

TAB TRACTION BATTERIES



TAB

DIN
DIN-S
BS

BATTERY ASIA (THAILAND) CO.,LTD.

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STANDARD CHARACTERISTIC DATA

50Ah/plate

[h1 = 282, h2 = 305 mm | length = b = 198 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 EPzS 100 L	2 Pg 190 L	100	45	6,8	5,7
3 EPzS 150 L	3 Pg 190 L	150	63	9,6	7,7
4 EPzS 200 L	4 Pg 190 L	200	81	12,4	9,9
5 EPzS 250 L	5 Pg 190 L	250	99	15,3	12,2
6 EPzS 300 L	6 Pg 190 L	300	118	18,2	14,5
7 EPzS 350 L	7 Pg 190 L	350	136	21,1	16,7
8 EPzS 400 L	8 Pg 190 L	400	155	24,0	19,0
9 EPzS 450 L	9 Pg 190 L	450	173	26,9	21,3
10 EPzS 500 L	10 Pg 190 L	500	191	29,8	23,6
12 EPzS 600 L	12 Pg 190 L	600	227	35,9	28,4

60Ah/plate

[h1 = 340, h2 = 363 mm | length = b = 198 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 EPzS 120 L	2 Pg 250 L	120	45	8,5	6,5
3 EPzS 180 L	3 Pg 250 L	180	63	11,9	9,2
4 EPzS 240 L	4 Pg 250 L	240	81	15,4	11,9
5 EPzS 300 L	5 Pg 250 L	300	99	18,9	14,6
6 EPzS 360 L	6 Pg 250 L	360	118	22,4	17,2
7 EPzS 420 L	7 Pg 250 L	420	136	25,9	19,9
8 EPzS 480 L	8 Pg 250 L	480	155	29,4	22,6
9 EPzS 540 L	9 Pg 250 L	540	173	32,9	25,2
10 EPzS 600 L	10 Pg 250 L	600	191	36,4	27,9
12 EPzS 720 L	12 Pg 250 L	720	227	43,7	33,6

80Ah/plate

[h1 = 402, h2 = 425 mm | length = b = 198 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 EPzS 160 L	2 Pg 310 L	160	45	10,2	8,1
3 EPzS 240 L	3 Pg 310 L	240	63	14,5	11,2
4 EPzS 320 L	4 Pg 310 L	320	81	18,7	14,6
5 EPzS 400 L	5 Pg 310 L	400	99	22,9	17,9
6 EPzS 480 L	6 Pg 310 L	480	118	27,1	21,3
7 EPzS 560 L	7 Pg 310 L	560	136	31,3	24,7
8 EPzS 640 L	8 Pg 310 L	640	155	35,5	28,0
9 EPzS 720 L	9 Pg 310 L	720	173	39,7	31,4
10 EPzS 800 L	10 Pg 310 L	800	191	43,9	34,7
12 EPzS 960 L	12 Pg 310 L	960	227	52,6	41,8

90Ah/plate

[h1 = 472, h2 = 495 mm | length = b = 198 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 EPzS 180 L	2 Pg 360 L	180	47	11,6	9,1
3 EPzS 270 L	3 Pg 360 L	270	65	16,6	12,8
4 EPzS 360 L	4 Pg 360 L	360	83	21,4	16,6
5 EPzS 450 L	5 Pg 360 L	450	101	26,2	20,5
6 EPzS 540 L	6 Pg 360 L	540	119	31,0	24,4
7 EPzS 630 L	7 Pg 360 L	630	137	35,8	28,2
8 EPzS 720 L	8 Pg 360 L	720	155	40,6	32,1
9 EPzS 810 L	9 Pg 360 L	810	173	45,4	35,9
10 EPzS 900 L	10 Pg 360 L	900	191	50,2	39,8
12 EPzS 1080 L	12 Pg 360 L	1080	227	60,1	47,8

105Ah/plate

[h1 = 515, h2 = 538 mm | length = b = 198 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 EPzS 210 L	2 Pg 425 L	210	47	13,3	10,3
3 EPzS 315 L	3 Pg 425 L	315	65	18,3	14,4
4 EPzS 420 L	4 Pg 425 L	420	83	23,7	18,6
5 EPzS 525 L	5 Pg 425 L	525	101	29,1	22,9
6 EPzS 630 L	6 Pg 425 L	630	119	34,5	27,1
7 EPzS 735 L	7 Pg 425 L	735	137	39,9	31,4
8 EPzS 840 L	8 Pg 425 L	840	155	45,3	35,6
9 EPzS 945 L	9 Pg 425 L	945	173	50,7	39,9
10 EPzS 1050 L	10 Pg 425 L	1050	191	56,4	44,5
12 EPzS 1260 L	12 Pg 425 L	1260	227	67,2	53,0

115Ah/plate

[h1 = 545, h2 = 568 mm | length = b = 198 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 EPzS 230 L	2 Pg 445 L	230	47	14,0	10,8
3 EPzS 345 L	3 Pg 445 L	345	65	19,8	15,3
4 EPzS 460 L	4 Pg 445 L	460	83	25,6	19,9
5 EPzS 575 L	5 Pg 445 L	575	101	31,4	24,8
6 EPzS 690 L	6 Pg 445 L	690	119	37,2	29,6
7 EPzS 805 L	7 Pg 445 L	805	137	43,0	34,5
8 EPzS 920 L	8 Pg 445 L	920	155	48,8	39,3
9 EPzS 1035 L	9 Pg 445 L	1035	173	54,9	44,5
10 EPzS 1150 L	10 Pg 445 L	1150	191	60,7	49,3
12 EPzS 1380 L	12 Pg 445 L	1380	227	72,3	59,0

125Ah/plate

[h1 = 570, h2 = 593 mm | length = b = 198 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 EPzS 250 L	2 Pg 480 L	250	47	14,7	11,6
3 EPzS 375 L	3 Pg 480 L	375	65	20,7	16,2
4 EPzS 500 L	4 Pg 480 L	500	83	26,9	21,1
5 EPzS 625 L	5 Pg 480 L	625	101	33,1	26,0
6 EPzS 750 L	6 Pg 480 L	750	119	39,3	30,9
7 EPzS 875 L	7 Pg 480 L	875	137	45,5	35,8
8 EPzS 1000 L	8 Pg 480 L	1000	155	51,7	40,7
9 EPzS 1125 L	9 Pg 480 L	1125	173	58,2	45,9
10 EPzS 1250 L	10 Pg 480 L	1250	191	64,4	50,8
12 EPzS 1500 L	12 Pg 480 L	1500	227	76,8	60,6

140Ah/plate

[h1 = 686, h2 = 709 mm | length = b = 198 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 EPzS 280 L	2 Pg 555 L	280	47	20,6	14,4
3 EPzS 420 L	3 Pg 555 L	420	65	25,3	19,4
4 EPzS 560 L	4 Pg 555 L	560	83	32,2	25,1
5 EPzS 700 L	5 Pg 555 L	700	101	39,5	30,9
6 EPzS 840 L	6 Pg 555 L	840	119	46,7	36,6
7 EPzS 980 L	7 Pg 555 L	980	137	54,0	42,3
8 EPzS 1120 L	8 Pg 555 L	1120	155	61,2	48,0
9 EPzS 1260 L	9 Pg 555 L	1260	173	68,8	54,1
10 EPzS 1400 L	10 Pg 555 L	1400	191	76,0	59,8
12 EPzS 1680 L	12 Pg 555 L	1680	227	90,5	71,3

155Ah/plate

[h1 = 720, h2 = 743 mm | length = b = 198 mm]

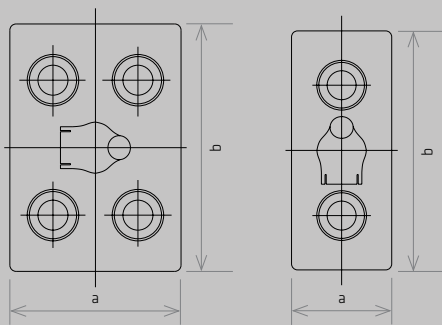
CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 EPzS 310 L	2 Pg 590 L	310	47	21,5	14,9
3 EPzS 465 L	3 Pg 590 L	465	65	26,1	20,6
4 EPzS 620 L	4 Pg 590 L	620	83	33,5	26,7
5 EPzS 775 L	5 Pg 590 L	775	101	41,1	32,9
6 EPzS 930 L	6 Pg 590 L	930	119	48,9	39,0
7 EPzS 1085 L	7 Pg 590 L	1085	137	56,7	45,1
8 EPzS 1240 L	8 Pg 590 L	1240	155	64,5	51,3
9 EPzS 1395 L	9 Pg 590 L	1395	173	72,8	57,8
10 EPzS 1550 L	10 Pg 590 L	1550	191	80,6	64,0
12 EPzS 1860 L	12 Pg 590 L	1860	227	96,2	76,2

Electrolyte density by 30 °C : 1,29 ± 0,01 kg/l. Weight tolerance is ± 5 %.

Cells from 7 to 10 EPzS types are available with 2 poles. For 4 poles, please specify with your order. **!**
All 12 EPzS and 10 Pg/555 and 10 Pg/590 cells are available with 4 poles only.

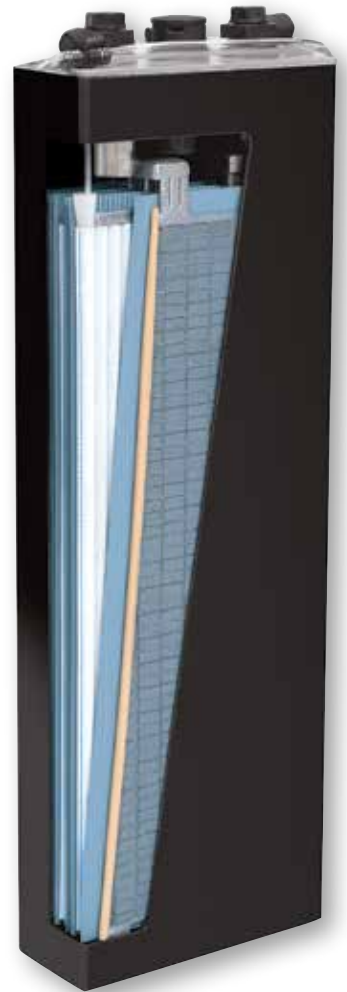
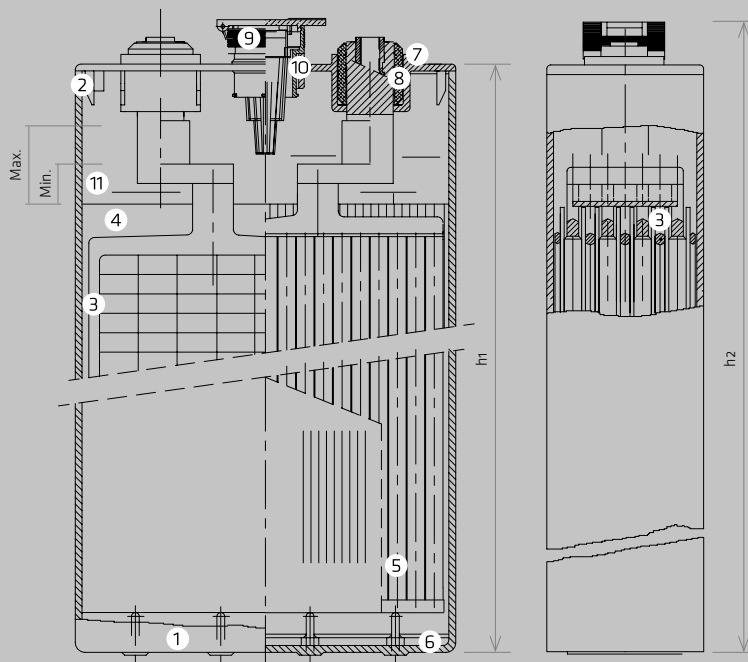
Traction

IN CASE OF PROBLEMS WITH ORDERING WE WILL BE GLAD TO ADVISE AND ASSIST YOU IN THE SELECTION OF THE SUITABLE TYPE OF BATTERY.



In order that the batteries would meet all your demands, we kindly ask you to enclose the following data with your order:

- + battery **voltage**
- + **capacity** of the battery at a five-hour discharge rate
- + **dimensions** of the battery tray
- + **designation and type** of the electric machine
- + any **special demands**
- + a battery **drawing** (when possible)



All measures and weights are within standard production tolerances.

Electrical values are approximate.

Technical modifications are reserved without prior notice.

- 1 Polypropilene container
- 2 Polypropilene cover
- 3 Negative grid Plate
- 4 Microporous separator
- 5 Positive armoured tube Plate
- 6 Settling rib
- 7 Terminal post
- 8 Rubber sealing
- 9 Cell plug \varnothing 35,5
- 10 Plug sealing \varnothing 35,5
- 11 Electrolite

h1 = 570 mm, h2 = 593 mm length = 198 mm

CELL TYPE	Capacity C5 (Ah)	Width (mm)	Weight with acid (kg)	Weight dry (kg)
2 PzRM 230	230	47	14,5	11,1
3 PzRM 345	345	65	20,4	15,6
4 PzRM 460	460	83	26,2	20,2
5 PzRM 575	575	101	32,0	25,0
6 PzRM 690	690	119	37,8	29,8
7 PzRM 805	805	137	43,6	34,7
8 PzRM 920	920	155	49,4	39,5

h1 = 720 mm, h2 = 743 mm length = 198 mm

CELL TYPE	Capacity C5 (Ah)	Width (mm)	Weight with acid (kg)	Weight dry (kg)
2 PzRM 280	280	47	21,1	14,9
3 PzRM 420	420	65	26,0	19,9
4 PzRM 560	560	83	32,6	25,6
5 PzRM 700	700	101	39,9	31,4
6 PzRM 840	840	119	47,2	37,1
7 PzRM 980	980	137	54,5	42,9
8 PzRM 1120	1120	155	61,8	48,6

WATER REFILL INTERVAL IS dramatically reduced

Traction **AQUALESS**

CELL DESIGN WITH HIGHEST ELECTROLYTE RESERVE AND PROVEN EPzS TECHNOLOGY USING TUBULAR PLATES WITH LOW ANTIMONY ALLOYS IN COMBINATION WITH AN ADJUSTED CHARGING REGIME RESULTS IN EXTENDED WATERING INTERVALS. TAB PzRM CELLS ARE MANUFACTURED AND TESTED ACCORDING TO EN60254-1 AND IEC 254-1.

Main advantages of TAB Aqualess (PzRM) batteries:

- + water refill interval is dramatically reduced
- + reduced water consumption
- + low maintenance and operational costs
- + 50 to 80% reduced gas release and ventilation requirements
- + 20 to 30% less charging time
- + cost saving due to lower energy consumption from 10-20%
- + recharging factor reduced from standard to 1,07
- + operating temperatures reduced in average for 5°C

TAB Aqualess Battery specifications:

- + water refilling interval up to 100 cycles (at normal duty applications with 80%DOD C5, 1 cycle per day; Electrolyte T=30°C)
- + for these batteries proper chargers must be used (Hf, IUla, pulse chargers) with recharging factor 1,07
- + cells are equipped with Electrolyte Mixing system (using charger with integrated air pump) to prevent electrolyte stratification and to ensure optimised charging
- + batteries are assembled with Central Water Filling system
- + each battery has an Electrolyte Level Sensor. With its red light it gives signal to the user when water refilling is needed.



AQUAMATIC



AIRMATIC



LEVEL SENSOR



TOPPING UP TO 100 CYCLES

Battery application. Traction batteries TAB of type EPzS and PzB are appropriated for propulsion of different electrical machines (forklifts, mine locomotives, etc.).

One of the very important production part of your company is internal logistics. We are introducing our traction batteries TAB which have been satisfying the most demanding users for more than half a century. **Batteries are known by their: high capacity, long life-time, resistance to vibrations, short charging times, low consumption of distilled water, simple maintenance.**

We assemble individual cells (2V) into batteries with different voltages, capacities and dimensions which suite to all types of electrical machines. Wide production program covers the range of DIN (EPzS) and BS (PzB) cells according to EN60254 - 1,2 and IEC 254 - 1,2.

WE PRODUCE BATTERIES / CELLS IN WELDED AND BOLTED VERSION



BOTH VERSIONS ARE BEING MANUFACTURED:

- + **DRY-CHARGED VERSION:** a battery / cell have to be filled up with an electrolyte and supplementary charged before use. The Plates are already formed and in special process protected against oxidation. They can be stored up to two years.
- + **ELECTROLYTE-CHARGED:** a battery / cell can be installed immediately, because it is already filled up with electrolyte and electrically charged as well.



WE HIGHLY RECOMMEND THE USE OF ADDITIONAL SYSTEMS:

- + **CENTRAL WATER FILLING SYSTEM** which enables a quick and precise service of the whole battery under any working conditions.
- + **CAPACITIVE BATTERY ELECTROLYTE LEVEL SENSOR** which with clearly visible green light indicates electrolyte at proper specified level. Flashing red light indicates that the electrolyte level is bellow minimum and battery needs to be refilled with demineralised water to avoid permanent damage of the battery.
- + **ELECTROLYTE MIXING SYSTEM** which allows faster charging of battery. Yet, the battery with a 100 % daily charge (maximum charging current is $2,5 \times I_5$) can not be damaged during this time.