



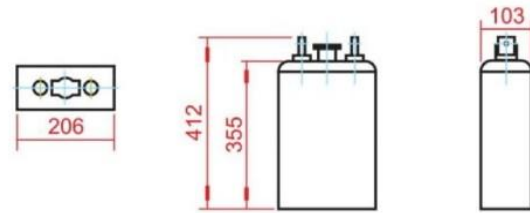
شرکت فنی و مهندسی میپسا

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4 OPzS 200 (2 V 200Ah)



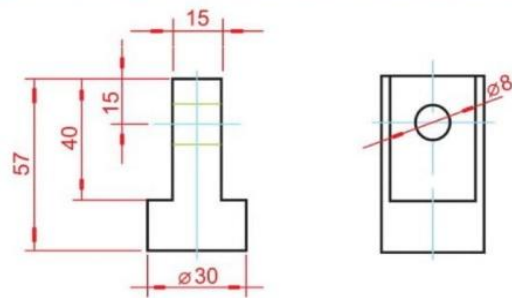
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		200 Ah
Dimensions	Total Height	412 mm
	Height	355 mm
	Length	206 mm
	Width	103 mm
Weight of Dry Battery ($\pm 2.5\%$)		12.6 Kg
Weight of Electrolyte		4.8 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

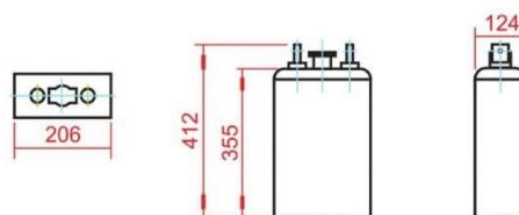
TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
4 OPzS 200	200	10	20	1.82	30	14	7	50
	170	5	34	1.79				
	150	3	50	1.77				

Constant Current (A) Discharge Table at 25 C (77 F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	81	65.2	46	36	30.4	26.6	23.4	19.2	16.2
1.87 V	95	74.8	51.6	40	33.6	29.2	25.8	21	17.6
1.83 V	111	85.6	58	44.8	36.8	31.8	28.4	22.8	19
1.80 V	122	92	61.6	47.2	38.6	33.2	29.6	24	20
1.75 V	142	100	66.4	50.4	40.8	35	31.2	25.2	—
1.70 V	156	108	69.6	52.4	42.4	36.2	32	—	—



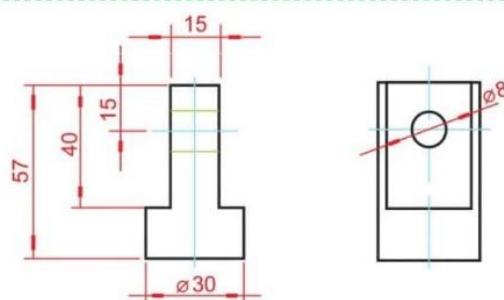
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		250 Ah
Dimensions	Total Height	412 mm
	Height	355 mm
	Length	206 mm
	Width	124 mm
Weight of Dry Battery ($\pm 2.5\%$)		15.2 Kg
Weight of Electrolyte		6.1 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

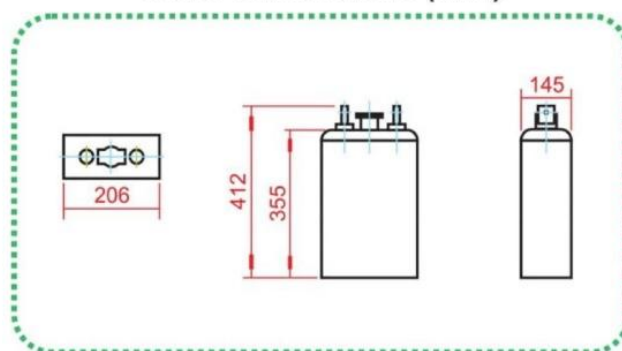
TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
5 OPzS 250	250	10	25	1.82	38	17	8.5	50
	215	5	43	1.79				
	189	3	63	1.77				

Constant Current (A) Discharge Table at 25 C (77 F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	102	81.5	57.5	45	38	33.25	29.25	24	20.25
1.87 V	119	93.5	64.5	50	42	36.5	32.25	26.25	22
1.83 V	139	107	72.5	56	46	39.75	35.5	28.5	23.75
1.80 V	153	115	77	59	48.25	41.5	37	30	25
1.75 V	178	126	83	63	51	43.75	39	31.5	—
1.70 V	195	135	87	65.5	53	45.25	40	—	—



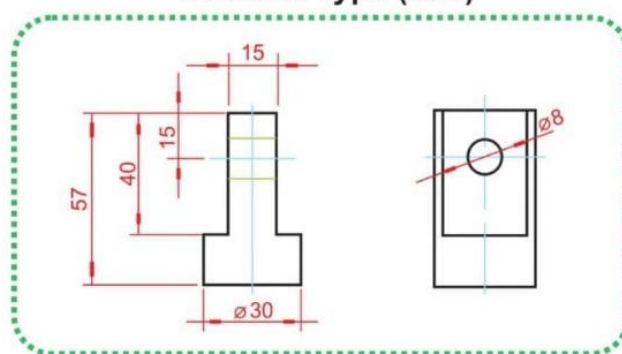
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		300 Ah
Dimensions	Total Height	412 mm
	Height	355 mm
	Length	206 mm
	Width	145 mm
Weight of Dry Battery (±2.5%)		17.6 Kg
Weight of Electrolyte		7.3 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
6 OPzS 300	300 255 225	10 5 3	30 51 75	1.82 1.79 1.77	45	20	10	50

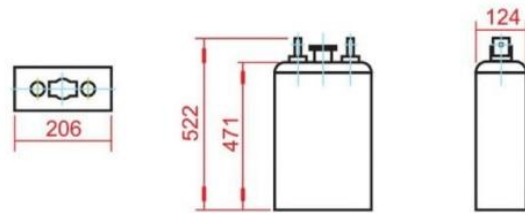
Constant Current (A) Discharge Table at 25°C (77°F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	123	97.8	69	54	45.6	39.9	35.1	28.8	24.3
1.87 V	143	112	77.4	60	50.4	43.8	38.7	31.5	26.4
1.83 V	166	128	87	67.2	55.2	47.7	42.6	34.2	28.5
1.80 V	184	138	92.4	70.8	57.9	49.8	44.4	36	30
1.75 V	213	151	99.6	75.6	61.2	52.5	46.8	37.8	—
1.70 V	234	162	104.4	78.6	63.6	54.3	48	—	—

5 OPzS 350 (2 V 350Ah)



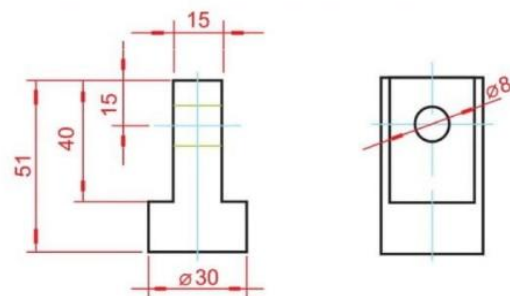
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		350 Ah
Dimensions	Total Height	522 mm
	Height	471 mm
	Length	206 mm
	Width	124 mm
Weight of Dry Battery ($\pm 2.5\%$)		20.7 Kg
Weight of Electrolyte		8.6 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
5 OPzS 350	350 300 264	10 5 3	35 60 88	1.82 1.79 1.77	53	24	12	70

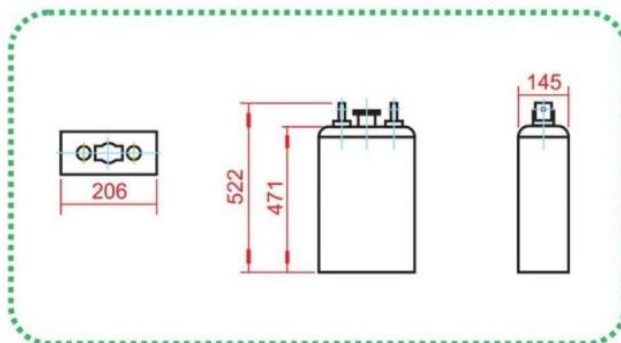
Constant Current (A) Discharge Table at 25°C (77°F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	121	99	70	57	48.5	43	37.5	32.5	29.5
1.87 V	148	118	84	67	56.5	49	43	36	31
1.83 V	179	140	98.5	77	64.5	55	47.5	39	33
1.80 V	199	154	106	82	68	58	50	40.5	34
1.75 V	231	171	115	88	72.5	61.5	52.5	42	—
1.70 V	254	185	122	92	75	64	54	—	—

6 OPzS 420 (2 V 420Ah)



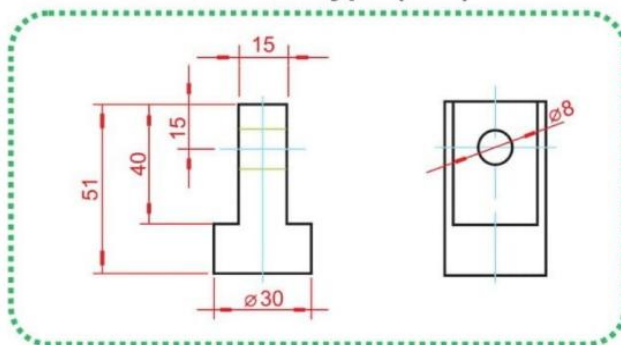
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		420 Ah
Dimensions	Total Height	522 mm
	Height	471 mm
	Length	206 mm
	Width	145 mm
Weight of Dry Battery (±2.5%)		23.7 Kg
Weight of Electrolyte		10.3 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
6 OPzS 420	420	10	42	1.82	83	28	14	70
	360	5	72	1.79				
	315	3	105	1.77				

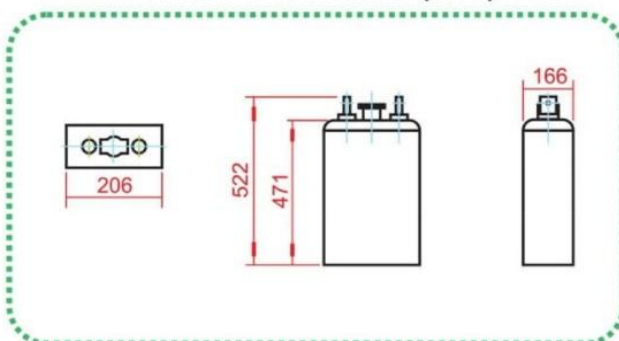
Constant Current (A) Discharge Table at 25°C (77°F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	145	118	84	68.4	58.2	51.6	45	39	35.4
1.87 V	177	141	100	80.4	67.8	58.8	51.6	43.6	37.2
1.83 V	214	168	118	92.4	77.4	66	57	46.8	39.6
1.80 V	238	185	127	98.4	81.6	69.6	60	48.6	40.8
1.75 V	277	205	138	105	87	73.8	63	50.4	—
1.70 V	304	222	147	110	90	76.80	65.40	—	—

7 OPzS 490 (2 V 490Ah)



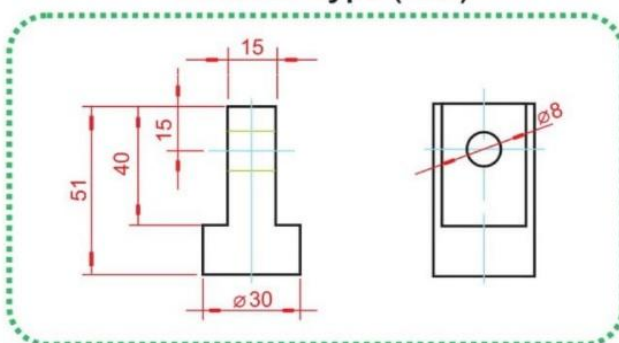
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		490 Ah
Dimensions	Total Height	522 mm
	Height	471 mm
	Length	206 mm
	Width	166 mm
Weight of Dry Battery ($\pm 2.5\%$)		28 Kg
Weight of Electrolyte		12 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
7 OPzS 490	490	10	49	1.82	74	32	16	70
	425	5	85	1.79				
	369	3	123	1.77				

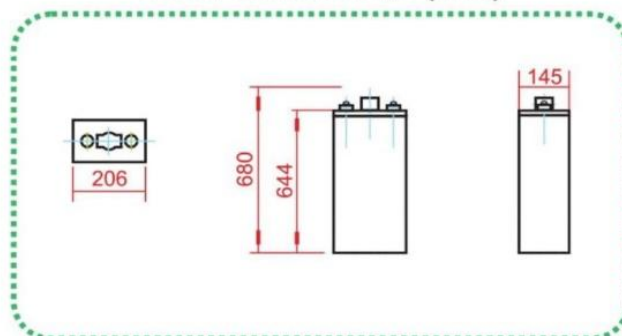
Constant Current (A) Discharge Table at 25°C (77°F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	170	138	98	79.8	67.9	60.2	52.5	45.5	41.3
1.87 V	207	165	117	93.8	79.1	68.6	60.2	50.4	43.2
1.83 V	250	196	137	107	90.3	77	66.5	54.6	46.2
1.80 V	278	216	149	114	95.2	81.2	70	56.7	47.6
1.75 V	323	239	161	123	101	86.1	73.5	58.8	—
1.70 V	355	259	171	128	105	89.6	76.3	—	—

6 OPzS 600 (2 V 600Ah)



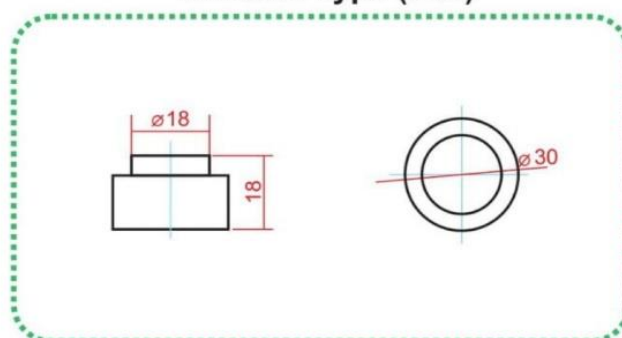
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		600 Ah
Dimensions	Total Height	680 mm
	Height	644 mm
	Length	206 mm
	Width	145 mm
Weight of Dry Battery ($\pm 2.5\%$)		34 Kg
Weight of Electrolyte		14.7 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
6 OPzS 600	600	10	60	1.80	90	40	20	100
	510	5	102	1.77				
	450	3	150	1.75				

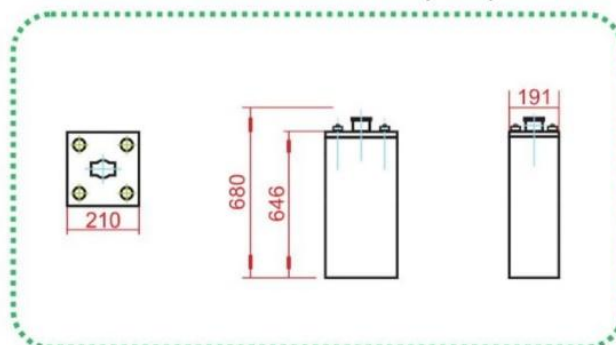
Constant Current (A) Discharge Table at 25°C (77°F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	192	163	121	99.6	87.6	75.6	66	53.4	43.2
1.87 V	237	193	142	115	98.4	84.6	73.8	60	49.2
1.83 V	292	228	163	130	109	94	82.2	66.6	57
1.80 V	330	252	176	139	115	99.6	87	70.2	58.8
1.75 V	385	285	192	149	121	105	91.8	74.4	—
1.70 V	427	309	204	156	127	109	95.4	—	—

8 OPzS 800 (2 V 800Ah)



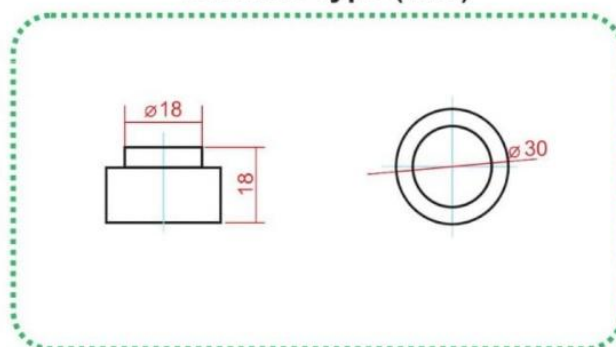
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		800 Ah
Dimensions	Total Height	680 mm
	Height	646 mm
	Length	210 mm
	Width	191 mm
Weight of Dry Battery ($\pm 2.5\%$)		47.6 Kg
Weight of Electrolyte		19.6 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

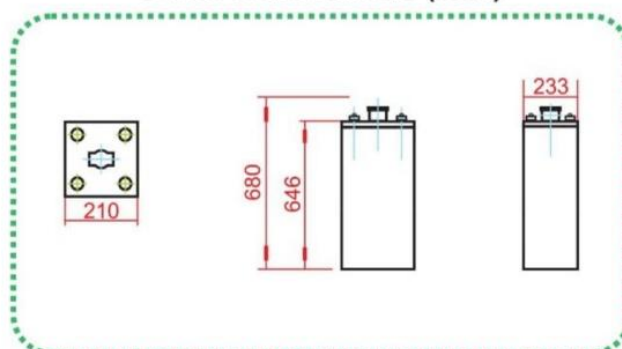
TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
8 OPzS 800	800 690 600	10 5 3	80 138 200	1.80 1.77 1.75	120	54	27	100

Constant Current (A) Discharge Table at 25 °C (77 °F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	256	217	162	132	116	100	88	71.2	57.6
1.87 V	316	258	189	153	131	112	98.4	80	65.6
1.83 V	390	304	216	173	145	125	109	88.8	76
1.80 V	440	336	235	185	154	132	116	93.6	78.4
1.75 V	514	380	256	199	162	140	122	99.2	—
1.70 V	569	412	279	208	169	146	127	—	—



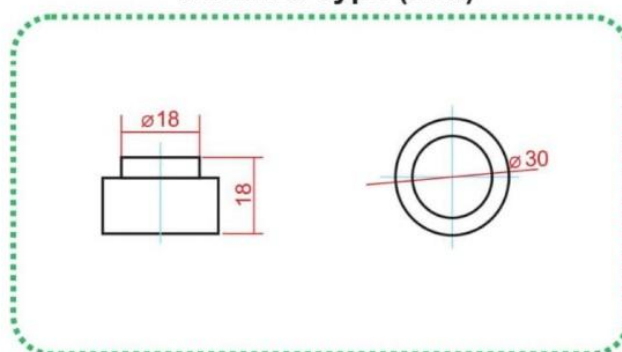
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		1000 Ah
Dimensions	Total Height	680 mm
	Height	646 mm
	Length	210 mm
	Width	233 mm
Weight of Dry Battery (±2.5%)		57 Kg
Weight of Electrolyte		24.4 Kg

Terminal Type (mm)



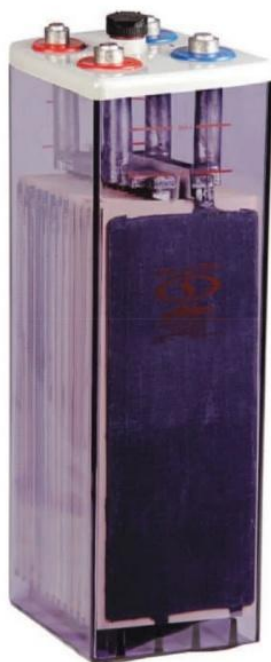
SINGLE CELL BATTERIES

TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
10 OPzS 1000	1000 865 750	10 5 3	100 173 250	1.80 1.77 1.75	150	66	33	100

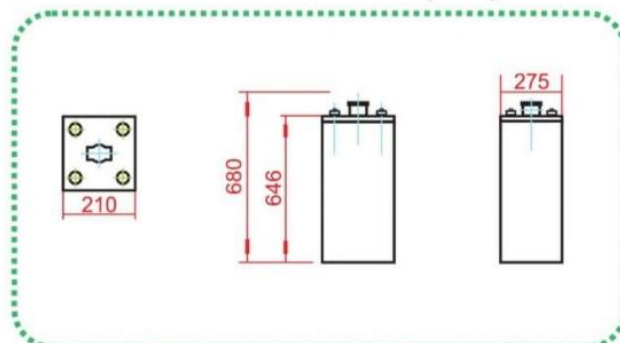
Constant Current (A) Discharge Table at 25 °C (77 °F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	321	272	202	166	146	126	110	89	72
1.87 V	396	323	237	192	164	141	123	100	82.2
1.83 V	488	380	272	261	181	156	137	111	95
1.80 V	550	420	294	232	193	166	145	117	98
1.75 V	643	475	321	249	203	176	153	124	—
1.70 V	712	516	341	261	212	183	159	—	—

12 OPzS 1200 (2 V 1200Ah)



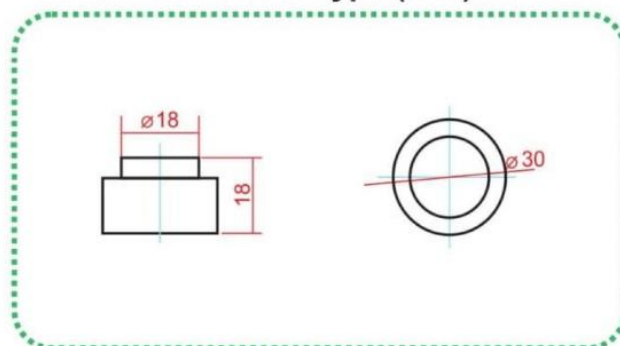
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		1200 Ah
Dimensions	Total Height	680 mm
	Height	646 mm
	Length	210 mm
	Width	275 mm
Weight of Dry Battery ($\pm 2.5\%$)		68.6 Kg
Weight of Electrolyte		29.3 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

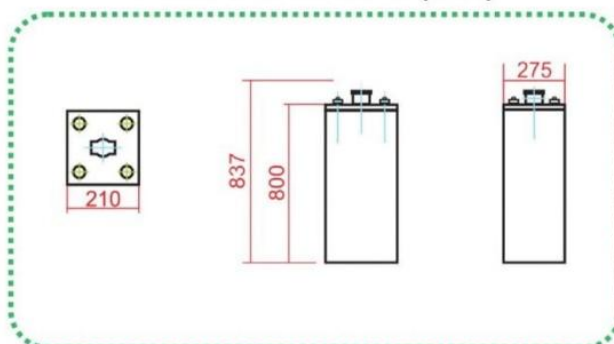
TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
12 OPzS 1200	1200 1040 900	10 5 3	120 208 300	1.80 1.77 1.75	180	80	40	100

Constant Current (A) Discharge Table at 25 C (77 F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	385	326	243	199	175	151	132	107	86.4
1.87 V	475	387	284	230	196	169	147	120	98.4
1.83 V	585	456	327	260	218	188	164	133	114
1.80 V	660	504	352	278	231	199	174	140	117
1.75 V	711	570	385	298	243	211	183	148	—
1.70 V	854	619	409	313	254	219	190	—	—



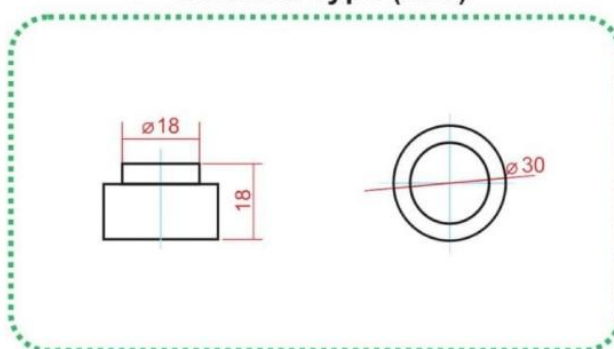
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		1500 Ah
Dimensions	Total Height	837 mm
	Height	800 mm
	Length	210 mm
	Width	275 mm
Weight of Dry Battery ($\pm 2.5\%$)		84 Kg
Weight of Electrolyte		34 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

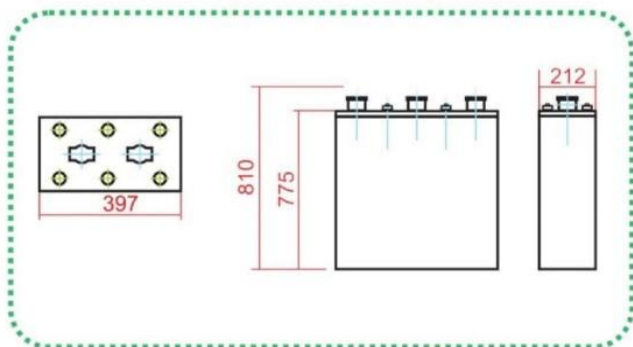
TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
12 OPzS 1500	1500 1302 1152	10 5 3	150 260.4 384	1.80 1.77 1.74	225	100	50	125

Constant Current (A) Discharge Table at 25 °C (77 °F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	396	396	296	252	219	194	172	138	110
1.87 V	512	464	349	296	250	218	194	153	124
1.83 V	660	541	410	326	274	240	211	169	139
1.80 V	728	591	440	345	287	249	222	178	147
1.75 V	840	667	485	374	309	264	234	189	—
1.70 V	955	757	517	398	324	274	240	—	—



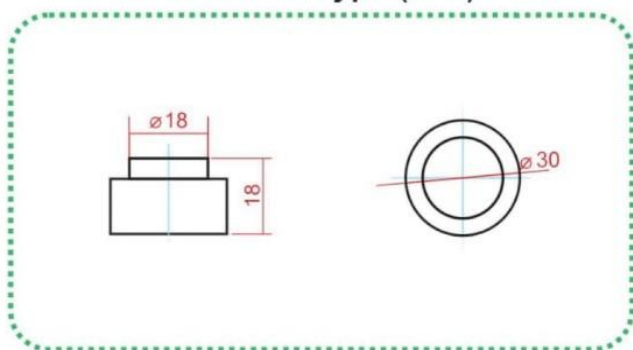
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		2000 Ah
Dimensions	Total Height	810 mm
	Height	775 mm
	Length	212 mm
	Width	397 mm
Weight of Dry Battery ($\pm 2.5\%$)		105 Kg
Weight of Electrolyte		48 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

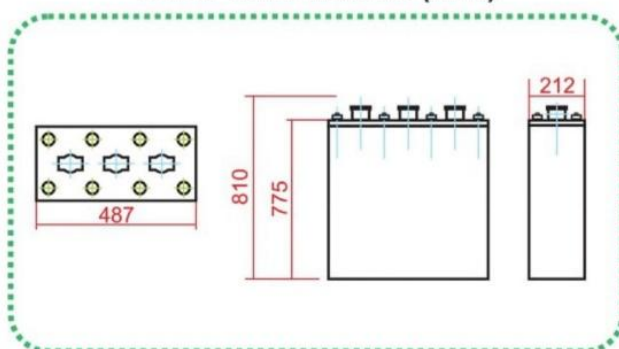
TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
16 OPzS 2000	2000	10	200	1.80	300	132.8	67.2	125
	1736	5	347	1.77				
	1536	3	512	1.74				

Constant Current (A) Discharge Table at 25 C (77 F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	528	528	394	336	292	258	229	184	146
1.87 V	682	618	465	395	333	290	258	204	165
1.83 V	880	721	546	434	365	320	281	225	185
1.80 V	970	788	586	460	382	332	296	237	196
1.75 V	1120	889	646	498	412	352	312	252	—
1.70 V	1273	1009	689	530	432	365	320	—	—



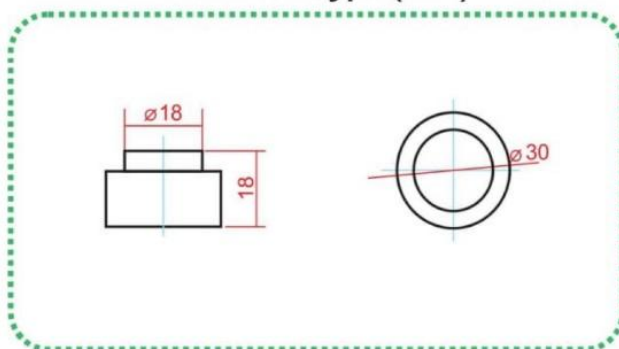
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		2500 Ah
Dimensions	Total Height	810 mm
	Height	775 mm
	Length	212 mm
	Width	487 mm
Weight of Dry Battery ($\pm 2.5\%$)		130 Kg
Weight of Electrolyte		60 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

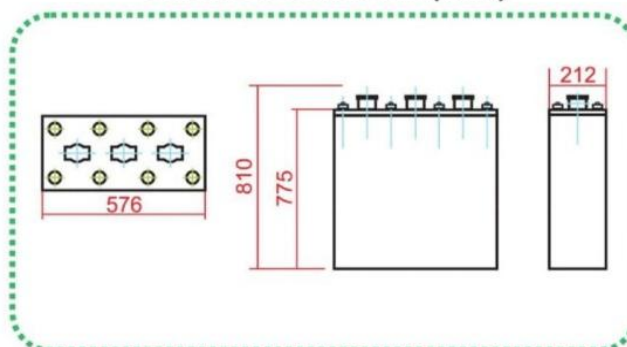
TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
20 OPzS 2500	2500 2170 1920	10 5 3	250 434 640	1.80 1.77 1.74	375	166	83	125

Constant Current (A) Discharge Table at 25 °C (77 °F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	660	660	493	436	365	323	288	230	184
1.87 V	853	773	581	493	416	363	323	256	208
1.83 V	1100	901	683	543	456	400	351	282	232
1.80 V	1213	985	733	575	478	415	370	298	246
1.75 V	1400	1111	808	623	515	440	390	316	—
1.70 V	1591	1261	861	663	540	456	400	—	—



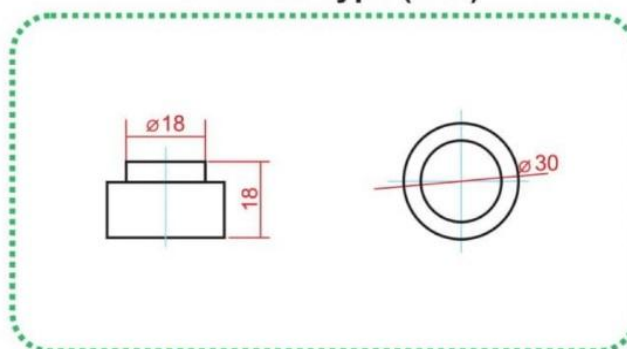
Outer Dimensions (mm)



Specifications

Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		3000 Ah
Dimensions	Total Height	810 mm
	Height	775 mm
	Length	212 mm
	Width	576 mm
Weight of Dry Battery ($\pm 2.5\%$)		153 Kg
Weight of Electrolyte		72 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES

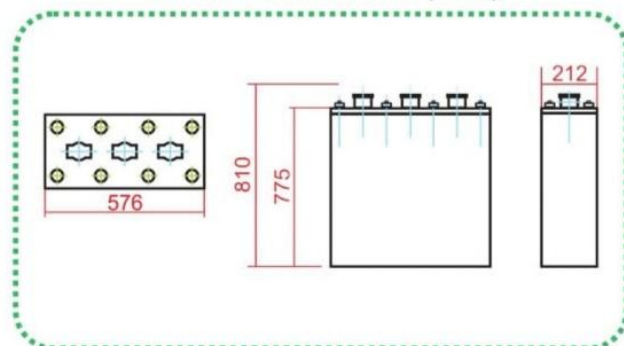
TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
24 OPzS 3000	3000 2605 2304	10 5 3	300 521 768	1.80 1.77 1.74	450	200	100	125

Constant Current (A) Discharge Table at 25 °C (77 °F)

Final Voltage	DISCHARGE TIME								
	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
1.90 V	792	792	592	523	438	388	345	276	220
1.87 V	1023	927	698	592	500	436	388	307	249
1.83 V	1320	1082	820	652	548	480	422	338	278
1.80 V	1456	1182	880	690	574	498	444	357	295
1.75 V	1680	1334	970	745	618	528	468	379	—
1.70 V	1910	1514	1034	796	648	548	480	—	—

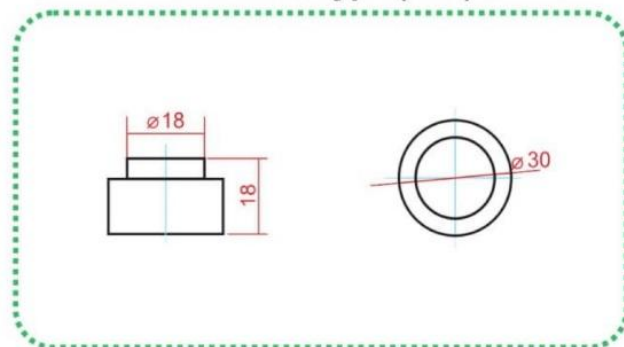


Outer Dimensions (mm)



Specifications		
Nominal Voltage		2 V
Rated Capacity (10 Hour Rate)		3400 Ah
Dimensions	Total Height	810 mm
	Height	775 mm
	Length	212 mm
	Width	576 mm
Weight of Dry Battery ($\pm 2.5\%$)		158 Kg
Weight of Electrolyte		72 Kg

Terminal Type (mm)



SINGLE CELL BATTERIES								
TYPE ACCORDING TO DIN 40736	Capacity		Discharge		Charging			Size of Plates in Ah at 10 hours rate of discharge OPzS
	in Ah	rate of discharge (hours)	(A)	until final voltage V/cell	to 2.4 V/cell (A)	over 2.4V/cell		
						falling by (A)	falling to (A)	
28 OPzS 3400	3400 2950 2600	10 5 3	340 590 866	1.80 1.77 1.74	510	227	113.5	125