



GERMANY TECHNOLOGY

**10 OPzV 1000**

(2V-1050AH @ C10)

# HIGH PERFORMANCE



## Specifications

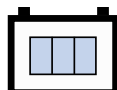
- ◆ Extraordinary energy-saving features in addition with robust reliability
- ◆ Maintenance-free (no topping up) during the whole service life
- ◆ Nominal capacity 100~3000 Ah C<sub>10</sub>
- ◆ Design life: 20 years at 20°C (80% remaining capacity from C<sub>10</sub>)
- ◆ Container material: ABS, UL 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

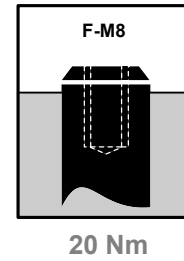
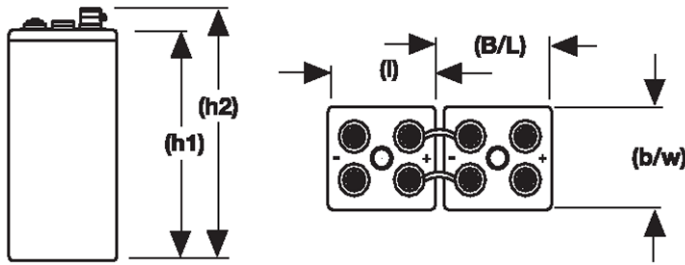
## Applications

- 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.





**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)					
2TV101000	10 OPzV 1000	2	1050	1283	210	233	646	681	220	80.0	2	0.32	8200	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	546	515	410	289	226	189	162	141	112	93.5	47.0
1.87	630	578	452	310	239	200	170	148	118	97.7	51.1
1.85	777	662	504	336	255	210	177	153	123	102	53.6
1.80	861	735	546	349	263	214	182	158	126	105	55.3
1.75	987	819	588	364	273	221	185	162	128	106	57.3
1.70	1113	903	614	375	278	222	186	162	128	107	59.4

## 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	780	737	683	525	432	364	313	278	228	197	93.0
1.87	966	922	777	593	452	405	348	307	249	214	102
1.85	1307	1159	958	697	558	456	385	338	272	231	107
1.80	1348	1195	987	719	574	469	397	349	280	238	110
1.75	1554	1352	1118	782	608	497	415	360	285	240	114
1.70	1736	1491	1202	820	618	497	415	360	285	240	117

## Long Duration Discharge Capacity (Ah) at 20°C

Part No.	DIN Type	End Point Volts/Cell	C <sub>24</sub>	C <sub>48</sub>	C <sub>100</sub>	C <sub>120</sub>	C <sub>240</sub>
2TV101000	10 OPzV 1000	1.85	1113	1250	1270	1296	1318
		1.80	1124	1263	1283	1309	1331

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

