MONOLITE

SLA VRLA range

The **MONOLITE** valve regulated lead-acid range is specifically designed to meet and exceed the stringent specifications of the Telecommunications industry. Extensive testing and customer field experience since **MONOLITE**'s inception during 1985 ensure ultimate reliability. This "purpose built design" philosophy, coupled with industry leading manufacturing technology, ensures product consistency and reliable performance, in a family of batteries ideally suited to those applications where reliability and quality are a must:

- 12-year plus life
- All **MONOLITE** batteries have passed stringent Telcordia (Bellcore) 10 year accelerated life tests
- Good Energy Density
- Good Low-Rate Performance
- Easy Handling and Installation
- Safe Operation and Ease of Testing
- No Water Addition Needed

Saft has a program of continuos improvement investing in manufacturing processes, equipment and technology. Saft's Standby Battery manufacture conforms to ISO 9001 quality system and ISO 14001 environmental system. Our continuous investment in battery technology is reflected by means of premium products that are of the highest quality and reliability. **MONOLITE** valve regulated lead acid batteries are the ideal energy source for many different standby applications.

TECHNICAL FEATURES

- **Plates and Grids:** extra-thick plates with grids cast from high purity lead calcium tin alloy to ensure long and reliable life and low gas emission.
- **Separators:** micro porous glass mat facilitates recombination and immobilizes the electrolyte
- **Internal Connections:** heavy-duty internal straps and through-the-partition cell connections minimize internal resistance for increased enery density.
- **Terminals:** threaded post terminals with brass inserts provide for high conductivity and maximum torque retention.
- **Post Seals:** state of the art post seals prevent seepage over a wide temperature range.
- **Safety Valve:** each cell has its own one-way valve that opens at 5 psi and closes at 3 psi to allow excess gas to escape in case of over charging.
- **Flame Arrestor:** lets excess gas out while preventing any errant spark or flame from entering the battery.
- **Container and Cover:** made from thick walled flame retardant ABS plastic and designed for unsurpassed mechanical strength , the cases and covers have an LOI greater than 28% and meet the flame retardancy standards of UL 94 V-0 .
- **Handles:** most sizes have either tough rope handles or handles integrated into the battery cover, to aid in handling, installing and removing the batteries.

APPLICABLE STANDARDS

- Telcordia (Bellcore) SR-4228
- Telcordia (Bellcore) TR-NWT-001200
- Telcordia (Bellcore) TR-NWT-000909
- UL Recognized
- UL 94 Class V-0
- UL 1778
- IEC 60896 Part 21-22
- Eurobat guide -12 years and longer "long life"
- British Standard BS 6290 Part 4
- British Standard BS 6334 method FV 0

PRODUCT FEATURES

- Safe
- Versatile
- Reliable
- Long life

MONOLITE SLA range

SLA VRLA Range

Battery Type	Capacity Ah 8 hrs to 1.75 Vpc at 77°F	Nominal Voltage (v)	Dimensions						Weight
			Length		Width		Height		lbs.
			in	mm	in	mm	in	mm	
12 SLA 12	12	12	7.87	200	3.03	77	5.43	138	12.35
12 SLA 25	25	12	8.58	218	5.08	129	6.53	166	24.2
12 SLA 30	30	12	7.91	201	5.43	138	7.48	190	30.8
12 SLA 50	50	12	11.33	288	6.81	173	7.95	202	48.4
12 SLA 75	75	12	14.17	360	6.45	164	8.97	228	70.4
6 SLA 100	100	6	10.66	271	6.81	173	7.95	202	46.2
6 SLA 125	125	6	10.55	268	6.77	172	9.33	237	57.2
6 SLA 160	160	6	11.73	298	7.95	202	8.89	226	74.8
6 SLA 180	180	6	15.27	388	6.81	173	9.88	251	85.8
4 SLA 150	150	4	10.67	271	6.81	173	7.95	202	44
4 SLA 200	200	4	9.84	250	7.95	202	8.89	226	57.2
2 SLA 250	250	2	10.67	271	6.81	173	7.95	202	39.6
2 SLA 300	300	2	10.67	271	6.81	173	7.95	202	44
2 SLA 405	400	2	9.84	250	7.95	202	8.89	226	57.2
2 SLA 500	500	2	15.23	387	6.81	173	9.88	251	81.4
2 SLA 580	580	2	15.23	387	6.81	173	9.88	251	90.2
2 SLA 800*	800	2	10	254	20.66	525	8.26	210	140.8
2 SLA 1000*	1048	2	10	254	20.66	525	8.26	210	162.8
2 SLA 1500*	1500	2	10.82	275	25.98	660	8.26	210	242
2 SLA 2000*	2000	2	14.48	368	25.98	660	8.58	218	314.6

***This cell must be installed horizontal**

ELECTRICAL CHARACTERISTICS

- **Float Voltage at 77°F :** 2.26 Vpc
- **Float Voltage temperature compensation:** -1.38 mV/°F per cell
- **Self Discharge :** <2% per month at 77°F

MONOLITE SLA range

Constant Current discharge rates Amperes to 1.67 Vpc at 77°F (25°C)

Battery Type	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 12	69.0	42.0	29.0	22.5	18.5	13.9	10.2	8.17	4.70	3.38	2.68	2.23	1.51	1.25	0.65
12 SLA 25	117	87.3	61.0	47.0	38.7	29.0	21.3	16.8	9.51	6.83	5.43	4.54	3.14	2.59	1.37
12 SLA 30	139	104	72.6	56.0	46.1	34.6	25.5	20.2	11.4	8.20	6.52	5.45	3.76	3.10	1.64
12 SLA 50	231	173	121	93.3	76.9	57.6	42.5	33.7	19.0	13.7	10.9	9.08	6.27	5.17	2.74
12 SLA 75	347	260	182	140	115	86.4	63.8	50.5	28.5	20.5	16.3	13.6	9.41	7.76	4.10
6 SLA 100	463	346	242	187	154	115	85.0	67.4	38.0	27.3	21.7	18.2	12.5	10.3	5.47
6 SLA 125	348	305	251	205	176	134	103	83.2	47.5	34.2	27.2	22.7	15.7	12.9	6.84
6 SLA 160	566	486	369	273	229	177	135	109	64.4	46.2	36.4	30.2	20.6	17.1	8.94
6 SLA 180	501	440	362	296	254	194	148	120	68.3	49.2	39.1	32.7	22.6	18.6	9.85
4 SLA 150	630	494	357	280	230	173	128	102	57.5	41.6	33.0	27.6	19.1	15.7	8.32
4 SLA 200	573	510	430	362	304	228	169	138	80.5	57.8	45.4	37.7	25.7	21.4	11.2
2 SLA 250	851	679	529	430	368	283	212	168	94.5	68.7	55.4	46.5	31.5	25.8	13.9
2 SLA 300	885	738	603	498	427	332	253	201	114	82.4	66.4	55.8	37.8	31.0	16.7
2 SLA 405	896	761	656	584	525	415	310	251	148	109	86.9	72.6	49.3	41.1	21.8
2 SLA 500	1506	1264	1009	832	701	536	404	327	190	137	109	90.8	62.7	51.7	27.4
2 SLA 580	1649	1405	1152	956	811	624	476	384	220	159	126	105	72.8	60.0	31.7
2 SLA 800	1429	1369	1293	1199	1049	855	658	536	324	238	191	159	106	86.6	46.1
2 SLA 1000	1786	1712	1616	1498	1311	1069	822	670	405	297	239	199	132	108	57.6
2 SLA 1500	2035	1885	1711	1553	1408	1202	975	824	530	400	321	271	189	156	85.9
2 SLA 2000	2713	2513	2281	2070	1877	1602	1300	1099	706	533	428	362	252	207	115

Constant Current discharge rates Amperes to 1.75 Vpc at 77°F (25°C)

Battery Type	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 12	60.7	38.9	27.5	21.6	17.9	13.5	9.98	8.01	4.63	3.33	2.64	2.20	1.49	1.23	0.65
12 SLA 25	101	78.0	56.0	44.0	36.5	27.5	20.6	16.3	9.32	6.77	5.39	4.51	3.12	2.56	1.35
12 SLA 30	120	92.7	66.6	52.4	43.5	32.8	24.6	19.6	11.2	8.12	6.47	5.41	3.74	3.08	1.63
12 SLA 50	202	155	111	87.3	72.4	54.7	41.0	32.6	18.5	13.5	10.8	9.02	6.23	5.13	2.71
12 SLA 75	303	232	166	131	109	82.0	61.5	48.9	27.8	20.3	16.2	13.5	9.35	7.69	4.07
6 SLA 100	404	309	222	175	145	109	82.0	65.2	37.1	27.1	21.6	18.0	12.5	10.3	5.42
6 SLA 125	301	259	216	186	162	126	97.9	80.3	46.6	33.8	26.9	22.6	15.6	12.8	6.78
6 SLA 160	524	445	330	255	215	169	130	106	62.9	45.0	35.4	29.4	20.1	16.7	8.78
6 SLA 180	433	373	311	268	233	182	141	116	67.1	48.7	38.8	32.5	22.4	18.5	9.76
4 SLA 150	546	439	326	262	218	164	123	98.3	56.5	41.1	32.7	27.4	18.9	15.6	8.24
4 SLA 200	513	465	393	330	278	215	162	131	78.6	56.3	44.2	36.8	25.1	20.9	11.0
2 SLA 250	705	586	473	393	342	265	201	161	92.9	67.8	54.7	46.0	31.2	25.6	13.8
2 SLA 300	759	642	528	454	399	315	240	193	112	81.3	65.7	55.2	37.5	30.7	16.6
2 SLA 405	763	695	616	551	496	394	296	241	145	108	86.1	71.9	49.1	40.8	21.7
2 SLA 500	1332	1090	882	752	650	506	387	317	186	135	108	90.2	62.3	51.3	27.1
2 SLA 580	1396	1208	999	863	745	585	456	373	216	157	125	105	72.3	59.5	31.5
2 SLA 800	1141	1122	1090	1037	937	793	622	514	316	234	187	157	105	85.6	45.5
2 SLA 1000	1427	1403	1362	1296	1171	992	777	642	395	292	234	196	131	107	56.9
2 SLA 1500	1637	1565	1473	1374	1274	1112	929	791	514	389	315	267	187	154	84.8
2 SLA 2000	2182	2086	1964	1831	1698	1483	1238	1054	686	519	420	357	249	205	113

MONOLITE SLA range

Constant Current discharge rates Amperes to 1.81 Vpc at 77°F (25°C)

Battery Type	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 12	49.7	34.4	25.4	20.3	17.0	13.0	9.69	7.81	4.54	3.27	2.59	2.16	1.47	1.21	0.64
12 SLA 25	88.5	68.8	51.0	40.9	34.1	25.6	19.4	15.6	9.04	6.63	5.30	4.45	3.07	2.53	1.33
12 SLA 30	102	80.3	59.7	47.8	39.9	30.9	23.3	18.7	10.9	7.96	6.36	5.34	3.69	3.03	1.60
12 SLA 50	169	133	99.7	80.2	66.8	51.7	39.0	31.2	17.9	13.3	10.6	8.89	6.14	5.05	2.67
12 SLA 75	254	200	150	120	100	77.5	58.4	46.7	26.9	19.9	15.9	13.3	9.22	7.58	4.01
6 SLA 100	339	267	199	160	134	103	77.9	62.3	35.8	26.5	21.2	17.8	12.3	10.1	5.34
6 SLA 125	260	220	187	163	143	116	92.2	76.9	45.2	33.2	26.5	22.2	15.4	12.6	6.68
6 SLA 160	444	372	287	234	200	160	123	100	60.9	43.7	34.4	28.5	19.3	16.1	8.55
6 SLA 180	374	317	269	235	206	167	133	111	65.1	47.7	38.2	32.0	22.1	18.2	9.62
4 SLA 150	463	378	291	239	200	154	117	93.9	54.7	40.2	32.1	26.9	18.6	15.2	8.09
4 SLA 200	441	409	358	300	253	198	152	125	75.3	54.1	42.7	35.5	24.2	20.2	10.7
2 SLA 250	550	472	397	342	302	243	183	151	90.0	66.3	53.5	45.0	30.7	25.3	13.5
2 SLA 300	645	558	467	404	359	287	221	180	109	79.9	64.6	54.3	36.9	30.3	16.3
2 SLA 405	673	620	558	496	445	356	278	230	141	105	84.5	70.9	48.3	40.3	21.4
2 SLA 500	1082	905	773	667	587	469	367	303	181	133	106	88.9	61.4	50.5	26.7
2 SLA 580	1190	1011	867	757	668	546	428	354	210	154	123	103	71.3	58.6	31.0
2 SLA 800	980	970	942	902	831	709	568	473	300	225	181	152	101	82.6	43.9
2 SLA 1000	1225	1213	1177	1127	1039	887	710	592	375	281	227	190	127	103	54.9
2 SLA 1500	1379	1319	1245	1171	1097	986	841	730	492	375	306	259	182	151	81.8
2 SLA 2000	1839	1758	1660	1562	1462	1314	1121	974	656	499	408	345	243	201	109

Constant Power discharge rates Watt per Cell to 1.67 Vpc at 77°F (25°C)

Battery Type	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 12	122	76.9	53.9	42.1	34.8	26.1	19.4	15.5	8.98	6.48	5.13	4.28	2.90	2.40	1.26
12 SLA 25	202	154	110	85.7	71.1	53.6	39.7	31.4	17.9	13.0	10.4	8.72	6.03	4.95	2.62
12 SLA 30	240	184	131	102	84.7	64.0	47.5	37.7	21.4	15.6	12.5	10.5	7.23	5.94	3.14
12 SLA 50	396	303	216	168	140	105	78.3	62.4	35.6	26.1	20.8	17.5	12.1	9.92	5.25
12 SLA 75	594	455	324	253	209	158	117	93.6	53.4	39.1	31.3	26.2	18.1	14.9	7.88
6 SLA 100	792	606	432	337	279	211	157	125	71.2	52.2	41.7	35.0	24.2	19.8	10.5
6 SLA 125	601	533	444	367	317	244	188	153	88.8	65.1	52.0	43.6	30.2	24.8	13.1
6 SLA 160	931	772	594	490	416	326	250	204	121	86.9	68.4	56.9	38.8	32.2	16.9
6 SLA 180	865	767	640	528	457	351	270	220	128	93.7	74.9	62.8	43.5	35.7	18.9
4 SLA 150	1069	857	632	501	415	315	234	187	107	78.2	62.5	52.4	36.2	29.8	15.8
4 SLA 200	997	895	765	650	551	417	311	255	151	108	85.4	71.0	48.5	40.3	21.1
2 SLA 250	1456	1186	941	774	667	519	392	312	177	130	105	88.4	60.2	49.4	26.6
2 SLA 300	1519	1289	1069	893	772	607	466	373	213	156	126	106	72.2	59.3	32.0
2 SLA 405	1588	1362	1183	1060	956	762	574	466	276	208	166	139	94.9	79.1	42.1
2 SLA 500	2657	2254	1822	1515	1284	989	750	609	356	260	208	174	121	99.0	52.4
2 SLA 580	2903	2500	2073	1735	1481	1148	882	715	413	301	241	202	140	115	60.8
2 SLA 800	2430	2340	2224	2077	1838	1521	1187	975	599	443	357	299	200	164	87.5
2 SLA 1000	3038	2926	2779	2596	2297	1901	1484	1219	749	553	446	374	250	205	109
2 SLA 1500	3554	3313	3028	2766	2522	2171	1777	1511	983	745	601	510	358	296	163
2 SLA 2000	4739	4418	4038	3688	3363	2894	2369	2015	1310	993	802	681	477	395	217

MONOLITE SLA range

Constant Power discharge rates Watt per Cell to 1.75 Vpc at 77°F (25°C)

Battery Type	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 12	111	72.8	52.1	41.1	34.2	25.9	19.3	15.5	8.98	6.48	5.13	4.28	2.90	2.40	1.26
12 SLA 25	180	142	103	82.0	68.4	51.9	39.0	31.0	17.9	13.0	10.4	8.72	6.03	4.95	2.62
12 SLA 30	215	169	123	97.7	81.6	61.9	46.7	37.3	21.4	15.6	12.5	10.5	7.23	5.94	3.14
12 SLA 50	358	278	203	161	135	102	77.1	61.6	35.4	26.0	20.8	17.5	12.1	9.91	5.24
12 SLA 75	536	418	305	242	202	153	116	92.5	53.1	39.1	31.2	26.2	18.1	14.9	7.87
6 SLA 100	715	557	406	322	269	204	154	123	70.8	52.1	41.6	34.9	24.1	19.8	10.5
6 SLA 125	537	467	392	340	298	234	183	151	88.7	65.0	51.9	43.6	30.1	24.7	13.1
6 SLA 160	795	697	557	469	405	315	247	202	120	86.3	67.9	56.5	38.5	32.1	16.9
6 SLA 180	773	672	565	490	429	337	263	218	128	93.6	74.8	62.8	43.4	35.6	18.9
4 SLA 150	960	784	593	480	402	305	231	185	107	78.1	62.4	52.3	36.2	29.7	15.7
4 SLA 200	919	840	717	608	515	402	305	248	150	108	84.8	70.6	48.1	40.1	21.1
2 SLA 250	1253	1057	865	724	634	496	379	305	177	130	105	88.4	60.2	49.4	26.6
2 SLA 300	1351	1157	964	835	738	589	452	364	213	156	126	106	72.2	59.3	32.0
2 SLA 405	1393	1277	1137	1023	923	739	559	457	276	208	166	139	94.9	79.1	42.1
2 SLA 500	2418	2001	1635	1403	1218	953	733	603	356	260	208	174	121	99.0	52.4
2 SLA 580	2537	2213	1847	1604	1392	1100	862	707	413	301	241	202	140	115	60.8
2 SLA 800	2028	1997	1945	1857	1691	1446	1147	955	596	443	357	299	200	164	87.5
2 SLA 1000	2536	2496	2431	2321	2113	1808	1434	1194	744	554	446	374	250	205	109
2 SLA 1500	2966	2844	2687	2515	2341	2057	1729	1480	973	740	601	510	358	296	163
2 SLA 2000	3955	3792	3583	3353	3121	2743	2306	1973	1297	986	801	681	477	395	217

Constant Power discharge rates Watt per Cell to 1.81 Vpc at 77°F (25°C)

Battery Type	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 12	93.5	65.8	48.9	39.3	33.1	25.3	19.0	15.3	8.94	6.46	5.12	4.27	2.90	2.40	1.26
12 SLA 25	162	128	96.1	77.6	65.1	49.1	37.4	30.1	17.6	12.9	10.3	8.67	6.00	4.93	2.61
12 SLA 30	188	149	113	90.7	76.2	59.3	45.0	36.2	21.1	15.5	12.4	10.4	7.20	5.92	3.13
12 SLA 50	308	246	186	151	127	98.5	74.6	60.0	34.8	25.8	20.7	17.4	12.0	9.87	5.22
12 SLA 75	462	370	280	227	190	148	112	90.0	52.2	38.7	31.0	26.0	18.0	14.8	7.83
6 SLA 100	617	493	373	302	253	197	149	120	69.6	51.7	41.3	34.7	24.0	19.7	10.4
6 SLA 125	476	407	348	306	269	220	176	147	87.5	64.4	51.6	43.3	30.0	24.6	13.0
6 SLA 160	692	611	512	437	381	306	239	194	118	85.0	66.9	55.5	37.7	31.5	16.7
6 SLA 180	686	586	501	440	388	317	253	212	126	92.8	74.2	62.4	43.1	35.5	18.8
4 SLA 150	838	693	541	447	376	292	222	180	105	77.4	61.9	52.0	36.0	29.6	15.7
4 SLA 200	812	756	667	563	477	377	292	240	146	105	83.1	69.2	47.2	39.4	20.9
2 SLA 250	1011	877	743	644	571	462	351	290	174	129	104	87.7	59.9	49.3	26.5
2 SLA 300	1181	1032	870	759	677	546	422	347	210	155	126	106	72.0	59.1	31.8
2 SLA 405	1257	1162	1051	939	845	679	534	442	273	205	164	138	94.3	78.6	41.8
2 SLA 500	2018	1701	1461	1267	1119	899	707	585	351	258	206	173	120	98.6	52.2
2 SLA 580	2215	1898	1637	1436	1271	1045	823	682	407	299	239	201	139	114	60.5
2 SLA 800	1791	1774	1725	1657	1534	1321	1069	897	575	434	351	294	197	161	85.7
2 SLA 1000	2239	2218	2157	2071	1918	1652	1337	1121	719	542	438	368	246	201	107
2 SLA 1500	2564	2457	2326	2195	2061	1860	1596	1392	945	723	593	501	354	294	160
2 SLA 2000	3419	3276	3102	2927	2748	2481	2128	1856	1260	964	790	668	472	392	213