



GERMANY TECHNOLOGY

7 OPzS 490

(2V-530AH @ 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.

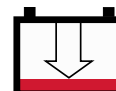
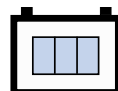
**PROVEN HIGH RELIABILITY ENERGY
STORAGE FOR CRITICAL APPLICATION**

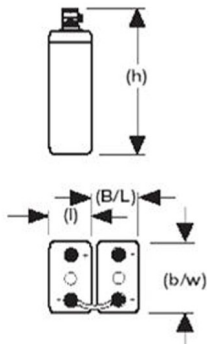
Standard and Compliance

DIN 40736 part 1

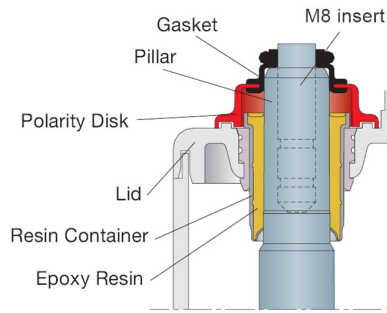
DIN 40737 part 2

IEC 896 part 1

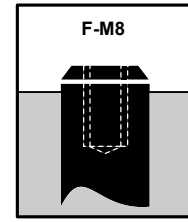




Dimension figure



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)						
2TS070490	7 OPzS 490	2	526	530	740	168	208	520	178	39.0	11.0	1	0.45	4100	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	235	233	224	218	202	170	148	129	105	87.9	76.6	55.3	46.1	25.6	
1.87	257	254	245	237	220	183	158	138	112	93.0	80.7	58.2	48.5	26.7	
1.85	279	274	265	256	237	196	168	147	118	98.1	84.8	61.0	50.9	27.8	
1.83	310	303	291	280	257	209	178	154	123	102	87.1	62.0	51.7	28.4	
1.80	358	346	330	316	287	229	192	164	130	106	90.6	63.6	53.0	29.2	
1.75	438	416	390	369	328	252	207	176	136	111	94.9	65.7	54.6	29.9	
1.70	517	483	446	416	364	269	218	183	140	114	97.0	67.3	55.7	30.7	
1.65	596	548	499	459	395	280	226	187	143	115	97.5	67.4	55.8	30.9	

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	381	381	369	362	338	295	263	234	198	166	146	107	89.1	50.8	
1.87	462	458	444	431	401	340	297	261	214	179	157	114	95.4	53.4	
1.85	516	510	494	477	444	370	319	279	225	189	165	119	99.7	55.1	
1.83	567	557	536	517	477	392	335	291	234	196	168	121	101	56.0	
1.80	646	628	601	576	526	424	358	309	246	203	174	123	103	57.4	
1.75	770	735	693	658	590	461	384	328	256	210	181	127	106	58.8	
1.70	884	833	773	725	641	485	400	339	263	215	185	130	108	60.2	
1.65	992	921	845	782	683	500	410	345	268	216	185	130	108	60.2	

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
2TS070490	7 OPzS 490	1.85	628	676	726	730	733	736	747
		1.80	634	683	733	737	740	743	754

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

