

TAB TRACTION BATTERIES



TAB

DIN
DIN-S
BS
PzV
PzVB

DIN

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. !

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 1320 S *	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 1440 S *	12 Pg 445 S	1440	227	72,7	59,1

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 1620 S *	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

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 *.



STANDARD CHARACTERISTIC DATA

23Ah/plate

[h1 = 216, h2 = 240 mm | length = b = 157,5 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 PzB 46 E	2 Pgi 135	46	45	3,7	3,0
3 PzB 69 E	3 Pgi 135	69	61	5,4	4,2
4 PzB 92 E	4 Pgi 135	92	77	6,9	5,4
5 PzB 115 E	5 Pgi 135	115	93	8,4	6,6
6 PzB 138 E	6 Pgi 135	138	109	10,0	7,8
7 PzB 161 E	7 Pgi 135	161	125	11,6	9,0
8 PzB 184 E	8 Pgi 135	184	141	13,2	10,2
9 PzB 207 E *	9 Pgi 135	207	157	15,3	11,9
10 PzB 230 E *	10 Pgi 135	230	173	16,9	13,1
11 PzB 253 E *	11 Pgi 135	253	189	18,4	14,3

32Ah/plate

[h1 = 260, h2 = 284 mm | length = b = 157,5 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 PzB 64 E	2 Pgi 190	64	45	5,1	4,0
3 PzB 96 E	3 Pgi 190	96	61	7,1	5,6
4 PzB 128 E	4 Pgi 190	128	77	9,2	7,2
5 PzB 160 E	5 Pgi 190	160	93	11,3	8,8
6 PzB 192 E	6 Pgi 190	192	109	13,2	10,3
7 PzB 224 E	7 Pgi 190	224	125	15,0	11,7
8 PzB 256 E	8 Pgi 190	256	141	16,8	13,1
9 PzB 288 E *	9 Pgi 190	288	157	19,1	14,9
10 PzB 320 E *	10 Pgi 190	320	173	20,9	16,3
11 PzB 352 E *	11 Pgi 190	352	189	22,7	17,7

42Ah/plate

[h1 = 326, h2 = 350 mm | length = b = 157,5 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 PzB 84 E	2 Pgi 250	84	45	6,9	5,4
3 PzB 126 E	3 Pgi 250	126	61	9,4	7,3
4 PzB 168 E	4 Pgi 250	168	77	11,9	9,3
5 PzB 210 E	5 Pgi 250	210	93	14,5	11,3
6 PzB 252 E	6 Pgi 250	252	109	17,3	13,5
7 PzB 294 E	7 Pgi 250	294	125	20,0	15,6
8 PzB 336 E	8 Pgi 250	336	141	22,3	17,6
9 PzB 378 E *	9 Pgi 250	378	157	25,2	19,9
10 PzB 420 E *	10 Pgi 250	420	173	27,6	21,8
11 PzB 462 E *	11 Pgi 250	462	189	30,0	23,7

55Ah/plate

[h1 = 399, h2 = 423 mm | length = b = 157,5 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 PzB 110 E	2 Pgi 310	110	45	7,6	6,1
3 PzB 165 E	3 Pgi 310	165	61	10,5	8,5
4 PzB 220 E	4 Pgi 310	220	77	13,5	11,0
5 PzB 275 E	5 Pgi 310	275	93	16,5	13,5
6 PzB 330 E	6 Pgi 310	330	109	19,6	15,9
7 PzB 385 E	7 Pgi 310	385	125	22,6	18,4
8 PzB 440 E	8 Pgi 310	440	141	25,6	20,8
9 PzB 495 E	9 Pgi 310	495	157	29,1	23,8
10 PzB 550 E	10 Pgi 310	550	173	32,1	26,3
11 PzB 605 E	11 Pgi 310	605	189	35,2	28,7

65Ah/plate

[h1 = 453, h2 = 477 mm | length = b = 157,5 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 PzB 130 E	2 Pgi 360	130	45	8,2	6,8
3 PzB 195 E	3 Pgi 360	195	61	12,0	10,1
4 PzB 260 E	4 Pgi 360	260	77	15,5	13,0
5 PzB 325 E	5 Pgi 360	325	93	19,0	16,0
6 PzB 390 E	6 Pgi 360	390	109	22,6	18,9
7 PzB 455 E	7 Pgi 360	455	125	26,1	21,8
8 PzB 520 E	8 Pgi 360	520	141	29,6	24,5
9 PzB 585 E *	9 Pgi 360	585	157	33,6	27,9
10 PzB 650 E *	10 Pgi 360	650	173	37,2	30,6
11 PzB 715 E *	11 Pgi 360	715	189	40,7	33,3

75Ah/plate

[h1 = 513, h2 = 537 mm | length = b = 157,5 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 PzB 150 E	2 Pgi 413	150	45	10,0	7,5
3 PzB 225 E	3 Pgi 413	225	61	13,9	10,8
4 PzB 300 E	4 Pgi 413	300	77	17,8	14,1
5 PzB 375 E	5 Pgi 413	375	93	21,6	17,5
6 PzB 450 E	6 Pgi 413	450	109	25,6	20,9
7 PzB 525 E	7 Pgi 413	525	125	29,6	24,1
8 PzB 600 E	8 Pgi 413	600	141	33,5	27,4
9 PzB 675 E *	9 Pgi 413	675	157	38,2	31,1
10 PzB 750 E *	10 Pgi 413	750	173	42,3	34,2
11 PzB 825 E *	11 Pgi 413	825	189	46,4	37,3

86Ah/plate

[h1 = 567, h2 = 591 mm | length = b = 157,5 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 PzB 172 E	2 Pgi 450	172	45	10,7	8,3
3 PzB 258 E	3 Pgi 450	258	61	15,0	11,8
4 PzB 344 E	4 Pgi 450	344	77	19,3	15,2
5 PzB 430 E	5 Pgi 450	430	93	23,7	18,6
6 PzB 516 E	6 Pgi 450	516	109	28,1	22,0
7 PzB 602 E	7 Pgi 450	602	125	32,6	25,4
8 PzB 688 E	8 Pgi 450	688	141	37,1	28,8
9 PzB 774 E	9 Pgi 450	774	157	42,3	32,9
10 PzB 860 E	10 Pgi 450	860	173	46,9	36,3
11 PzB 946 E	11 Pgi 450	946	189	51,4	39,7

100Ah/plate

[h1 = 608, h2 = 632 mm | length = b = 157,5 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 PzB 200 E	2 Pgi 492	200	45	11,8	9,4
3 PzB 300 E	3 Pgi 492	300	61	16,6	13,5
4 PzB 400 E	4 Pgi 492	400	77	21,5	17,5
5 PzB 500 E	5 Pgi 492	500	93	26,4	21,6
6 PzB 600 E	6 Pgi 492	600	109	31,5	25,6
7 PzB 700 E	7 Pgi 492	700	125	36,4	29,7
8 PzB 800 E	8 Pgi 492	800	141	41,4	33,7
9 PzB 900 E	9 Pgi 492	900	157	47,1	38,6
10 PzB 1000 E	10 Pgi 492	1000	173	52,0	42,7
11 PzB 1100 E	11 Pgi 492	1100	189	56,9	46,7

108Ah/plate

[h1 = 688, h2 = 712 mm | length = b = 157,5 mm]

CELL TYPE	TAB DESIGNATION	CAPACITY 5 h	WIDTH mm	WEIGHT with acid	WEIGHT dry
2 PzB 216 E	2 Pgi 530	216	45	13,5	9,9
3 PzB 324 E	3 Pgi 530	324	61	18,9	14,3
4 PzB 432 E	4 Pgi 530	432	77	24,3	18,7
5 PzB 540 E	5 Pgi 530	540	93	29,7	23,2
6 PzB 648 E	6 Pgi 530	648	109	35,1	27,6
7 PzB 756 E	7 Pgi 530	756	125	40,5	32,1
8 PzB 864 E	8 Pgi 530	864	141	45,9	36,5
9 PzB 972 E	9 Pgi 530	972	157	52,0	41,6
10 PzB 1080 E	10 Pgi 530	1080	173	57,4	46,0
11 PzB 1188 E	11 Pgi 530	1188	189	62,8	50,4

Electrolyte density by 30 °C: 1,29 ± 0,01 kg/l.

Weight tolerance is ± 5 %.

! Cells from 9 - 11 PzB types are available with 4 poles only.

STANDARD CHARACTERISTIC DATA

Fully charged Specific Gravity 1,29 ± 0,01 kg/l at 30 °C.

Weight tolerance is ± 5 %.

! 9 - 11 USi types are available with 4 poles only.

Cell height presents jar height.

Technical modifications are reserved without prior notice.

Number of plates: Number of 85Ah / 120Ah positive tubular plates.



85Ah/plate

[h = 20,5" / 520 mm | length = 6,2" / 158 mm]

CELL TYPE	US TYPE	CAPACITY 6 h	Nr. of PLATES	WIDTH Inch / mm	WEIGHT Wet	WEIGHT Dry
2 USI 413	5 plt	170	2	2,00/51	10,7/24	7,7/17
3 USI 413	7 plt	255	3	2,75/70	14,9/33	11,0/24
4 USI 413	9 plt	340	4	3,50/89	19,1/42	14,3/32
6 USI 413	11 plt	510	6	4,25/108	25,8/57	21,1/47
7 USI 413	13 plt	595	7	5,00/127	30,0/66	24,3/54
8 USI 413	15 plt	680	8	5,75/146	34,1/75	27,6/61
9 USI 413	17 plt	765	9	6,50/165	39,1/86	31,3/69
10 USI 413	19 plt	850	10	7,25/184	43,5/96	34,4/76
11 USI 413	21 plt	935	11	8,00/203	47,8/106	37,5/83

Weight: kg / Lbs

120Ah/plate

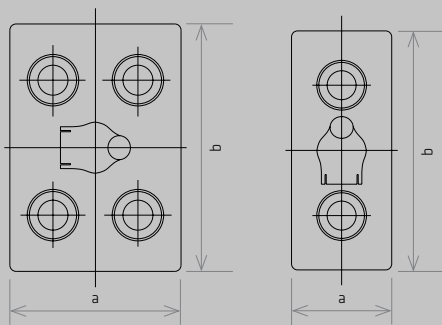
[h = 28,6" / 726 mm | length = 6,2" / 158 mm]

CELL TYPE	US TYPE	CAPACITY 6 h	Nr. of PLATES	WIDTH Inch / mm	WEIGHT Wet	WEIGHT Dry
2 USI 590	5 plt	240	2	2,00/51	15,1/33	10,5/23
3 USI 590	7 plt	360	3	2,75/70	21,3/47	15,2/34
4 USI 590	9 plt	480	4	3,50/89	27,4/60	19,9/44
6 USI 590	11 plt	720	6	4,25/108	37,4/82	29,4/65
7 USI 590	13 plt	840	7	5,00/127	43,1/95	34,2/75
8 USI 590	15 plt	960	8	5,75/146	49,5/109	38,9/86
9 USI 590	17 plt	1080	9	6,50/165	56,4/124	44,3/98
10 USI 590	19 plt	1200	10	7,25/184	62,5/138	49,0/108
11 USI 590	21 plt	1320	11	8,00/203	68,6/151	53,7/118

Weight: kg / Lbs

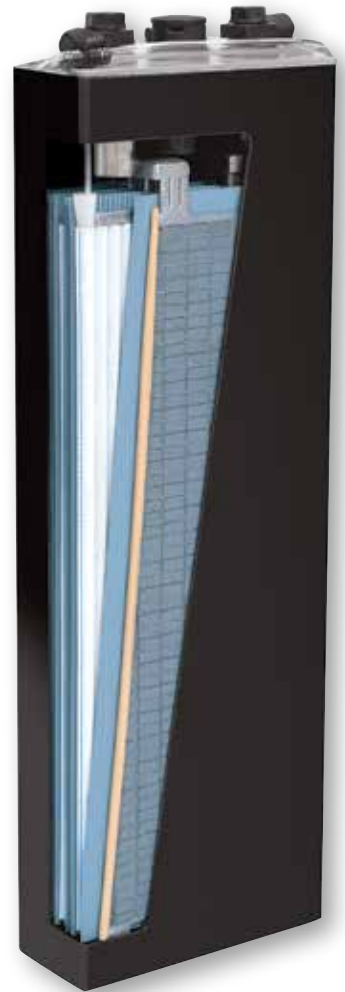
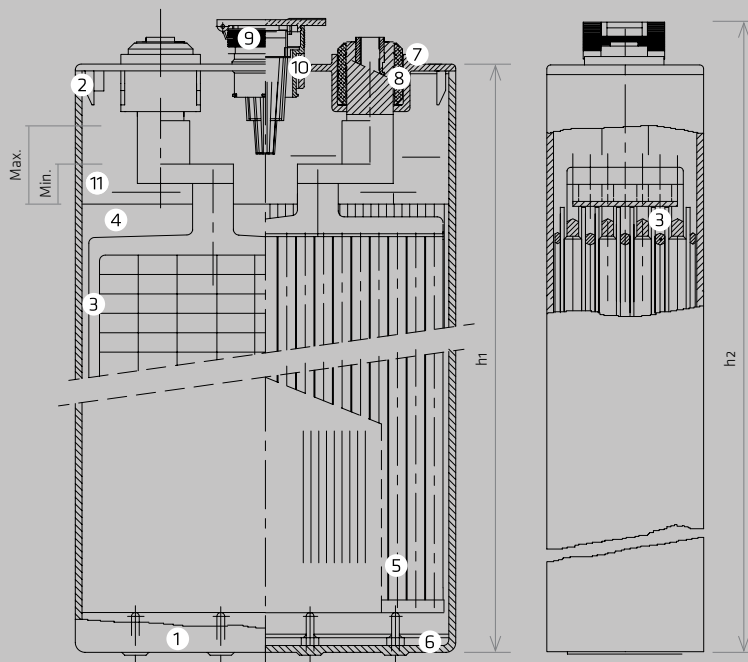
Traction

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

GEL TRACTION

Maintenance free TAB Gel batteries are new high sophisticated traction batteries in the family of TAB motive power products.

Sealed TAB Gel batteries are produced in VRGLA Gel technology (Valve Regulated Lead Acid batteries with electrolyte in the form of gel) according to EN 60254-2 standard.

They can be used in all kind of electrical appliances like: forklift trucks, electric road machines, cleaning machines, etc.

Due to its high operational safety and high degree of environmental friendliness TAB Gel battery is particularly suitable for applications in pharmaceutical, food, chemical and similar industries.

MAIN CHARACTERISTICS

- + maintenance free
- + incorporated valves in exhaust tubes prevent corrosive gas release
- + extremely low self-discharge
- + extremely low gassing during operation
- + maintenance errors are minimised
- + no electrolyte leakage in case of cell damage
- + no contamination or corrosion due to leaking electrolyte

PzV

STANDARD CHARACTERISTIC DATA

55Ah/plate

[h1 = 340, h2 = 350 mm | length = b = 198 mm]

CELL TYPE	CAPACITY Ah (C5) at 30 °C	WIDTH mm	WEIGHT kg
2 PzV 110	110	45	9,3
3 PzV 165	165	63	12,7
4 PzV 220	220	81	16,5
5 PzV 275	275	99	20,1
6 PzV 330	330	118	23,8
7 PzV 385	385	136	27,4

70Ah/plate

[h1 = 402, h2 = 412 mm | length = b = 198 mm]

CELL TYPE	CAPACITY Ah (C5) at 30 °C	WIDTH mm	WEIGHT kg
2 PzV 140	140	45	10,8
3 PzV 210	210	63	15,5
4 PzV 280	280	81	19,7
5 PzV 350	350	99	24,2
6 PzV 420	420	118	29,1

80Ah/plate

[h1 = 472, h2 = 482 mm | length = b = 198 mm]

CELL TYPE	CAPACITY Ah (C5) at 30 °C	WIDTH mm	WEIGHT kg
2 PzV 160	160	47	12,7
3 PzV 240	240	65	18,1
4 PzV 320	320	83	23,6
5 PzV 400	400	101	29,0
6 PzV 480	480	119	35,0



100Ah/plate

[h1 = 563, h2 = 573 mm | length = b = 198 mm]

CELL TYPE	CAPACITY Ah (C5) at 30 °C	WIDTH mm	WEIGHT kg
2 PzV 200	200	47	14,7
3 PzV 300	300	65	21,6
4 PzV 400	400	83	27,8
5 PzV 500	500	101	34,3
6 PzV 600	600	119	40,6

120Ah/plate

[h1 = 720, h2 = 730 mm | length = b = 198 mm]

CELL TYPE	CAPACITY Ah (C5) at 30 °C	WIDTH mm	WEIGHT kg
2 PzV 240	240	47	19,7
3 PzV 360	360	65	27,4
4 PzV 480	480	83	35,3
5 PzV 600	600	101	42,1
6 PzV 720	720	119	50,0

PzVB

STANDARD CHARACTERISTIC DATA

61Ah/plate

[h1 = 472, h2 = 486 mm | length = b = 157,5 mm]

CELL TYPE	CAPACITY Ah (C5) at 30 °C	WIDTH mm	WEIGHT kg
2 PzVB 122	122	45	9,7
3 PzVB 183	183	61	13,5
4 PzVB 244	244	77	16,9

71Ah/plate

[h1 = 516, h2 = 530 mm | length = b = 157,5 mm]

CELL TYPE	CAPACITY Ah (C5) at 30 °C	WIDTH mm	WEIGHT kg
2 PzVB 142	142	45	10,6
3 PzVB 213	213	61	14,8
4 PzVB 284	284	77	18,5

85Ah/plate

[h1 = 611, h2 = 625 mm | length = b = 157,5 mm]

CELL TYPE	CAPACITY Ah (C5) at 30 °C	WIDTH mm	WEIGHT kg
2 PzVB 170	170	45	11,8
3 PzVB 255	255	61	16,1
4 PzVB 340	340	77	20,7

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

Ex

APPLICATION FIELD

Assembly of ex batteries operating in various applications:

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



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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