



HIGH PERFORMANCE

GERMANY TECHNOLOGY

OPzV 12-100

(12V-100AH @ C10)



Specifications

- Extraordinary energy-saving features in addition with robust reliability
- Maintenance-free (no topping up) during the whole service life
- Nominal capacity 60~250 Ah C₁₀
- Design life: 15 years at 20°C
- 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
- Compliant Standards: IEC 60896-21/22 , IEC 61427

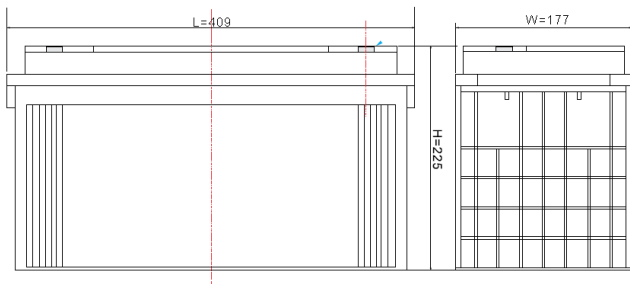
Applications

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

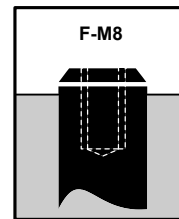
Innovative Features

- 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

DIN Type	Nom. Voltage (V)	C10 AH to 1.80VPC	C20 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)					
OPzV 12-100	12	100	109	409	177	225	225	187	34	1	0.56	2300	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	74.0	60.0	42.5	27.5	21.0	17.3	15.0	13.0	10.3	9.00	4.57	
1.87	82.0	66.0	47.5	33.0	25.0	19.7	17.0	14.7	12.0	9.80	4.81	
1.85	93.3	73.3	49.1	31.0	23.5	19.0	16.3	14.3	11.5	9.90	5.25	
1.80	101	77.3	51.0	31.8	25.0	19.7	16.7	14.4	11.7	10.0	5.45	
1.75	113	82.7	55.0	32.8	25.0	20.0	17.0	14.8	12.0	10.3	5.80	
1.70	125	86.0	55.5	33.4	25.0	20.2	17.3	15.0	12.0	10.5	6.10	

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	105	95.3	76.0	53.5	41.5	34.0	29.0	25.5	20.0	16.5	9.00	
1.87	129	111	86.0	59.0	45.0	37.0	32.0	28.0	22.0	18.5	9.53	
1.85	167	135	101	66.7	51.5	41.0	35.0	30.5	24.0	20.0	10.3	
1.80	171	139	104	68.7	53.0	42.4	36.0	31.5	24.5	20.5	10.5	
1.75	195	155	113	72.7	54.5	43.5	36.5	32.0	24.5	20.5	10.9	
1.70	215	165	117	73.3	54.5	43.5	36.5	32.0	24.5	20.5	11.3	

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

