



GERMANY TECHNOLOGY

4 OPzS 200

(2V-214AH @ 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

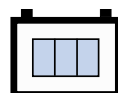
PROVEN HIGH RELIABILITY ENERGY STORAGE FOR CRITICAL APPLICA-

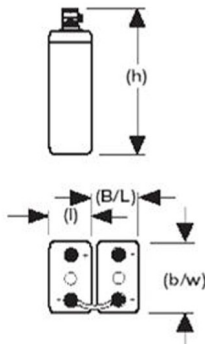
Standard and Compliance

DIN 40736 part 1

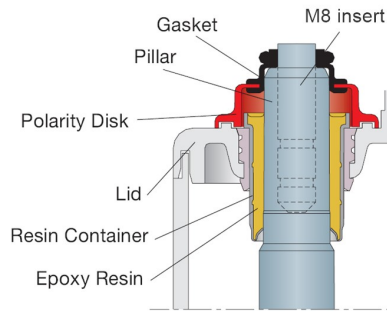
DIN 40737 part 2

IEC 896 part 1

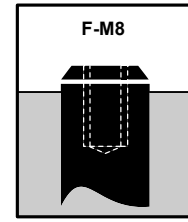




Dimension figure



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)						
2TS040200	4 OPzS 200	2	214	214	294	105	208	405	115	18.0	4.50	1	0.62	2450	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	128	127	119	112	102	80.1	66.9	57.4	45.1	37.1	31.6	22.5	18.7	10.1	
1.87	141	139	129	122	110	85.2	71.0	60.8	47.7	39.1	33.3	23.6	19.7	10.6	
1.85	153	150	139	131	118	90.3	75.0	64.1	50.2	41.0	34.9	24.6	20.6	11.0	
1.83	171	166	153	143	126	94.7	78.0	66.4	52.0	42.4	36.0	25.0	20.9	11.3	
1.80	199	190	174	161	140	101	82.5	69.9	54.6	44.4	37.6	25.6	21.4	11.8	
1.75	243	226	205	186	158	109	87.2	73.5	57.1	46.3	39.1	26.7	22.1	12.1	
1.70	284	258	229	206	172	115	90.3	75.2	58.6	47.3	39.7	26.9	22.3	12.2	
1.65	322	286	249	222	182	118	92.0	76.4	59.4	47.7	40.1	27.0	22.4	12.3	

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	207	207	198	187	176	145	122	106	84.5	70.4	60.9	44.3	36.1	20.1	
1.87	252	250	235	222	203	160	134	116	91.5	75.6	65.0	46.5	38.6	21.1	
1.85	283	279	260	245	220	170	142	122	96.1	79.1	67.6	48.0	40.3	21.8	
1.83	313	306	283	264	235	177	147	126	99.1	81.4	69.5	48.7	40.9	22.4	
1.80	359	346	317	294	256	188	154	131	103	84.8	72.3	49.7	41.7	23.2	
1.75	427	401	365	332	285	200	161	137	108	87.7	74.7	51.6	42.8	23.7	
1.70	485	445	398	359	304	207	166	139	110	89.1	75.6	51.8	43.1	23.8	
1.65	536	481	423	379	315	211	167	141	111	89.7	76.1	51.8	43.1	23.8	

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
2TS040200	4 OPzS 200	1.85	258	276	288	290	291	293	304
		1.80	261	279	291	293	294	296	307

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

