



GERMANY TECHNOLOGY

10 OPzV 700

(2V-735AH @ C10)

HIGH PERFORMANCE



Specifications

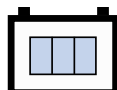
- ◆ Extraordinary energy-saving features in addition with robust reliability
- ◆ Maintenance-free (no topping up) during the whole service life
- ◆ Nominal capacity 100~3000 Ah C₁₀
- ◆ Design life: 20 years at 20°C (80% remaining capacity from C₁₀)
- ◆ Container material: ABS, UL 94-HB; optional: ABS, 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

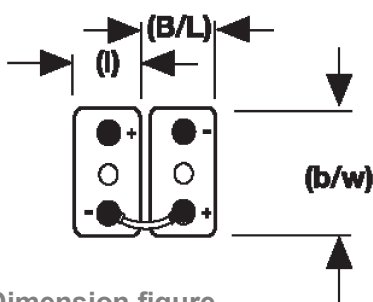
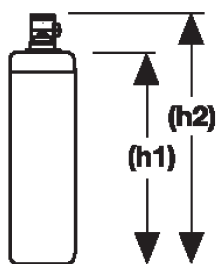
Applications

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

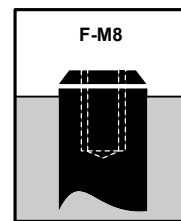
Innovative Features

- ◆ **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.





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) | | | | | |
| 2TV100700 | 10 OPzV 700 | 2 | 735 | 907 | 210 | 254 | 471 | 506 | 235 | 57.0 | 1 | 0.35 | 5500 | 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 | 382 | 360 | 287 | 203 | 158 | 132 | 113 | 100 | 78.8 | 65.6 | 33.6 |
| 1.87 | 441 | 404 | 316 | 217 | 168 | 140 | 120 | 104 | 82.4 | 68.3 | 36.8 |
| 1.85 | 544 | 463 | 353 | 235 | 177 | 147 | 125 | 108 | 86.1 | 71.9 | 37.9 |
| 1.80 | 603 | 515 | 382 | 244 | 184 | 150 | 127 | 110 | 88.2 | 73.5 | 39.0 |
| 1.75 | 691 | 573 | 404 | 255 | 191 | 154 | 129 | 113 | 89.8 | 74.6 | 40.3 |
| 1.70 | 779 | 632 | 431 | 263 | 195 | 155 | 130 | 113 | 89.8 | 75.6 | 41.5 |

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 | 538 | 509 | 470 | 362 | 298 | 251 | 218 | 192 | 159 | 149 | 66.2 |
| 1.87 | 667 | 636 | 536 | 410 | 335 | 278 | 242 | 212 | 173 | 148 | 72.9 |
| 1.85 | 903 | 799 | 662 | 482 | 384 | 315 | 268 | 235 | 189 | 161 | 74.9 |
| 1.80 | 931 | 824 | 681 | 497 | 396 | 324 | 276 | 243 | 195 | 166 | 76.3 |
| 1.75 | 1072 | 932 | 772 | 539 | 419 | 343 | 288 | 250 | 197 | 167 | 78.7 |
| 1.70 | 1198 | 1029 | 830 | 566 | 426 | 343 | 288 | 250 | 197 | 167 | 80.2 |

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 |
|-----------|-------------|----------------------|-----------------|-----------------|------------------|------------------|------------------|
| 2TV100700 | 10 OPzV 700 | 1.85 | 786 | 875 | 898 | 916 | 932 |
| | | 1.80 | 794 | 884 | 907 | 925 | 941 |

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

