Tubular OPzV Range

EverExceed®
power your applications

HIGH PERFORMANCE

GERMANY TECHNOLOGY

5 OPzV 400

(2V- 400AH @ C10)

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_{10}
- Design life: 20 years at 20°C(80% remaining capacity from C_{10})
- 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.

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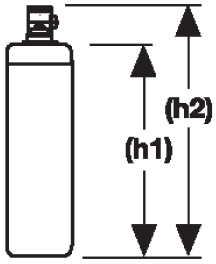
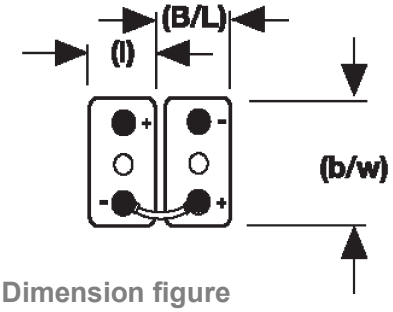
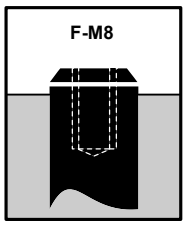




Dimension figure



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)					
2TV050400	5 OPzV 400	2	400	460	126	208	475	513	134	29.0	1	0.60	3450	F-M8

Acid density d_N = 1.260 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	242	214	159	108	83.3	69.1	58.2	54.8	42.8	36.2	17.5
1.87	275	237	173	116	88.2	72.3	62.5	54.8	44.4	37.3	18.9
1.85	318	267	192	124	93.2	76.7	65.8	57.5	46.6	37.8	19.7
1.80	351	290	203	128	95.9	78.9	67.4	58.7	47.2	40.0	20.4
1.75	403	318	215	134	99.2	81.1	69.1	60.3	48.2	40.6	21.5
1.70	447	342	221	137	101	81.6	69.6	60.3	48.8	41.7	22.4

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	326	307	278	199	156	131	112	98.7	81.1	70.2	34.5
1.87	406	384	311	221	173	144	123	109	87.7	75.7	37.3
1.85	555	479	373	255	198	161	136	119	95.4	80.1	38.8
1.80	573	494	385	262	205	167	140	123	98.7	82.3	39.5
1.75	653	547	429	282	215	173	145	125	98.7	82.3	40.5
1.70	719	592	448	290	215	173	145	125	98.7	82.3	41.4

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}
2TV050400	5 OPzV 400	1.85	415	438	450	464	475
		1.80	420	445	460	472	485

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