



GERMANY TECHNOLOGY

**6 OPzV 420**

(2V-446AH @ 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<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

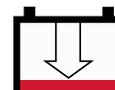
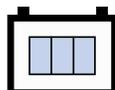
- Telecommunications  Emergency lighting
- Microwave radio systems  Power generation plants
- Photovoltaic / Solar

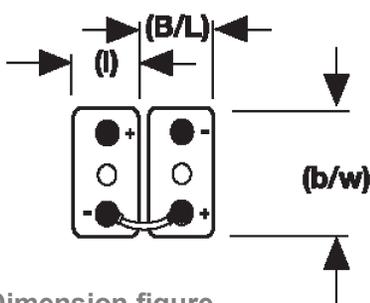
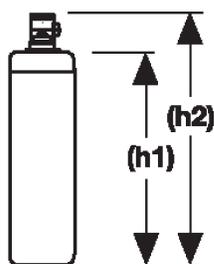
# HIGH PERFORMANCE



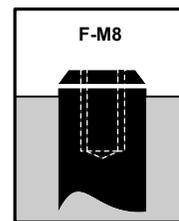
## Innovative Features

- ◆ **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)					
2TV060420	6 OPzV 420	2	446	544	145	206	471	506	155	35.0	1	0.38	4220	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	263	246	183	123	95.6	78.8	67.2	60.9	49.4	41.0	20.3
1.87	315	273	201	134	102	83.0	71.4	62.5	51.0	42.8	21.7
1.85	365	308	221	143	107	88.2	75.6	66.2	53.6	44.7	22.7
1.80	403	334	233	148	110	90.1	77.5	67.4	54.2	44.6	23.5
1.75	464	365	247	153	114	93.2	79.4	69.3	55.4	46.7	24.5
1.70	515	394	255	158	117	94.0	80.3	69.3	55.7	47.3	25.4

## 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	375	353	316	228	180	149	128	113	93.5	80.9	39.8
1.87	467	441	358	254	200	165	142	124	101	87.2	43.0
1.85	637	549	427	291	227	187	156	138	110	91.4	44.6
1.80	657	566	441	300	234	192	162	142	113	94.5	45.2
1.75	751	629	492	323	246	201	167	144	113	94.5	47.0
1.70	826	681	516	334	247	201	167	144	113	94.5	47.9

## 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>
2TV060420	6 OPzV 420	1.85	472	525	539	550	559
		1.80	477	530	544	556	565

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

