



GERMANY TECHNOLOGY
12 OPzS 1500
(2V-1700AH @ 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.

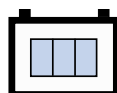
**PROVEN HIGH RELIABILITY ENERGY
STORAGE FOR CRITICAL APPLICATION**

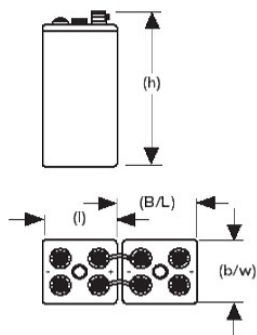
Standard and Compliance

DIN 40736 part 1

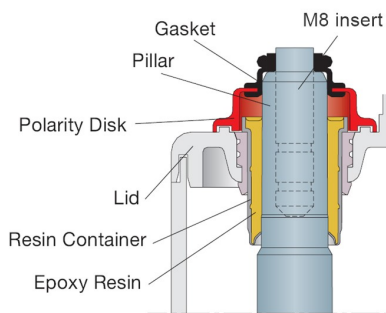
DIN 40737 part 2

IEC 896 part 1

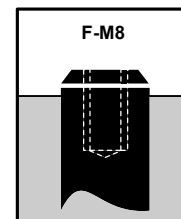




Dimension figure



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)						
2TS121500	12 OPzS 1500	2	1696	1700	2207	215	277	845	225	112	30.0	2	0.32	9500	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	496	495	485	473	455	398	366	334	377	244	219	164	141	75.8	
1.87	548	546	534	521	500	434	397	361	350	261	233	174	149	80.4	
1.85	599	596	583	568	544	469	428	388	323	277	246	184	156	85.0	
1.83	673	668	652	633	602	513	465	418	343	292	258	191	162	88.3	
1.80	785	777	756	731	690	578	520	462	374	316	277	201	170	93.2	
1.75	966	952	923	884	824	676	598	524	413	346	301	212	178	97.4	
1.70	1145	1125	1085	1030	950	768	665	573	442	367	318	219	182	100	
1.65	1330	1300	1240	1175	1070	853	721	612	462	382	330	223	184	101	

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	775	775	764	749	728	655	615	570	496	441	403	306	268	143	
1.87	976	974	956	931	838	788	726	665	566	492	443	336	290	158	
1.85	1110	1105	1080	1055	1010	875	801	728	612	526	471	356	304	167	
1.83	1225	1220	1195	1165	1110	949	863	778	647	552	491	368	314	173	
1.80	1410	1400	1370	1330	1260	1060	957	854	699	594	525	385	328	182	
1.75	1690	1675	1630	1575	1470	1210	1075	951	761	642	565	403	341	189	
1.70	1950	1930	1865	1785	1660	1350	1175	1025	803	672	590	414	348	193	
1.65	2200	2170	2085	1995	1835	1475	1260	1080	832	695	610	419	350	195	

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
2TS121500	12 OPzS 1500	1.85	1854	2070	2163	2178	2185	2194	2256
		1.80	1873	2091	2185	2200	2207	2216	2279

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

