

The PowerSafe OPzV range are valve regulated lead-acid cells which use a proven combination of GEL and tubular technologies to offer a very high level of reliability. These single cells benefit from an optimized plate design which gives capacities in excess of the DIN standard values. In addition, the PowerSafe OPzV range offers both a long float life and a high cycle life for a truly flexible solution.

PowerSafe OPzV batteries are suitable for a broad range of applications including telecommunications, telephony, power generating stations and distribution systems, railway, airport and seaport signalling, computing, emergency lighting, automation and measuring systems.

Features & Benefits

- Capacity range: 215Ah to 3170Ah
- C₁₀ capacities exceed the DIN standard values
- Highest EUROBAT classification 'Long Life'
- Excellent deep discharge recovery and cyclability
- High temperature resistance due to double separation (gelled electrolyte combined with microporous separator)
- Increased operational safety with flame arrestor safety spring valve, insulated connectors and immobilized electrolyte
- Easy installation: vertical or horizontal position
- Very low maintenance: no water addition



Construction

Positive Electrode - Tubular plate with Lead-Calcium-Tin alloy

Negative Electrode - Flat plate with Lead-Calcium alloy grid

Separator - Micro-porous design, combined with a corrugated separator

Case Material - Container and lid in ABS; optional flame retardant ABS available (UL94 V-0)

Electrolyte - Sulfuric acid, immobilised as a gel

Terminal Design - Terminals with brass insert and M10 stainless steel bolts. Coloured washers are included for easy polarity recognition

Connectors - Solid copper connector (30 x 3mm) insulated, bolt-on-type, flexible cable connector (70mm²) for horizontal installation.

The design also allows for voltage measurement

Cell Valve - Flame arrestor safety valve

Operation

- Recommended float charge voltage: 2.25V per cell (20°C)

- Recommended temperature range: -10°C to 45°C (preferred value 20°C)

- Cells can be installed horizontally to minimize use of floor space

- Optional racking offers easy installation and space saving accommodation

Standards

- Conforms to DIN standard 40742 (valve-regulated OPzV single cells)

- The OPzV range complies with the international standard IEC896-2

- Classified as 'long life' according to the EUROBAT guide 1999

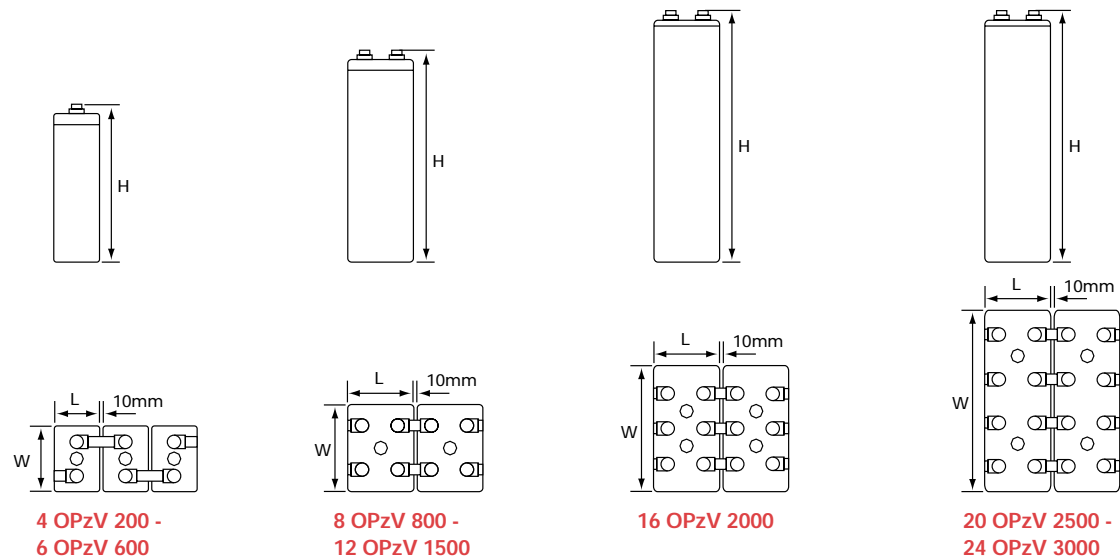
- Low ventilation requirement according to EN 50272.2

- The manufacture of this range is in full compliance of internationally recognized quality standard ISO 9001

General Specifications

Type	Nominal Voltage (V)	Terminal Pairs	Nominal Capacity (Ah)		Nominal Dimensions						Typical Weight		Short Circuit Current (A)	Internal Resistance (mΩ)
			10 hr rate to 1.80Vpc @ 20°C	8 hr rate to 1.75Vpc @ 77°F	Length mm	Length in	Width mm	Width in	Height mm	Height in	kg	lbs		
4 OPzV 200	2	1	215	215	103	4.1	206	8.1	403	15.8	19.5	43.0	2266	0.92
5 OPzV 250	2	1	265	265	124	4.9	206	8.1	403	15.8	23.5	51.9	2803	0.74
6 OPzV 300	2	1	320	320	145	5.7	206	8.1	403	15.8	28.0	61.8	3317	0.63
5 OPzV 350	2	1	385	385	124	4.9	206	8.1	520	20.3	31.0	68.4	3630	0.57
6 OPzV 420	2	1	465	465	145	5.7	206	8.1	520	20.3	36.5	80.5	4271	0.49
7 OPzV 490	2	1	540	540	166	6.5	206	8.1	520	20.3	42.0	92.6	4883	0.43
6 OPzV 600	2	1	705	705	145	5.7	206	8.1	695	27.3	50.0	110.3	3796	0.55
8 OPzV 800	2	2	940	940	210	8.2	191	7.5	695	27.3	68.0	150.0	5200	0.40
10 OPzV 1000	2	2	1170	1170	210	8.2	233	9.2	695	27.3	82.0	180.8	6460	0.32
12 OPzV 1200	2	2	1410	1410	210	8.2	275	10.8	695	27.3	97.0	213.9	7675	0.27
12 OPzV 1500	2	2	1580	1580	210	8.2	275	10.8	845	33.3	120.0	264.6	7510	0.28
16 OPzV 2000	2	3	2110	2110	212	8.3	397	15.6	820	32.3	165.0	363.8	10048	0.21
20 OPzV 2500	2	4	2640	2640	212	8.3	487	19.2	820	32.3	200.0	441.0	12606	0.17
24 OPzV 3000	2	4	3170	3170	212	8.3	576	22.3	820	32.3	240.0	529.2	14964	0.14

The electrical values shown in the table relate to loadings from a fully charged condition at ambient temperature of +20°C (unless otherwise specified).



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