

TAB TRACTION BATTERIES



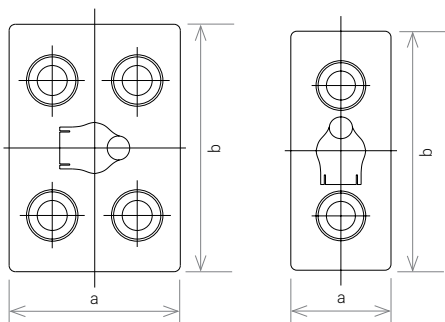
TAB

DIN
DIN-S
BS
PzV
PzVB

TAB was established in 1965 as a subsidiary of Lead Mine Mežica Holding in a region where different lead activities are more than 350 years old. Nowadays, TAB is producing a wide range of industrial and starter batteries.

**WE HAVE EXPERIENCE AND WE HAVE KNOWLEDGE –
THEREFORE OUR HIGH QUALITY BATTERIES ARE KNOWN WORLDWIDE.
WE ARE PROUD OF OUR DURABLE ENERGY – NOW ALREADY MORE THAN 50 YEARS.**

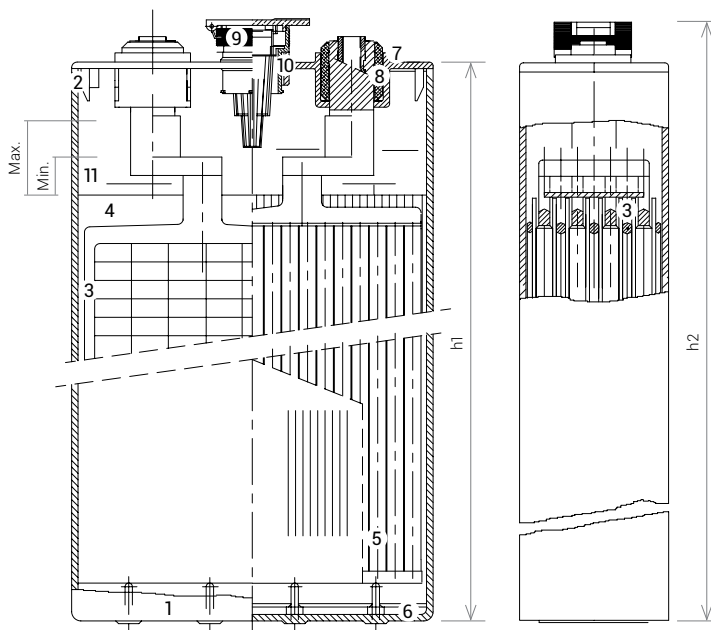
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IN CASE OF PROBLEMS WITH ORDERING WE WILL BE GLAD TO ADVISE AND ASSIST YOU IN THE SELECTION OF THE SUITABLE TYPE OF BATTERY.

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)



- 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 Ø 35,5
- 10 Plug sealing Ø 35,5
- 11 Electrolite

All measures and weights are within standard production tolerances. Electrical values are approximate. Technical modifications are reserved without prior notice.

DIN STANDARD CHARACTERISTIC DATA

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.

50Ah/plate

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

CELL TYPE	TAB DESIGNATION	CAPACITY 5h	WIDTH mm	WEIGHT with acid	WEIGHT dry (kg)
2 PzS 100 L	2 Pg 190 L	100	45	6,8	5,7
3 PzS 150 L	3 Pg 190 L	150	63	9,6	7,7
4 PzS 200 L	4 Pg 190 L	200	81	12,4	9,9
5 PzS 250 L	5 Pg 190 L	250	99	15,3	12,2
6 PzS 300 L	6 Pg 190 L	300	118	18,2	14,5
7 PzS 350 L	7 Pg 190 L	350	136	21,1	16,7
8 PzS 400 L	8 Pg 190 L	400	155	24,0	19,0
9 PzS 450 L	9 Pg 190 L	450	173	26,9	21,3
10 PzS 500 L	10 Pg 190 L	500	191	29,8	23,6
12 PzS 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 5h	WIDTH mm	WEIGHT with acid	WEIGHT dry (kg)
2 PzS 120 L	2 Pg 250 L	120	45	8,5	6,5
3 PzS 180 L	3 Pg 250 L	180	63	11,9	9,2
4 PzS 240 L	4 Pg 250 L	240	81	15,4	11,9
5 PzS 300 L	5 Pg 250 L	300	99	18,9	14,6
6 PzS 360 L	6 Pg 250 L	360	118	22,4	17,2
7 PzS 420 L	7 Pg 250 L	420	136	25,9	19,9
8 PzS 480 L	8 Pg 250 L	480	155	29,4	22,6
9 PzS 540 L	9 Pg 250 L	540	173	32,9	25,2
10 PzS 600 L	10 Pg 250 L	600	191	36,4	27,9
12 PzS 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 5h	WIDTH mm	WEIGHT with acid	WEIGHT dry (kg)
2 PzS 160 L	2 Pg 310 L	160	45	10,2	8,1
3 PzS 240 L	3 Pg 310 L	240	63	14,5	11,2
4 PzS 320 L	4 Pg 310 L	320	81	18,7	14,6
5 PzS 400 L	5 Pg 310 L	400	99	22,9	17,9
6 PzS 480 L	6 Pg 310 L	480	118	27,1	21,3
7 PzS 560 L	7 Pg 310 L	560	136	31,3	24,7
8 PzS 640 L	8 Pg 310 L	640	155	35,5	28,0
9 PzS 720 L	9 Pg 310 L	720	173	39,7	31,4
10 PzS 800 L	10 Pg 310 L	800	191	43,9	34,7
12 PzS 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 5h	WIDTH mm	WEIGHT with acid	WEIGHT dry (kg)
2 PzS 180 L	2 Pg 360 L	180	47	11,6	9,1
3 PzS 270 L	3 Pg 360 L	270	65	16,6	12,8
4 PzS 360 L	4 Pg 360 L	360	83	21,4	16,6
5 PzS 450 L	5 Pg 360 L	450	101	26,2	20,5
6 PzS 540 L	6 Pg 360 L	540	119	31,0	24,4
7 PzS 630 L	7 Pg 360 L	630	137	35,8	28,2
8 PzS 720 L	8 Pg 360 L	720	155	40,6	32,1
9 PzS 810 L	9 Pg 360 L	810	173	45,4	35,9
10 PzS 900 L	10 Pg 360 L	900	191	50,2	39,8
12 PzS 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 5h	WIDTH mm	WEIGHT with acid	WEIGHT dry (kg)
2 PzS 210 L	2 Pg 425 L	210	47	13,3	10,3
3 PzS 315 L	3 Pg 425 L	315	65	18,3	14,4
4 PzS 420 L	4 Pg 425 L	420	83	23,7	18,6
5 PzS 525 L	5 Pg 425 L	525	101	29,1	22,9
6 PzS 630 L	6 Pg 425 L	630	119	34,5	27,1
7 PzS 735 L	7 Pg 425 L	735	137	39,9	31,4
8 PzS 840 L	8 Pg 425 L	840	155	45,3	35,6
9 PzS 945 L	9 Pg 425 L	945	173	50,7	39,9
10 PzS 1050 L	10 Pg 425 L	1050	191	56,4	44,5
12 PzS 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 5h	WIDTH mm	WEIGHT with acid	WEIGHT dry (kg)
2 PzS 230 L	2 Pg 445 L	230	47	14,0	10,8
3 PzS 345 L	3 Pg 445 L	345	65	19,8	15,3
4 PzS 460 L	4 Pg 445 L	460	83	25,6	19,9
5 PzS 575 L	5 Pg 445 L	575	101	31,4	24,8
6 PzS 690 L	6 Pg 445 L	690	119	37,2	29,6
7 PzS 805 L	7 Pg 445 L	805	137	43,0	34,5
8 PzS 920 L	8 Pg 445 L	920	155	48,8	39,3
9 PzS 1035 L	9 Pg 445 L	1035	173	54,9	44,5
10 PzS 1150 L	10 Pg 445 L	1150	191	60,7	49,3
12 PzS 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 5h	WIDTH mm	WEIGHT with acid	WEIGHT dry (kg)
2 PzS 250 L	2 Pg 480 L	250	47	14,7	11,6
3 PzS 375 L	3 Pg 480 L	375	65	20,7	16,2
4 PzS 500 L	4 Pg 480 L	500	83	26,9	21,1
5 PzS 625 L	5 Pg 480 L	625	101	33,1	26,0
6 PzS 750 L	6 Pg 480 L	750	119	39,3	30,9
7 PzS 875 L	7 Pg 480 L	875	137	45,5	35,8
8 PzS 1000 L	8 Pg 480 L	1000	155	51,7	40,7
9 PzS 1125 L	9 Pg 480 L	1125	173	58,2	45,9
10 PzS 1250 L	10 Pg 480 L	1250	191	64,4	50,8
12 PzS 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 5h	WIDTH mm	WEIGHT with acid	WEIGHT dry (kg)
2 PzS 280 L	2 Pg 555 L	280	47	20,6	14,4
3 PzS 420 L	3 Pg 555 L	420	65	25,3	19,4
4 PzS 560 L	4 Pg 555 L	560	83	32,2	25,1
5 PzS 700 L	5 Pg 555 L	700	101	39,5	30,9
6 PzS 840 L	6 Pg 555 L	840	119	46,7	36,6
7 PzS 980 L	7 Pg 555 L	980	137	54,0	42,3
8 PzS 1120 L	8 Pg 555 L	1120	155	61,2	48,0
9 PzS 1260 L	9 Pg 555 L	1260	173	68,8	54,1
10 PzS 1400 L	10 Pg 555 L	1400	191	76,0	59,8
12 PzS 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 5h	WIDTH mm	WEIGHT with acid	WEIGHT dry (kg)
2 PzS 310 L	2 Pg 590 L	310	47	21,5	14,9
3 PzS 465 L	3 Pg 590 L	465	65	26,1	20,6
4 PzS 620 L	4 Pg 590 L	620	83	33,5	26,7
5 PzS 775 L	5 Pg 590 L	775	101	41,1	32,9
6 PzS 930 L	6 Pg 590 L	930	119	48,9	39,0
7 PzS 1085 L	7 Pg 590 L	1085	137	56,7	45,1
8 PzS 1240 L	8 Pg 590 L	1240	155	64,5	51,3
9 PzS 1395 L	9 Pg 590 L	1395	173	72,8	57,8
10 PzS 1550 L	10 Pg 590 L	1550	191	80,6	64,0
12 PzS 1860 L	12 Pg 590 L	1860	227	96,2	76,2



TAB-EX APPLICATION FIELD

**Assembly of ex batteries operating
in various applications:**

- + MINING
- + PETROCHEMISTRY
- + CHEMISTRY
- + PHARMACY
- + STORAGE DEPOTS

Ex

**TAB-EX TRACTION CELLS COMPLYING
WITH TRACTION BATTERY STANDARDS
EN/IEC 60254-1 AND 60254-2 ARE COMPONENT
CERTIFIED FOR ASSEMBLY OF BATTERIES
USED IN ZONE AREAS WITH RISKS OF
EXPLOSION DUE TO FLAMMABLE GAS OR DUST:**

Group I Category M2:

Ex e I Mb

Group II Category 2 and 3:

Zone 1 and 2 (Gas), 21 and 22 (Dust):

Ex e IIC Gb

Ex t IIIC Db IP 64

THE CELLS ARE PRODUCED IN
ACCORDANCE WITH THE DIRECTIVE
94/9/EC IN IECEX CERTIFICATION
SCHEME AND FULFILL THE
APPLICABLE REQUIREMENTS OF
DIRECTIVE HARMONIZED STANDARDS
EN/IEC 60079-0 AND 60079-7.



CERTIFICATES

Traction batteries:
EPzS, EPzV, PzB and PzBV

ATEX Certificate:
Sira 10ATEX3255U
SIQ 11 ATEX Q 327-0

IECEX Certificate:
IECEX SIR 11.0157U

TAB-EX cells are available for the following range:

- + All DIN and DIN S types except for cells with 12 positive plates
- + All BS types except for cells from 9 to 11 positive plates
- + All PzVB and PzV gel cells

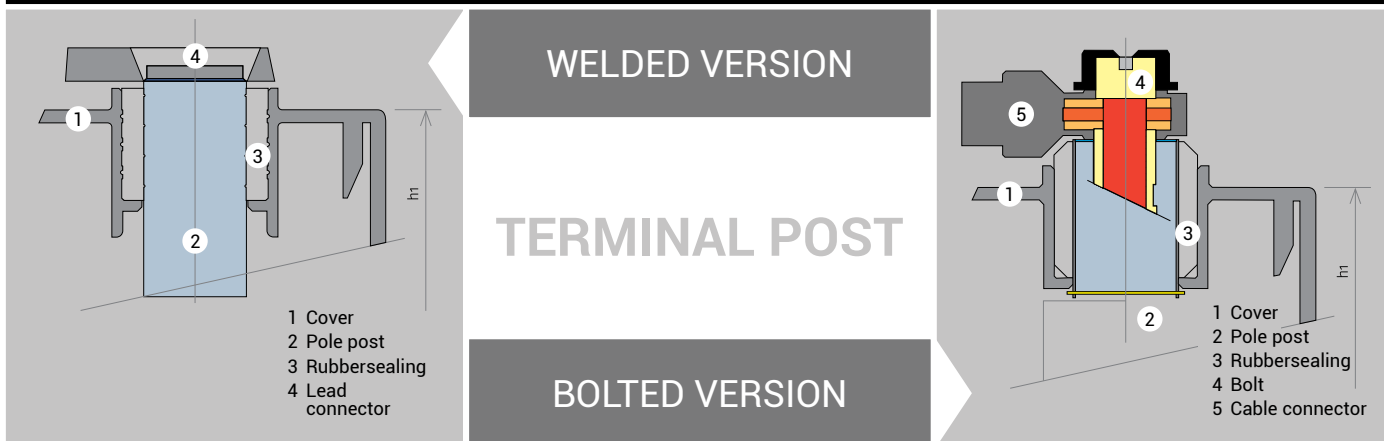


Battery application. Traction batteries TAB of type EPzS and PzB are appropriated for propulsion of different electrical machines (forklifts, mine locomotives, etc.).

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

SALES DEPARTMENT

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