# Tubular OPzV Range





**GERMANY TECHNOLOGY** 

3 OPzV 150

(2V-158AH @ 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







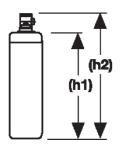


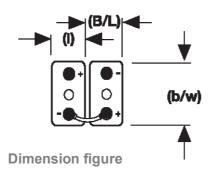
#### **Innovative Features**

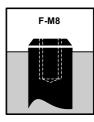
- Tubular positive plates: Robust tubular plates consisting of a lead calcium antimony-free alloy, optimized for high corrosion resistances
- Pasted negative plates: Grid plate construction consisting of lead calcium alloy
- Separators: Micro porous and robust, for electrical separation of the positive 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 cellto-cell performance, higher capacity and uniform grid protection.



# Tubular OPzV Range







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	C100 AH to 1.80VPC	Outline Dimensions (mm)					Weight	Pole	Internal Resist.	Short Circuit	
Part number					Length (I)	Width (b/w)	Height (h1)	Height t (h2)	Installed Length (B/L)		Pairs			Terminal
2TV030150	3 OPzV 150	2	158	195	103	206	355	390	111	14.5	1	0.70	1676	F-M8

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

## Tubular OPzV Range Discharge Data Amperes at 20°C

End Point	Discharge Tir	ne in Minutes	Discharge Time in hours								
Volts/Cell	15 min	30 min	1 hour	2 hour	3 hour	4 hour	5 hour	6 hour	8 hour	10 hour	20 hour
1.90	116	94.5	67.0	43.4	33.1	27.2	23.6	20.5	16.1	14.2	7.19
1.87	129	104	74.9	52.0	39.4	31.1	26.8	23.3	18.9	15.8	7.58
1.85	146	115	77.3	48.8	37.1	29.9	25.6	22.4	18.2	15.4	8.25
1.80	159	122	80.3	50.1	39.4	31.1	26.4	22.7	18.5	15.8	8.55
1.75	179	130	87.0	51.7	39.4	31.5	26.8	23.3	18.9	15.8	9.15
1.70	197	136	87.8	52.6	39.4	31.8	27.2	23.6	18.9	16.6	9.60

## **Tubular OPzV Range Discharge Data Watts at 20°C**

End Point Volts/Cell	Discharge Ti	me 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	164	150	120	84.0	65.4	53.6	45.7	40.2	31.5	26.0	14.2
1.87	203	176	136	93.0	70.9	58.3	50.4	44.1	34.7	29.2	15.1
1.85	263	214	159	105	81.0	64.6	55.1	48.1	37.8	31.5	16.2
1.80	270	220	164	108	83	67	56.7	49.7	38.6	32.3	16.5
1.75	306	245	178	114	85.5	68.6	57.5	50.4	38.6	32.3	17.3
1.70	340	261	185	115	85.5	68.6	57.5	50.4	38.6	32.3	17.8

## 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>
2TV030150	3 OPzV 150	1.85	169	188	193	197	200
21 0000100	3 OF ZV 150	1.80	171	190	195	199	202

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















