

CELLYTE 12TLG Bloc

Sealed VRLA Monobloc Gel Battery **SOLAR POWER BATTERY** Capacities : 26 Ah to 260 Ah @ C/100



CELLYTE TLG Bloc Gel, sealed valve regulated lead acid rechargeable batteries are maintenance free. **CELLYTE TLG** advanced gelled electrolyte gas recombination technology ensures reliable performance, safety, outstanding battery life and value. **CELLYTE TLG** batteries are designed for universal float service / cycling applications. Battery life will depend on frequency and depth of discharge and temperature of operation. (See curve) UL Recognised Component.

APPLICATIONS

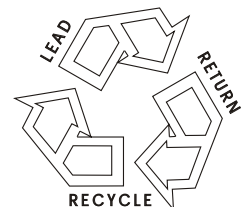
- * Photovoltaic / Solar / Wind
- * Telecommunications
- * Cycling / Float service
- * Wheelchair / Electric vehicle
- * Boats/Marine/Navigational Aids
- * Engine Starting
- * Golf caddy
- * Portable medical equipment
- * Cathodic Protection

INNOVATIVE FEATURES

- * Gelled Thixotropic electrolyte
- * Central Point Gassing System (Check Catalogues for Models)
- * Valve Regulated Lead Acid
- * Multi-position usage
- * Low self-discharge
- * Complies - BS 6290 Part 4 (with option)
- * FAA and IATA Approved as NON Hazardous
- * Flame Retardant material V-0 (option to meet BS 6290 Part 4)

SPECIFICATIONS

Voltage6 and 12 volt nominal
Plate alloy Lead calcium/copper grid alloy
Container/Case Grade 6 ABS
Charge voltage Cycle 2.35 vpc; Float 2.25 vpc @ 20/25°C
Specific gravity 1.300
Electrolyte Sulphuric acid thixotropic gel
Vent Self sealing - 2psi Operation



Supplied Worldwide by:
SEC Industrial Battery Co.



Introduction.

SEC batteries have been used in the industrial battery market for over 20 years. SEC's high quality, 10 year design life, reliable Gel technology lead acid batteries have a proven record and we have now extended our range of 12TLG batteries to include larger sizes. New features include handles for easy lifting, brass insert terminals for higher current capacity and reduced damage during transportation, designed to comply with EUROBAT (draft IEC 896-2), IEEE, JIS and BS 6290 Part 4, using UL certified components.

- **Valve Regulated (Sealed) Construction.**
The battery is of the Gel (gelled electrolyte technology), valve regulated (sealed) VRLA rechargeable type. The acid is immobilised in a specially formulated mixture of gelling agent and sulphuric acid electrolyte. All the acid is absorbed in this manner and it provides a safe non-spillable Battery.
- **Gas Recombination System.**
The gasses generated in the normal charge/discharge use of a rechargeable battery are internally recombined during normal operating parameters. In fact, in normal operational use, more than 99% of the gases generated are recombined.
- **Maintenance.**
The battery has been designed and built such that no addition of electrolyte is needed during the life of the battery. There is no requirement to add water or take time consuming specific gravity readings.
- **Battery Life - Float Service.**
The SEC TLG battery is suitable for float (standby) service with life of 10 years at 20 °C
- **Battery Life - Cycle Service.**
The SEC TLG battery is designed for 400 to 2800 charge/discharge cycles, actual quantity will depend on the depth of discharge. (see cycling curve)
- **Safety Valve.**
If excess pressure builds up within the battery, the safety valve automatically opens then closes releasing the gas at 1-3 p.s.i. The valve does not allow the ingress of oxygen which is harmful to the efficient operation and life of the battery.
- **Temperature Range for Normal Operation.**
The SEC battery has a wide operating temperature range. However for maximum life and safety, continuous operation over 45 Deg C is not recommended for any VRLA battery.
- **Grid Design and Paste Formulation.**
SEC has optimized the grid design and paste formulation to maximize the operating and storage life of the battery. This optimized design provides the following advantages:- Excellent recovery from deep discharge or over discharge. Low self discharge to ensure maximum storage time when not in use. Excellent cycling capability. Adequate safety margins in tough operating conditions.
- **Use In any Position.**
The SEC TLG battery is designed to use in horizontal and vertical positions.

These features make the 12TLG batteries suitable for renewable energy deep cycle applications.

CELLYTE Bloc 12TLG Ampere Hour Data @ 20 C.

SEC Bloc Gel TYPE	END Volts / CELL	DISCHARGE DATA AMPS				END Volts / CELL	DISCHARGE DATA AMPERE HOURS @ 20 C													
		TIME IN MINUTES					DISCHARGE TIME IN HOURS													
		15	30	45	60		1.5	2	3	4	5	8	10	12	20	24	48	72	100	
12TLG 30	1.80	33.6	21.5	16.0	13.3	1.85	12.8	14.3	15.5	16.3	16.9	18.8	19.4	19.8	21.8	22.3	23.3	24.1	24.9	
	1.75	36.4	22.2	16.5	13.6	1.80	13.5	15.2	16.4	17.3	17.9	20.0	20.8	21.2	23.0	23.4	24.1	24.8	25.6	
	1.67	38.3	22.7	16.6	13.7	1.75	13.9	15.6	16.9	17.7	18.3	20.5	21.3	21.8	23.7	24.1	24.7	25.5	26.3	
12TLG 40	1.80	41.9	26.9	20.1	16.6	1.85	17.0	19.1	20.7	21.7	22.5	25.1	25.9	26.4	29.1	29.7	31.0	32.1	33.3	
	1.75	45.5	27.8	20.7	17.0	1.80	18.0	20.3	21.9	23.0	23.9	26.6	27.7	28.2	30.7	31.1	32.2	33.1	34.1	
	1.67	47.8	28.4	20.8	17.1	1.75	18.5	20.8	22.5	23.6	24.5	27.3	28.4	29.0	31.6	32.1	33.0	34.0	35.0	
12TLG 50	1.80	53.1	34.0	25.4	21.0	1.85	21.5	24.2	26.2	27.5	28.5	31.8	32.8	33.4	36.4	37.6	39.3	40.7	42.1	
	1.75	57.6	35.2	26.2	21.5	1.80	22.8	25.6	27.8	29.2	30.2	33.7	35.1	35.7	38.9	39.4	40.7	42.1	43.4	
	1.67	60.5	36.0	26.3	21.7	1.75	23.4	26.3	28.4	29.9	31.0	34.6	36.0	36.7	40.0	40.6	41.8	43.0	44.3	
12TLG 60	1.80	73.0	46.8	34.9	28.9	1.85	29.6	33.2	36.0	37.8	39.2	43.7	45.0	45.9	50.1	51.6	54.0	55.9	57.8	
	1.75	79.2	48.4	36.0	29.6	1.80	31.4	35.3	38.2	40.1	41.5	46.3	48.2	49.1	53.5	54.2	56.0	57.8	59.7	
	1.67	83.2	49.5	36.1	29.8	1.75	32.2	36.1	39.1	41.1	42.6	47.5	49.5	50.5	55.0	55.8	57.4	59.2	60.9	
12TLG 80	1.80	92.9	59.5	44.4	36.7	1.85	37.7	42.3	45.8	48.1	49.8	55.6	57.3	58.5	63.7	65.7	68.7	71.2	73.6	
	1.75	101	61.6	45.8	37.6	1.80	40.0	44.9	48.6	51.0	52.9	59.0	61.4	62.5	68.0	69.0	71.3	73.6	75.9	
	1.67	106	63.0	46.0	37.9	1.75	41.0	46.0	49.8	52.3	54.2	60.5	63.0	64.3	70.0	71.1	73.1	75.3	77.5	
12TLG 90	1.80	104	66.3	49.5	40.9	1.85	42.0	47.1	51.0	53.6	55.5	62.0	63.9	65.2	71.0	73.2	76.5	79.3	82.0	
	1.75	112	68.6	51.1	41.9	1.80	44.5	50.0	54.1	56.9	58.9	65.7	68.4	69.7	75.8	76.9	79.4	82.0	84.6	
	1.67	118	70.1	51.3	42.2	1.75	45.6	51.2	55.5	58.3	60.4	67.4	70.2	71.6	78.0	79.2	81.4	83.9	86.3	
12TLG 100	1.80	119	76.5	57.1	47.2	1.85	48.4	54.4	58.9	61.9	64.1	71.5	73.7	75.2	81.9	84.5	88.3	91.5	94.6	
	1.75	130	79.2	58.9	48.4	1.80	51.4	57.7	62.5	65.6	68.0	75.8	78.9	80.4	87.5	88.7	91.6	94.6	97.6	
	1.67	136	80.9	59.1	48.7	1.75	52.7	59.1	64.0	67.2	69.7	77.8	81.0	82.6	90.0	91.4	94.0	96.8	99.6	
12TLG 110	1.80	133	85.0	63.5	52.5	1.85	53.8	60.4	65.4	68.7	71.2	79.5	81.9	83.5	91.0	93.9	98.1	102	105	
	1.75	144	88.0	65.5	53.8	1.80	57.1	64.1	69.4	72.9	75.5	84.2	87.7	89.3	97.2	98.6	102	105	108	
	1.67	151	89.9	65.7	54.1	1.75	58.5	65.7	71.1	74.7	77.4	86.4	90.0	91.8	100	102	104	108	111	
12TLG 120	1.80	146	93.5	69.8	57.7	1.85	59.2	66.5	72.0	75.6	78.3	87.4	90.1	91.9	100	103	108	112	116	
	1.75	158	96.8	72.0	59.2	1.80	62.8	70.5	76.3	80.2	83.1	92.7	96.4	98.3	107	108	112	116	119	
	1.67	166	98.9	72.3	59.6	1.75	64.4	72.3	78.2	82.2	85.1	95.0	99.0	101	110	112	115	118	122	
12TLG 130	1.80	159	102	76.2	63.0	1.85	64.6	72.5	78.5	82.5	85.4	95.4	98.3	109	109	113	118	122	126	
	1.75	173	106	78.5	64.5	1.80	68.5	76.9	83.3	87.5	90.7	101	105	117	117	118	122	126	130	
	1.67	182	108	78.9	65.0	1.75	70.2	78.8	85.3	89.6	92.9	104	108	120	120	122	125	129	133	
12TLG 170	1.80	199	128	95.2	78.7	1.85	80.7	90.7	98.1	103	107	119	123	125	137	141	147	152	158	
	1.75	216	132	98.2	80.7	1.80	85.6	96.2	104	109	113	126	131	134	146	148	153	158	163	
	1.67	227	135	98.6	81.2	1.75	87.8	98.6	107	112	116	130	135	138	150	152	157	161	166	
12TLG 200	1.80	239	153	114	94.4	1.85	96.9	109	118	124	128	143	147	150	164	169	177	183	190	
	1.75	259	158	118	96.8	1.80	103	115	125	131	136	152	158	161	175	177	183	189	196	
	1.67	272	162	118	97.5	1.75	105	118	128	134	139	156	162	165	180	183	188	194	200	
12TLG 220	1.80	265	170	127	105	1.85	108	121	131	137	142	159	164	167	182	188	196	203	210	
	1.75	288	176	131	108	1.80	114	128	139	146	151	168	175	179	194	197	204	210	217	
	1.67	303	180	131	108	1.75	117	131	142	149	155	173	180	184	200	203	209	215	221	
12TLG 260	1.80	308	197	147	122	1.85	125	140	152	159	165	184	190	194	211	218	228	236	244	
	1.75	334	204	152	125	1.80	132	149	161	169	175	195	203	207	226	229	236	244	252	
	1.67	351	209	152	126	1.75	136	152	165	173	180	200	209	213	232	235	242	250	257	
6TLG 130	1.80	159	102	76.2	63.0	1.85	64.6	72.5	78.5	82.5	85.4	95.4	98.3	100	109	113	118	122	126	
	1.75	173	106	78.5	64.5	1.80	68.5	76.9	83.3	87.5	90.7	101	105	107	117	118	122	126	130	
	1.67	182	108	78.9	65.0	1.75	70.2	78.8	85.3	89.6	92.9	104	108	110	120	122	125	129	133	
6TLG 200	1.80	242	155	116	95.5	1.85	98	110	119	125	130	145	149	152	166	171	179	185	191	
	1.75	262	160	119	97.9	1.80	104	117	126	133	137	153	160	163	177	179	185	191	197	
	1.67	275	164	120	98.6	1.75	106	120	129	136	141	157	164	167	182	185	190	196	201	
6TLG 220	1.80	265	170	127	105	1.85	108	121	131	137	142	159	164	167	182	188	196	203	210	
	1.75	288	176	131	108	1.80	114	128	139	146	151	168	175	179	194	197	204	210	217	
	1.67	303	180	131	108	1.75	117	131	142	149	155	173	180	184	200	203	209	215	221	

Actual Battery Discharge Data may be +/-5% of figures shown.

CELLYTE Bloc 12TLG Amps Data @ 20 C.

SEC Bloc Gel TYPE	END Volts / CELL	AMPS @ 20 C				END Volts / CELL	DISCHARGE DATA AMPS @ 20 C													
		TIME IN MINUTES					DISCHARGE TIME IN HOURS													
		15	30	45	60		1.5	2	3	4	5	8	10	12	20	24	48	72	100	
12TLG 30	1.80	33.6	21.5	16.0	13.3	1.85	8.5	7.16	5.17	4.07	3.38	2.35	1.94	1.65	1.09	0.93	0.48	0.33	0.25	
	1.75	36.4	22.2	16.5	13.6	1.80	9.0	7.6	5.48	4.32	3.58	2.50	2.08	1.76	1.15	0.97	0.50	0.35	0.26	
	1.67	38.3	22.7	16.6	13.7	1.75	9.2	7.8	5.62	4.43	3.67	2.56	2.13	1.81	1.19	1.00	0.52	0.35	0.26	
12TLG 40	1.80	41.9	26.9	20.1	16.6	1.85	11.3	9.55	6.89	5.43	4.50	3.14	2.59	2.20	1.45	1.24	0.65	0.45	0.33	
	1.75	45.5	27.8	20.7	17.0	1.80	12.0	10.1	7.31	5.76	4.77	3.33	2.77	2.35	1.54	1.30	0.67	0.46	0.34	
	1.67	47.8	28.4	20.8	17.1	1.75	12.3	10.4	7.49	5.90	4.89	3.41	2.84	2.42	1.58	1.34	0.69	0.47	0.35	
12TLG 50	1.80	53.1	34.0	25.4	21.0	1.85	14.4	12.1	8.72	6.87	5.70	3.97	3.28	2.78	1.82	1.56	0.82	0.56	0.42	
	1.75	57.6	35.2	26.2	21.5	1.80	15.2	12.8	9.25	7.29	6.04	4.21	3.51	2.98	1.94	1.64	0.85	0.58	0.43	
	1.67	60.5	36.0	26.3	21.7	1.75	15.6	13.1	9.48	7.47	6.19	4.32	3.60	3.06	2.00	1.69	0.87	0.60	0.44	
12TLG 60	1.80	73.0	46.8	34.9	28.9	1.85	19.7	16.6	12.0	9.45	7.83	5.46	4.50	3.83	2.50	2.15	1.12	0.78	0.58	
	1.75	79.2	48.4	36.0	29.6	1.80	20.9	17.6	12.7	10.0	8.31	5.79	4.82	4.09	2.67	2.26	1.17	0.80	0.60	
	1.67	83.2	49.5	36.1	29.8	1.75	21.5	18.1	13.0	10.3	8.51	5.94	4.95	4.21	2.75	2.33	1.20	0.82	0.61	
12TLG 80	1.80	92.9	59.5	44.4	36.7	1.85	25.1	21.2	15.3	12.0	10.0	6.96	5.73	4.87	3.19	2.74	1.43	0.99	0.74	
	1.75	101	61.6	45.8	37.6	1.80	26.6	22.4	16.2	12.8	10.6	7.37	6.14	5.21	3.40	2.87	1.48	1.02	0.76	
	1.67	106	63.0	46.0	37.9	1.75	27.3	23.0	16.6	13.1	10.8	7.56	6.30	5.36	3.50	2.96	1.52	1.05	0.77	
12TLG 90	1.80	104	66.3	49.5	40.9	1.85	28.0	23.6	17.0	13.4	11.1	7.75	6.39	5.43	3.55	3.05	1.59	1.10	0.82	
	1.75	112	68.6	51.1	41.9	1.80	29.7	25.0	18.0	14.2	11.8	8.21	6.84	5.81	3.79	3.20	1.65	1.14	0.85	
	1.67	118	70.1	51.3	42.2	1.75	30.4	25.6	18.5	14.6	12.1	8.42	7.02	5.97	3.90	3.30	1.70	1.17	0.86	
12TLG 100	1.80	119	76.5	57.1	47.2	1.85	32.3	27.2	19.6	15.5	12.8	8.94	7.37	6.27	4.10	3.52	1.84	1.27	0.95	
	1.75	130	79.2	58.9	48.4	1.80	34.3	28.9	20.8	16.4	13.6	9.48	7.89	6.70	4.37	3.70	1.91	1.31	0.98	
	1.67	136	80.9	59.1	48.7	1.75	35.1	29.6	21.3	16.8	13.9	9.72	8.10	6.89	4.50	3.81	1.96	1.34	1.00	
12TLG 110	1.80	133	85.0	63.5	52.5	1.85	35.9	30.2	21.8	17.2	14.2	9.94	8.19	6.96	4.55	3.91	2.04	1.41	1.05	
	1.75	144	88.0	65.5	53.8	1.80	38.1	32.1	23.1	18.2	15.1	10.5	8.77	7.44	4.86	4.11	2.12	1.46	1.08	
	1.67	151	89.9	65.7	54.1	1.75	39.0	32.9	23.7	18.7	15.5	10.8	9.00	7.65	5.00	4.23	2.18	1.49	1.11	
12TLG 120	1.80	146	93.5	69.8	57.7	1.85	39.5	33.2	24.0	18.9	15.7	10.9	9.01	7.66	5.01	4.30	2.25	1.55	1.16	
	1.75	158	97	72.0	59.2	1.80	41.9	35.3	25.4	20.0	16.6	11.6	9.64	8.19	5.35	4.52	2.33	1.61	1.19	
	1.67	166	99	72.3	59.6	1.75	42.9	36.1	26.1	20.5	17.0	11.9	9.90	8.42	5.50	4.65	2.39	1.64	1.22	
12TLG 130	1.80	159	102	76.2	63.0	1.85	43.1	36.3	26.2	20.6	17.1	11.9	9.83	9.10	5.46	4.69	2.45	1.69	1.26	
	1.75	173	106	78.5	64.5	1.80	45.7	38.5	27.8	21.9	18.1	12.6	10.5	9.73	5.83	4.93	2.54	1.75	1.30	
	1.67	182	108	78.9	65.0	1.75	46.8	39.4	28.4	22.4	18.6	13.0	10.8	10.0	6.00	5.08	2.61	1.79	1.33	
12TLG 170	1.80	199	128	95.2	78.7	1.85	53.8	45.3	32.7	25.8	21.4	14.9	12.3	10.4	6.83	5.87	3.07	2.12	1.58	
	1.75	216	132	98	80.7	1.80	57.1	48.1	34.7	27.3	22.7	15.8	13.1	11.2	7.29	6.16	3.18	2.19	1.63	
	1.67	227	135	99	81.2	1.75	58.5	49.3	35.6	28.0	23.2	16.2	13.5	11.5	7.50	6.34	3.26	2.24	1.66	
12TLG 200	1.80	239	153	114	94.4	1.85	64.6	54.4	39.2	30.9	25.6	17.9	14.7	12.5	8.19	7.04	3.68	2.54	1.90	
	1.75	259	158	118	97	1.80	68.5	57.7	41.6	32.8	27.2	19.0	15.8	13.4	8.75	7.39	3.82	2.63	1.96	
	1.67	272	162	118	97	1.75	70.2	59.1	42.7	33.6	27.9	19.4	16.2	13.8	9.00	7.61	3.92	2.69	2.00	
12TLG 220	1.80	265	170	127	105	1.85	71.8	60.4	43.6	34.4	28.5	19.9	16.4	13.9	9.10	7.82	4.09	2.82	2.10	
	1.75	288	176	131	108	1.80	76.1	64.1	46.3	36.5	30.2	21.1	17.5	14.9	9.72	8.21	4.24	2.92	2.17	
	1.67	303	180	131	108	1.75	78.0	65.7	47.4	37.4	31.0	21.6	18.0	15.3	10.0	8.46	4.35	2.99	2.21	
12TLG 260	1.80	308	197	147	122	1.85	83.2	70.1	50.6	39.9	33.0	23.1	19.0	16.2	10.6	9.08	4.74	3.28	2.44	
	1.75	334	204	152	125	1.80	88.3	74.4	53.7	42.3	35.1	24.4	20.3	17.3	11.3	9.53	4.92	3.39	2.52	
	1.67	351	209	152	126	1.75	90.5	76.2	55.0	43.3	35.9	25.1	20.9	17.7	11.6	9.81	5.05	3.47	2.57	
6TLG 130	1.80	159	102	76.2	63.0	1.85	43.1	36.3	26.2	20.6	17.1	11.9	9.8	8.35	5.46	4.69	2.45	1.69	1.26	
	1.75	173	106	78.5	64.5	1.80	45.7	38.5	27.8	21.9	18.1	12.6	10.5	8.93	5.83	4.93	2.54	1.75	1.30	
	1.67	182	108	78.9	65.0	1.75	46.8	39.4	28.4	22.4	18.6	13.0	10.8	9.18	6.00	5.08	2.61	1.79	1.33	
6TLG 200	1.80	242	155	116	95.5	1.85	65.3	55.0	39.7	31.3	25.9	18.1	14.9	12.7	8.28	7.12	3.72	2.57	1.91	
	1.75	262	160	119	98	1.80	69.3	58.4	42.1	33.2	27.5	19.2	16.0	13.5	8.85	7.47	3.86	2.66	1.97	
	1.67	275	164	120	99	1.75	71.0	59.8	43.1	34.0	28.2	19.7	16.4	13.9	9.1	7.70	3.96	2.72	2.01	
6TLG 220	1.80	265	170	127	105	1.85	71.8	60.4	43.6	34.4	28.5	19.9	16.4	13.9	9.10	7.82	4.09	2.82	2.10	
	1.75	288	176	131	108	1.80	76.1	64.1	46.3	36.5	30.2	21.1	17.5	14.9	9.72	8.21	4.24	2.92	2.17	
	1.67	303	180	131	108	1.75	78.0	65.7	47.4	37.4	31.0	21.6	18.0	15.3	10.0	8.46	4.35	2.99	2.21	

Actual Battery Discharge Data may be +/-5% of figures shown.

CELLYTE 12TLG Watts per Cell @ 20 C.

SEC Bloc Gel TYPE	END Volts / CELL	Watts per cell @ 20 C				END Volts / CELL	DISCHARGE DATA Watts Per Cell AT 20 C									
		TIME IN MINUTES					DISCHARGE TIME IN HOURS									
		15	30	45	60		1.5	2	3	4	5	8	10	12	20	24
12TLG 30	1.80	61.7	40.2	30.5	25.5	1.85	14.7	13.8	10.1	7.99	6.65	4.68	3.87	3.30	2.18	1.86
	1.75	67.0	41.6	31.4	26.1	1.80	17.2	14.6	10.6	8.42	7.01	4.93	4.09	3.51	2.30	1.95
	1.67	70.4	42.5	31.6	26.3	1.75	17.6	14.0	10.1	8.01	6.68	4.68	3.90	3.33	2.19	1.85
12TLG 40	1.80	77.2	50.2	38.1	31.8	1.85	21.0	18.5	13.4	10.7	8.87	6.24	5.16	4.40	2.91	2.48
	1.75	83.7	52.0	39.3	32.6	1.80	23.0	19.5	14.2	11.2	9.35	6.58	5.46	4.68	3.06	2.60
	1.67	88.0	53.1	39.5	32.9	1.75	23.4	19.9	14.5	11.4	9.5	6.69	5.57	4.76	3.13	2.65
12TLG 50	1.80	98	63.6	48.3	40.3	1.85	27.6	23.4	17.0	13.5	11.2	7.90	6.53	5.57	3.65	3.14
	1.75	106	65.8	49.7	41.3	1.80	29.1	24.6	17.9	14.2	11.8	8.33	6.91	5.92	3.88	3.29
	1.67	111	67.3	49.9	41.6	1.75	29.6	25.2	18.3	14.5	12.1	8.47	7.06	6.03	3.96	3.35
12TLG 60	1.80	134	87.4	66.3	55.4	1.85	38.0	32.1	23.4	18.5	15.4	10.9	8.98	7.65	5.02	4.32
	1.75	146	90.5	68.4	56.8	1.80	40.0	33.9	24.6	19.5	16.3	11.4	9.50	8.14	5.33	4.52
	1.67	153	92.5	68.7	57.2	1.75	40.8	34.7	25.2	19.9	16.6	11.6	9.70	8.29	5.44	4.61
12TLG 80	1.80	171	111	84.4	70.5	1.85	48.3	40.9	29.7	23.6	19.6	13.8	11.4	9.74	6.38	5.50
	1.75	186	115	87.1	72.3	1.80	50.9	43.1	31.4	24.9	20.7	14.6	12.1	10.4	6.78	5.75
	1.67	195	118	87.4	72.8	1.75	51.9	44.2	32.0	25.4	21.1	14.8	12.3	10.5	6.92	5.86
12TLG 90	1.80	191	124	94.1	78.6	1.85	53.8	45.6	33.1	26.3	21.9	15.4	12.7	10.9	7.11	6.12
	1.75	207	128	97.0	80.5	1.80	56.7	48.0	34.9	27.7	23.1	16.2	13.5	11.5	7.56	6.41
	1.67	217	131	97	81.1	1.75	57.8	49.2	35.7	28.3	23.5	16.5	13.8	11.8	7.71	6.53
12TLG 100	1.80	220	143	109	90.7	1.85	62.1	52.6	38.2	30.3	25.3	17.8	14.7	12.5	8.21	7.07
	1.75	239	148	112	92.9	1.80	65.4	55.4	40.3	32.0	26.6	18.7	15.5	13.3	8.72	7.39
	1.67	251	151	112	93.6	1.75	66.7	56.8	41.2	32.6	27.2	19.1	15.9	13.6	8.90	7.54
12TLG 110	1.80	244	159	121	101	1.85	69.0	58.4	42.5	33.7	28.1	19.7	16.3	13.9	9.12	7.85
	1.75	265	165	124	103	1.80	72.7	61.6	44.8	35.5	29.6	20.8	17.3	14.8	9.69	8.21
	1.67	278	168	125	104	1.75	74.1	63.1	45.7	36.2	30.2	21.2	17.6	15.1	9.89	8.37
12TLG 120	1.80	269	175	133	111	1.85	75.9	64.3	46.7	37.1	30.9	21.7	18.0	15.3	10.0	8.64
	1.75	292	181	137	114	1.80	79.9	67.7	49.3	39.1	32.6	22.9	19.0	16.3	10.7	9.03
	1.67	306	185	137	114	1.75	81.5	69.4	50.3	39.9	33.2	23.3	19.4	16.6	10.9	9.21
12TLG 130	1.80	293	191	145	121	1.85	82.8	70.1	51.0	40.5	33.7	23.7	19.6	18.2	10.9	9.42
	1.75	318	197	149	124	1.80	87.2	73.9	53.8	42.7	35.5	25.0	20.7	19.4	11.6	9.86
	1.67	334	202	150	125	1.75	88.9	75.7	54.9	43.5	36.2	25.4	21.2	19.7	11.9	10.0
12TLG 170	1.80	366	238	181	151	1.85	104	87.6	63.7	50.6	42.1	29.6	24.5	20.9	13.7	11.8
	1.75	398	247	187	155	1.80	109	92.3	67.2	53.3	44.4	31.2	25.9	22.2	14.5	12.3
	1.67	418	252	187	156	1.75	111	94.6	68.6	54.3	45.3	31.8	26.5	22.6	14.8	12.6
12TLG 200	1.80	440	286	217	181	1.85	124	105	76.5	60.7	50.5	35.5	29.4	25.0	16.4	14.1
	1.75	477	296	224	186	1.80	131	111	80.6	64.0	53.3	37.5	31.1	26.6	17.4	14.8
	1.67	501	303	225	187	1.75	133	114	82.3	65.2	54.3	38.1	31.8	27.1	17.8	15.1
12TLG 220	1.80	489	318	241	201	1.85	138	117	85.0	67.4	56.1	39.5	32.7	27.8	18.2	15.7
	1.75	530	329	249	207	1.80	145	123	89.6	71.1	59.2	41.6	34.5	29.6	19.4	16.4
	1.67	557	336	250	208	1.75	148	126	91.5	72.5	60.4	42.3	35.3	30.1	19.8	16.7
12TLG 260	1.80	567	369	280	234	1.85	160	136	99	78.2	65.1	45.8	37.9	32.3	21.2	18.2
	1.75	615	382	289	240	1.80	169	143	104	82.5	68.7	48.3	40.1	34.3	22.5	19.1
	1.67	646	390	290	241	1.75	172	146	106	84.1	70.0	49.1	40.9	35.0	22.9	19.4
6TLG 130	1.80	293	191	145	121	1.85	82.8	70.1	51.0	40.5	33.7	23.7	19.6	16.7	10.9	9.4
	1.75	318	197	149	124	1.80	87.2	73.9	53.8	42.7	35.5	25.0	20.7	17.8	11.6	9.9
	1.67	334	202	150	125	1.75	89	75.7	54.9	43.5	36.2	25.4	21.2	18.1	11.9	10.0
6TLG 200	1.80	445	289	220	183	1.85	126	106	77.3	61.4	51.1	35.9	29.7	25.3	16.6	14.3
	1.75	482	299	226	188	1.80	132	112	81.5	64.7	53.9	37.9	31.4	26.9	17.6	14.9
	1.67	507	306	227	189	1.75	135	115	83.2	65.9	54.9	38.5	32.1	27.4	18.0	15.2
6TLG 220	1.80	489	318	241	201	1.85	138	117	85.0	67.4	56.1	39.5	32.7	27.8	18.2	15.7
	1.75	530	329	249	207	1.80	145	123	89.6	71.1	59.2	41.6	34.5	29.6	19.4	16.4
	1.67	557	336	250	208	1.75	148	126	91.5	72.5	60.4	42.3	35.3	30.1	19.8	16.7

Actual Battery Discharge Data may be +/-5% of figures shown.

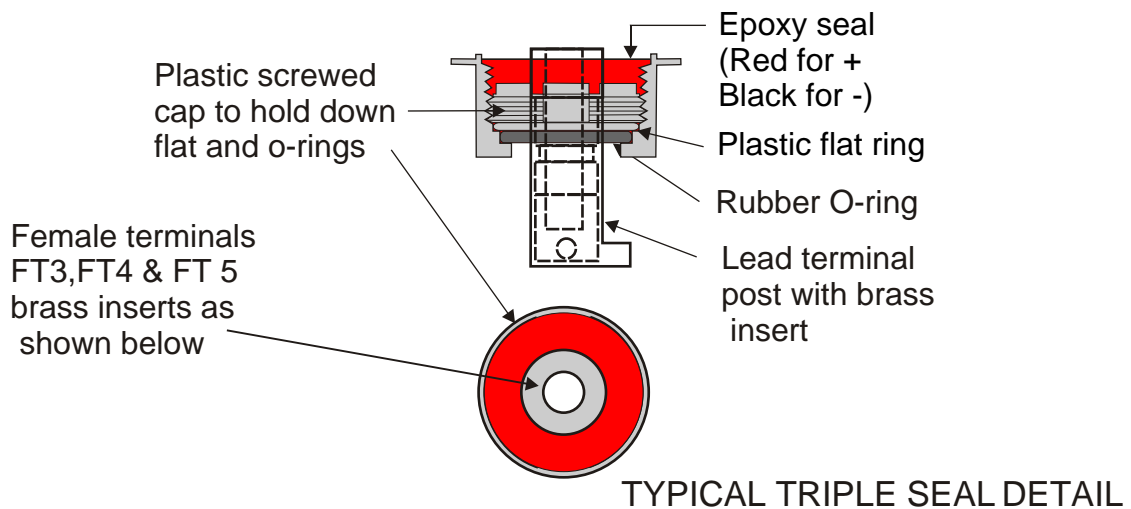
CELLYTE 12TLG Bloc Data & Dimensions

SEC Battery Type	Capacity C/20 1.75 vpc	Capacity C/5 1.75 vpc	CCA at -18 C 0 F.	CCA at 0 C. 32 F.	Short Circuit Amps	Internal Resistance milliohms	Female Terminal Type	Battery Weight		Overall Battery Dimensions					
								KG	lbs	Length		Width		Height	
										Inch	mm	Inch	mm	Inch	mm
12TLG 30	26	22.8	190	250	1100	12	FT3	9.4	20.7	6.54	166	4.96	126	6.93	176
12TLG 40	31	24.0	240	320	1500	7.3	FT 3	12.0	26.4	7.717	196	5.16	131	6.26	159
12TLG 50	40	31.0	260	350	1700	6.0	FT 3	14.0	30.8	7.80	198	6.535	166	6.693	170
12 TLG 60	55	42.6	280	380	1900	5.6	FT 3	18.7	41.1	9.016	229	5.433	138	8.425	214
12TLG 80	70	54.2	410	550	2100	5.4	FT 3	25.0	55.0	10.2	259	6.614	168	8.445	214.5
12TLG 90	78	60.4	460	620	2400	4.5	FT 3	28.0	61.6	10.2	259	6.614	168	8.465	215
12TLG 100	90	69.7	510	680	2650	4.3	FT 3	29.5	64.9	12.0	306	6.614	168	8.465	215
12TLG 110	100	77.4	580	780	2900	3.9	FT 3	30.0	66.0	12.0	306	6.614	168	8.465	215
12TLG 120	110	85.1	710	960	3000	3.4	FT 3	33.0	72.6	12.91	328	6.772	172	9.567	243
12TLG 130	120	92.9	760	1020	3300	3.1	FT 3	39.0	85.8	16.1	409	6.969	177	8.858	225
12TLG 170	150	116	970	1300	4200	2.9	FT 4	42.0	92	13.5	342	6.811	173	11.22	285
12TLG 200	180	139	1100	1440	4700	2.3	FT 4	55.0	121	20.87	530	8.228	209	9.606	244
12TLG 220	200	155	1240	1670	5400	2.2	FT 4	65.0	143	20.55	522	9.449	240	9.606	244
12TLG 260	232	180	1400	1870	5900	2.1	FT 5	75.0	165	20.51	521	10.59	269	7.992	203
6TLG 130	120	92.9	760	1010	3200	3.0	FT 3	16.0	35.2	7.68	195	6.693	170	8.13	206.5
6TLG 200	182	141	980	1290	4600	2.4	FT 4	26.0	57.2	12.0	306	6.614	168	8.74	222
6 TLG 220	200	155	1200	1600	5000	2.3	FT 4	36.0	79.2	12.72	323	7.008	178	9.764	248

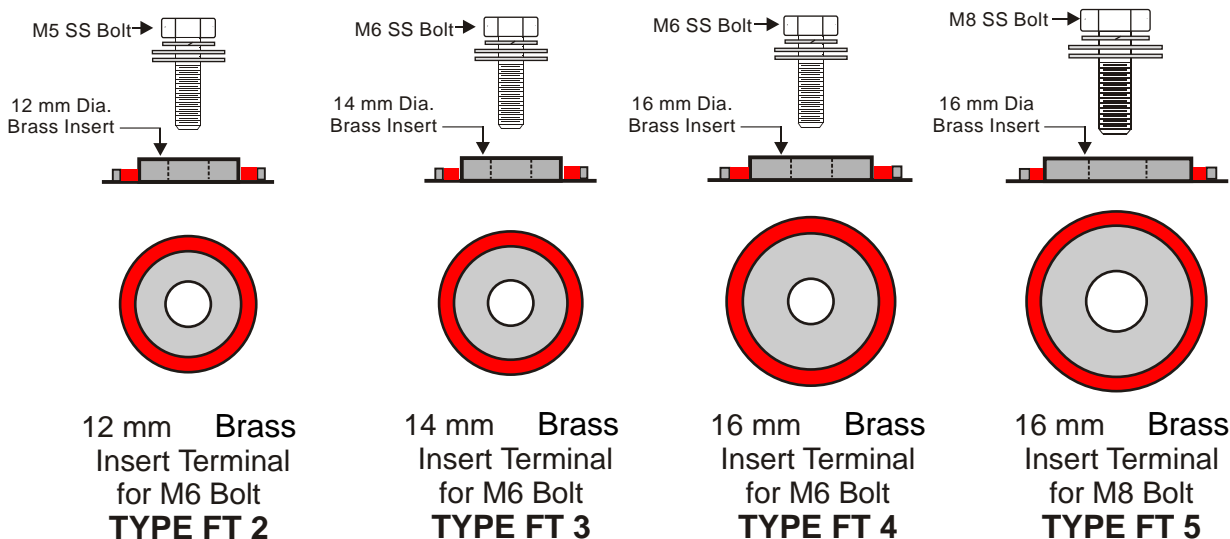
Female terminal type FT3 - 14mm dia. Copper insert for M6 bolt
 Female terminal type FT4 - 16mm dia. Copper insert for M6 bolt
 Female terminal type FT5 - 16mm dia. Copper insert for M8 bolt
 Actual Battery Dimensions may vary by +1%

* NOTE:-

SEC Battery Types *12TLG 60, *12TLG 90 and *12TLG 110 have a central manifold gassing systems, which incorporates a sintered PP flame-arrestor membrane so that they can be used in enclosed cabinets, and any gases vented and dispersed safely to the outside environment. With the V-0 cover and case material batteries comply with BS 6290 Part 4.



FEMALE TERMINAL (FT) DETAILS



Constant Voltage Charging.

It is recommended to use Constant Voltage method of charging for Valve Regulated lead acid (VRLA) batteries. Charging voltages must be regularly checked and to optimize the battery performance it is necessary to ensure that the voltage is kept within the following limits.

Float Service $2.25 \pm 1\%$ Volts Per Cell at 20/25 Deg C.

Cycle Service $2.35 \pm 1\%$ Volts Per Cell at 20/25 Deg C.

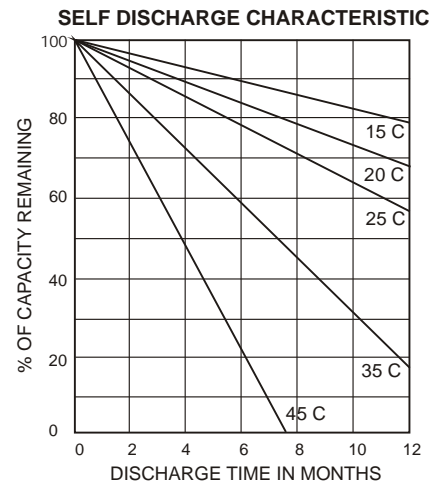
Temperature Effects.

Temperature affects the battery in a number of different ways.

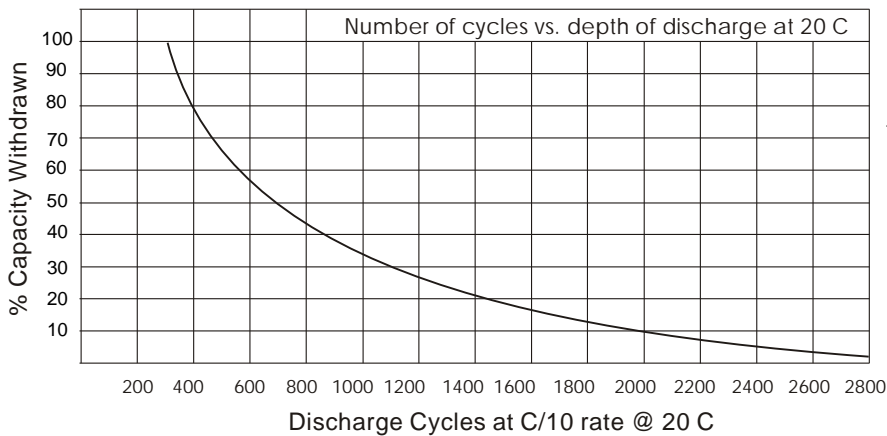
The battery will operate in extreme temperature ranges from below Zero to over 40 Deg C. However the Valve Regulated (VRLA) Battery nominal capacity, and optimum performance are based on operating temperature of 20 Deg C.

Above this temperature the Battery capacity will increase slightly, however the life will decrease at the higher temperature.

When designing your battery system the different discharge and recharge performance at different temperature should be taken into account, details of both listed below.



Cycling Ability



BATTERY CYCLING - CYCLING ABILITY

The SEC *CELLYTE* BlocTLG battery excels in cycling applications. *CELLYTE* BlocTLG batteries are capable of 2400 + charge / discharge cycles depending on the depth of discharge.

TYPICAL CYCLIC PERFORMANCE

CAPACITY WITHDRAWN	CYCLES
100%	300
80%	400
50%	700
40%	850
30%	1110
20%	1400
10%	2000
5%	2400

Battery Float Charging

(Temperature compensation)

Temperature Deg.C	Float Charge Volts/Cell
5	2.31
10	2.29
15	2.27
20	2.25
25	2.25
30	2.23
35	2.21

Temperature Compensation is the process whereby the charge voltage is changed as a function of the battery temperature.

For higher or lower temperatures outside the table range use temperature correction factor of 0.004 ± 0.01 per volt/per/cell/deg.C

For all your Battery Needs

SEC have Batteries to suit all your needs with full range of Absorbed Glass Mat (AGM) for Float, Standby and Gel Batteries for Cycling applications. 1.3 Ah. to over 4500 Ah.

SEC Main Battery Range

CELLYTE Modular AGM

20 Year Design Life
102Ah. to 4599Ah.

CELLYTE Gel OPzV Range

Tubular Plate
18 Year Design Life
240Ah. to 3500Ah.

CELLYTE 2TLA & 2TLG Range

15 Year Design Life
50Ah. to 3850Ah.

CELLYTE Bloc Gel

10 Year Design Life
12AH. to 265Ah.

CELLYTE Bloc "A" Line

10 Year Design Life
30Ah. to 220Ah.

CELLYTE Bloc TU / TG / RM

10 Year Design Life
30Ah. to 100Ah.

CELLYTE 12FTA & 12FTG

10 Year Design Life
55Ah. to 175Ah. and
50Ah. to 170Ah.

CELLYTE Bloc TUA Range

10 Year Design Life
50Ah. to 750Ah.

CELLYTE Bloc TSG Range

10 Year Design Life
60Ah. to 300Ah.

CELLYTE 12TLA & 12TLG Blocs

10 Year Design Life
30Ah. to 200AH. and
35Ah. to 260Ah.

MICROLYTE Plus & Gel

5 Year Design Life
1.3Ah. to 240 Ah. and
12Ah. to 260 Ah.

SOLAR POWR

10 to 15 Year Design Life
250 to 2678 Ampere Hour

SEC OSP FL Range

15 Year Design Life
150Ah. to 3500Ah.



Standards / Approvals

UL approval
BS 6290 Part 4 (Optional)
Eurobat (Draft IEC 896-2)
IEEE & JIS

FLOODED TUBULAR POSITIVE PLATE

15 + Year Design Life
110Ah. to 3110Ah.

FLOODED PLANTE POSITIVE PLATE

20 Year Design Life
15Ah. to 2600Ah.

NICKEL CADMIUM- Pocket Plate

20 + Year Design Life
10Ah. to 1650Ah.

Visit our Web site for more product
information on www.secbattery.com



The USA Sales Office
1643 Holicong Road
PO Box 849 Buckingham,
PA 18912, U.S.A.
Tel: 1 215 654 9334
Fax: 1 215 654 9871
ussalesoffice@secbattery.com

SEC Industrial Battery Co.Ltd.
Thorney Weir House, Iver
Bucks SLO 9AQ, ENGLAND
Tel. 44 (0)1895 431543
Fax. 44 (0)1895 431880
europeanoffice@secbattery.com

SEC Industrial Battery Co.
P.O.Box 32225
Kingdom of Bahrain
Tel: 97317 721322
Fax: 97317 740743
middleeastoffice@secbattery.com

SEC Industrial Battery Co.Ltd.
Unit 6, 6/f, Hewlett Centre
No. 54 Hoi Yuen Road, Kwun Tong
Kowloon, Hong Kong
Tel: 852 230 44382
Fax: 852 230 44013
fareastoffice@secbattery.com

SEC Industrial Battery Co.Ltd
Nickel-Cadmium Division,
Unit 16 Alexander Court, Fleming Road,
Earlscree Ind. Est. Corby, Northants, NN 17 4SW
Tel: 01536 264123 Fax: 01 536 264126
E-mail: nicadoffice@secbattery.com

Factory Address
SEC Industrial Battery Co.(China)Ltd
Tianxin Industrial Zone, Tangxia town
Dongguan city, Guangdong P.R. China
E-mail: jv@secbattery.com



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