

Tubular OPzS Range

EverExceed®
power your applications



GERMANY TECHNOLOGY

12 OPzS 1200

(2V-1370AH @ C10)

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

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

HIGH PERFORMANCE

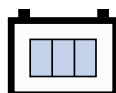


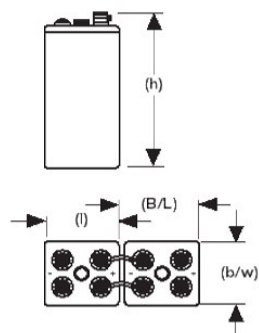
Innovative Features

- ☑ 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.

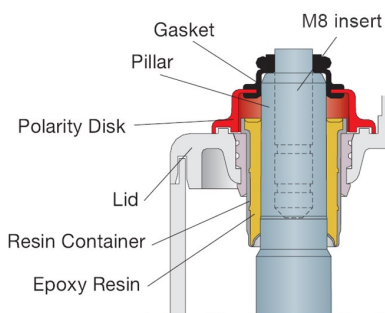
Standard and Compliance

- ☑ DIN 40736 part 1
- ☑ DIN 40737 part 2
- ☑ IEC 896 part 1

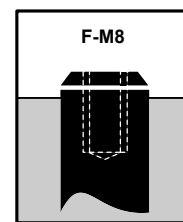




Dimension figure



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)						
2TS121200	12 OPzS 1200	2	1336	1370	1804	215	277	695	225	92.0	24.0	2	0.34	8900	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	534	530	511	492	458	395	347	312	251	214	188	140	119	66.0	
1.87	583	577	554	534	496	427	373	284	267	226	198	147	126	69.0	
1.85	631	623	597	575	534	459	399	256	282	237	208	153	132	71.9	
1.83	698	686	655	629	583	494	426	376	295	247	215	157	134	73.3	
1.80	800	781	741	710	655	547	467	407	315	261	225	162	137	75.4	
1.75	968	932	881	838	767	617	521	443	336	273	233	167	141	77.4	
1.70	1135	1080	1020	964	873	678	562	469	349	281	237	170	142	78.8	
1.65	1295	1220	1160	1090	971	733	592	490	358	286	240	176	144	79.5	

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	874	874	857	827	774	678	605	551	458	400	360	270	230	131	
1.87	1050	1045	1010	976	910	790	695	627	508	435	386	288	247	138	
1.85	1170	1160	1115	1075	1000	866	755	677	540	456	404	300	258	142	
1.83	1275	1265	1210	1165	1080	925	802	712	563	473	415	305	261	145	
1.80	1440	1415	1350	1295	1200	1015	874	765	597	497	432	314	266	148	
1.75	1695	1650	1565	1495	1380	1130	964	826	633	516	446	323	274	152	
1.70	1940	1860	1770	1685	1540	1225	1030	869	656	530	451	327	276	154	
1.65	2150	2050	1965	1860	1680	1305	1075	904	669	538	455	334	278	155	

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
2TS121200	12 OPzS 1200	1.85	1504	1656	1777	1782	1786	1792	1813
		1.80	1519	1673	1795	1800	1804	1810	1831

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

