

CELLYTE 6-12TLG Range

Sealed VRLA Monobloc Gel Battery SOLAR POWER BATTERY

Capacities : 20 Ah to 300 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

SPECIFICATIONS

Voltage6 and 12 volt nominal
Plate alloy Lead calcium/Tin grid alloy
Container/Case Grade 6 ABS
Charge voltage Cycle 2.35 vpc; Float 2.25 vpc @ 20/25°C
Specific gravity 1.280
Electrolyte Sulphuric acid thixotropic gel
Vent Self sealing - 2psi Operation

INNOVATIVE FEATURES

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

Introduction.

SEC batteries have been used in the industrial battery market for over 20 years. SEC's high quality, 10-12 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 10-12 years at 20-25° C when fitted with VRLA Catalyst.
- **Battery Life - Cycle Service.**
The SEC TLG battery is designed for 500 to 3700 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 releasing the gas at 1-3 p.s.i then automatically closes. Fitted with optional Mini-Catalyst to enhance the gas recombination, reduce cell dry-out, lower float current, minimize thermal runaway, positive plate corrosion and negative plate polarization. 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.



CELLYTE Bloc 6-12TLG - Solar - Ampere Hour Data @ 20 C.

SEC 6-12TLG TYPE	END Volts / CELL	DISCHARGE DATA			END Volts / CELL	DISCHARGE DATA AMPERE HOURS @ 20 C																
		TIME IN MINUTES				DISCHARGE TIME IN HOURS																
		15	30	45		1	1.5	2	3	4	5	6	8	10	12	20	24	48	72	100		
6TLG 130*	1.80	159	102	76.2	1.85	63.0	64.6	72.5	78.5	82.5	85.4	88.4	96.8	98.3	100	109	113	118	122	126		
	1.75	173	106	78.5	1.80	64.5	68.5	76.9	83.3	87.5	90.7	93.8	103	105	107	117	118	122	126	130		
	1.67	182	108	78.9	1.75	65.0	70.2	78.8	85.3	89.6	92.9	96.1	105	108	110	120	122	125	129	133		
6TLG 220*	1.80	265	170	127	1.85	105	108	121	131	137	142	147	161	164	167	182	188	196	203	210		
	1.75	288	176	131	1.80	108	114	128	139	146	151	156	171	175	179	194	197	204	210	217		
	1.67	303	180	131	1.75	108	117	131	142	149	155	160	175	180	184	200	203	209	215	221		
6TLG 250	1.80	305	196	146	1.85	121	124	139	150	158	164	169	185	188	192	209	216	226	234	242		
	1.75	331	202	151	1.80	124	131	147	160	168	174	180	197	202	205	224	227	234	242	250		
	1.67	348	207	151	1.75	125	135	151	164	172	178	184	202	207	211	230	233	240	247	255		
12TLG 20**	1.80	22.6	14.5	10.8	1.85	8.9	9.1	10.3	11.1	11.7	12.1	12.5	13.7	13.9	14.2	15.6	16.0	16.7	17.3	17.9		
	1.75	24.5	15.0	11.1	1.80	9.1	9.7	10.9	11.8	12.4	12.8	13.3	14.5	14.9	15.2	16.5	16.8	17.3	17.9	18.4		
	1.67	25.7	15.3	11.2	1.75	9.2	9.9	11.2	12.1	12.7	13.2	13.6	14.9	15.3	15.6	17.0	17.3	17.7	18.3	18.8		
12TLG30**	1.80	34.5	22.1	16.5	1.85	13.6	14.0	15.7	17.0	17.9	18.5	19.2	21.0	21.3	21.7	23.9	24.4	25.5	26.4	27.3		
	1.75	37.4	22.9	17.0	1.80	14.0	14.8	16.7	18.0	19.0	19.6	20.3	22.2	22.8	23.2	25.3	25.6	26.5	27.3	28.2		
	1.67	39.3	23.4	17.1	1.75	14.1	15.2	17.1	18.5	19.4	20.1	20.8	22.8	23.4	23.9	26.0	26.4	27.1	28.0	28.8		
12TLG 40	1.80	41.2	26.4	19.7	1.85	16.3	16.7	18.7	20.3	21.3	22.1	22.8	25.0	25.4	25.9	28.5	29.1	30.4	31.5	32.6		
	1.75	44.7	27.3	20.3	1.80	16.7	17.7	19.9	21.5	22.6	23.4	24.2	26.5	27.2	27.7	30.1	30.6	31.6	32.6	33.6		
	1.67	46.9	27.9	20.4	1.75	16.8	18.1	20.4	22.0	23.2	24.0	24.8	27.2	27.9	28.5	31.0	31.5	32.4	33.3	34.3		
12TLG 50	1.80	55.8	35.7	26.7	1.85	22.0	22.6	25.4	27.5	28.9	29.9	31.0	33.9	34.4	35.1	38.2	39.4	41.2	42.7	44.2		
	1.75	60.5	37.0	27.5	1.80	22.6	24.0	26.9	29.1	30.6	31.7	32.8	35.9	36.8	37.5	40.8	41.4	42.8	44.2	45.6		
	1.67	63.6	37.8	27.6	1.75	22.7	24.6	27.6	29.9	31.4	32.5	33.6	36.8	37.8	38.6	42.0	42.6	43.8	45.2	46.5		
12TLG 60	1.80	73.0	46.8	34.9	1.85	28.9	29.6	33.2	36.0	37.8	39.2	40.5	44.4	45.0	45.9	50.1	51.6	54.0	55.9	57.8		
	1.75	79.2	48.4	36.0	1.80	29.6	31.4	35.3	38.2	40.1	41.5	43.0	47.0	48.2	49.1	53.5	54.2	56.0	57.8	59.7		
	1.67	83.2	49.5	36.1	1.75	29.8	32.2	36.1	39.1	41.1	42.6	44.1	48.2	49.5	50.5	55.0	55.8	57.4	59.2	60.9		
12TLG 70	1.80	86.3	55.3	41.3	1.85	34.1	35.0	39.3	42.5	44.7	46.3	47.9	52.4	53.2	54.3	59.2	61.0	63.8	66.1	68.4		
	1.75	94	57.2	42.5	1.80	35.0	37.1	41.7	45.1	47.4	49.1	50.8	55.6	57.0	58.1	63.2	64.1	66.2	68.3	70.5		
	1.67	98	58.5	42.7	1.75	35.2	38.0	42.7	46.2	48.6	50.3	52.1	57.0	58.5	59.7	65.0	66.0	67.9	69.9	72.0		
12TLG 80	1.80	92.9	59.5	44.4	1.85	36.7	37.7	42.3	45.8	48.1	49.8	51.6	56.5	57.3	58.5	63.7	65.7	68.7	71.2	73.6		
	1.75	101	61.6	45.8	1.80	37.6	40.0	44.9	48.6	51.0	52.9	54.7	59.8	61.4	62.5	68.0	69.0	71.3	73.6	75.9		
	1.67	106	63.0	46.0	1.75	37.9	41.0	46.0	49.8	52.3	54.2	56.1	61.4	63.0	64.3	70.0	71.1	73.1	75.3	77.5		
12TLG 90	1.80	106	68.0	50.8	1.85	42.0	43.1	48.4	52.3	55.0	57.0	59.0	64.5	65.5	66.8	72.8	75.1	78.5	81.3	84.1		
	1.75	115	70.4	52.4	1.80	43.0	45.7	51.3	55.5	58.3	60.4	62.5	68.4	70.1	71.5	77.8	78.8	81.4	84.1	86.8		
	1.67	121	71.9	52.6	1.75	43.3	46.8	52.6	56.9	59.8	61.9	64.1	70.1	72.0	73.4	80.0	81.2	83.5	86.0	88.6		
12TLG 100	1.80	119	76.5	57.1	1.85	47.2	48.4	54.4	58.9	61.9	64.1	66.3	72.6	73.7	75.2	81.9	84.5	88.3	92.1	96.0		
	1.75	130	79.2	58.9	1.80	48.4	51.4	57.7	62.5	65.6	68.0	70.4	76.9	78.9	80.4	87.5	88.7	91.6	95.6	99.6		
	1.67	136	80.9	59.1	1.75	48.7	52.7	59.1	64.0	67.2	69.7	72.1	78.9	81.0	82.6	90.0	91.4	94.0	97.5	101		
12TLG 110	1.80	133	85.0	63.5	1.85	52.5	53.8	60.4	65.4	68.7	71.2	73.7	80.6	81.9	83.5	91.0	93.9	98.1	102	105		
	1.75	144	88.0	65.5	1.80	53.8	57.1	64.1	69.4	72.9	75.5	78.2	85.5	87.7	89.3	97.2	98.6	102	105	108		
	1.67	151	89.9	65.7	1.75	54.1	58.5	65.7	71.1	74.7	77.4	80.1	87.7	90.0	91.8	100	102	104	108	111		
12TLG 120	1.80	146	93.5	69.8	1.85	57.7	59.2	66.5	72.0	75.6	78.3	81.1	88.7	90.1	91.9	100	103	108	112	116		
	1.75	158	96.8	72.0	1.80	59.2	62.8	70.5	76.3	80.2	83.1	86.0	94.0	96.4	98.3	107	108	112	116	119		
	1.67	166	98.9	72.3	1.75	59.6	64.4	72.3	78.2	82.2	85.1	88.1	96.4	99.0	101	110	112	115	118	122		
12TLG 130	1.80	159	102	76.2	1.85	63.0	64.6	72.5	78.5	82.5	85.4	88.4	96.8	98.3	109	109	113	118	122	126		
	1.75	173	106	78.5	1.80	64.5	68.5	76.9	83.3	87.5	90.7	93.8	103	105	117	117	118	122	126	130		
	1.67	182	108	78.9	1.75	65.0	70.2	78.8	85.3	89.6	92.9	96.1	105	108	120	120	122	125	129	133		
12TLG 150	1.80	181	116	86.3	1.85	71.4	73.2	82.2	89.0	93.5	96.8	100	110	111	114	124	128	133	138	143		
	1.75	196	120	89.0	1.80	73.1	77.7	87.2	94.4	99.2	103	106	116	119	121	132	134	138	143	148		
	1.67	206	122	89.4	1.75	73.6	79.6	89.4	96.7	102	105	109	119	122	125	136	138	142	146	151		
12TLG 170	1.80	202	129	97	1.85	79.8	81.8	91.9	99	104	108	112	123	124	127	138	143	149	155	160		
	1.75	219	134	99	1.80	81.7	86.8	97	105	111	115	119	130	133	136	148	150	155	160	166		
	1.67	230	137	100	1.75	82.3	88.9	100	108	114	118	122	133	137	140	152	154	159	163	168		
12TLG 190	1.80	227	145	109	1.85	89.7	92	103	112	118	122	126	138	140	143	156	161	168	174	180		
	1.75	246	150	112	1.80	92	98	110	119	125	129	134	146	150	153	166	169	174	180	186		
	1.67	259	154	112	1.75	93	100	112	122	128	132	137	150	154	157	171	174	179	184	190		
12TLG 210	1.80	252	162	121	1.85	99.7	102	115	124	131	135	140	153	156	159	173	178	186	193	200		
	1.75	274	167	124	1.80	102	108	122	132	139	144	149	162	167	170	185	187	193	200	206		
	1.67	288	171	125	1.75	103	111	125	135	142	147	152	167	171	174	190	193	198	205	211		
12TLG 250	1.80	305	196	146	1.85	121	124	139	150	158	164	169	185	188	192	209	216	226	234	242		
	1.75	331	202	151	1.80	124	131	147	160	168	174	180	197	202	205	224	227	234	242	250		
	1.67	348	207	151	1.75	125	135	151	164	172	178	184	202	207	211	230	233	240	248	255		
12TG 300	1.80	356	228	170	1.85	141	144	162	175	184	191	197	216	219	224	244	252	263	273	282		
	1.75	386	236	175	1.80	144	153	172	186	195	202	210	229	235	239	260	264	273	282	291		
	1.67	406	241	176	1.75	145	157	176	191	200	207	215	235	241	246	268	272	280	288	297		

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

* Gel sizes not yet available

** Batteries too small for Catalyst



CELLYTE Bloc 6-12TLG - Solar - Amps Data @ 20 C.

SEC 6-12TLG TYPE	END Volts / CELL	DISCHARGE DATA TIME IN MINUTES			END Volts / CELL	DISCHARGE DATA AMPS @ 20 C																
		15	30	45		DISCHARGE TIME IN HOURS																
		1	1.5	2		3	4	5	6	8	10	12	20	24	48	72	100					
6TLG 130*	1.80	159	102	76.2	1.85	63.0	43.1	36.3	26.2	20.6	17.1	14.7	12.1	9.83	8.35	5.46	4.69	2.45	1.69	1.26		
	1.75	173	106	78.5	1.80	64.5	45.7	38.5	27.8	21.9	18.1	15.6	12.8	10.5	8.93	5.83	4.93	2.54	1.75	1.30		
	1.67	182	108	78.9	1.75	65.0	46.8	39.4	28.4	22.4	18.6	16.0	13.1	10.8	9.18	6.00	5.08	2.61	1.79	1.33		
6TLG 220*	1.80	265	170	127	1.85	105	71.8	60.4	43.6	34.4	28.5	24.6	20.2	16.4	13.9	9.10	7.82	4.09	2.82	2.10		
	1.75	288	176	131	1.80	108	76.1	64.1	46.3	36.5	30.2	26.1	21.4	17.5	14.9	9.72	8.21	4.24	2.92	2.17		
	1.67	303	180	131	1.75	108	78.0	65.7	47.4	37.4	31.0	26.7	21.9	18.0	15.3	10.0	8.46	4.30	2.99	2.21		
6TLG 250	1.80	305	196	146	1.85	121	82.5	69.5	50.1	39.5	32.8	28.2	23.2	18.8	16.0	10.5	9.00	4.70	3.25	2.42		
	1.75	331	202	151	1.80	124	87.5	73.7	53.2	41.9	34.7	30.0	24.6	20.2	17.1	11.2	9.44	4.88	3.36	2.50		
	1.67	348	207	151	1.75	125	89.7	75.6	54.5	43.0	35.6	30.7	25.2	20.7	17.6	11.5	9.73	5.00	3.44	2.55		
12TLG 20**	1.80	22.6	14.5	10.8	1.85	8.9	6.1	5.14	3.71	2.92	2.42	2.09	1.71	1.39	1.18	0.78	0.67	0.35	0.24	0.18		
	1.75	24.5	15.0	11.1	1.80	9.1	6.5	5.5	3.93	3.10	2.57	2.22	1.82	1.49	1.27	0.83	0.70	0.36	0.25	0.18		
	1.67	25.7	15.3	11.2	1.75	9.2	6.6	5.6	4.03	3.17	2.63	2.27	1.86	1.53	1.30	0.85	0.72	0.37	0.25	0.19		
12TLG30**	1.80	34.5	22.1	16.5	1.85	13.6	9.33	7.86	5.67	4.47	3.70	3.19	2.62	2.13	1.81	1.20	1.02	0.53	0.37	0.27		
	1.75	37.4	22.9	17.0	1.80	14.0	9.90	8.34	6.01	4.74	3.93	3.39	2.78	2.28	1.94	1.26	1.07	0.55	0.38	0.28		
	1.67	39.3	23.4	17.1	1.75	14.1	10.1	8.54	6.16	4.86	4.02	3.47	2.85	2.34	1.99	1.30	1.10	0.57	0.39	0.29		
12TLG 40	1.80	41.2	26.4	19.7	1.85	16.3	11.1	9.37	6.76	5.33	4.41	3.81	3.13	2.54	2.16	1.43	1.21	0.63	0.44	0.33		
	1.75	44.7	27.3	20.3	1.80	16.7	11.8	9.9	7.17	5.65	4.68	4.04	3.31	2.72	2.31	1.51	1.27	0.66	0.45	0.34		
	1.67	46.9	27.9	20.4	1.75	16.8	12.1	10.2	7.35	5.79	4.80	4.14	3.40	2.79	2.37	1.55	1.31	0.67	0.46	0.34		
12TLG 50	1.80	55.8	35.7	26.7	1.85	22.0	15.1	12.7	9.16	7.22	5.98	5.16	4.23	3.44	2.92	1.91	1.64	0.86	0.59	0.44		
	1.75	60.5	37.0	27.5	1.80	22.6	16.0	13.5	9.72	7.66	6.35	5.47	4.49	3.68	3.13	2.04	1.72	0.89	0.61	0.46		
	1.67	63.6	37.8	27.6	1.75	22.7	16.4	13.8	9.95	7.84	6.50	5.61	4.60	3.78	3.21	2.10	1.78	0.91	0.63	0.46		
12TLG 60	1.80	73.0	46.8	34.9	1.85	28.9	19.7	16.6	12.0	9.45	7.83	6.76	5.54	4.50	3.83	2.50	2.15	1.12	0.78	0.58		
	1.75	79.2	48.4	36.0	1.80	29.6	20.9	17.6	12.7	10.0	8.31	7.17	5.88	4.82	4.09	2.67	2.26	1.17	0.80	0.60		
	1.67	83.2	49.5	36.1	1.75	29.8	21.5	18.1	13.0	10.3	8.51	7.34	6.03	4.95	4.21	2.75	2.33	1.20	0.82	0.61		
12TLG 70	1.80	86.3	55.3	41.3	1.85	34.1	23.3	19.6	14.2	11.2	9.3	7.98	6.55	5.32	4.52	2.96	2.54	1.33	0.92	0.68		
	1.75	94	57.2	42.5	1.80	35.0	24.7	20.8	15.0	11.8	9.8	8.47	6.94	5.70	4.84	3.16	2.67	1.38	0.95	0.71		
	1.67	98	58.5	42.7	1.75	35.2	25.4	21.4	15.4	12.1	10.1	8.68	7.12	5.85	4.97	3.25	2.75	1.41	0.97	0.72		
12TLG 80	1.80	92.9	59.5	44.4	1.85	36.7	25.1	21.2	15.3	12.0	10.0	8.60	7.06	5.73	4.87	3.19	2.74	1.43	0.99	0.74		
	1.75	101	61.6	45.8	1.80	37.6	26.6	22.4	16.2	12.8	10.6	9.12	7.48	6.14	5.21	3.40	2.87	1.48	1.02	0.76		
	1.67	106	63.0	46.0	1.75	37.9	27.3	23.0	16.6	13.1	10.8	9.35	7.67	6.30	5.36	3.50	2.96	1.52	1.05	0.77		
12TLG 90	1.80	106	68.0	50.8	1.85	42.0	28.7	24.2	17.4	13.7	11.4	9.8	8.06	6.55	5.57	3.64	3.13	1.64	1.13	0.84		
	1.75	115	70.4	52.4	1.80	43.0	30.5	25.6	18.5	14.6	12.1	10.4	8.55	7.01	5.95	3.89	3.29	1.70	1.17	0.87		
	1.67	121	71.9	52.6	1.75	43.3	31.2	26.3	19.0	14.9	12.4	10.7	8.77	7.20	6.12	4.00	3.38	1.74	1.20	0.89		
12TLG 100	1.80	119	76.5	57.1	1.85	47.2	32.3	27.2	19.6	15.5	12.8	11.1	9.07	7.37	6.27	4.10	3.52	1.84	1.28	0.96		
	1.75	130	79.2	58.9	1.80	48.4	34.3	28.9	20.8	16.4	13.6	11.7	9.62	7.89	6.70	4.37	3.70	1.91	1.33	1.00		
	1.67	136	80.9	59.1	1.75	48.7	35.1	29.6	21.3	16.8	13.9	12.0	9.86	8.10	6.89	4.50	3.81	1.96	1.35	1.01		
12TLG 110	1.80	133	85.0	63.5	1.85	52.5	35.9	30.2	21.8	17.2	14.2	12.3	10.1	8.19	6.96	4.55	3.91	2.04	1.41	1.05		
	1.75	144	88.0	65.5	1.80	53.8	38.1	32.1	23.1	18.2	15.1	13.0	10.7	8.77	7.44	4.86	4.11	2.12	1.46	1.08		
	1.67	151	89.9	65.7	1.75	54.1	39.0	32.9	23.7	18.7	15.5	13.4	11.0	9.00	7.65	5.00	4.23	2.18	1.49	1.11		
12TLG 120	1.80	146	93.5	69.8	1.85	57.7	39.5	33.2	24.0	18.9	15.7	13.5	11.1	9.01	7.66	5.01	4.30	2.25	1.55	1.16		
	1.75	158	96.8	72.0	1.80	59.2	41.9	35.3	25.4	20.0	16.6	14.3	11.8	9.64	8.19	5.35	4.52	2.33	1.61	1.19		
	1.67	166	98.9	72.3	1.75	59.6	42.9	36.1	26.1	20.5	17.0	14.7	12.1	9.90	8.42	5.50	4.65	2.39	1.64	1.22		
12TLG 130	1.80	159	102	76.2	1.85	63.0	43.1	36.3	26.2	20.6	17.1	14.7	12.1	9.83	8.35	5.46	4.69	2.45	1.69	1.26		
	1.75	173	106	78.5	1.80	64.5	45.7	38.5	27.8	21.9	18.1	15.6	12.8	10.5	9.73	5.83	4.93	2.54	1.75	1.30		
	1.67	182	108	78.9	1.75	65.0	46.8	39.4	28.4	22.4	18.6	16.0	13.1	10.8	10.0	6.00	5.08	2.61	1.79	1.33		
12TLG 150	1.80	181	116	86.3	1.85	71.4	48.8	41.1	29.7	23.4	19.4	16.7	13.7	11.1	9.47	6.19	5.32	2.78	1.92	1.43		
	1.75	196	120	89.0	1.80	73.1	51.8	43.6	31.5	24.8	20.5	17.7	14.5	11.9	10.1	6.61	5.58	2.88	1.99	1.48		
	1.67	206	122	89.4	1.75	73.6	53.0	44.7	32.2	25.4	21.1	18.2	14.9	12.2	10.4	6.80	5.75	2.96	2.03	1.51		
12TLG 170	1.80	202	129	96.5	1.85	79.8	54.5	45.9	33.1	26.1	21.6	18.7	15.3	12.4	10.6	6.92	5.95	3.11	2.15	1.60		
	1.75	219	134	99.5	1.80	81.7	57.9	48.7	35.2	27.7	23.0	19.8	16.2	13.3	11.3	7.39	6.24	3.22	2.22	1.66		
	1.67	230	137	100	1.75	82.3	59.3	49.9	36.0	28.4	23.5	20.3	16.7	13.7	11.6	7.60	6.43	3.31	2.27	1.68		
12TLG 190	1.80	227	145	109	1.85	89.7	61.4	51.7	37.3	29.4	24.4	21.0	17.2	14.0	11.9	7.78	6.69	3.50	2.42	1.80		
	1.75	246	150	112	1.80	92.0	65.1	54.8	39.6	31.2	25.8	22.3	18.3	15.0	12.7	8.31	7.02	3.63	2.50	1.86		
	1.67	259	154	112	1.75	92.6	66.7	56.2	40.5	31.9	26.5	22.8	18.7	15.4	13.1	8.55	7.23	3.72	2.56	1.90		
12TLG 210	1.80	252	162	121	1.85	99.7	68.2	57.4	41.4	32.6	27.1	23.3	19.2	15.6	13.2	8.65	7.43	3.88	2.68	2.00		
	1.75	274	167	124	1.80	102	72.3	60.9	43.9	34.6	28.7	24.8	20.3	16.7	14.1	9.23	7.80	4.03	2.78	2.06		
	1.67	288	171	125	1.75	103	74.1	62.4	45.0	35.5	29.4	25.4	20.8									



CELLYTE 6-12TLG Watts per Cell @ 20 C.

SEC 6-12TLG TYPE	END Volts / CELL	Watts per cell			END Volts / CELL	DISCHARGE DATA Watts Per Cell AT 20 C													
		TIME IN MINUTES				DISCHARGE TIME IN HOURS													
		15	30	45		1	1.5	2	3	4	5	6	8	10	12	20	24		
6TLG 130*	1.80	303	194	146	1.85	121	82.8	69.6	51.0	40.5	33.7	29.1	24.0	19.6	16.7	10.9	9.4		
	1.75	328	201	151	1.80	124	87.2	73.9	53.8	42.7	35.5	30.9	25.3	20.7	17.8	11.6	9.9		
	1.67	345	205	151	1.75	125	88.9	75.7	54.9	43.5	36.2	31.7	25.8	21.2	18.1	11.9	10.0		
6TLG 220*	1.80	504	323	244	1.85	201	138	116	85.0	67.4	56.1	48.5	40.1	32.7	27.8	18.2	15.7		
	1.75	547	334	251	1.80	207	145	123	89.6	71.1	59.2	51.5	42.2	34.5	29.6	19.4	16.4		
	1.67	575	342	252	1.75	208	148	126	91.5	72.5	60.4	52.8	43.0	35.3	30.1	19.8	16.7		
6TLG 250	1.80	580	371	280	1.85	232	159	133	97.7	77.5	64.5	55.8	46.1	37.6	32.0	21.0	18.1		
	1.75	629	384	289	1.80	238	167	142	103	81.7	68.1	59.2	48.6	39.7	34.1	22.3	18.9		
	1.67	661	393	290	1.75	239	170	145	105	83.3	69.4	60.7	49.4	40.6	34.7	22.7	19.3		
12TLG 20**	1.80	42.9	27.5	20.7	1.85	17.1	21.0	9.86	7.22	5.73	4.77	4.13	3.41	2.78	2.37	1.57	1.33		
	1.75	46.5	28.4	21.4	1.80	17.6	12.4	10.5	7.62	6.04	5.03	4.38	3.59	2.94	2.52	1.65	1.40		
	1.67	48.9	29.0	21.4	1.75	17.7	12.6	10.7	7.78	6.16	5.13	4.48	3.65	3.00	2.56	1.68	1.42		
12TLG30**	1.80	65.6	42.0	31.7	1.85	26.2	21.0	15.1	11.0	8.76	7.29	6.31	5.21	4.25	3.62	2.40	2.04		
	1.75	71.2	43.5	32.7	1.80	26.8	18.9	16.0	11.6	9.24	7.70	6.69	5.49	4.49	3.85	2.52	2.14		
	1.67	74.8	44.4	32.8	1.75	27.0	19.3	16.4	11.9	9.42	7.85	6.86	5.58	4.59	3.92	2.57	2.18		
12TLG 40	1.80	78.2	50.1	37.8	1.85	31.2	21.0	18.0	13.2	10.4	8.70	7.52	6.21	5.06	4.31	2.86	2.43		
	1.75	84.8	51.8	39.0	1.80	32.0	22.5	19.1	13.9	11.0	9.18	7.98	6.55	5.35	4.59	3.00	2.55		
	1.67	89.1	53.0	39.1	1.75	32.2	23.0	19.6	14.2	11.2	9.36	8.18	6.66	5.47	4.67	3.07	2.60		
12TLG 50	1.80	106	67.8	51.2	1.85	42.3	29.0	24.4	17.8	14.2	11.8	10.19	8.41	6.86	5.84	3.83	3.30		
	1.75	115	70.2	52.8	1.80	43.4	30.5	25.9	18.8	14.9	12.4	10.8	8.87	7.25	6.22	4.07	3.45		
	1.67	121	71.8	53.0	1.75	43.7	31.1	26.5	19.2	15.2	12.7	11.1	9.02	7.41	6.33	4.15	3.52		
12TLG 60	1.80	139	88.8	67.0	1.85	55.4	38.0	31.9	23.4	18.5	15.4	13.3	11.0	8.98	7.65	5.02	4.32		
	1.75	151	91.9	69.1	1.80	56.8	40.0	33.9	24.6	19.5	16.3	14.2	11.6	9.50	8.14	5.33	4.52		
	1.67	158	94.0	69.4	1.75	57.2	40.8	34.7	25.2	19.9	16.6	14.5	11.8	9.70	8.29	5.44	4.61		
12TLG 70	1.80	164	105	79.2	1.85	65.5	44.9	37.7	27.6	21.9	18.2	15.8	13.0	10.6	9.05	5.93	5.10		
	1.75	178	109	81.7	1.80	67.1	47.2	40.0	29.1	23.1	19.2	16.7	13.7	11.2	9.6	6.30	5.34		
	1.67	187	111	82.0	1.75	67.6	48.2	41.0	29.7	23.5	19.6	17.1	14.0	11.5	9.8	6.43	5.44		
12TLG 80	1.80	177	113	85.3	1.85	70.5	48.3	40.6	29.7	23.6	19.6	17.0	14.0	11.4	9.74	6.38	5.50		
	1.75	192	117	88.0	1.80	72.3	50.9	43.1	31.4	24.9	20.7	18.0	14.8	12.1	10.4	6.78	5.75		
	1.67	201	120	88.3	1.75	72.8	51.9	44.2	32.0	25.4	21.1	18.5	15.0	12.3	10.5	6.92	5.86		
12TLG 90	1.80	202	129	97.5	1.85	80.6	55.2	46.4	34.0	27.0	22.4	19.4	16.0	13.1	11.1	7.29	6.28		
	1.75	219	134	100.5	1.80	82.6	58.1	49.2	35.8	28.4	23.7	20.6	16.9	13.8	11.8	7.75	6.57		
	1.67	230	137	100.9	1.75	83.2	59.3	50.5	36.6	29.0	24.1	21.1	17.2	14.1	12.1	7.91	6.70		
12TLG 100	1.80	227	145	110	1.85	90.7	62.1	52.2	38.2	30.3	25.3	21.8	18.0	14.7	12.5	8.21	7.07		
	1.75	246	150	113	1.80	92.9	65.4	55.4	40.3	32.0	26.6	23.2	19.0	15.5	13.3	8.72	7.39		
	1.67	259	154	114	1.75	93.6	66.7	56.8	41.2	32.6	27.2	23.7	19.3	15.9	13.6	8.90	7.54		
12TLG 110	1.80	252	162	122	1.85	101	69.0	58.0	42.5	33.7	28.1	24.3	20.0	16.3	13.9	9.12	7.85		
	1.75	274	167	126	1.80	103	72.7	61.6	44.8	35.5	29.6	25.7	21.1	17.3	14.8	9.69	8.21		
	1.67	288	171	126	1.75	104	74.1	63.1	45.7	36.2	30.2	26.4	21.5	17.6	15.1	9.89	8.37		
12TLG 120	1.80	277	178	134	1.85	111	75.9	63.8	46.7	37.1	30.9	26.7	22.0	18.0	15.3	10.0	8.64		
	1.75	301	184	138	1.80	114	79.9	67.7	49.3	39.1	32.6	28.3	23.2	19.0	16.3	10.7	9.03		
	1.67	316	188	139	1.75	114	81.5	69.4	50.3	39.9	33.2	29.0	23.6	19.4	16.6	10.9	9.21		
12TLG 130	1.80	303	194	146	1.85	121	82.8	69.6	51.0	40.5	33.7	29.1	24.0	19.6	18.2	10.9	9.42		
	1.75	328	201	151	1.80	124	87.2	73.9	53.8	42.7	35.5	30.9	25.3	20.7	19.4	11.6	9.86		
	1.67	345	205	151	1.75	125	88.9	75.7	54.9	43.5	36.2	31.7	25.8	21.2	19.7	11.9	10.0		
12TLG 150	1.80	343	220	166	1.85	137	93.9	78.9	57.8	45.8	38.2	33.0	27.2	22.2	18.9	12.4	10.7		
	1.75	372	227	171	1.80	140	98.8	83.7	60.9	48.3	40.3	35.0	28.7	23.5	20.1	13.2	11.2		
	1.67	391	232	172	1.75	141	101	85.8	62.2	49.3	41.1	35.9	29.2	24.0	20.5	13.5	11.4		
12TLG 170	1.80	383	245	185	1.85	153	105	88.2	64.6	51.2	42.6	36.9	30.4	24.8	21.2	13.9	11.9		
	1.75	416	254	191	1.80	157	110	93.6	68.1	54.0	45.0	39.1	32.1	26.2	22.5	14.7	12.5		
	1.67	437	260	192	1.75	158	113	95.9	69.5	55.1	45.9	40.1	32.6	26.8	22.9	15.0	12.7		
12TLG 190	1.80	431	276	208	1.85	172	118	99.2	72.7	57.6	48.0	41.5	34.3	27.9	23.8	15.6	13.4		
	1.75	468	286	215	1.80	177	124	105	76.6	60.8	50.6	44.0	36.1	29.5	25.3	16.6	14.0		
	1.67	492	292	216	1.75	178	127	108	78.2	62.0	51.6	45.1	36.7	30.2	25.8	16.9	14.3		
12TLG 210	1.80	479	307	232	1.85	191	131	110	80.7	64.0	53.3	46.1	38.1	31.0	26.4	17.3	14.9		
	1.75	520	318	239	1.80	196	138	117	85.1	67.5	56.2	48.9	40.1	32.8	28.1	18.4	15.6		
	1.67	546	325	240	1.75	198	141	120	86.9	68.8	57.4	50.1	40.8	33.5	28.6	18.8	15.9		
12TLG 250	1.80	580	371	280	1.85	232	159	133	97.7	77.5	64.5	55.8	46.1	37.6	32.0	21.0	18.1		
	1.75	629	384	289	1.80	238	167	142	103	81.7	68.1	59.2	48.6	39.7	34.1	22.3	18.9		
	1.67	661	393	290	1.75	239	170	145	105	83.3	69.4	60.7	49.4	40.6	34.7	22.7	19.3		
12TG 300	1.80	676	433	327	1.85	270	185	156	113.9	90.3	75.2	65.0	53.7	43.8	37.3	24.4	21.0		
	1.75	733	448	337	1.80	277	195	165	120	95.3	79.3	69.0	56.6	46.3	39.7	26.0	22.0		
	1.67	771	458	338	1.75	279	199	169	123	97.1	80.9	70.7	57.6	47.3	40.4	26.5	22.4		

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

* Gel sizes not yet available

** Batteries too small for Catalyst

CELLYTE 6-12TLG Bloc Data & Dimensions

SEC Battery Type	Capacity C/100 1.80 vpc	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 Ω Ohms	Female Terminal Type	Battery Weight		Overall Battery Dimensions					
									KG	lbs	Length		Width		Height	
											Inch	mm	Inch	mm		
6TLG 130*	130	120	92.9	760	1010	3200	3.0	FT 4	16.0	35.2	7.68	195	6.69	170	8.13	207
6 TLG 220*	221	200	155	1150	1440	5000	2.3	FT 5	31.5	69.3	12.7	323	7.01	178	9.25	235
6 TLG 250	255	230	178	1240	1650	5400	2.1	FT 5	33.0	72.6	9.57	243	7.40	188	10.8	275
12TLG20**	18.8	17.0	13.2	110	165	750	12	FT 3	6.0	13.2	7.07	180	2.99	76	6.61	168
12TLG 30**	28.8	26.0	20.1	190	250	1100	8.2	FT 3	10.0	22.0	6.54	165	4.96	127	6.93	176
12TLG 40	34.3	31.0	24.0	240	320	1500	7.3	FT 3	11.0	24.2	7.72	196	5.16	131	6.34	161
12TLG 50	46.5	42.0	32.5	260	350	1700	6.0	FT 3	14.8	32.56	7.76	197	6.54	166	6.69	170
12 TLG 60	60.9	55.0	42.6	280	380	1900	5.6	FT 3	19.0	41.8	9.02	229	5.43	138	8.43	214
12TLG 70	72.0	65.0	50.6	390	510	2000	5.5	FT 3	22.5	49.5	13.8	350	6.61	168	7.05	179
12TLG 80	77.5	70.0	54.2	410	550	2100	5.4	FT 3	25.5	56.1	10.2	259	6.61	168	8.44	215
12TLG 90	88.6	80.0	61.9	460	620	2400	4.5	FT 3	26.5	58.3	10.2	259	6.61	168	8.46	215
12TLG 100	99.6	90.0	69.7	510	680	2650	4.3	FT 3	30.5	67.1	12.1	307	6.65	169	8.46	215
12TLG 110	111	100	77.4	580	780	2900	3.9	FT 4	32.5	71.5	13.0	330	6.69	170	8.46	215
12TLG 120	122	110	85.1	710	960	3000	3.4	FT 4	34.0	74.8	13.3	339	6.81	173	8.86	225
12TLG 130	133	120	92.9	760	1020	3300	3.1	FT 4	36.0	79.2	13.3	339	6.81	173	8.86	225
12TLG 150	151	136	105	970	1300	4200	2.9	FT 4	42.5	93.5	13.5	342	6.81	173	11.2	285
12TLG 170	168	152	118	1060	1390	4500	2.7	FT 5	48.5	107	19.0	483	6.69	170	9.49	241
12TLG 190	190	171	132	1100	1410	4600	2.5	FT 5	57.0	125	20.9	530	8.23	209	8.86	225
12TLG 210	211	190	147	1150	1440	4700	2.3	FT 5	60.0	132	20.9	530	8.23	209	8.86	225
12TLG 250	255	230	178	1240	1670	5400	2.2	FT 5	66.0	145	20.6	522	9.45	240	8.86	225
12TLG 300	294	265	205	1390	1870	6050	2.1	FT 5	80.5	177	20.6	522	10.59	269	8.66	220

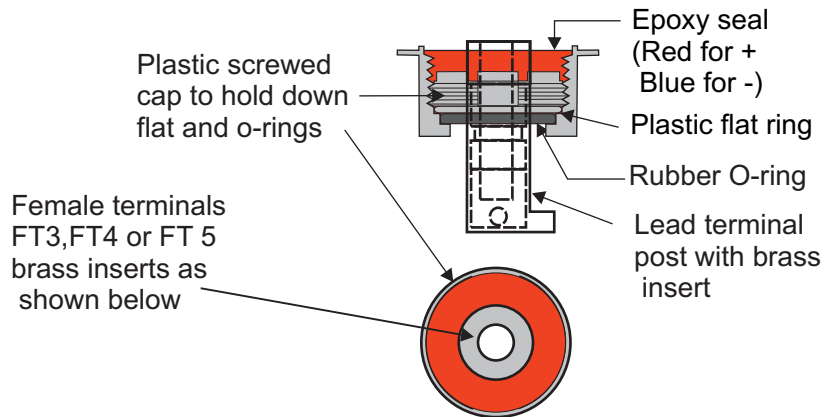
* Gel sizes not yet available ** Batteries too small for Catalyst

* 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 available to meet BS 6290 Part 4.

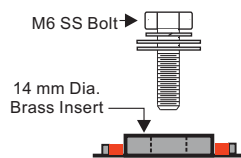
Applicable Standards

UL Component approval
BS 6290 Part 4
Eurobat
IEC 60896-21/22-2004
(Testing in progress)

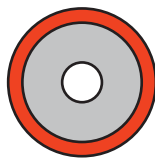
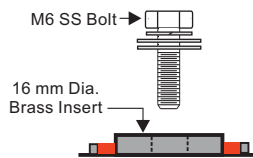


TYPICAL TRIPLE SEAL DETAIL

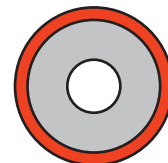
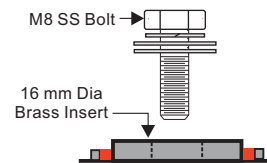
FEMALE TERMINAL (FT) DETAILS



14 mm \varnothing Brass Insert Terminal for M6 Bolt
TYPE FT 3



16 mm \varnothing Brass Insert Terminal for M6 Bolt
TYPE FT 4



16 mm \varnothing Brass Insert Terminal for M8 Bolt
TYPE FT 5

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.

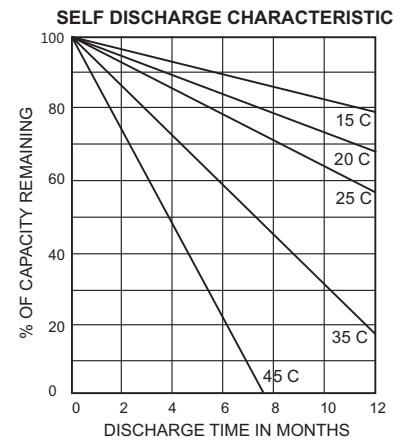
Temperature Effects.

Temperature affects the battery in a number of different ways.

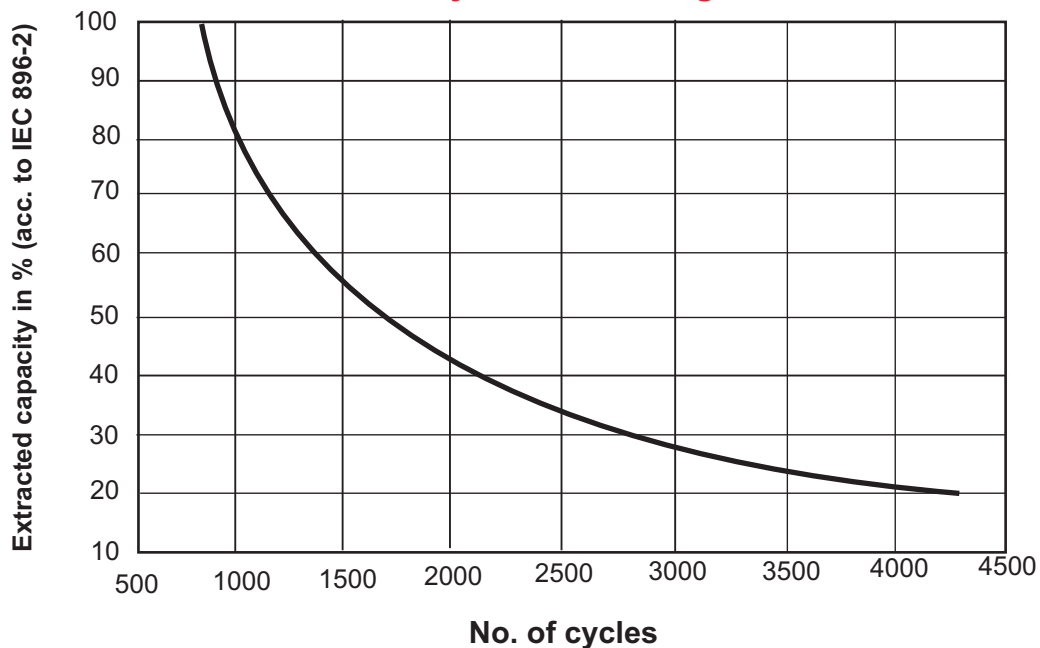
The battery will operate in extreme temperature ranges from below Zero to over 40 Deg C. However the Valve Regulated (VRLA) Battery nominal capacity, and optimum performance are based on operating temperature of 20 Deg C.

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.



Endurance in cycles according to IEC 896-2



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 0.003 ± 0.01 per volt/per/cell/deg.C

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

SEC Industrial Battery Co. range of products

<p>CELLYTE 2CMT/G Modular Steel Rack</p>	<p>CELLYTE 2TLAM/G Tubular Steel Rack</p>	<p>CELLYTE 2CMT/G, CELLYTE 2TLAM/G with Catalyst</p>	
<p>CELLYTE 12PLF & 12PLT Range</p>	<p>CELLYTE 12FTA/G Range</p>	<p>CELLYTE 6-12TUA Range</p>	<p>CELLYTE 6-12TSG Range</p>
<p>CELLYTE 6-12TLA Range</p>	<p>CELLYTE 6-12TLG Range</p>	<p>MICROLYTE +Plus Range</p>	<p>MICROLYTE Red Top Range</p>
<p>CELLYTE 2ETG OPzV Range Tubular Steel Rack</p>	<p>SEC Tubular OPzS Range</p>	<p>Nickel Cadmium Range Pocket Plate flooded and Valve Regulated</p>	<p>Typical VRLA catalyst</p>

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