

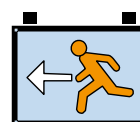
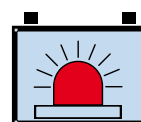
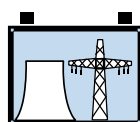
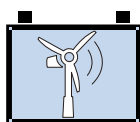
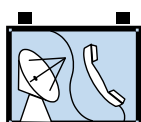
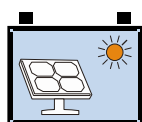


**EverExceed®**  
*power your applications*

## Tubular OPzS Range



*»Premium quality for  
uninterrupted communication«*



[www.everexceed.com](http://www.everexceed.com)



## GERMANY TECHNOLOGY

### PROVEN HIGH RELIABILITY ENERGY STORAGE FOR CRITICAL APPLICATIONS

#### Specifications:

Very high operationally reliability under rough operating conditions.

Low maintenance due to reduced antimony in the alloy and high electrolyte reserve.

Nominal capacity 50–3500 Ah C10, tailor solution model up to 15000AH available on request.

20 years at 20°C (80% remaining capacity from C10).

Also designed for cyclic applications.

Also available in dry charged condition with separate electrolyte.

Low gassing due to PbSb1.6SnSe alloy (EN 50272-2); High antimony alloy also available on request.

Conforms to DIN 40 736 and DIN 40 737 T3.

Electrolyte: diluted sulphuric acid  $d_N = 1.24 \sim 1.25$  kg/l.

Optimized plate design produces increased capacities compared to DIN.

Completely recyclable.

#### Applicable Operating temperature range:

-40°C (-40°F) to +70°C (+158°F)

#### Ideal Operating temperature range:

+20°C (+68°F) to +35°C (+95°F)

#### Storage time from a fully charged condition:

12 months at 20°C ~ 25°C / 68°F ~ 77°F.

Could up to 5 years if in sealed dry charged condition.

For each 9°C / 15°F rise, reduce the storage time by half.

#### Innovative Features

**Tubular positive plates:** EverExceed™ robust tubular plates consisting of a lead antimony alloy, optimized for high corrosion resistances.

**Pasted negative plates:** EverExceed™ grid plate construction consisting of low antimony with long-life expander material.

**Separators:** Microporous and robust, for electrical separation of the positive and negative plates and optimized for low internal resistance.

#### Container:

High impact, transparent SAN (Styrol-Acryl-Nitril).

**Safety Vents:** Cells incorporate flame retardant ceramic plugs that filter out any drops of electrolyte from the escaping gases preventing any errant spark or flame from entering the battery.

**Poles:** Screw connection for easy and safe assembly and maintenance-free connection with excellent conductivity.

**Post seals:** Extremely high integrity post seal design to prevent electrolyte leakage and terminal corrosion.

**Connectors:** Flexible, fully insulated cable connectors screwed to the terminal with an insulated screw having a probe hole on the top for electrical measurement.

Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection

#### Applications

Photovoltaics / Solar

Telecommunications

Wind Generation

Power generation plants

Microwave radio systems

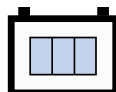
Emergency lighting

#### Standard and Compliance

DIN 40736 part 1

DIN 40737 part 2

IEC 896 part 1

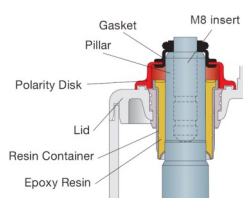


## EverExceed Tubular OPzS Range Electrical Specifications & Dimensions

Part number	DIN Type	Nom. Voltage (V)	C8 AH to 1.75VPC	C10 AH to 1.80VPC	C100 AH to 1.80VPC	Outline Dimensions (mm)				Weight With acid (kg)	Acid Weight (kg)	Pole Pairs	Internal Resist. acc. to IEC 896-2 mOhms	Short Circuit Current	Terminal
						Length (l)	Width (b/w)	Height (h)	Installed Length (B/L)						
2TS020100	2 OPzS 100	2	127	128	146	105	208	405	115	13.7	5.20	1	0.83	1400	F-M8
2TS030150	3 OPzS 150	2	168	168	225	105	208	405	115	15.2	5.00	1	0.74	1950	F-M8
2TS040200	4 OPzS 200	2	214	214	294	105	208	405	115	18.0	4.50	1	0.62	2450	F-M8
2TS050250	5 OPzS 250	2	263	265	368	126	208	405	136	21.0	5.00	1	0.58	2850	F-M8
2TS060300	6 OPzS 300	2	312	316	440	147	208	405	157	25.0	6.00	1	0.53	3250	F-M8
2TS050350	5 OPzS 350	2	377	380	527	126	208	520	136	28.0	6.50	1	0.51	3250	F-M8
2TS060420	6 OPzS 420	2	451	455	631	147	208	520	157	33.5	8.00	1	0.48	3650	F-M8
2TS070490	7 OPzS 490	2	526	530	740	168	208	520	178	39.0	11.0	1	0.45	4100	F-M8
2TS060600	6 OPzS 600	2	664	680	902	147	208	695	157	46.0	12.0	1	0.44	4350	F-M8
2TS080800	8 OPzS 800	2	896	910	1204	215	193	695	225	64.0	16.0	2	0.41	6800	F-M8
2TS101000	10 OPzS 1000	2	1120	1140	1505	215	235	695	225	77.0	20.0	2	0.37	7900	F-M8
2TS121200	12 OPzS 1200	2	1336	1370	1804	215	277	695	225	92.0	24.0	2	0.34	8900	F-M8
2TS121500	12 OPzS 1500	2	1696	1700	2207	215	277	845	225	112	30.0	2	0.32	9500	F-M8
2TS141750	14 OPzS 1750	2	1800	1800	2573	215	400	815	225	142	41.0	3	0.3	10500	F-M8
2TS151875	15 OPzS 1875	2	1928	1930	2741	215	400	815	225	146	40.0	3	0.29	11600	F-M8
2TS162000	16 OPzS 2000	2	2248	2250	2931	215	400	815	225	150	40.0	3	0.28	12800	F-M8
2TS182250	18 OPzS 2250	2	2448	2450	3292	215	490	815	225	185	53.0	4	0.27	14600	F-M8
2TS202500	20 OPzS 2500	2	2800	2800	3671	215	490	815	225	204	52.0	4	0.26	17000	F-M8
2TS243000	24 OPzS 3000	2	3352	3350	4404	215	580	815	225	230	63.0	4	0.24	18600	F-M8
2TS283500	28 OPzS 3500	2	3904	3900	5135	215	580	815	225	250	63.0	4	0.22	19800	F-M8

Acid density  $d_N = 1.250 \text{ kg/l}$

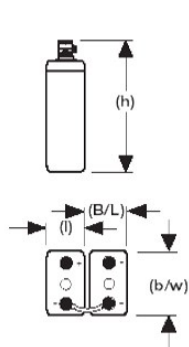
### High Reliability Post Seal



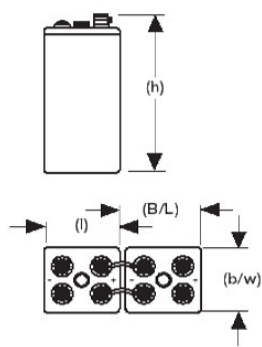
Container: SAN (acrylonitrile polystyrene),  
UL 94 V-0 standard



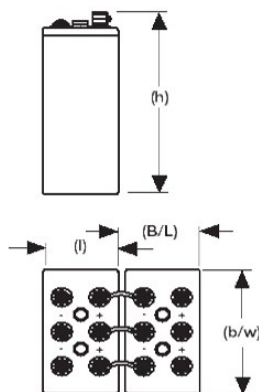
16 Nm



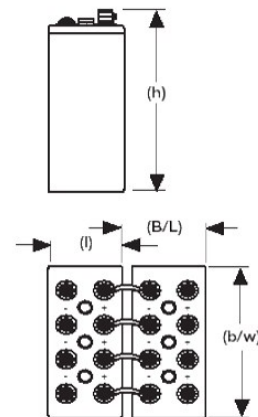
2 OPzS 100  
up to  
6 OPzS 600



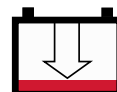
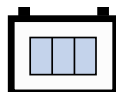
8 OPzS 800  
up to  
15 OPzS 1875



16 OPzS 2000



18 OPzS 2250  
up to  
24 OPzS 3500

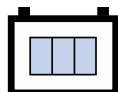


## EverExceed Tubular OPzS Range Cell Discharge Data Amperes at 20°C

Part Number	DIN Type	Discharge Data Amps @ 20°C to 1.90VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	78.4	77.0	72.2	67.9	61.9	48.6	40.6	34.5	27.2	22.2	19.0	13.4	11.1	5.99
2TS030150	3 OPzS 150	101	99.8	93.6	87.0	79.2	62.9	52.5	45.1	35.4	29.1	24.9	17.7	14.6	7.98
2TS040200	4 OPzS 200	128	127	119	112	102	80.1	66.9	57.4	45.1	37.1	31.6	22.5	18.7	10.1
2TS050250	5 OPzS 250	155	153	143	135	124	97.9	82.0	70.8	55.3	45.5	39.0	27.7	23.1	12.5
2TS060300	6 OPzS 300	180	177	166	158	144	115	96.9	84.0	65.3	53.7	46.3	33.0	27.6	14.9
2TS050350	5 OPzS 350	181	178	171	165	152	128	109	94.8	75.8	63.2	54.9	39.6	33.1	18.3
2TS060420	6 OPzS 420	205	203	197	191	177	149	128	112	90.8	75.7	65.7	47.5	39.6	21.9
2TS070490	7 OPzS 490	235	233	224	218	202	170	148	129	105	87.9	76.6	55.3	46.1	25.6
2TS060600	6 OPzS 600	265	263	254	244	227	197	172	155	124	105	93.6	69.3	59.2	32.8
2TS080800	8 OPzS 800	383	376	359	347	320	276	239	211	169	144	127	93.2	79.2	43.8
2TS101000	10 OPzS 1000	460	456	438	422	391	337	294	262	210	179	159	117	98.8	54.9
2TS121200	12 OPzS 1200	534	530	511	492	458	395	347	312	251	214	188	140	119	66.0
2TS121500	12 OPzS 1500	496	495	485	473	455	398	366	334	377	244	219	164	141	75.8
2TS141750	14 OPzS 1750	525	524	514	505	483	422	388	353	298	258	233	174	149	80.3
2TS151875	15 OPzS 1875	563	561	551	542	517	452	415	379	319	276	250	186	160	86.0
2TS162000	16 OPzS 2000	716	714	694	676	642	549	499	449	372	322	290	218	186	99.8
2TS162250	18 OPzS 2250	751	750	731	711	676	584	533	482	406	352	316	237	202	109
2TS202500	20 OPzS 2500	890	889	865	841	740	684	621	560	464	402	361	270	232	125
2TS243000	24 OPzS 3000	1026	1021	998	969	923	799	728	658	555	481	432	323	277	149
2TS283500	28 OPzS 3500	1150	1140	1119	1085	1119	907	830	752	645	560	503	376	322	173

Part Number	DIN Type	Discharge Data Amps @ 20°C to 1.87VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	85.9	84.1	78.4	73.8	66.7	51.7	43.1	36.5	28.7	23.4	20.0	14.0	11.7	6.30
2TS030150	3 OPzS 150	111	109	102	94.0	85.0	67.0	55.7	47.7	37.4	30.7	26.2	18.5	15.4	8.34
2TS040200	4 OPzS 200	141	139	129	122	110	85.2	71.0	60.8	47.7	39.1	33.3	23.6	19.7	10.6
2TS050250	5 OPzS 250	170	167	156	147	134	104	87.0	74.9	58.4	47.9	41.0	29.0	24.3	13.1
2TS060300	6 OPzS 300	198	194	181	172	156	123	103	88.9	69.0	56.6	48.6	34.5	29.0	15.6
2TS050350	5 OPzS 350	198	195	187	180	165	138	117	101	80.1	66.7	57.9	41.7	34.8	19.2
2TS060420	6 OPzS 420	225	222	215	208	192	161	137	120	95.9	79.9	69.3	49.9	41.7	22.9
2TS070490	7 OPzS 490	257	254	245	237	220	183	158	138	112	93.0	80.7	58.2	48.5	26.7
2TS060600	6 OPzS 600	289	286	275	265	246	213	185	166	132	112	98.3	72.8	62.3	34.3
2TS080800	8 OPzS 800	420	411	391	376	347	297	257	226	180	153	134	98.1	83.3	45.8
2TS101000	10 OPzS 1000	503	498	476	458	424	364	316	281	224	189	167	123	104	57.4
2TS121200	12 OPzS 1200	583	577	554	534	496	427	373	284	267	226	198	147	126	69.0
2TS121500	12 OPzS 1500	548	546	534	521	500	434	397	361	350	261	233	174	149	80.4
2TS141750	14 OPzS 1750	580	578	566	554	530	460	421	382	320	276	247	184	158	85.2
2TS151875	15 OPzS 1875	622	619	606	594	567	493	451	409	343	295	265	197	169	91.2
2TS162000	16 OPzS 2000	791	788	765	744	705	599	542	486	400	344	308	231	197	106
2TS162250	18 OPzS 2250	830	827	805	782	742	636	578	521	436	376	336	251	214	116
2TS202500	20 OPzS 2500	983	980	953	926	848	745	675	605	498	429	384	286	245	133
2TS243000	24 OPzS 3000	1133	1128	1099	1067	1012	871	790	711	596	514	459	343	293	158
2TS283500	28 OPzS 3500	1271	1263	1233	1196	1175	989	900	813	692	598	535	399	340	184

Actual battery performance data may be +/-5% of figures shown above

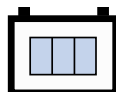


## EverExceed Tubular OPzS Range Cell Discharge Data Amperes at 20°C

Part Number	DIN Type	Discharge Data Amps @ 20°C to 1.85VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	93.4	91.2	84.5	79.7	71.4	54.8	45.5	38.5	30.2	24.6	21.0	14.6	12.3	6.60
2TS030150	3 OPzS 150	121	118	110	101	90.8	71.0	58.9	50.3	39.4	32.2	27.4	19.3	16.2	8.70
2TS040200	4 OPzS 200	153	150	139	131	118	90.3	75.0	64.1	50.2	41.0	34.9	24.6	20.6	11.0
2TS050250	5 OPzS 250	185	181	168	159	143	110	92.0	79.0	61.5	50.3	42.9	30.3	25.5	13.7
2TS060300	6 OPzS 300	215	210	195	185	167	130	109	93.7	72.6	59.4	50.9	35.9	30.4	16.3
2TS050350	5 OPzS 350	215	211	202	194	178	148	124	107	84.4	70.2	60.8	43.7	36.5	20.0
2TS060420	6 OPzS 420	244	240	232	224	207	172	146	127	101	84.0	72.8	52.3	43.7	23.9
2TS070490	7 OPzS 490	279	274	265	256	237	196	168	147	118	98.1	84.8	61.0	50.9	27.8
2TS060600	6 OPzS 600	313	309	296	286	265	228	198	177	140	118	103	76.2	65.3	35.7
2TS080800	8 OPzS 800	457	446	422	405	373	318	275	241	191	161	141	103	87.4	47.8
2TS101000	10 OPzS 1000	546	539	513	493	456	390	338	299	237	199	175	128	109	59.9
2TS121200	12 OPzS 1200	631	623	597	575	534	459	399	256	282	237	208	153	132	71.9
2TS121500	12 OPzS 1500	599	596	583	568	544	469	428	388	323	277	246	184	156	85.0
2TS141750	14 OPzS 1750	635	632	617	602	576	497	454	410	342	293	261	194	166	90.0
2TS151875	15 OPzS 1875	680	677	661	645	617	533	486	439	366	314	280	208	178	96.4
2TS162000	16 OPzS 2000	865	861	835	811	768	648	585	522	427	366	326	243	207	112
2TS162250	18 OPzS 2250	908	903	878	853	808	688	623	559	465	399	355	265	225	122
2TS202500	20 OPzS 2500	1075	1070	1040	1010	956	806	728	649	532	456	406	302	258	140
2TS243000	24 OPzS 3000	1240	1235	1200	1165	1100	942	852	764	636	546	486	362	308	167
2TS283500	28 OPzS 3500	1391	1386	1346	1306	1231	1070	969	874	739	636	566	422	357	194

Part Number	DIN Type	Discharge Data Amps @ 20°C to 1.83VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	104	101	93.0	86.9	76.8	57.5	47.4	39.9	31.2	25.4	21.6	14.9	12.5	6.70
2TS030150	3 OPzS 150	134	130	120	110	97.4	74.3	61.3	52.2	40.8	33.2	28.2	19.6	16.4	8.90
2TS040200	4 OPzS 200	171	166	153	143	126	94.7	78.0	66.4	52.0	42.4	36.0	25.0	20.9	11.3
2TS050250	5 OPzS 250	207	201	185	173	154	116	95.7	81.9	63.7	52.0	44.3	30.8	25.9	14.0
2TS060300	6 OPzS 300	241	231	215	201	180	136	113	97.3	75.2	61.4	52.5	36.5	30.9	16.7
2TS050350	5 OPzS 350	238	232	221	213	194	158	131	113	87.9	72.6	62.5	44.5	37.1	20.3
2TS060420	6 OPzS 420	272	265	255	245	225	183	154	133	105	86.8	74.8	53.2	44.4	24.3
2TS070490	7 OPzS 490	310	303	291	280	257	209	178	154	123	102	87.1	62.0	51.7	28.4
2TS060600	6 OPzS 600	347	341	325	312	289	245	211	187	147	123	107	77.8	66.4	36.4
2TS080800	8 OPzS 800	505	493	464	443	407	342	292	255	199	166	145	105	88.8	48.7
2TS101000	10 OPzS 1000	605	595	563	539	497	420	360	317	248	207	180	131	111	61.0
2TS121200	12 OPzS 1200	698	686	655	629	583	494	426	376	295	247	215	157	134	73.3
2TS121500	12 OPzS 1500	673	668	652	633	602	513	465	418	343	292	258	191	162	88.3
2TS141750	14 OPzS 1750	713	708	691	671	638	543	493	442	364	310	274	201	172	93.4
2TS151875	15 OPzS 1875	764	759	740	719	684	582	528	474	390	332	294	215	184	100
2TS162000	16 OPzS 2000	973	966	934	904	850	708	634	562	454	387	342	252	214	116
2TS162250	18 OPzS 2250	1015	1010	982	951	894	752	677	602	495	421	373	275	233	127
2TS202500	20 OPzS 2500	1205	1200	1165	1125	1060	881	790	700	566	482	426	313	267	145
2TS243000	24 OPzS 3000	1390	1380	1345	1300	1220	1030	924	825	675	575	510	375	319	174
2TS283500	28 OPzS 3500	1559	1543	1510	1460	1365	1171	1051	945	783	667	594	437	371	203

Actual battery performance data may be +/-5% of figures shown above

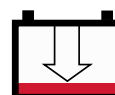
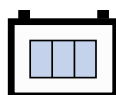


## EverExceed Tubular OPzS Range Cell Discharge Data Amperes at 20°C

Part Number	DIN Type	Discharge Data Amps @ 20°C to 1.80VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	122	116	106	97.7	84.8	61.5	50.1	42.0	32.8	26.6	22.6	15.3	12.8	7.00
2TS030150	3 OPzS 150	155	148	135	124	107	79.2	64.8	54.9	42.9	34.8	29.5	20.1	16.8	9.20
2TS040200	4 OPzS 200	199	190	174	161	140	101	82.5	69.9	54.6	44.4	37.6	25.6	21.4	11.8
2TS050250	5 OPzS 250	241	230	211	195	170	124	101	86.3	66.9	54.5	46.3	31.6	26.5	14.6
2TS060300	6 OPzS 300	281	268	245	227	199	146	120	103	79.0	64.3	54.9	37.4	31.6	17.4
2TS050350	5 OPzS 350	273	264	251	240	216	172	141	120	93.1	76.2	65.0	45.6	38.0	20.9
2TS060420	6 OPzS 420	314	303	289	277	252	200	166	142	111	90.9	77.8	54.6	45.5	25.0
2TS070490	7 OPzS 490	358	346	330	316	287	229	192	164	130	106	90.6	63.6	53.0	29.2
2TS060600	6 OPzS 600	398	388	368	352	325	271	232	202	156	129	112	80.2	68.0	37.4
2TS080800	8 OPzS 800	572	564	528	501	457	378	319	277	211	175	152	108	91.0	50.1
2TS101000	10 OPzS 1000	695	678	639	609	559	464	394	343	263	218	189	135	114	62.7
2TS121200	12 OPzS 1200	800	781	741	710	655	547	467	407	315	261	225	162	137	75.4
2TS121500	12 OPzS 1500	785	777	756	731	690	578	520	462	374	316	277	201	170	93.2
2TS141750	14 OPzS 1750	831	823	801	774	731	612	551	490	396	334	293	212	180	98.6
2TS151875	15 OPzS 1875	890	882	858	829	783	656	590	525	424	358	314	227	193	106
2TS162000	16 OPzS 2000	1135	1125	1080	1040	974	798	709	622	495	418	367	265	225	123
2TS162250	18 OPzS 2250	1185	1175	1140	1095	1025	848	757	666	539	455	399	289	245	134
2TS202500	20 OPzS 2500	1390	1375	1345	1300	1210	993	884	775	616	520	456	330	280	153
2TS243000	24 OPzS 3000	1620	1605	1555	1500	1400	1160	1035	911	737	622	546	395	335	184
2TS283500	28 OPzS 3500	1836	1821	1748	1683	1575	1317	1178	1041	857	723	636	460	390	215

Part Number	DIN Type	Discharge Data Amps @ 20°C to 1.75VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	147	137	125	113	96.1	66.4	52.9	44.2	34.3	27.7	23.5	15.9	13.1	7.20
2TS030150	3 OPzS 150	188	175	158	144	122	85.3	68.5	57.8	44.9	36.4	30.7	21.0	17.3	9.50
2TS040200	4 OPzS 200	243	226	205	186	158	109	87.2	73.5	57.1	46.3	39.1	26.7	22.1	12.1
2TS050250	5 OPzS 250	294	274	249	225	193	134	107	90.8	70.0	56.8	48.1	32.9	27.3	15.0
2TS060300	6 OPzS 300	343	319	290	263	226	158	127	108	82.6	67.0	57.1	39.0	32.6	17.8
2TS050350	5 OPzS 350	333	316	296	281	247	190	153	129	97.3	79.7	68.0	47.1	39.1	21.5
2TS060420	6 OPzS 420	383	364	341	323	288	221	180	152	116	95.0	81.4	56.4	46.9	25.7
2TS070490	7 OPzS 490	438	416	390	369	328	252	207	176	136	111	94.9	65.7	54.6	29.9
2TS060600	6 OPzS 600	480	462	437	416	381	306	258	220	167	136	116	83.0	70.0	38.4
2TS080800	8 OPzS 800	703	677	630	592	534	430	353	303	226	184	157	112	92.8	51.4
2TS101000	10 OPzS 1000	843	812	761	719	654	526	438	374	281	229	196	140	117	64.4
2TS121200	12 OPzS 1200	968	932	881	838	767	617	521	443	336	273	233	167	141	77.4
2TS121500	12 OPzS 1500	966	952	923	884	824	676	598	524	413	346	301	212	178	97.4
2TS141750	14 OPzS 1750	1025	1010	977	936	873	716	634	554	437	366	319	225	188	103
2TS151875	15 OPzS 1875	1098	1082	1047	1003	935	767	679	594	468	392	342	241	201	110
2TS162000	16 OPzS 2000	1395	1375	1320	1260	1165	933	817	705	547	458	398	281	235	129
2TS162250	18 OPzS 2250	1460	1440	1390	1325	1225	993	871	755	595	498	434	306	256	141
2TS202500	20 OPzS 2500	1735	1710	1645	1565	1450	1165	1015	877	680	569	496	350	293	161
2TS243000	24 OPzS 3000	2000	1970	1900	1810	1675	1360	1190	1030	814	681	593	419	350	192
2TS283500	28 OPzS 3500	2241	2206	2134	2035	1881	1544	1356	1176	947	792	689	488	406	223

Actual battery performance data may be +/-5% of figures shown above

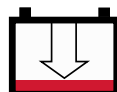
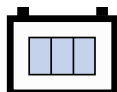


## EverExceed Tubular OPzS Range Cell Discharge Data Amperes at 20°C

Part Number	DIN Type	Discharge Data Amps @ 20°C to 1.70VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	173	157	139	125	105	69.7	54.8	45.2	35.2	28.3	23.9	16.0	13.3	7.30
2TS030150	3 OPzS 150	220	200	177	160	134	89.4	71.0	59.1	46.0	37.0	31.2	21.1	17.5	9.60
2TS040200	4 OPzS 200	284	258	229	206	172	115	90.3	75.2	58.6	47.3	39.7	26.9	22.3	12.2
2TS050250	5 OPzS 250	344	313	278	250	210	141	111	93.0	71.8	57.9	48.9	33.1	27.6	15.1
2TS060300	6 OPzS 300	403	366	325	292	247	166	132	111	84.8	68.4	58.0	39.3	32.9	18.0
2TS050350	5 OPzS 350	394	368	339	316	274	202	161	134	100	81.4	69.5	47.1	39.9	22.0
2TS060420	6 OPzS 420	453	423	390	364	319	235	189	158	120	97.7	83.3	57.8	47.8	26.4
2TS070490	7 OPzS 490	517	483	446	416	364	269	218	183	140	114	97.0	67.3	55.7	30.7
2TS060600	6 OPzS 600	562	535	507	479	433	337	279	233	173	139	118	84.3	70.7	39.1
2TS080800	8 OPzS 800	824	785	728	678	606	471	379	322	237	190	160	114	94.6	52.3
2TS101000	10 OPzS 1000	988	941	881	826	743	577	471	397	294	237	199	142	119	65.6
2TS121200	12 OPzS 1200	1135	1080	1020	964	873	678	562	469	349	281	237	170	142	78.8
2TS121500	12 OPzS 1500	1145	1125	1085	1030	950	768	665	573	442	367	318	219	182	100
2TS141750	14 OPzS 1750	1215	1190	1150	1090	1005	814	704	607	468	389	337	232	193	106
2TS151875	15 OPzS 1875	1302	1275	1232	1168	1077	872	754	650	501	417	361	249	207	114
2TS162000	16 OPzS 2000	1655	1625	1555	1470	1345	1060	907	771	585	486	421	290	241	132
2TS162250	18 OPzS 2250	1735	1700	1635	1545	1410	1125	968	826	637	529	458	316	262	144
2TS202500	20 OPzS 2500	2060	2020	1930	1830	1670	1320	1130	960	728	605	524	361	300	165
2TS243000	24 OPzS 3000	2375	2330	2230	2115	1930	1540	1325	1130	871	723	626	462	358	197
2TS283500	28 OPzS 3500	2662	2613	2505	2376	2169	1747	1510	1293	1013	840	727	575	415	229

Part Number	DIN Type	Discharge Data Amps @ 20°C to 1.65VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	196	174	151	135	111	71.8	55.8	46.4	35.7	28.6	24.1	16.1	13.4	7.40
2TS030150	3 OPzS 150	249	221	194	172	142	91.7	72.3	60.1	46.7	37.5	31.5	21.2	17.6	9.70
2TS040200	4 OPzS 200	322	286	249	222	182	118	92.0	76.4	59.4	47.7	40.1	27.0	22.4	12.3
2TS050250	5 OPzS 250	392	348	303	270	222	145	113	94.6	72.8	58.6	49.4	33.2	27.7	15.2
2TS060300	6 OPzS 300	458	407	355	315	261	171	134	113	86.0	69.3	58.6	39.4	33.0	18.1
2TS050350	5 OPzS 350	454	417	379	349	297	211	167	137	103	82.9	69.9	47.2	40.0	22.1
2TS060420	6 OPzS 420	522	480	437	402	346	246	196	162	123	99.1	83.7	57.9	47.9	26.5
2TS070490	7 OPzS 490	596	548	499	459	395	280	226	187	143	115	97.5	67.4	55.8	30.9
2TS060600	6 OPzS 600	643	605	576	541	482	364	294	243	177	141	119	86.5	71.4	39.4
2TS080800	8 OPzS 800	945	890	824	760	673	502	399	335	244	194	162	117	95.6	52.8
2TS101000	10 OPzS 1000	1130	1065	999	929	826	620	496	414	302	241	201	147	120	66.1
2TS121200	12 OPzS 1200	1295	1220	1160	1090	971	733	592	490	358	286	240	176	144	79.5
2TS121500	12 OPzS 1500	1330	1300	1240	1175	1070	853	721	612	462	382	330	223	184	101
2TS141750	14 OPzS 1750	1410	1375	1315	1245	1135	904	763	648	490	405	349	236	194	107
2TS151875	15 OPzS 1875	1511	1473	1409	1334	1216	969	818	694	525	434	374	253	208	115
2TS162000	16 OPzS 2000	1920	1875	1775	1675	1510	1180	984	824	612	506	436	295	243	133
2TS162250	18 OPzS 2250	2015	1965	1870	1765	1590	1250	1050	882	666	550	475	321	265	145
2TS202500	20 OPzS 2500	2390	2335	2215	2090	1885	1465	1220	1025	762	630	543	367	302	166
2TS243000	24 OPzS 3000	2755	2690	2555	2415	2175	1710	1435	1205	911	753	650	439	362	199
2TS283500	28 OPzS 3500	3088	3013	2865	2713	2440	1941	1641	1377	1059	875	756	511	422	232

Actual battery performance data may be +/-5% of figures shown above

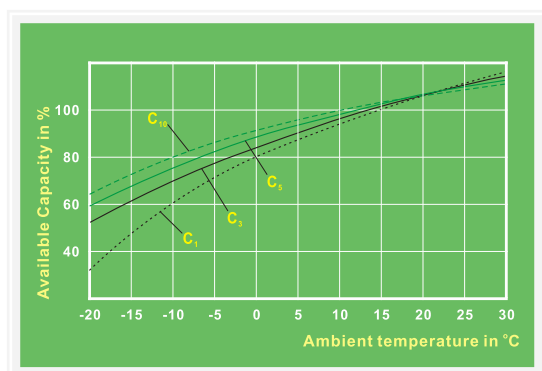




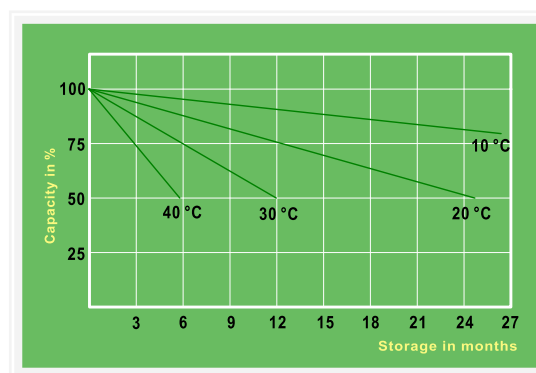
## EverExceed Tubular OPzS Range Cell Discharge Data Amperes at 20°C

Part Number	DIN Type	Discharge Data Amps @ 20°C to 1.60VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	216	188	162	143	116	73.3	56.4	46.5	36.0	29.4	24.0	16.2	13.5	7.42
2TS030150	3 OPzS 150	275	239	207	182	147	93.4	72.9	60.7	47.0	37.3	31.4	21.3	17.7	9.72
2TS040200	4 OPzS 200	355	309	267	235	190	121	92.8	77.3	59.9	47.6	39.9	27.1	22.5	12.4
2TS050250	5 OPzS 250	434	377	325	286	232	148	114	95.7	73.4	58.8	49.6	33.2	27.7	15.2
2TS060300	6 OPzS 300	508	442	381	335	272	176	136	114	86.6	68.8	58.3	39.6	33.3	18.3
2TS050350	5 OPzS 350	515	466	418	377	319	217	171	139	105	83.4	69.2	47.5	40.5	22.6
2TS060420	6 OPzS 420	592	536	481	435	370	253	200	165	125	99.3	82.8	58.2	48.6	27.1
2TS070490	7 OPzS 490	676	612	549	496	423	288	231	190	146	116	96.5	67.8	56.7	31.5
2TS060600	6 OPzS 600	723	673	645	602	528	388	305	252	179	142	119	87.2	72.4	40.4
2TS080800	8 OPzS 800	1065	992	917	837	737	524	416	342	248	195	162	118	96.6	53.6
2TS101000	10 OPzS 1000	1270	1185	1115	1030	905	653	516	426	305	242	201	148	122	67.2
2TS121200	12 OPzS 1200	1455	1355	1300	1215	1065	781	614	508	360	286	240	178	146	80.5
2TS121500	12 OPzS 1500	1515	1470	1395	1320	1190	933	767	642	476	391	337	224	185	103
2TS141750	14 OPzS 1750	1605	1560	1475	1395	1260	988	812	680	504	414	356	238	196	108
2TS151875	15 OPzS 1875	1720	1671	1580	1495	1350	1059	870	729	540	444	381	255	210	117
2TS162000	16 OPzS 2000	2185	2125	1995	1880	1680	1290	1045	864	630	518	445	297	245	135
2TS162250	18 OPzS 2250	2290	2225	2100	1975	1765	1370	1115	926	686	564	485	323	267	147
2TS202500	20 OPzS 2500	2725	2645	2485	2340	2090	1600	1305	1080	784	645	554	370	304	168
2TS243000	24 OPzS 3000	3135	3045	2870	2705	2415	1875	1525	1265	938	771	663	442	364	201
2TS283500	28 OPzS 3500	3507	3408	3223	3040	2713	2136	1733	1441	1091	896	771	513	424	234

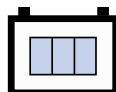
Actual battery performance data may be +/-5% of figures shown above



Available capacity in relation to ambient temperature



Self-discharge in relation to the storage temperature



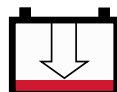
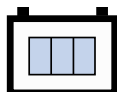


## EverExceed Tubular OPzS Range Cell Discharge Data Watts at 20°C

Part Number	DIN Type	Discharge Data Watts @ 20°C to 1.90VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		3 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	126	126	120	113	107	87.9	74.3	64.0	50.8	42.1	36.6	26.4	21.5	12.0
2TS030150	3 OPzS 150	163	163	156	147	138	114	96.2	83.7	66.4	55.4	47.9	34.8	28.4	15.8
2TS040200	4 OPzS 200	207	207	198	187	176	145	122	106	84.5	70.4	60.9	44.3	36.1	20.1
2TS050250	5 OPzS 250	249	249	239	225	214	176	150	131	104	86.4	75.1	54.6	44.7	24.9
2TS060300	6 OPzS 300	288	288	277	262	250	207	177	156	122	102	89.1	64.8	53.3	29.7
2TS050350	5 OPzS 350	290	290	281	276	255	222	194	171	142	119	104	76.5	63.9	36.4
2TS060420	6 OPzS 420	334	334	323	317	296	258	228	202	170	142	125	91.6	76.5	43.6
2TS070490	7 OPzS 490	381	381	369	362	338	295	263	234	198	166	146	107	89.1	50.8
2TS060600	6 OPzS 600	434	434	426	410	384	336	301	274	227	197	179	134	114	65.1
2TS080800	8 OPzS 800	614	614	594	582	540	478	418	375	310	269	243	180	153	87.1
2TS101000	10 OPzS 1000	748	748	729	709	660	582	514	464	385	335	302	225	192	109
2TS121200	12 OPzS 1200	874	874	857	827	774	678	605	551	458	400	360	270	230	131
2TS121500	12 OPzS 1500	775	775	764	749	728	655	615	570	496	441	403	306	268	143
2TS141750	14 OPzS 1750	821	821	809	813	772	695	645	605	525	466	428	325	284	151
2TS151875	15 OPzS 1875	1050	1050	1027	1003	966	848	784	722	615	548	500	381	333	177
2TS162000	16 OPzS 2000	1120	1120	1095	1070	1030	905	836	770	656	584	533	406	355	189
2TS162250	18 OPzS 2250	1170	1170	1150	1125	1080	965	890	824	714	635	582	441	386	206
2TS202500	20 OPzS 2500	1390	1390	1360	1330	1280	1140	1040	956	816	726	665	506	441	236
2TS243000	24 OPzS 3000	1605	1605	1575	1535	1480	1315	1220	1125	977	869	795	604	528	282
2TS283500	28 OPzS 3500	1873	1873	1838	1791	1727	1534	1423	1313	1140	1014	928	705	616	329

Part Number	DIN Type	Discharge Data Watts @ 20°C to 1.87VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		3 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	154	152	143	135	123	97.2	81.5	69.5	55.0	45.4	39.1	27.7	23.0	12.6
2TS030150	3 OPzS 150	198	197	185	172	157	126	105	90.9	71.9	59.4	51.0	36.6	30.4	16.6
2TS040200	4 OPzS 200	252	250	235	222	203	160	134	116	91.5	75.6	65.0	46.5	38.6	21.1
2TS050250	5 OPzS 250	304	302	284	268	246	195	165	143	112	92.9	80.0	57.3	47.8	26.2
2TS060300	6 OPzS 300	353	350	329	311	288	230	194	169	132	109	94.9	68.0	57.0	31.2
2TS050350	5 OPzS 350	355	351	338	328	303	256	219	191	154	128	113	81.8	68.4	38.3
2TS060420	6 OPzS 420	404	402	389	378	352	298	257	226	184	154	135	98.0	81.9	45.8
2TS070490	7 OPzS 490	462	458	444	431	401	340	297	261	214	179	157	114	95.4	53.4
2TS060600	6 OPzS 600	521	519	502	484	452	392	345	311	252	215	192	143	122	68.5
2TS080800	8 OPzS 800	753	743	710	687	635	551	480	425	343	294	261	192	164	91.6
2TS101000	10 OPzS 1000	905	899	865	836	777	674	590	527	426	364	324	240	205	115
2TS121200	12 OPzS 1200	1050	1045	1010	976	910	790	695	627	508	435	386	288	247	138
2TS121500	12 OPzS 1500	976	974	956	931	838	788	726	665	566	492	443	336	290	158
2TS141750	14 OPzS 1750	1030	1030	1010	995	889	835	769	703	598	521	472	356	308	167
2TS151875	15 OPzS 1875	1059	1059	1039	1023	914	859	791	723	615	536	485	366	317	172
2TS162000	16 OPzS 2000	1410	1405	1365	1330	1185	1085	990	894	745	649	587	445	384	208
2TS162250	18 OPzS 2250	1480	1475	1440	1400	1245	1155	1055	958	813	708	641	484	417	228
2TS202500	20 OPzS 2500	1755	1750	1700	1665	1365	1355	1235	1115	930	810	731	552	478	261
2TS243000	24 OPzS 3000	2020	2010	1965	1905	1700	1580	1445	1310	1110	969	876	661	572	311
2TS283500	28 OPzS 3500	2357	2345	2293	2223	1983	1843	1686	1528	1295	1131	1022	771	667	363

Actual battery performance data may be +/-5% of figures shown above

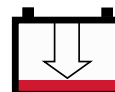
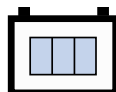


## EverExceed Tubular OPzS Range Cell Discharge Data Watts at 20°C

Part Number	DIN Type	Discharge Data Watts @ 20°C to 1.85VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		3 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	172	170	158	149	134	103	86.2	73.2	57.8	47.5	40.7	28.6	24.0	13.0
2TS030150	3 OPzS 150	223	219	205	189	170	134	112	95.7	75.5	62.1	53.1	37.7	31.7	17.2
2TS040200	4 OPzS 200	283	279	260	245	220	170	142	122	96.1	79.1	67.6	48.0	40.3	21.8
2TS050250	5 OPzS 250	342	337	313	296	268	208	174	150	118	97.1	83.3	59.1	49.9	27.0
2TS060300	6 OPzS 300	397	391	364	345	313	244	206	178	139	114	98.8	70.2	59.5	32.2
2TS050350	5 OPzS 350	397	392	376	363	334	279	236	204	162	135	118	85.4	71.5	39.5
2TS060420	6 OPzS 420	451	447	433	418	389	324	277	242	193	162	141	102	85.6	47.3
2TS070490	7 OPzS 490	516	510	494	477	444	370	319	279	225	189	165	119	99.7	55.1
2TS060600	6 OPzS 600	579	575	553	533	497	430	375	336	268	227	201	149	128	70.7
2TS080800	8 OPzS 800	845	829	787	756	699	599	521	459	366	310	274	201	171	94.6
2TS101000	10 OPzS 1000	1010	1000	956	921	854	735	640	569	454	383	339	251	214	119
2TS121200	12 OPzS 1200	1170	1160	1115	1075	1000	866	755	677	540	456	404	300	258	142
2TS121500	12 OPzS 1500	1110	1105	1080	1055	1010	875	801	728	612	526	471	356	304	167
2TS141750	14 OPzS 1750	1175	1170	1145	1115	1070	927	850	770	648	557	500	375	324	177
2TS151875	15 OPzS 1875	1500	1495	1453	1411	1341	1134	1027	919	758	652	585	441	379	207
2TS162000	16 OPzS 2000	1600	1595	1550	1505	1430	1210	1095	980	809	695	624	470	404	221
2TS162250	18 OPzS 2250	1675	1670	1630	1580	1505	1285	1165	1050	881	758	680	513	439	240
2TS202500	20 OPzS 2500	1990	1980	1930	1875	1780	1505	1365	1220	1010	866	777	584	503	276
2TS243000	24 OPzS 3000	2295	2285	2225	2165	2045	1755	1595	1435	1205	1035	931	700	601	329
2TS283500	28 OPzS 3500	2678	2666	2596	2526	2386	2048	1861	1674	1406	1208	1086	817	701	384

Part Number	DIN Type	Discharge Data Watts @ 20°C to 1.83VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		3 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	190	186	172	161	142	108	89.2	75.6	59.6	48.8	41.8	29.0	24.3	13.3
2TS030150	3 OPzS 150	245	239	221	204	181	139	115	98.7	77.8	63.7	54.6	38.3	32.1	17.6
2TS040200	4 OPzS 200	313	306	283	264	235	177	147	126	99.1	81.4	69.5	48.7	40.9	22.4
2TS050250	5 OPzS 250	380	369	342	320	285	217	180	155	121	99.8	85.6	60.0	50.6	27.7
2TS060300	6 OPzS 300	442	429	397	372	334	255	213	184	143	118	102	71.2	60.3	33.0
2TS050350	5 OPzS 350	435	427	408	393	359	295	247	213	167	139	121	86.6	72.4	40.2
2TS060420	6 OPzS 420	497	488	470	453	418	343	290	252	201	167	145	104	86.7	48.1
2TS070490	7 OPzS 490	567	557	536	517	477	392	335	291	234	196	168	121	101	56.0
2TS060600	6 OPzS 600	635	627	600	577	536	459	398	354	280	235	206	152	130	71.9
2TS080800	8 OPzS 800	918	908	857	819	754	639	551	483	380	318	281	205	173	96.2
2TS101000	10 OPzS 1000	1105	1095	1040	996	922	785	679	599	472	396	349	255	217	121
2TS121200	12 OPzS 1200	1275	1265	1210	1165	1080	925	802	712	563	473	415	305	261	145
2TS121500	12 OPzS 1500	1225	1220	1195	1165	1110	949	863	778	647	552	491	368	314	173
2TS141750	14 OPzS 1750	1300	1295	1270	1235	1175	1005	915	823	686	586	522	387	334	183
2TS151875	15 OPzS 1875	1669	1659	1608	1561	1472	1228	1102	980	803	685	610	455	389	213
2TS162000	16 OPzS 2000	1780	1770	1715	1665	1570	1310	1175	1045	856	731	651	485	415	227
2TS162250	18 OPzS 2250	1860	1850	1800	1750	1650	1390	1255	1120	933	796	711	529	452	249
2TS202500	20 OPzS 2500	2205	2195	2140	2070	1955	1630	1465	1305	1066	911	812	603	518	284
2TS243000	24 OPzS 3000	2540	2525	2470	2390	2250	1905	1715	1535	1270	1085	972	722	619	341
2TS283500	28 OPzS 3500	2963	2946	2882	2788	2625	2223	2001	1791	1482	1266	1134	842	722	398

Actual battery performance data may be +/-5% of figures shown above

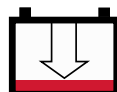
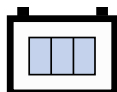


## EverExceed Tubular OPzS Range Cell Discharge Data Watts at 20°C

Part Number	DIN Type	Discharge Data Watts @ 20°C to 1.80VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		3 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	220	210	193	178	155	114	93.7	79.0	62.2	50.8	43.5	29.6	24.8	13.8
2TS030150	3 OPzS 150	279	268	245	226	197	147	121	103	81.3	66.5	56.8	39.1	32.7	18.2
2TS040200	4 OPzS 200	359	346	317	294	256	188	154	131	103	84.8	72.3	49.7	41.7	23.2
2TS050250	5 OPzS 250	435	418	384	355	311	229	190	162	127	104	89.1	61.2	51.6	28.7
2TS060300	6 OPzS 300	507	486	447	414	365	270	224	193	150	123	106	72.6	61.5	34.2
2TS050350	5 OPzS 350	492	479	457	439	397	319	265	226	176	145	125	88.5	73.9	41.2
2TS060420	6 OPzS 420	566	550	526	505	461	371	311	268	211	174	150	106	88.5	49.3
2TS070490	7 OPzS 490	646	628	601	576	526	424	358	309	246	203	174	123	103	57.4
2TS060600	6 OPzS 600	718	703	670	643	596	503	434	380	296	246	215	156	132	73.7
2TS080800	8 OPzS 800	1040	1025	961	913	837	700	596	520	400	333	292	210	177	98.6
2TS101000	10 OPzS 1000	1250	1230	1165	1110	1025	860	737	644	499	415	363	262	222	124
2TS121200	12 OPzS 1200	1440	1415	1350	1295	1200	1015	874	765	597	497	432	314	266	148
2TS121500	12 OPzS 1500	1410	1400	1370	1330	1260	1060	957	854	699	594	525	385	328	182
2TS141750	14 OPzS 1750	1495	1485	1450	1410	1335	1120	1015	905	740	628	555	406	347	192
2TS151875	15 OPzS 1875	1538	1527	1491	1450	1373	1152	1044	931	761	646	571	418	357	197
2TS162000	16 OPzS 2000	2040	2030	1955	1895	1780	1460	1305	1150	926	786	695	507	434	240
2TS162250	18 OPzS 2250	2130	2120	2065	1995	1870	1550	1395	1230	1010	855	756	553	473	261
2TS202500	20 OPzS 2500	2495	2480	2435	2365	2210	1815	1625	1430	1150	978	864	632	540	298
2TS243000	24 OPzS 3000	2915	2895	2815	2730	2555	2125	1905	1685	1380	1170	1035	756	647	359
2TS283500	28 OPzS 3500	3401	3378	3284	3185	2981	2479	2223	1966	1610	1365	1208	882	755	419

Part Number	DIN Type	Discharge Data Watts @ 20°C to 1.75VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		3 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	258	243	222	201	173	122	98.0	82.5	64.7	52.5	44.9	30.7	25.5	14.1
2TS030150	3 OPzS 150	330	310	280	256	219	156	127	108	84.6	69.0	58.7	40.5	33.6	18.6
2TS040200	4 OPzS 200	427	401	365	332	285	200	161	137	108	87.7	74.7	51.6	42.8	23.7
2TS050250	5 OPzS 250	517	485	442	402	347	245	198	170	132	108	92.1	63.5	53.0	29.3
2TS060300	6 OPzS 300	603	565	516	469	407	289	235	202	156	127	109	75.3	63.1	35.0
2TS050350	5 OPzS 350	586	560	527	501	445	347	284	240	183	151	130	91.1	75.9	42.1
2TS060420	6 OPzS 420	674	644	607	577	517	404	333	285	220	180	156	109	90.9	50.4
2TS070490	7 OPzS 490	770	735	693	658	590	461	384	328	256	210	181	127	106	58.8
2TS060600	6 OPzS 600	842	818	777	743	685	560	479	410	314	257	221	160	136	75.4
2TS080800	8 OPzS 800	1230	1200	1120	1055	960	786	654	566	425	348	301	216	180	101
2TS101000	10 OPzS 1000	1480	1435	1355	1285	1175	962	811	698	530	433	374	270	227	126
2TS121200	12 OPzS 1200	1695	1650	1565	1495	1380	1130	964	826	633	516	446	323	274	152
2TS121500	12 OPzS 1500	1690	1675	1630	1575	1470	1210	1075	951	761	642	565	403	341	189
2TS141750	14 OPzS 1750	1795	1780	1725	1665	1560	1280	1140	1005	805	679	599	427	360	200
2TS151875	15 OPzS 1875	1923	1907	1848	1784	1671	1371	1221	1077	863	728	642	458	386	214
2TS162000	16 OPzS 2000	2440	2420	2330	2245	2080	1670	1470	1280	1010	850	747	534	450	250
2TS162250	18 OPzS 2250	2555	2535	2455	2360	2185	1775	1570	1370	1095	924	815	581	490	274
2TS202500	20 OPzS 2500	3035	3010	2905	2786	2590	2085	1825	1590	1255	1055	931	665	561	312
2TS243000	24 OPzS 3000	3500	3465	3355	3220	2990	2435	2140	1870	1500	1260	1115	796	670	372
2TS283500	28 OPzS 3500	4083	4043	3914	3757	3488	2841	2497	2182	1750	1470	1301	929	782	434

Actual battery performance data may be +/-5% of figures shown above

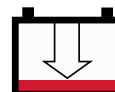
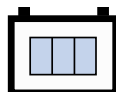


## EverExceed Tubular OPzS Range Cell Discharge Data Watts at 20°C

Part Number	DIN Type	Discharge Data Watts @ 20°C to 1.70VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		3 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	295	270	242	218	184	126	101	83.8	66.1	53.3	45.4	30.8	25.6	14.2
2TS030150	3 OPzS 150	376	344	308	279	236	162	130	110	86.4	69.7	59.4	40.7	33.8	18.7
2TS040200	4 OPzS 200	485	445	398	359	304	207	166	139	110	89.1	75.6	51.8	43.1	23.8
2TS050250	5 OPzS 250	588	540	483	436	370	254	204	172	135	109	93.1	63.8	53.3	29.5
2TS060300	6 OPzS 300	689	631	564	509	435	300	242	205	159	129	110	75.7	63.6	35.2
2TS050350	5 OPzS 350	673	634	588	552	483	365	295	248	188	153	132	91.9	77.2	43.2
2TS060420	6 OPzS 420	774	730	677	635	562	425	346	294	225	184	159	111	92.4	51.7
2TS070490	7 OPzS 490	884	833	773	725	641	485	400	339	263	215	185	130	108	60.2
2TS060600	6 OPzS 600	961	923	879	835	764	608	512	431	325	262	224	162	137	76.6
2TS080800	8 OPzS 800	1405	1355	1265	1185	1070	851	696	598	444	358	305	219	183	102
2TS101000	10 OPzS 1000	1685	1620	1530	1440	1310	1045	865	736	551	447	379	273	229	128
2TS121200	12 OPzS 1200	1940	1860	1770	1685	1540	1225	1030	869	656	530	451	327	276	154
2TS121500	12 OPzS 1500	1950	1930	1865	1785	1660	1350	1175	1025	803	672	590	414	348	193
2TS141750	14 OPzS 1750	2070	2040	1980	1890	1755	1430	1245	1085	850	712	626	438	368	205
2TS151875	15 OPzS 1875	2218	2186	2121	2025	1880	1532	1334	1163	911	763	671	469	394	220
2TS162000	16 OPzS 2000	2820	2790	2675	2550	2345	1860	1605	1375	1065	889	792	548	460	255
2TS162250	18 OPzS 2250	2955	2915	2810	2680	2460	1975	1715	1475	1155	968	850	597	500	279
2TS202500	20 OPzS 2500	3510	3465	3320	3175	2915	2315	2000	1715	1325	1105	973	682	573	319
2TS243000	24 OPzS 3000	4045	3995	3835	3670	3370	2705	2345	2015	1585	1320	1160	816	684	381
2TS283500	28 OPzS 3500	4719	4661	4474	4282	3932	3156	2736	2351	1849	1540	1353	952	798	445

Part Number	DIN Type	Discharge Data Watts @ 20°C to 1.65VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		3 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	326	292	257	230	191	128	102	85.5	66.8	53.7	45.8	30.8	25.6	14.2
2TS030150	3 OPzS 150	414	371	329	294	245	163	131	111	87.3	70.5	59.8	40.7	33.8	18.7
2TS040200	4 OPzS 200	536	481	423	379	315	211	167	141	111	89.7	76.1	51.8	43.1	23.8
2TS050250	5 OPzS 250	652	584	514	460	384	259	206	174	136	110	93.8	63.8	53.3	29.5
2TS060300	6 OPzS 300	762	684	601	538	452	306	244	208	161	130	111	75.7	63.6	35.2
2TS050350	5 OPzS 350	755	701	643	595	514	377	303	253	192	156	133	91.9	77.2	43.2
2TS060420	6 OPzS 420	869	807	740	685	598	438	356	299	230	186	159	111	92.4	51.7
2TS070490	7 OPzS 490	992	921	845	782	683	500	410	345	268	216	185	130	108	60.2
2TS060600	6 OPzS 600	1065	1015	976	922	834	648	534	449	332	265	226	166	138	77.1
2TS080800	8 OPzS 800	1565	1495	1395	1295	1165	895	726	617	456	365	307	222	185	103
2TS101000	10 OPzS 1000	1875	1790	1695	1585	1430	1105	903	763	564	453	382	278	231	129
2TS121200	12 OPzS 1200	2150	2050	1965	1860	1680	1305	1075	904	669	538	455	334	278	155
2TS121500	12 OPzS 1500	2200	2170	2085	1995	1835	1475	1260	1080	832	695	610	419	350	195
2TS141750	14 OPzS 1750	2330	2295	2210	2115	1945	1565	1330	1145	883	737	645	444	369	206
2TS151875	15 OPzS 1875	2397	2361	2273	2175	2001	1610	1368	1178	908	758	663	457	380	212
2TS162000	16 OPzS 2000	3175	3130	2980	2845	2590	2040	1715	1455	1105	921	805	555	462	257
2TS162250	18 OPzS 2250	3330	3280	3140	3000	2725	2160	1830	1555	1200	1000	877	603	503	280
2TS202500	20 OPzS 2500	3955	3900	3720	3555	3235	2535	2130	1810	1375	1145	1005	690	574	320
2TS243000	24 OPzS 3000	4555	4490	4290	4105	3730	2960	2505	2125	1640	1370	1200	825	688	384
2TS283500	28 OPzS 3500	5314	5238	5005	4789	4352	3453	2923	2479	1913	1598	1400	963	803	448

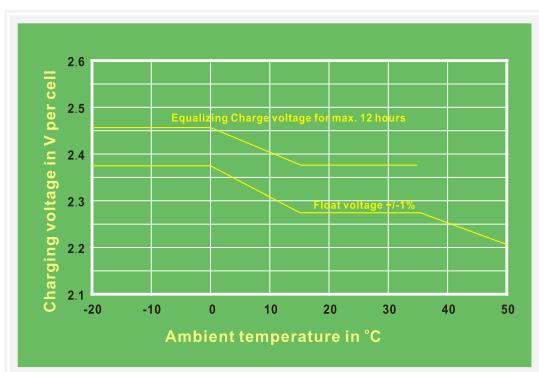
Actual battery performance data may be +/-5% of figures shown above



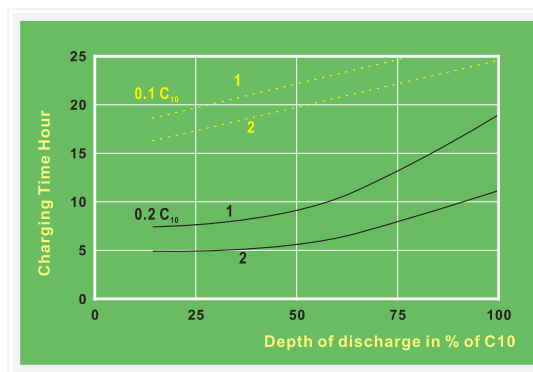
## EverExceed Tubular OPzS Range Cell Discharge Data Watts at 20°C

Part Number	DIN Type	Discharge Data Watts @ 20°C to 1.60VPC													
		Discharge Time in Minutes					Discharge Time in hours								
		3 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour
2TS020100	2 OPzS 100	350	308	269	239	197	129	102	85.1	67.0	55.3	45.8	30.8	25.6	14.2
2TS030150	3 OPzS 150	445	392	343	304	250	165	131	111	87.6	70.1	59.8	40.7	33.8	18.7
2TS040200	4 OPzS 200	575	507	443	394	324	213	167	141	112	89.5	76.1	51.8	43.1	23.8
2TS050250	5 OPzS 250	703	618	539	479	395	262	206	175	137	110	93.8	63.8	53.3	29.5
2TS060300	6 OPzS 300	822	724	632	561	464	310	244	209	161	129	111	75.7	63.6	35.2
2TS050350	5 OPzS 350	834	763	693	632	543	383	307	254	195	157	133	91.9	77.2	43.2
2TS060420	6 OPzS 420	959	879	797	728	631	445	361	302	233	187	159	111	92.4	51.7
2TS070490	7 OPzS 490	1095	1005	910	831	720	509	416	348	272	218	185	130	108	60.2
2TS060600	6 OPzS 600	1165	1105	1070	1010	900	684	549	462	333	266	226	166	138	77.1
2TS080800	8 OPzS 800	1720	1625	1520	1400	1255	925	749	626	461	366	307	222	185	103
2TS101000	10 OPzS 1000	2050	1945	1850	1725	1540	1150	930	780	568	454	382	278	231	129
2TS121200	12 OPzS 1200	2350	2225	2150	2035	1815	1380	1105	931	671	536	455	334	278	155
2TS121500	12 OPzS 1500	2435	2390	2290	2200	2005	1590	1325	1120	854	710	619	420	350	195
2TS141750	14 OPzS 1750	2580	2535	2420	2320	2125	1685	1400	1185	905	751	654	446	369	206
2TS151875	15 OPzS 1875	2764	2716	2593	2486	2277	1805	1500	1270	970	805	701	478	395	221
2TS162000	16 OPzS 2000	3515	3455	3270	3130	2830	2200	1805	1510	1130	940	817	557	462	257
2TS162250	18 OPzS 2250	3685	3615	3445	3290	2975	2335	1925	1615	1230	1025	890	606	503	280
2TS202500	20 OPzS 2500	4385	4300	4075	3895	3520	2730	2250	1885	1405	1170	1020	694	574	320
2TS243000	24 OPzS 3000	5045	4950	4705	4505	4070	3195	2630	2205	1685	1400	1220	829	688	384
2TS283500	28 OPzS 3500	5886	5775	5489	5256	4748	3728	3068	2573	1966	1633	1423	967	803	448

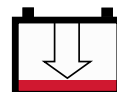
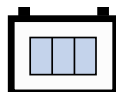
Actual battery performance data may be +/-5% of figures shown above



For continuous charging we recommend a voltage of 2.25 V.  
The charging voltage must be compensated to the curve for a continuously different battery ambient temperature.



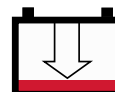
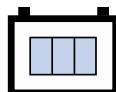
Recharging time in relation to the initial charging current at 20°C.  
----- State of charge 100 %  
----- State of charge 90 %  
Charge voltage:  
1: 2.25 V/C  
2: 2.40 V/C



## EverExceed Tubular OPzS Range Long Duration Discharge Capacity (Ah)

Part Number	DIN Type	C24	C48	C72	C96	C100	C120	C240
		1.85 VPC – Discharge Data in Ampere Hour at 20°C						
2TS020100	2 OPzS 100	133	138	144	145	145	146	152
2TS030150	3 OPzS 150	194	207	218	220	223	224	225
2TS040200	4 OPzS 200	258	276	288	290	291	293	304
2TS050250	5 OPzS 250	319	345	361	363	364	366	376
2TS060300	6 OPzS 300	386	414	433	435	436	438	443
2TS050350	5 OPzS 350	448	483	515	520	522	525	536
2TS060420	6 OPzS 420	541	579	618	623	625	628	639
2TS070490	7 OPzS 490	628	676	726	730	733	736	747
2TS060600	6 OPzS 600	754	828	890	891	893	896	908
2TS080800	8 OPzS 800	1004	1104	1185	1190	1192	1195	1210
2TS101000	10 OPzS 1000	1246	1380	1483	1488	1490	1494	1514
2TS121200	12 OPzS 1200	1504	1656	1777	1782	1786	1792	1813
2TS121500	12 OPzS 1500	1854	2070	2163	2178	2185	2194	2256
2TS141750	14 OPzS 1750	2163	2415	2524	2539	2548	2560	2606
2TS151875	15 OPzS 1875	2318	2587	2704	2709	2714	2719	2796
2TS162000	16 OPzS 2000	2472	2760	2884	2894	2902	2905	2966
2TS162250	18 OPzS 2250	2781	3105	3245	3255	3259	3265	3327
2TS202500	20 OPzS 2500	3090	3451	3605	3626	3635	3646	3744
2TS243000	24 OPzS 3000	3708	4141	4326	4347	4360	4378	4460
2TS283500	28 OPzS 3500	4326	4831	5047	5067	5084	5111	5165

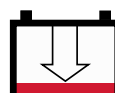
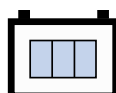
Actual battery performance data may be +/-5% of figures shown above



## EverExceed Tubular OPzS Range Long Duration Discharge Capacity (Ah)

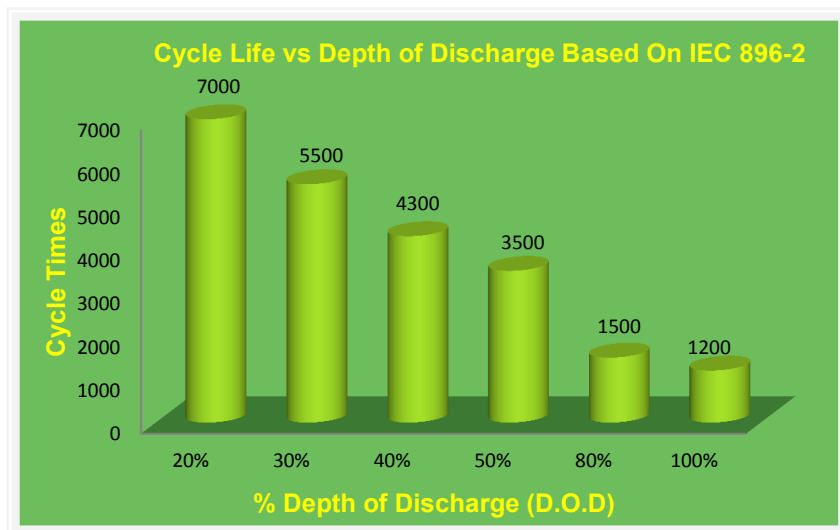
Part Number	DIN Type	C24	C48	C72	C96	C100	C120	C240
		1.80 VPC – Discharge Data in Ampere Hour at 20°C						
2TS020100	2 OPzS 100	134	139	145	146	146	147	154
2TS030150	3 OPzS 150	196	209	220	222	225	226	227
2TS040200	4 OPzS 200	261	279	291	293	294	296	307
2TS050250	5 OPzS 250	322	348	365	367	368	370	380
2TS060300	6 OPzS 300	390	418	437	439	440	442	447
2TS050350	5 OPzS 350	452	488	520	525	527	530	541
2TS060420	6 OPzS 420	546	585	624	629	631	634	645
2TS070490	7 OPzS 490	634	683	733	737	740	743	754
2TS060600	6 OPzS 600	762	836	899	900	902	905	917
2TS080800	8 OPzS 800	1014	1115	1197	1202	1204	1207	1222
2TS101000	10 OPzS 1000	1258	1394	1498	1503	1505	1509	1529
2TS121200	12 OPzS 1200	1519	1673	1795	1800	1804	1810	1831
2TS121500	12 OPzS 1500	1873	2091	2185	2200	2207	2216	2279
2TS141750	14 OPzS 1750	2185	2439	2549	2564	2573	2586	2632
2TS151875	15 OPzS 1875	2341	2613	2731	2736	2741	2746	2824
2TS162000	16 OPzS 2000	2497	2788	2913	2923	2931	2934	2996
2TS162250	18 OPzS 2250	2809	3136	3277	3288	3292	3298	3360
2TS202500	20 OPzS 2500	3121	3486	3641	3662	3671	3682	3781
2TS243000	24 OPzS 3000	3745	4182	4369	4390	4404	4422	4505
2TS283500	28 OPzS 3500	4369	4879	5097	5118	5135	5162	5217

Actual battery performance data may be +/-5% of figures shown above





## Technical Data Curves

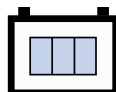


### BATTERY CYCLING ABILITY

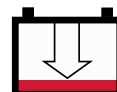
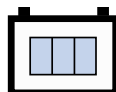
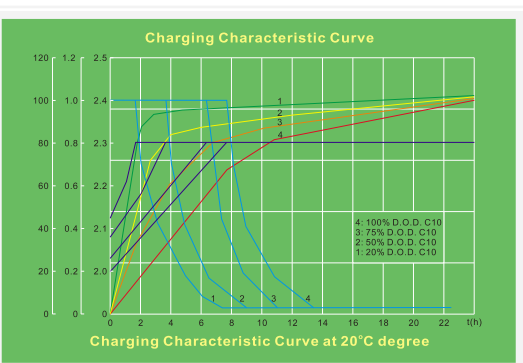
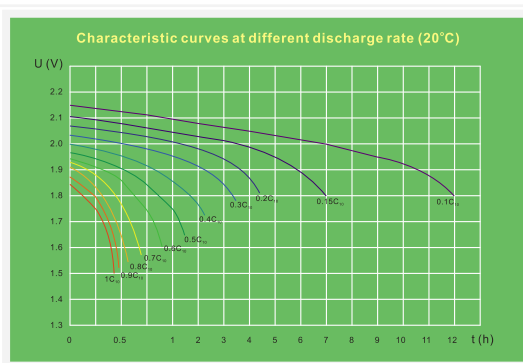
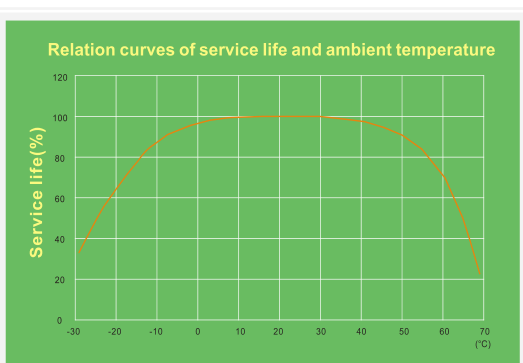
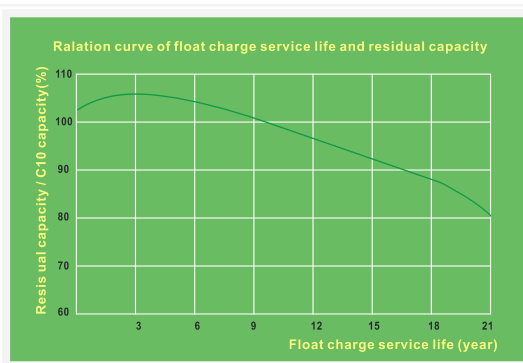
The EverExceed's Tubular OPzS Range Battery excels in cycling applications. This Range are capable of 7000+ charge / discharge cycles depending on the depth of discharge.

TYPICAL CYCLIC PERFORMANCE	
CAPACITY WITHDRAWN	CYCLES
100%	1200
80%	1500
50%	3500
40%	4300
30%	5500
20%	7000

3500 cycles to 50% DoD and 5500 to over 30% DoD



## Technical Data Curves



***EverExceed<sup>®</sup>***  
***power your applications***



***Supplied Worldwide by  
EverExceed Corporation***

