

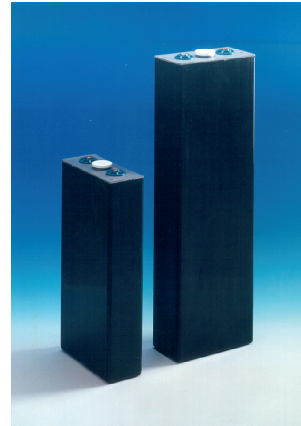
## Technical specification for traction VRLA - cells

### 1. Application

BAE PzV - batteries are maintenance-free and designed for a high cycle life and a high operational safety.

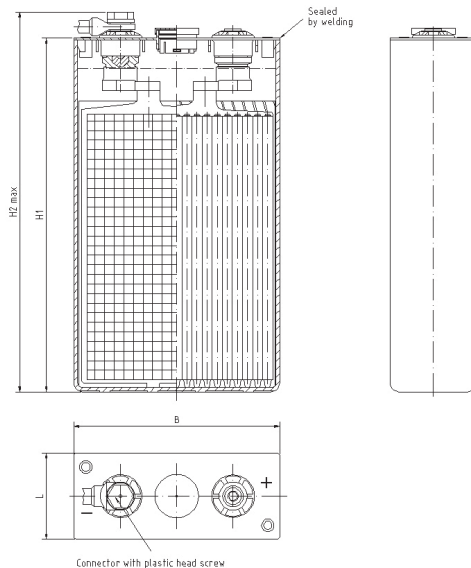
BAE PzV - batteries are ideal for motive power applications

- where no maintenance people are available,
- where charging should be made outside of charging stations between the goods,
- where sensible goods like fresh food are transported.



### 2. Design

Positive plate: robust tubular plate  
 Alloy: PbCaSn, free of Cadmium and Antimony  
 Electrolyte: gelled using pyrogenic silica  
 Pole bushing: 100 % acid and gas tight  
 Poles: with brass inlay and thread M10 female  
 Connectors: bolt-on flexible, fully insulated intercell and terminal connectors  
 Valve: with optimized opening pressure and with backfire barrier



### 3. Operation

Operational temperature: -10 °C to +45 °C  
 Regular discharges: up to 60 %  
 Final charging current: maximal 1.6 A/100 Ah C<sub>5h</sub>  
 Self discharge: less than 2 % per month  
 No topping up during the whole life.  
 No electrolyte spilling from the battery.  
 Reduced ventilation requirements.

### 4. Charging regime with IUI

t<sub>1</sub>: initial current: I<sub>1</sub> = 15..20 A per 100 Ah C<sub>5h</sub>  
 t<sub>2</sub>: charging at 2.4 V per cell, current reduction to I<sub>2</sub>  
 t<sub>3</sub>: gas charging with I<sub>2</sub> = 1.2 A to 1.6 A per 100 Ah C<sub>5h</sub>  
 t<sub>1</sub>, t<sub>2</sub> and t<sub>3</sub> are time intervals of charging steps.

(t<sub>1</sub> + t<sub>2</sub>) is set of maximum 10 h for safety reasons,  
 t<sub>3</sub> should be equal to (t<sub>1</sub> + t<sub>2</sub>), but at least 1 h and maximum 4 h.

Warning:

If higher gas charging currents are used (during t<sub>3</sub>), the cells will dry out.

### 5. Cycle life

Using the charging regime acc. to point 4 and observing of the BAE operating instructions following cycles can be expected:

20 % DOD	3,600 cycles
40 % DOD	1,800 cycles
60 % DOD	1,200 cycles
80 % DOD	900 cycles

# Technical specification for BAE *Nova trans PzV*

## 6. Types, capacities, dimensions, weights

Cell type	5 h – capacity <sup>1</sup> (C <sub>5</sub> ) Ah	Length (L) mm	Width (B) mm	Height (H1) mm	Height (H2) mm	Weight <sup>2</sup> kg
2 PzV 110	110	47	198	340	370	9.0
3 PzV 165	165	65	198	340	370	12.7
4 PzV 220	220	83	198	340	370	16.7
5 PzV 275	275	101	198	340	370	20.5
6 PzV 330	330	119	198	340	370	24.2
7 PzV 385	385	137	198	340	370	28.0
8 PzV 440	440	155	198	340	370	32.0
9 PzV 495	495	173	198	340	370	35.6
10 PzV 550	550	191	198	340	370	39.7
2 PzV 150	150	47	198	445	472	11.6
3 PzV 225	225	65	198	445	472	16.4
4 PzV 300	300	83	198	445	472	20.7
5 PzV 375	375	101	198	445	472	25.3
6 PzV 450	450	119	198	445	472	30.3
7 PzV 525	525	137	198	445	472	35.1
8 PzV 600	600	155	198	445	472	40.0
9 PzV 675	675	173	198	445	472	45.3
10 PzV 750	750	191	198	445	472	49.9
2 PzV 220	220	47	198	594	621	19.3
3 PzV 330	330	65	198	594	621	26.1
4 PzV 440	440	83	198	594	621	32.8
5 PzV 550	550	101	198	594	621	40.1
6 PzV 660	660	119	198	594	621	47.0
7 PzV 770	770	137	198	594	621	53.8
8 PzV 880	880	155	198	594	621	60.0
9 PzV 990	990	173	198	594	621	68.8
10 PzV 1100	1100	191	198	594	621	75.4
2 PzV 250	250	47	198	696	723	22.1
3 PzV 375	375	65	198	696	723	30.3
4 PzV 500	500	83	198	696	723	38.0
5 PzV 625	625	101	198	696	723	46.5
6 PzV 750	750	119	198	696	723	54.4
7 PzV 875	875	137	198	696	723	62.2
8 PzV 1000	1000	155	198	696	723	69.3
9 PzV 1125	1125	173	198	696	723	79.5
10 PzV 1250	1250	191	198	696	723	87.1

<sup>1</sup> Capacity at 30 °C (86 °F) according to DIN EN 60 254-1

<sup>2</sup> Cell weight filled and charged ± 5 %



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