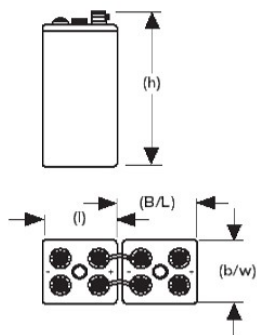
Standard and Compliance

DIN 40736 part 1

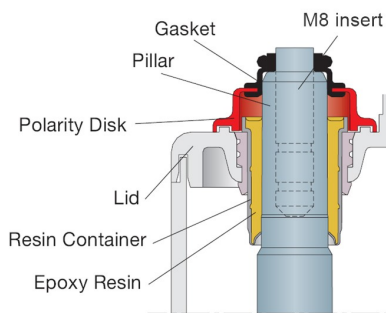
DIN 40737 part 2

IEC 896 part 1

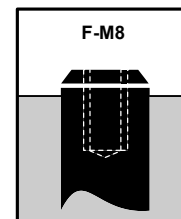




Dimension figure



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)						
2TS101000	10 OPzS 1000	2	1120	1140	1505	215	235	695	225	77.0	20.0	2	0.37	7900	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	460	456	438	422	391	337	294	262	210	179	159	117	98.8	54.9
1.87	503	498	476	458	424	364	316	281	224	189	167	123	104	57.4
1.85	546	539	513	493	456	390	338	299	237	199	175	128	109	59.9
1.83	605	595	563	539	497	420	360	317	248	207	180	131	111	61.0
1.80	695	678	639	609	559	464	394	343	263	218	189	135	114	62.7
1.75	843	812	761	719	654	526	438	374	281	229	196	140	117	64.4
1.70	988	941	881	826	743	577	471	397	294	237	199	142	119	65.6
1.65	1130	1065	999	929	826	620	496	414	302	241	201	147	120	66.1

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	748	748	729	709	660	582	514	464	385	335	302	225	192	109
1.87	905	899	865	836	777	674	590	527	426	364	324	240	205	115
1.85	1010	1000	956	921	854	735	640	569	454	383	339	251	214	119
1.83	1105	1095	1040	996	922	785	679	599	472	396	349	255	217	121
1.80	1250	1230	1165	1110	1025	860	737	644	499	415	363	262	222	124
1.75	1480	1435	1355	1285	1175	962	811	698	530	433	374	270	227	126
1.70	1685	1620	1530	1440	1310	1045	865	736	551	447	379	273	229	128
1.65	1875	1790	1695	1585	1430	1105	903	763	564	453	382	278	231	129

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
2TS101000	10 OPzS 1000	1.85	1246	1380	1483	1488	1490	1494	1514
		1.80	1258	1394	1498	1503	1505	1509	1529

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

