Tubular OPzS Range

EverExceed®
power your applications

HIGH PERFORMANCE

GERMANY TECHNOLOGY

2 OPzS 100

(2V-128AH @ C10)

Specifications:

Very high operationally 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
- Microwave radio systems
- Photovoltaics
- Emergency lighting
- Power generation plants

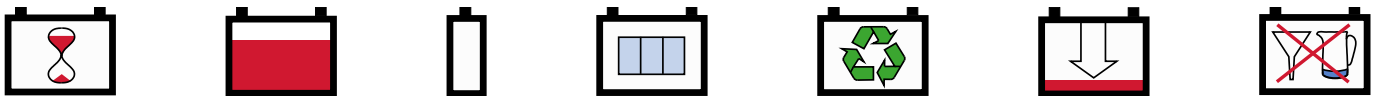
PROVEN HIGH RELIABILITY ENERGY STORAGE FOR CRITICAL APPLICATION

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



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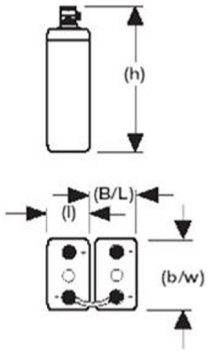
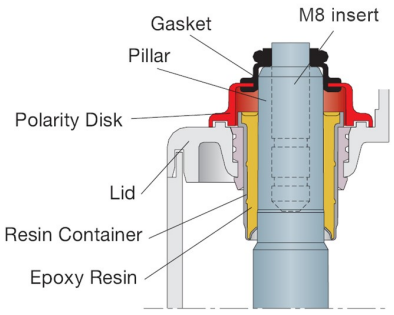
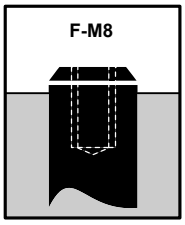


Dimension figure



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)						
2TS020100	2 OPzS 100	2	127	128	146	105	208	405	115	13.7	5.20	1	0.83	1400	F-M8

Acid density d_N = 1.250 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	78.4	77.0	72.2	67.9	61.9	48.6	40.6	34.5	27.2	22.2	19.0	13.4	11.1	5.99
1.87	85.9	84.1	78.4	73.8	66.7	51.7	43.1	36.5	28.7	23.4	20.0	14.0	11.7	6.30
1.85	93.4	91.2	84.5	79.7	71.4	54.8	45.5	38.5	30.2	24.6	21.0	14.6	12.3	6.60
1.83	104	101	93.0	86.9	76.8	57.5	47.4	39.9	31.2	25.4	21.6	14.9	12.5	6.70
1.80	122	116	106	97.7	84.8	61.5	50.1	42.0	32.8	26.6	22.6	15.3	12.8	7.00
1.75	147	137	125	113	96.1	66.4	52.9	44.2	34.3	27.7	23.5	15.9	13.1	7.20
1.70	173	157	139	125	105	69.7	54.8	45.2	35.2	28.3	23.9	16.0	13.3	7.30
1.65	196	174	151	135	111	71.8	55.8	46.4	35.7	28.6	24.1	16.1	13.4	7.40

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	126	126	120	113	107	87.9	74.3	64.0	50.8	42.1	36.6	26.4	21.5	12.0
1.87	154	152	143	135	123	97.2	81.5	69.5	55.0	45.4	39.1	27.7	23.0	12.6
1.85	172	170	158	149	134	103	86.2	73.2	57.8	47.5	40.7	28.6	24.0	13.0
1.83	190	186	172	161	142	108	89.2	75.6	59.6	48.8	41.8	29.0	24.3	13.3
1.80	220	210	193	178	155	114	93.7	79.0	62.2	50.8	43.5	29.6	24.8	13.8
1.75	258	243	222	201	173	122	98.0	82.5	64.7	52.5	44.9	30.7	25.5	14.1
1.70	295	270	242	218	184	126	101	83.8	66.1	53.3	45.4	30.8	25.6	14.2
1.65	326	292	257	230	191	128	102	85.5	66.8	53.7	45.8	30.8	25.6	14.2

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}
2TS020100	2 OPzS 100	1.85	133	138	144	145	145	146	152
		1.80	134	139	145	146	146	147	154

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