



GERMANY TECHNOLOGY

4 OPzV 200

(2V-210AH @ C10)

HIGH PERFORMANCE



Specifications

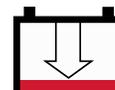
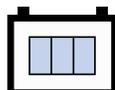
- ◆ Extraordinary energy-saving features in addition with robust reliability
- ◆ Maintenance-free (no topping up) during the whole service life
- ◆ Nominal capacity 100~3000 Ah C₁₀
- ◆ Design life: 20 years at 20°C (80% remaining capacity from C₁₀)
- ◆ Container material: ABS, UL 94-HB; optional: ABS, UL 94V-0
- ◆ Robust tubular plate technology
- ◆ Very low gassing due to internal gas recombination
- ◆ Long shelf life of up to 2 years at 20°C without recharge due to the very low self discharge rate
- ◆ Proof against deep discharge according to DIN 43 539 T5
- ◆ Cells in compliance with DIN 40742 Completely recyclable

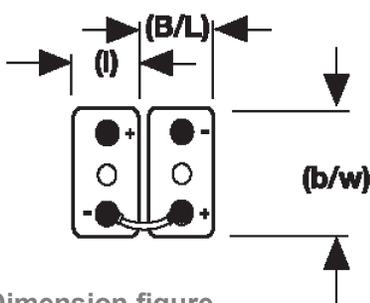
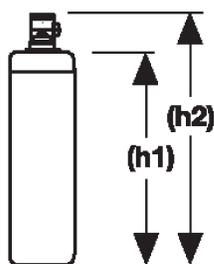
Applications

- Telecommunications Emergency lighting
- Microwave radio systems Power generation plants
- Photovoltaic / Solar

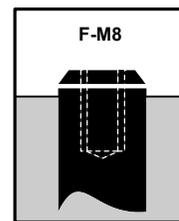
Innovative Features

- ◆ **Tubular positive plates:** Robust tubular plates consisting of a lead calcium antimony-free alloy, optimized for high corrosion resistances
- ◆ **Pasted negative plates:** Grid plate construction consisting of lead calcium alloy
- ◆ **Separators:** Micro porous and robust, for electrical separation of the positive and negative plates and optimized for low internal resistance
- ◆ **Housing:** ABS, on request flame retardant ABS according to UL 94 V-0
- ◆ **One way relief valve:** operates at low pressure and fitted with flame arrestor, release gas in case of excess pressure and protects the cell against atmosphere
- ◆ **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
- ◆ **Electrolyte:** Gel structure
- ◆ Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection.





Dimension figure



20 Nm

Container: ABS, UL 94-HB Optional ABS, UL 94V-0

Tubular OPzV Range Electrical Specifications & Dimensions

Part number	DIN Type	Nom. Voltage (V)	C10 AH to 1.80VPC	C100 AH to 1.80VPC	Outline Dimensions (mm)					Weight (kg)	Pole Pairs	Internal Resist. acc. to IEC 896-2 mOhms	Short Circuit Current acc. to IEC 896-2A	Terminal
					Length (l)	Width (b/w)	Height (h1)	Height t (h2)	Installed Length (B/L)					
2TV040200	4 OPzV 200	2	210	260	103	206	355	390	113	19.0	1	0.53	2235	F-M8

Acid density $d_N = 1.260 \text{ kg/l}$

Tubular OPzV Range Discharge Data Amperes at 20°C

End Point Volts/Cell	Discharge Time in Minutes		Discharge Time in hours								
	15 min	30 min	1 hour	2 hour	3 hour	4 hour	5 hour	6 hour	8 hour	10 hour	20 hour
1.90	155	126	89.3	57.8	44.1	36.2	31.5	27.3	21.5	18.9	9.59
1.87	172	139	99.8	69.3	52.5	41.5	35.7	31.0	25.2	21.0	10.1
1.85	195	153	103	65.1	49.4	39.9	34.1	29.9	24.2	20.5	11.0
1.80	212	162	107	66.8	52.5	41.5	35.2	30.2	24.7	21.0	11.4
1.75	238	173	116	68.9	52.5	42.0	35.7	31.1	25.2	21.0	12.2
1.70	263	181	117	70.1	52.5	42.4	36.2	31.5	25.2	22.1	12.8

Tubular OPzV Range Discharge Data Watts at 20°C

End Point Volts/Cell	Discharge Time in Minutes		Discharge Time in hours								
	15 min	30 min	1 hour	2 hour	3 hour	4 hour	5 hour	6 hour	8 hour	10 hour	20 hour
1.90	219	200	160	112	87.2	71.4	60.9	53.6	42.0	34.7	18.9
1.87	270	234	181	124	94.5	77.7	67.2	58.8	46.2	38.9	20.1
1.85	350	285	212	140	108	86.1	73.5	64.1	50.4	42.0	21.6
1.80	360	293	218	144	111	89	75.6	66.2	51.5	43.1	22.0
1.75	408	326	237	152	114	91.4	76.7	67.2	51.5	43.1	23.0
1.70	453	348	247	153	114	91.4	76.7	67.2	51.5	43.1	23.7

Long Duration Discharge Capacity (Ah) at 20°C

Part No.	DIN Type	End Point Volts/Cell	C ₂₄	C ₄₈	C ₁₀₀	C ₁₂₀	C ₂₄₀
2TV040200	4 OPzV 200	1.85	225	250	257	262	266
		1.80	227	253	260	265	269

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

