

TAB TRACTION BATTERIES



TAB

DIN
DIN-S
BS

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DIN-S

STANDARD CHARACTERISTIC DATA

110Ah/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 220 S	2 Pg 425 S	220	47	13,9	10,4
3 EPzS 330 S	3 Pg 425 S	330	65	19,1	14,5
4 EPzS 440 S	4 Pg 425 S	440	83	24,4	18,7
5 EPzS 550 S	5 Pg 425 S	550	101	29,8	23,1
6 EPzS 660 S	6 Pg 425 S	660	119	35,2	27,3
7 EPzS 770 S	7 Pg 425 S	770	137	40,6	31,6
8 EPzS 880 S	8 Pg 425 S	880	155	46,0	35,8
9 EPzS 990 S	9 Pg 425 S	990	173	51,4	40,1
10 EPzS 1100 S *	10 Pg 425 S	1100	191	57,1	44,6
12 EPzS 1320S *	12 Pg 425 S	1320	227	67,9	53,2

120Ah/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 240 S	2 Pg 445 S	240	47	14,3	10,9
3 EPzS 360 S	3 Pg 445 S	360	65	20,2	15,4
4 EPzS 480 S	4 Pg 445 S	480	83	26,0	20,0
5 EPzS 600 S	5 Pg 445 S	600	101	31,8	24,8
6 EPzS 720 S	6 Pg 445 S	720	119	37,6	29,7
7 EPzS 840 S	7 Pg 445 S	840	137	43,4	34,6
8 EPzS 960 S	8 Pg 445 S	960	155	49,2	39,4
9 EPzS 1080 S *	9 Pg 445 S	1080	173	55,3	44,6
10 EPzS 1200 S *	10 Pg 445 S	1200	191	61,1	49,4
12 EPzS 1440S *	12 Pg 445 S	1440	227	72,7	59,1

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

Welded cells from 8-12 EPzS with 4 poles.
Screwed cells with 4 poles are signed with *.



135Ah/plate [h1 = 686, h2 = 709 mm | length = b = 198 mm]

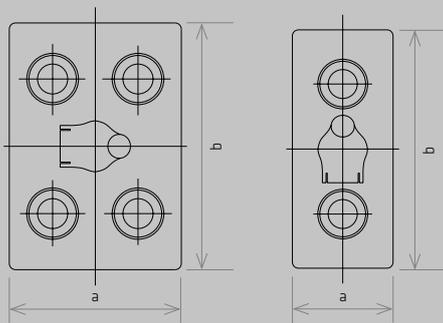
CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 EPzS 270 S	2 Pg 530 S	270	47	20,1	14,4
3 EPzS 405 S	3 Pg 530 S	405	65	25,0	18,6
4 EPzS 540 S	4 Pg 530 S	540	83	31,9	24,1
5 EPzS 675 S	5 Pg 530 S	675	101	38,8	29,5
6 EPzS 810 S	6 Pg 530 S	810	119	45,7	34,9
7 EPzS 945 S	7 Pg 530 S	945	137	52,6	40,4
8 EPzS 1080 S	8 Pg 530 S	1080	155	59,5	45,8
9 EPzS 1215 S *	9 Pg 530 S	1215	173	66,7	51,6
10 EPzS 1350 S *	10 Pg 530 S	1350	191	73,6	57,0
12 EPzS 1620S *	12 Pg 530 S	1620	227	87,4	67,9

145Ah/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 290 S	2 Pg 555 S	290	47	20,9	14,7
3 EPzS 435 S	3 Pg 555 S	435	65	25,8	19,7
4 EPzS 580 S	4 Pg 555 S	580	83	32,4	25,4
5 EPzS 725 S	5 Pg 555 S	725	101	39,7	31,2
6 EPzS 870 S	6 Pg 555 S	870	119	47,0	36,9
7 EPzS 1015 S	7 Pg 555 S	1015	137	54,3	42,7
8 EPzS 1160 S	8 Pg 555 S	1160	155	61,6	48,4
9 EPzS 1305 S *	9 Pg 555 S	1305	173	69,2	54,5
10 EPzS 1450 S *	10 Pg 555 S	1450	191	76,5	60,2
12 EPzS 1740 S *	12 Pg 555 S	1740	227	91,1	71,7

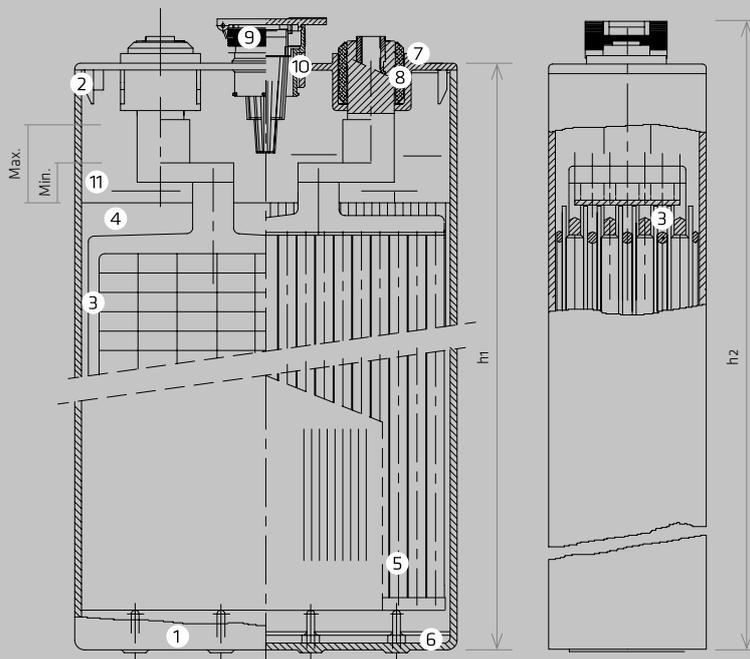
Traction

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, IU1a, 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.**

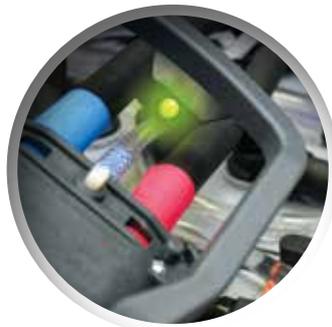
We assemble individual cells (2V) into batteries with different voltages, capacities and dimensions which suite to all types of electrical machines. Wide production program covers the range of DIN (EPzS) and BS (PzB) cells according to EN60254 - 1,2 and IEC 254 - 1,2.

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.