



GERMANY TECHNOLOGY

11 OPzS 770

(2V-860AH @ 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.

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.

Applications

Telecommunications

Emergency lighting

Microwave radio systems

Power generation plants

Photovoltaics

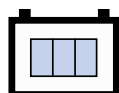
**PROVEN HIGH RELIABILITY ENERGY
STORAGE FOR CRITICAL APPLICATION**

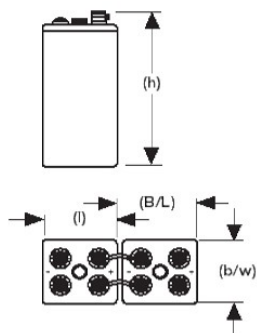
Standard and Compliance

DIN 40736 part 1

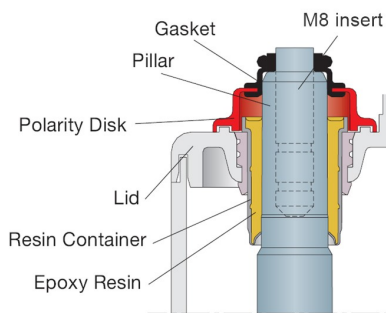
DIN 40737 part 2

IEC 896 part 1

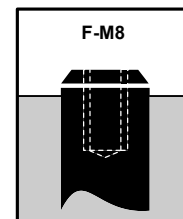




Dimension figure



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)						
2TS011770	11 OPzS 770	2	864	890	1104	255	210	506	265	62.0	16.0	2	0.42	6400	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	369	362	346	334	308	266	230	203	163	139	122	89.8	76.3	42.2
1.87	405	396	377	362	334	286	248	218	173	147	129	94.5	80.3	44.1
1.85	440	430	407	390	359	306	265	232	184	155	136	99.2	84.2	46.1
1.83	487	475	447	427	392	329	281	246	192	160	140	101	85.5	46.9
1.80	551	543	509	483	440	364	307	267	203	169	146	104	87.7	48.3
1.75	677	652	607	570	514	414	340	292	218	177	151	108	89.4	49.5
1.70	794	756	701	653	584	454	365	310	228	183	154	110	91.1	50.4
1.65	910	857	794	732	648	484	384	323	235	187	156	113	92.1	50.9

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	592	592	572	561	520	461	403	361	299	259	234	173	147	83.9
1.87	725	716	684	662	612	531	462	409	330	283	251	185	158	88.2
1.85	814	799	758	728	673	577	502	442	353	299	264	194	165	91.1
1.83	884	875	826	789	726	616	531	465	366	306	271	197	167	92.7
1.80	1002	987	926	880	806	674	574	501	385	321	281	202	171	95.0
1.75	1185	1156	1079	1016	925	757	630	545	409	335	290	208	173	97.3
1.70	1354	1305	1219	1142	1031	820	671	576	428	345	294	211	176	98.3
1.65	1508	1440	1344	1248	1122	862	699	594	439	352	296	214	178	99.2

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
2TS011770	11 OPzS 770	1.85	967.2	1064	1142	1146	1148	1151	1166
		1.80	976.9	1074	1153	1158	1160	1163	1177

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

