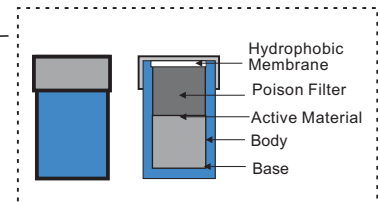


CELLYTE 12FTA & 12FTG Range

Announcing a world first New Monobloc Catalyst 10-12 year design life



**Monobloc Catalyst
(Optional)**



Typical assembly detail

New Catalyst generation

- *Reduces float current by up to 50%.
- *Reduces gassing by up to 80%.
- *Will minimize water loss from the cell.
- *Reduces cell failure due to dry out, a major failure mode of VRLA batteries.
- *Batteries will have full design life when used at temperatures up to 30°C.
- *Reduces cell heating reducing the possibility of thermal runaway.
- *Energy saving from reduced float current and cell cooling requirements.
- *Maintains full cell capacity by preventing depolarization of the negative plate

Full range of 12FTA/G available

**Capacity: 40Ah. to 175Ah.
C/10 to 1.80Vpc at 20C**

CELLYTE 12FTA & 12FTG Front Terminal Batteries

In keeping with our philosophy to stay at the forefront of the ever expanding Telecom standby battery market we have extended our range of 19" front terminal batteries to 160Ah. capacity and 180Ah. capacity for 23" front terminal batteries, These batteries include several innovative features: triple barrier terminal post seal, high Tin / Calcium positive plate alloy for improved, by up to 65% deep cycle capacity of the 12FTA batteries and the " World first" Monobloc Cat5alyst.

Sealed Valve Regulated Construction

- * These batteries are of the Absorbed Glass Mat (AGM) or gelled electrolyte technology (Gel). The electrolyte in the cell is immobilized in a specially formulated non woven glass mat separator or in a thixotropic Gel. All the acid is absorbed in this manner providing a safe non-spillable battery.

Gas Recombination System

- * The gasses generated in the normal charge / discharge use of a rechargeable lead acid battery are internally recombined during normal operating parameters and in normal operational use, more than 99% of the gas generated is recombined.

SEC Catvent - Catalyst Vent

- * SEC's VRLA cells incorporate the Philadelphia Scientific Monobloc precious metal Catalyst Catvent w hich prevents the negative plate from depolarizing reduces the cell float current by up to 50%, reduces the cell gassing by about 80%, reduces cell dry out w hich is the major cause of VRLA battery failure

Battery Maintenance

- * The battery has been designed and built such that no addition of electrolyte or water is needed during the life of the battery.

Battery Life in Float Service

- * CELLYTE 12FTA&G batteries are suitable for float / standby Service with a design life of 10-12 years at 20C

Battery Life in Cycle Life

- * CELLYTE 12FTG batteries are suitable for deep cycle service battery life will depend on temperature, depth and frequency of cycling, however the use of the optional Catvent Catalyst will improve life in temperatures up to 30 C.

Battery One-Way Safety Valve

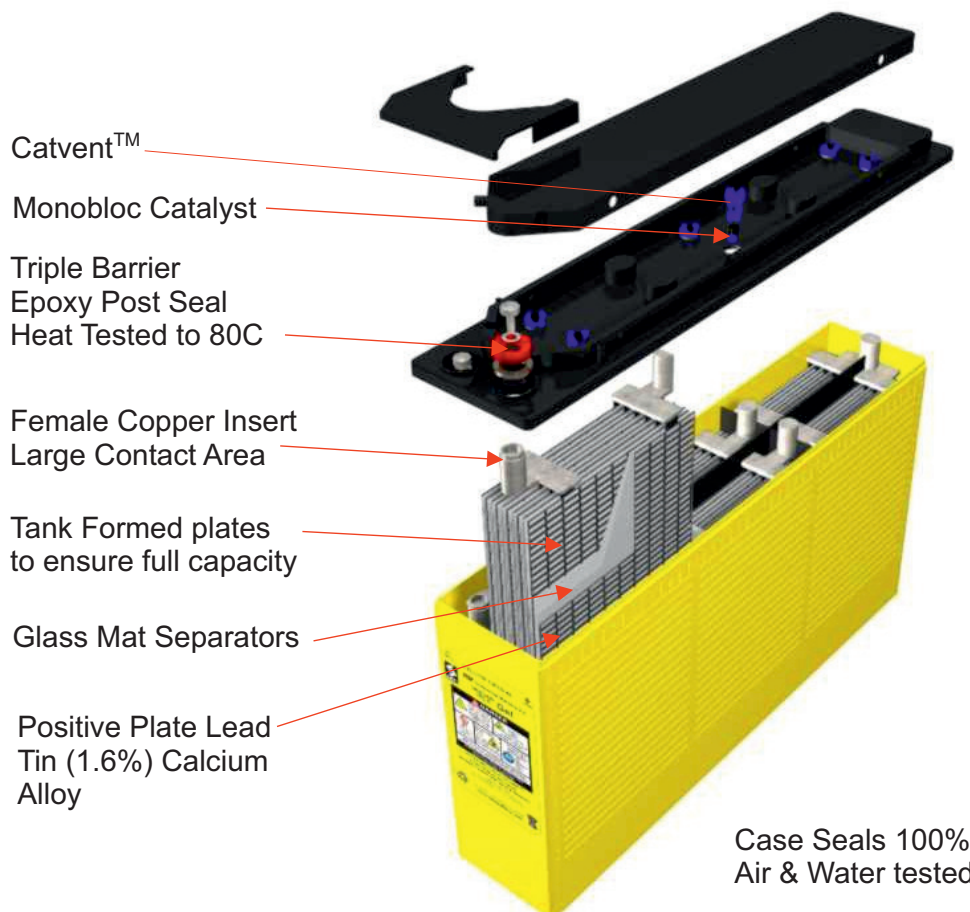
- * When pressure builds up in the cell the B & S German safety one-way valve opens at 2-3 psi and releases the excessive pressure and then closes. The one-way valve does not allow the ingress of oxygen which is harmful and reduces battery life.

Temperature Range for Normal Operation

- * **CELLYTE** 12FTA batteries have a wide operating temperature range -25C to +55C. However for maximum life it is recommended to operate the battery at 20°C when not fitted with VRLA Catalyst & between 20°C to 30°C when fitted with VRLA Catalyst

Plate Design and Paste Formulation

- * SEC has optimized the plate and paste formulation to maximize the operating life of the battery. The High Tin Virgin pure lead 98.13%, Tin 1.6%, Calcium 0.05% & Aluminium 0.016% plate alloy is used to extend battery life and cycling capability. Paste formulation will provide excellent recovery from deep discharge. With low self-discharge to ensure maximum storage time when not in use. Alternative lower cost Calcium /Tin plate (lead 99.1% / Calcium 0.1% / Tin 0.8%) is available.





CELLYTE AGM Front Terminal 12FTA Ampere Hour Data @ 20 C.

SEC	END	DISCHARGE DATA AMPS at 20 C.							END	DISCHARGE DATA AMPERE HOURS at 20 C																		
		Bloc AGM	Volts	DISCHARGE TIME IN MINUTES							Volts	DISCHARGE TIME IN HOURS																
				TYPE	/ CELL	5	10	15		20		30	45	/ CELL	1	1.5	2	3	4	5	6	8	10	12	20	24		
12FTA40	1.80	108	80.6	63.7	60.1	40.8	30.5	1.85	25.2	28.5	30.9	33.5	35.4	37.6	39.8	42.4	43.2	44.1	47.1	47.6								
	1.75	125	90.3	69.2	64.5	42.2	31.4	1.80	27.0	29.7	32.0	35.1	37.1	39.1	41.3	44.1	45.0	45.9	49.1	49.5								
	1.67	134	98.3	72.7	67.3	43.2	31.7	1.75	27.5	30.3	32.6	35.8	37.9	39.9	42.1	45.0	45.9	46.6	49.8	50.1								
12FTA55	1.80	132	98.5	77.9	73.4	49.9	37.3	1.85	30.8	34.9	37.7	41.0	43.3	46.0	48.6	51.8	52.9	53.9	57.6	58.1								
	1.75	152	110	84.5	78.8	51.6	38.4	1.80	33.0	36.3	39.1	42.9	45.4	47.8	50.5	53.9	55.0	56.1	60.0	60.5								
	1.67	164	120	88.8	82.2	52.8	38.7	1.75	33.7	37.0	39.8	43.8	46.3	48.8	51.5	55.0	56.1	57.0	60.9	61.2								
12FTA80*	1.80	193	143	113	107	72.6	54.2	1.85	44.8	50.7	54.9	59.6	63.0	66.9	70.7	75.4	76.9	78.4	83.8	84.6								
	1.75	221	161	123	115	75.1	55.9	1.80	48.0	52.8	56.8	62.4	66.0	69.5	73.4	78.4	80.0	81.6	87.2	88.0								
	1.67	239	175	129	120	76.8	56.4	1.75	49.0	53.9	57.9	63.6	67.3	70.9	74.9	79.9	81.6	82.9	88.6	89.0								
12FTA 100	1.80	241	179	142	133	90.7	67.7	1.85	56.0	63.4	68.6	74.5	78.8	83.6	88.3	94.3	96.1	98	105	106								
	1.75	277	201	154	143	93.9	69.8	1.80	60.0	66.0	71.0	78.0	82.5	86.9	91.8	98.0	100	102	109	110								
	1.67	298	219	161	150	95.9	70.4	1.75	61.2	67.3	72.4	79.6	84.2	88.6	93.6	100	102	104	111	111								
12FTA 105	1.80	253	188	149	140	95.2	71.1	1.85	58.8	66.6	72.0	78.2	82.7	87.8	92.8	99.0	101	103	110	111								
	1.75	291	211	161	150	98.6	73.3	1.80	63.0	69.3	74.6	81.9	86.6	91.2	96.4	103	105	107	114	116								
	1.67	313	229	170	157	101	74.0	1.75	64.3	70.7	76.0	83.5	88.4	93.1	98	105	107	109	116	117								
12FTA 105us	1.80	245	182	144	136	92.4	69.0	1.85	57.7	65.3	70.6	76.7	81.1	86.1	91.0	97.1	99.0	101	108	109								
	1.75	282	204	157	146	95.6	71.1	1.80	61.8	68.0	73.1	80.3	85.0	89.5	94.6	101	103	105	112	113								
	1.67	304	223	164	152	97.7	71.7	1.75	63.0	69.3	74.6	81.9	86.7	91.3	96.4	103	105	107	114	115								
12FTA 120	1.80	269	200	158	153	101	75.6	1.85	64.4	72.9	78.9	85.6	90.6	96.2	102	108	111	113	120	122								
	1.75	309	224	171	164	105	77.9	1.80	69.0	75.9	81.7	89.7	94.9	100	106	113	115	117	125	127								
	1.67	333	244	180	171	107	78.5	1.75	70.4	77.4	83.3	91.5	96.8	102	108	115	117	119	127	128								
12FTA 125	1.80	301	224	177	171	113	84.7	1.85	70.0	79.3	85.7	93.1	98	105	110	118	120	123	131	132								
	1.75	346	251	192	184	117	87.3	1.80	75.0	82.5	88.8	98	103	109	115	123	125	128	136	138								
	1.67	373	273	202	192	120	88.1	1.75	76.5	84.2	90.5	99	105	111	117	125	127	130	138	139								
12FTA 155	1.80	373	278	220	205	141	105	1.85	86.8	98	106	115	122	134	137	146	149	152	162	164								
	1.75	429	311	238	220	145	108	1.80	93.0	102	110	121	128	140	142	152	155	158	169	171								
	1.67	463	339	250	230	149	109	1.75	94.9	104	112	123	130	142	145	155	158	161	172	172								
12FTA 175	1.80	421	313	248	205	159	119	1.85	98.0	111	120	130	138	152	155	165	171	176	187	190								
	1.75	484	351	269	220	164	122	1.80	105	116	124	137	144	158	161	172	175	179	191	193								
	1.67	522	382	283	230	168	123	1.75	107	118	127	139	147	161	164	175	181	186	198	200								

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

*12FTA80S - available in case size 495 mm x 110 mm x 230 mm

CELLYTE AGM Front Terminal 12FTG Ampere Hour Data @ 20 C.

SEC	END	DISCHARGE DATA AMPS at 20 C.							END	DISCHARGE DATA AMPERE HOURS at 20 C																		
		Bloc Gel	Volts	DISCHARGE TIME IN MINUTES							Volts	DISCHARGE TIME IN HOURS																
				TYPE	/ CELL	5	10	15		20		30	45	/ CELL	60	1.5	2	3	4	5	6	8	10	12	20	24		
12FTG 40	1.80	92.1	69.3	55.4	52.6	35.9	27.1	1.85	22.7	26.0	28.4	31.2	33.1	35.4	37.6	40.3	41.1	42.3	45.7	46.6								
	1.75	106	77.6	60.2	56.4	37.2	28.0	1.80	24.3	27.0	29.4	32.6	34.7	36.8	39.0	41.9	42.8	44.1	47.6	48.5								
	1.67	114	84.6	63.2	58.9	38.0	28.2	1.75	24.8	27.6	30.0	33.3	35.4	37.5	39.8	4.28	43.6	44.8	48.3	49.1								
12FTG 55	1.80	113	84.7	67.8	64.2	43.9	33.2	1.85	27.7	31.7	34.7	38.1	40.5	43.5	45.7	49.3	50.2	51.8	55.9	57.0								
	1.75	129	94.9	73.5	68.9	45.4	34.2	1.80	29.7	33.0	35.9	39.9	42.4	45.2	47.5	51.2	52.3	53.9	58.2	59.3								
	1.67	140	103	77.3	72.0	46.4	34.5	1.75	30.3	33.7	36.6	40.7	43.3	46.1	48.4	52.3	53.3	54.7	59.1	60.0								
12FTG 80*	1.80	164	123	98.6	93.9	63.8	48.2	1.85	40.3	46.2	50.5	55.4	58.9	63.2	66.4	71.6	73.0	75.3	81.3	82.9								
	1.75	188	138	107	101	66.1	49.7	1.80	43.2	48.0	52.3	58.0	61.7	65.7	69.0	74.5	76.0	78.3	84.6	86.2								
	1.67	203	150	112	105	67.5	50.2	1.75	44.1	49.0	53.3	59.2	62.9	67.0	70.4	76.0	77.5	79.6	85.9	87.2								
12FTG 100	1.80	205	154	123	117	79.8	60.3	1.85	50.4	57.7	63.1	69.3	73.6	79.0	83.0	89.6	91.3	94.1	102	104								
	1.75	235	173	134	125	82.6	62.2	1.80	54.0	60.1	65.3	72.5	77.1	82.1	86.3	93.1	95.0	97.9	106	108								
	1.67	254	188	140	131	84.4	62.7	1.75	55.1	61.3	66.6	74.0	78.7	83.8	88.0	95.0	96.9	99.5	107	109								
12FTG 105	1.80	215	162	129	123	83.8	63.3	1.85	52.9	60.6	66.2	72.7	77.3	83.0	87.2	94.0	95.9	98.8	107	109								
	1.75	247	181	140	131	86.7	65.3	1.80	56.7	63.1	68.6	76.2	81.0	86.2	90.6	97.8	99.8	103	111	113								
	1.67	266	197	147	137	88.7	65.8	1.75	57.8	64.3	70.0	77.7	82.6	88.0	92.4	99.8	102	104	113	114								
12FTG 105us	1.80	208	157	125	119	81.3	61.4	1.85	51.9	59.4	65.0	71.3	75.9	81.4	85.5	92.2	94.0	97	105	107								
	1.75	240	176	136	128	84.1	63.3	1.80	55.6	61.9	67.3	74.7	79.5	84.6	88.9	95.9	97.9	101	109	111								
	1.67	258	191	143	133	86.0	63.9	1.75	56.7	63.1	68.6	76.2	81.0	86.3	90.7	97.9	99.8	102	111	112								
12FTG 120	1.80	228	172	137	134	89.0	67.2	1.85	57.9	66.4	72.6	79.6	84.7	90.9	95.5	103	105	108	117	119								
	1.75	262	192	149	144	92.1	69.3	1.80	62.1	69.1	75.1	83.4	88.7	94.4	99.2	107	109	113	122	124								
	1.67	283	210	157	150	94.1	69.9	1.75	63.3	70.5	76.6	85.1	90.5	96.3	101.2	109	111	114	123	125								
12FTG 125	1.80	256	193	154	150	99.8	75.4	1.85	63.0	72.1	78.9	86.6	92.1	98.8	103.8	112	114	118	127	129								
	1.75	294	216	167	161	103	77.7	1.80	67.5	75.1	81.7	90.7	96.4	102.7	107.9	116	119	122	132	135								
	1.67	317	235	176	168	106	78.4	1.75	68.9	76.6	83.3	92.5	98.4	104.7	110.0	119	121	124	134	136								
12FTG 155	1.80	317	239	191	180	124	93.4	1.85	78.1	89.4	97.8	107	114.1	126.9	128.7	139	142	146	157	161								
	1.75	365	267	207	193	128	96.3	1.80	83.7	93.1	101	112	119.6	131.8	133.8	144	147	152	164	167								
	1.67	393	291	218	201	131	97.2	1.75	85.4	95.0	103	115	122.0	134.5	136.4	147	150	154	166	169								
12FTG 175	1.80	358	270	216	180	140	105	1.85	88.2	101	110	121	128.9	143.2	145.3	157	163	169	181	186								
	1.75	412	302	234	193	145	109	1.80	94.5	105	114	127	135.0	148.8	151.0	163	166	171	185	189								



CELLYTE AGM - Front Terminal 12FTA Amps Data @ 20 C.

SEC	END	DISCHARGE DATA AMPS at 20 C.							END	DISCHARGE DATA AMPS @ 20 C																		
		Bloc AGM	Volts	DISCHARGE TIME IN MINUTES							Volts	DISCHARGE TIME IN HOURS																
				TYPE	/ CELL	5	10	15		20		30	45	/ CELL	60	1.5	2	3	4	5	6	8	10	12	20	24		
12FTA40	1.80	108	80.6	63.7	60.1	40.8	30.5	1.85	25.2	19.0	15.4	11.2	8.86	7.53	6.63	5.30	4.32	3.68	2.36	1.98								
	1.75	125	90.3	69.2	64.5	42.2	31.4	1.80	27.0	19.8	16.0	11.7	9.28	7.82	6.89	5.51	4.50	3.83	2.45	2.06								
	1.67	134	98	72.7	67.3	43.2	31.7	1.75	27.5	20.2	16.3	11.9	9.47	7.98	7.02	5.62	4.59	3.89	2.49	2.09								
12FTA55	1.80	132	99	77.9	73.4	49.9	37.3	1.85	30.8	23.3	18.9	13.7	10.8	9.20	8.10	6.48	5.29	4.49	2.88	2.42								
	1.75	152	110	84.5	78.8	51.6	38.4	1.80	33.0	24.2	19.5	14.3	11.3	9.56	8.42	6.74	5.50	4.68	3.00	2.52								
	1.67	164	120	88.8	82.2	52.8	38.7	1.75	33.7	24.7	19.9	14.6	11.6	9.75	8.58	6.87	5.61	4.75	3.04	2.55								
12FTA80*	1.80	193	143	113	107	72.6	54.2	1.85	44.8	33.8	27.4	19.9	15.8	13.4	11.8	9.43	7.69	6.53	4.19	3.52								
	1.75	221	161	123	115	75.1	55.9	1.80	48.0	35.2	28.4	20.8	16.5	13.9	12.2	9.80	8.00	6.80	4.36	3.67								
	1.67	239	175	129	120	76.8	56.4	1.75	49.0	35.9	29.0	21.2	16.8	14.2	12.5	10.0	8.16	6.91	4.43	3.71								
12FTA 100	1.80	241	179	142	133	90.7	67.7	1.85	56.0	42.3	34.3	24.8	19.7	16.7	14.7	11.8	9.61	8.17	5.24	4.40								
	1.75	277	201	154	143	93.9	69.8	1.80	60.0	44.0	35.5	26.0	20.6	17.4	15.3	12.3	10.0	8.50	5.45	4.58								
	1.67	298	219	161	150	95.9	70.4	1.75	61.2	44.9	36.2	26.5	21.0	17.7	15.6	12.5	10.2	8.64	5.54	4.63								
12FTA 105	1.80	253	188	149	140	95.2	71.1	1.85	58.8	44.4	36.0	26.1	20.7	17.6	15.5	12.4	10.1	8.58	5.50	4.62								
	1.75	291	211	161	150	98.6	73.3	1.80	63.0	46.2	37.3	27.3	21.7	18.2	16.1	12.9	10.5	8.93	5.72	4.81								
	1.67	313	229	170	157	100.7	74.0	1.75	64.3	47.1	38.0	27.8	22.1	18.6	16.4	13.1	10.7	9.07	5.81	4.87								
12FTA 105us	1.80	245	182	144	136	92.4	69.0	1.85	57.7	43.5	35.3	25.6	20.3	17.2	15.2	12.1	9.90	8.41	5.39	4.54								
	1.75	282	204	157	146	95.6	71.1	1.80	61.8	45.3	36.6	26.8	21.2	17.9	15.8	12.6	10.3	8.76	5.61	4.72								
	1.67	304	223	164	152	97.7	71.7	1.75	63.0	46.2	37.3	27.3	21.7	18.3	16.1	12.9	10.5	8.90	5.70	4.77								
12FTA 120	1.80	269	200	158	153	101	75.6	1.85	64.4	48.6	39.4	28.5	22.6	19.2	16.9	13.6	11.1	9.39	6.02	5.07								
	1.75	309	224	171	164	105	77.9	1.80	69.0	50.6	40.8	29.9	23.7	20.0	17.6	14.1	11.5	9.8	6.27	5.27								
	1.67	333	244	180	171	107	78.5	1.75	70.4	51.6	41.6	30.5	24.2	20.4	17.9	14.4	11.7	9.9	6.37	5.33								
12FTA 125	1.80	301	224	177	171	113	84.7	1.85	70.0	52.8	42.9	31.0	24.6	20.9	18.4	14.7	12.0	10.2	6.55	5.51								
	1.75	346	251	192	184	117	87.3	1.80	75.0	55.0	44.4	32.5	25.8	21.7	19.1	15.3	12.5	10.6	6.81	5.73								
	1.67	373	273	202	192	120	88.1	1.75	76.5	56.1	45.3	33.2	26.3	22.2	19.5	15.6	12.7	10.8	6.92	5.79								
12FTA 155	1.80	373	278	220	205	141	105	1.85	86.8	65.5	53.2	38.5	30.5	26.9	22.8	18.3	14.9	12.7	8.12	6.83								
	1.75	429	311	238	220	145	108	1.80	93.0	68.2	55.0	40.3	32.0	27.9	23.7	19.0	15.5	13.2	8.45	7.10								
	1.67	463	339	250	230	149	109	1.75	94.9	69.6	56.1	41.1	32.6	28.5	24.2	19.4	15.8	13.4	8.58	7.18								
12FTA 175	1.80	421	313	248	205	159	119	1.85	98.0	74.0	60.0	43.4	34.5	30.3	25.8	20.6	17.1	14.6	9.35	7.93								
	1.75	484	351	269	220	164	122	1.80	105	77.0	62.1	45.5	36.1	31.5	26.8	21.4	17.5	14.9	9.54	8.02								
	1.67	522	382	283	230	168	123	1.75	107	78.5	63.4	46.4	36.8	32.1	27.3	21.9	18.1	15.5	9.88	8.34								

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

*12FTA80S - available in case size 495 mm x 110 mm x 230 mm

CELLYTE AGM - Front Terminal 12FTG Amps Data @ 20 C.

SEC	END	DISCHARGE DATA AMPS at 20 C.							END	DISCHARGE DATA AMPS @ 20 C																		
		Bloc Gel	Volts	DISCHARGE TIME IN MINUTES							Volts	DISCHARGE TIME IN HOURS																
				TYPE	/ CELL	5	10	15		20		30	45	/ CELL	60	1.5	2	3	4	5	6	8	10	12	20	24		
12FTG 40	1.80	92.1	69.3	55.4	52.6	35.9	27.1	1.85	22.7	17.3	14.2	10.4	8.28	7.08	6.26	5.04	4.11	3.53	2.29	1.94								
	1.75	106	77.6	60.2	56.4	37.2	28.0	1.80	24.3	18.0	14.7	10.9	8.68	7.35	6.51	5.24	4.28	3.67	2.38	2.02								
	1.67	114	84.6	63.2	58.9	38.0	28.2	1.75	24.8	18.4	15.0	11.1	8.85	7.50	6.64	5.44	4.36	3.73	2.42	2.04								
12FTG 55	1.80	113	84.7	67.8	64.2	43.9	33.2	1.85	27.7	21.2	17.4	12.7	10.1	8.69	7.61	6.16	5.02	4.31	2.79	2.37								
	1.75	129	94.9	73.5	68.9	45.4	34.2	1.80	29.7	22.0	18.0	13.3	10.6	9.03	7.91	6.40	5.23	4.49	2.91	2.47								
	1.67	140	103	77.3	72.0	46.4	34.5	1.75	30.3	22.5	18.3	13.6	10.8	9.21	8.07	6.54	5.33	4.56	2.95	2.50								
12FTG 80*	1.80	164	123	98.6	93.9	63.8	48.2	1.85	40.3	30.8	25.2	18.5	14.7	12.6	11.1	8.96	7.30	6.27	4.06	3.45								
	1.75	188	138	107	101	66.1	49.7	1.80	43.2	32.0	26.1	19.3	15.4	13.1	11.5	9.31	7.60	6.53	4.23	3.59								
	1.67	203	150	112	105	67.5	50.2	1.75	44.1	32.7	26.7	19.7	15.7	13.4	11.7	9.50	7.75	6.63	4.30	3.63								
12FTG 100	1.80	205	154	123	117	79.8	60.3	1.85	50.4	38.5	31.5	23.1	18.4	15.8	13.8	11.2	9.13	7.84	5.08	4.32								
	1.75	235	173	134	125	82.6	62.2	1.80	54.0	40.0	32.7	24.2	19.3	16.4	14.4	11.6	9.50	8.16	5.29	4.49								
	1.67	254	188	140	131	84.4	62.7	1.75	55.1	40.8	33.3	24.7	19.7	16.8	14.7	11.9	9.69	8.29	5.37	4.54								
12FTG 105	1.80	215	162	129	123	83.8	63.3	1.85	52.9	40.4	33.1	24.2	19.3	16.6	14.5	11.8	9.59	8.23	5.33	4.53								
	1.75	247	181	140	131	86.7	65.3	1.80	56.7	42.0	34.3	25.4	20.2	17.2	15.1	12.2	10.0	8.57	5.55	4.72								
	1.67	266	197	147	137	88.7	65.8	1.75	57.8	42.9	35.0	25.9	20.7	17.6	15.4	12.5	10.2	8.71	5.64	4.77								
12FTG 105us	1.80	208	157	125	119	81.3	61.4	1.85	51.9	39.6	32.5	23.8	19.0	16.3	14.3	11.5	9.40	8.08	5.23	4.45								
	1.75	240	176	136	128	84.1	63.3	1.80	55.6	41.2	33.6	24.9	19.9	16.9	14.8	12.0	9.79	8.40	5.45	4.63								
	1.67	258	191	143	133	86.0	63.9	1.75	56.7	42.1	34.3	25.4	20.3	17.3	15.1	12.2	10.0	8.54	5.53	4.68								
12FTG 120	1.80	228	172	137	134	89.0	67.2	1.85	57.9	44.2	36.3	26.5	21.2	18.2	15.9	12.9	10.5	9.02	5.84	4.96								
	1.75	262	192	149	144	92.1	69.3	1.80	62.1	46.0	37.6	27.8	22.2	18.9	16.5	13.4	10.9	9.38	6.08	5.17								
	1.67	283	210	157	150	94.1	69.9	1.75	63.3	47.0	38.3	28.4	22.6	19.3	16.9	13.6	11.1	9.53	6.17	5.22								
12FTG 125	1.80	256	193	154	150	99.8	75.4	1.85	63.0	48.1	39.4	28.9	23.0	19.8	17.3	14.0	11.4	9.80	6.35	5.40								
	1.75	294	216	167	161	103	77.7	1.80	67.5	50.1	40.8	30.2	24.1	20.5	18.0	14.5	11.9	10.2	6.61	5.61								
	1.67	317	235	176	168	106	78.4	1.75	68.9	51.1	41.6	30.8	24.6	20.9	18.3	14.8	12.1	10.4	6.71	5.68								
12FTG 155	1.80	317	239	191	180	124	93.4	1.85	78.1																			



CELLYTE AGM - Front Terminal 12FTA Watts per Cell @ 20 C.

SEC Bloc AGM	END Volts	DISCHARGE W P C @ 20 C						END Volts	DISCHARGE DATA Watts Per Cell AT 20 C											
		DISCHARGE TIME IN MINUTES							DISCHARGE TIME IN HOURS											
		5	10	15	20	30	45		1	1.5	2	3	4	5	6	8	10	12	20	24
12FTA40	1.80	191	145	118	111	76.7	57.9	1.85	48.4	36.6	29.8	21.8	17.4	14.8	13.1	10.5	8.62	7.35	4.72	3.98
	1.75	210	155	128	121	79.4	59.7	1.80	49.6	37.8	30.7	22.7	18.1	15.3	13.5	10.9	8.87	7.61	4.89	4.13
	1.67	229	167	134	127	81.2	59.9	1.75	50.1	38.4	31.3	23.0	18.4	15.6	13.7	11.0	8.99	7.66	4.93	4.13
12FTA55	1.80	233	177	144	136	93.8	70.8	1.85	59.1	44.7	36.5	26.6	21.2	18.1	16.0	12.9	10.5	8.98	5.77	4.86
	1.75	256	190	156	147	97.1	73.0	1.80	60.6	46.2	37.5	27.7	22.1	18.7	16.5	13.3	10.8	9.30	5.98	5.04
	1.67	280	204	164	155	99.2	73.3	1.75	61.2	46.9	38.2	28.2	22.4	19.0	16.8	13.5	11.0	9.36	6.02	5.05
12FTA80*	1.80	339	258	210	199	136	103	1.85	86.0	65.1	53.0	38.7	30.9	26.4	23.3	18.7	15.3	13.1	8.40	7.07
	1.75	373	276	227	215	141	106	1.80	88.1	67.2	54.8	40.3	32.2	27.2	24.1	19.4	15.8	13.5	8.69	7.33
	1.67	407	297	239	226	144	107	1.75	89.0	68.2	55.6	40.9	32.7	27.7	24.4	19.6	16.0	13.6	8.76	7.34
12FTA 100	1.80	424	322	262	247	170	129	1.85	107	81.3	66.3	48.4	38.6	33.0	29.1	23.4	19.2	16.3	10.5	8.84
	1.75	466	345	284	268	176	133	1.80	110	84.0	68.5	50.4	40.2	34.0	30.1	24.2	19.7	16.9	10.9	9.17
	1.67	508	371	299	282	180	133	1.75	111	85.3	69.5	51.2	40.8	34.6	30.5	24.5	20.0	17.0	10.9	9.18
12FTA 105	1.80	445	339	275	259	179	135	1.85	113	85.4	69.6	50.8	40.6	34.6	30.5	24.6	20.1	17.1	11.0	9.28
	1.75	489	362	298	281	185	139	1.80	116	88.2	71.9	52.9	42.2	35.7	31.6	25.4	20.7	17.8	11.4	9.63
	1.67	534	389	314	295	189	140	1.75	117	89.5	73.0	53.7	42.9	36.3	32.0	25.7	21.0	17.9	11.5	9.64
12FTA 105us	1.80	431	328	267	251	174	131	1.85	111	83.8	68.3	49.8	39.8	33.9	30.0	24.1	19.7	16.8	10.8	9.11
	1.75	475	351	290	273	180	135	1.80	113	86.5	70.6	51.9	41.4	35.1	31.0	24.9	20.3	17.4	11.2	9.44
	1.67	518	378	304	286	184	136	1.75	115	87.8	71.6	52.7	42.0	35.6	31.4	25.2	20.6	17.5	11.3	9.45
12FTA 120	1.80	473	360	292	283	190	144	1.85	124	93.5	76.2	56.6	44.4	37.9	33.4	26.9	22.0	18.8	12.1	10.2
	1.75	520	385	317	307	197	148	1.80	127	96.6	78.8	57.9	46.3	39.2	34.6	27.9	22.7	19.4	12.5	10.5
	1.67	567	413	333	323	201	149	1.75	128	98.1	80.0	58.9	46.9	39.8	35.1	28.2	23.0	19.6	12.6	10.6
12FTA 125	1.80	530	403	328	317	213	161	1.85	134	102	82.9	60.5	48.3	41.2	36.4	29.3	24.0	20.4	13.1	11.0
	1.75	583	431	355	344	221	166	1.80	138	105	85.6	63.0	50.3	42.6	37.6	30.3	24.6	21.1	13.6	11.5
	1.67	635	464	373	362	225	167	1.75	139	107	86.9	64.0	51.0	43.2	38.1	30.6	25.0	21.3	13.7	11.5
12FTA 155	1.80	657	500	406	380	264	199	1.85	167	126	103	75.0	59.9	52.9	45.1	36.3	29.7	25.3	16.3	13.7
	1.75	722	535	441	412	274	206	1.80	171	130	105	78.1	62.3	54.7	46.6	37.5	30.5	26.2	16.8	14.2
	1.67	788	575	463	433	280	206	1.75	172	132	108	79.3	63.3	55.5	47.3	37.9	31.0	26.4	17.0	14.2
12FTA 175	1.80	741	564	459	380	298	225	1.85	188	142	116	84.7	67.6	59.7	50.9	41.0	34.1	29.3	18.7	15.9
	1.75	816	604	497	412	309	232	1.80	193	147	118	88.1	70.4	61.7	52.6	42.4	34.5	29.6	19.0	16.0
	1.67	890	649	523	433	316	233	1.75	195	149	122	89.6	71.4	62.7	53.4	42.9	35.6	30.5	19.5	16.5

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

*12FTA80S - available in case size 495 mm x 110 mm x 230 mm

CELLYTE Gel - Front Terminal 12FTG Watts per Cell @ 20 C.

SEC Bloc Gel	END Volts	DISCHARGE W P C @ 20 C						END Volts	DISCHARGE DATA Watts Per Cell AT 20 C											
		DISCHARGE TIME IN MINUTES							DISCHARGE TIME IN HOURS											
		5	10	15	20	30	45		60	1.5	2	3	4	5	6	8	10	12	20	24
12FTG 40	1.80	162.0	124.8	102.6	97.2	67.5	51.5	1.85	43.5	33.3	27.4	20.2	16.3	13.9	12.4	10.0	8.19	7.05	4.58	3.90
	1.75	178	133.5	111.3	105.5	69.9	53.1	1.80	44.6	34.4	28.2	21.1	16.9	14.4	12.8	10.4	8.42	7.30	4.74	4.04
	1.67	194	143.5	116.9	110.9	71.4	53.3	1.75	45.1	34.9	28.8	21.4	17.2	14.6	13.0	10.5	8.54	7.35	4.78	4.05
12FTG 55	1.80	198	153	125	119	82.5	63.0	1.85	53.2	40.7	33.5	24.7	19.9	17.0	15.1	12.2	10.0	8.62	5.60	4.76
	1.75	218	163	136	129	85.4	65.0	1.80	54.5	42.0	34.5	25.8	20.7	17.6	15.6	12.7	10.3	8.93	5.80	4.94
	1.67	238	175	143	135	87.3	65.2	1.75	55.1	42.7	35.2	26.2	21.0	17.9	15.9	12.8	10.4	8.98	5.84	4.95
12FTG 80*	1.80	288	222	182	174	120	91.6	1.85	77.4	59.2	48.8	36.0	28.9	24.8	22.0	17.8	14.6	12.5	8.14	6.93
	1.75	317	237	198	188	124	94.5	1.80	79.3	61.1	50.4	37.5	30.1	25.6	22.7	18.4	15.0	13.0	8.43	7.19
	1.67	346	255	208	198	127	94.8	1.75	80.1	62.1	51.2	38.1	30.5	26.0	23.1	18.6	15.2	13.1	8.50	7.19
12FTG 100	1.80	360	277	228	216	150	115	1.85	96.7	74.0	61.0	45.0	36.1	31.0	27.5	22.2	18.2	15.7	10.2	8.66
	1.75	396	297	247	234	155	118	1.80	99.2	76.4	63.0	46.8	37.6	32.0	28.4	23.0	18.7	16.2	10.5	8.98
	1.67	432	319	260	246	159	119	1.75	100.1	77.6	64.0	47.6	38.2	32.5	28.8	23.3	19.0	16.3	10.6	8.99
12FTG 105	1.80	378	291	239	227	158	120	1.85	101.6	77.7	64.0	47.2	37.9	32.5	28.9	23.4	19.1	16.5	10.7	9.10
	1.75	416	312	260	246	163	124	1.80	104.1	80.3	66.2	49.2	39.5	33.6	29.8	24.2	19.7	17.0	11.1	9.43
	1.67	454	335	273	258	167	124	1.75	105.1	81.5	67.2	50.0	40.1	34.1	30.3	24.4	19.9	17.1	11.2	9.44
12FTG 105us	1.80	367	282	232	220	153	117	1.85	99.6	76.2	62.8	46.3	37.2	31.9	28.3	22.9	18.8	16.1	10.5	8.92
	1.75	403	302	252	239	158	120	1.80	102	78.7	64.9	48.2	38.7	33.0	29.3	23.7	19.3	16.7	10.9	9.25
	1.67	440	325	265	251	162	121	1.75	103	79.9	65.9	49.0	39.3	33.5	29.7	24.0	19.6	16.8	10.9	9.26
12FTG 120	1.80	402	309	254	248	167	128	1.85	111	85.1	70.1	51.7	41.5	35.6	31.6	25.6	20.9	18.0	11.7	10.0
	1.75	442	331	276	269	173	132	1.80	114	87.9	72.5	53.9	43.2	36.8	32.7	26.5	21.5	18.7	12.1	10.3
	1.67	482	356	290	282	177	132	1.75	115	89.2	73.6	54.7	43.9	37.4	33.2	26.7	21.8	18.8	12.2	10.3
12FTG 125	1.80	450	347	285	278	188	143	1.85	121	92.5	76.2	56.2	45.2	38.7	34.4	27.8	22.8	19.6	12.7	10.8
	1.75	495	371	309	301	194	148	1.80	124	95.5	78.8	58.5	47.0	40.0	35.5	28.8	23.4	20.3	13.2	11.2
	1.67	540	399	325	316	198	148	1.75	125	97.0	80.0	59.5	47.7	40.6	36.0	29.1	23.7	20.4	13.3	11.2
12FTG 155	1.80	558	430	353	333	233	178	1.85	150	115	94.5	69.7	56.0	49.7	42.6	34.5	28.2	24.3	15.8	13.4
	1.75	614	460	383	361	241	183	1.80	154											

CELLYTE 12FTA&G Bloc Data & Dimensions

SEC Battery Type	SEC Battery Type	Nominal Capacity 1.80 vpc	Short Circuit Amps	Internal Resistance Ohms	Maximum Charge Current	Female Terminal Type	Battery Weight		Overall Dimensions			Battery Dimensions		
							KG	lbs	Length		Width		Height	
									Inch	mm	Inch	mm	Inch	mm
12FTG 40	12FTA 40	45	1350	6.7	7	FT4 - M6	14.6	32.1	10.83	275	4.134	105	8.858	225
12FTG 55	12FTA 60	55	1900	6.3	10	FT4 - M6	18.0	39.6	10.83	275	4.134	105	8.858	225
12FTG 80	12FTA 80	80	2400	5.8	15	FT5 - M8	28.0	61.6	15.55	395	4.331	110	11.34	288
12FTG 100	12FTA 100	100	3000	5.7	18	FT5 - M8	34.0	74.8	15.55	395	4.331	110	11.34	288
12FTG 105	12FTA 105	105	3200	5.6	19	FT5 - M8	35.0	77.0	21.65	550	4.331	110	9.370	238
12FTG 105us	12FTA 105us	103	3000	5.6	19	FT5 - M8	35.0	77.0	19.29	490	4.331	110	9.055	230
12FTG 120	12FTA 120	120	3550	5.4	19	FT5 - M8	38.0	83.6	21.65	550	4.331	110	9.370	238
12FTG 125	12FTA 125	125	4200	5.3	25	FT5 - M8	42.0	92.4	21.65	550	4.331	110	11.34	288
12FTG 155	12FTA 155	155	4800	5.1	30	FT5 - M8	49.2	108	21.65	550	4.331	110	11.34	288
12FTG 175	12FTA 175	175	5300	4.8	32	FT5 - M8	56.0	123	21.65	550	4.331	110	12.60	320

6 mm Female Terminal - FT 4 = 16 mm with M6 Bolt

8 mm Female Terminal - FT 5 = 16 mm with M8 Bolt

SPECIFICATION:

- * POSITIVE PLATE: High Tin or Calcium Alloy pasted flat plate
- * NEGATIVE PLATE: Calcium Alloy pasted flat plate
- * ELECTROLYTE: Dilute sulphuric acid or gelled
- * CATALYST VENT: German Valve with Optional Catalyst
- * CONTAINER: ABS grade V-0 as Standard
- * SEPARATORS: Absorbed Glass Mat (for FTA)
- * SEPARATORS: Micro porous separator (for FTG)
- * FLOAT VOLTAGE: 2.25 Vpc \pm 0.01at 20 to 25°C
- * MAX CHARGE VOLTAGE: 2.35 Vpc \pm 0.01 at 20 to 25°C
- * SAFETY ONE WAY VALVE: 1.5 to 2.5 p.s.i Self-resealing
- * TERMINALS: Heavy duty female copper insert with M8 bolt
- * INTERCONNECTS: Insulated Copper bar

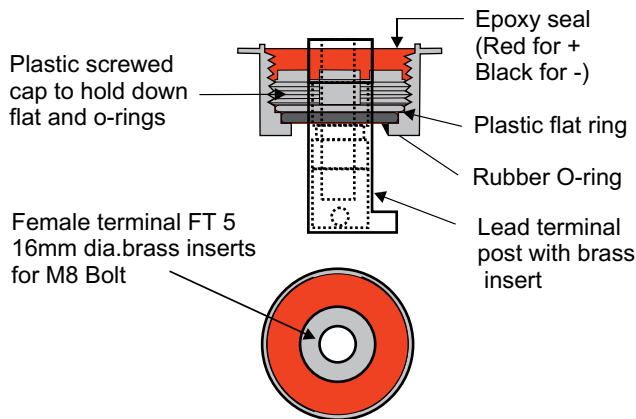
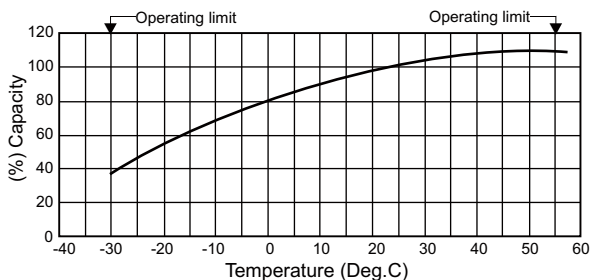
APPLICATIONS

- * Telecommunications
- * Power Stations
- * UPS- Uninterruptible Power
- * Standby Power Systems
- * Emergency lighting
- * Fire & security
- * Switchgear
- * Power Control systems
- * Cellular radio
- * PV -Photovoltaic Systems
- * Alternative Energy Systems

Extra Features of the SEC 12FTA - AGM - Battery

Conventional sealed Valve Regulated Lead acid batteries using Absorbed Glass Mat (AGM) technology are used in temperature controlled conditions for Float Charge standby applications.

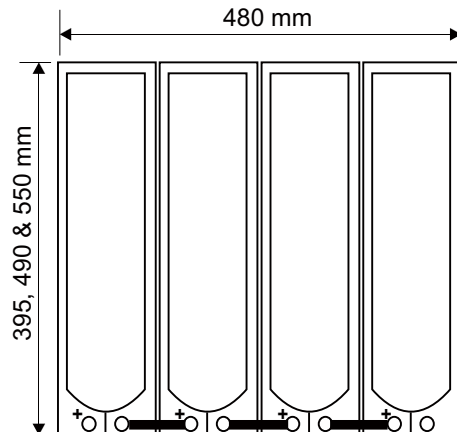
CELLYTE 12FTA batteries employing Monobloc Catalyst in the cell head space, a deep cycle special Virgin pure Lead Tin (1.6%) positive plate alloy, can be used in environments with temperatures up to 30C. in areas of unstable (cyclic) power conditions- instead of the more expensive gelled electrolyte batteries. At lower cost Calcium Tin plate is also available.



TYPICAL TRIPLE SEAL DETAIL

Applicable Standards

UL Component approval
BS 6290 Part 4
Eurobat
IEC 60896-21/22-2004

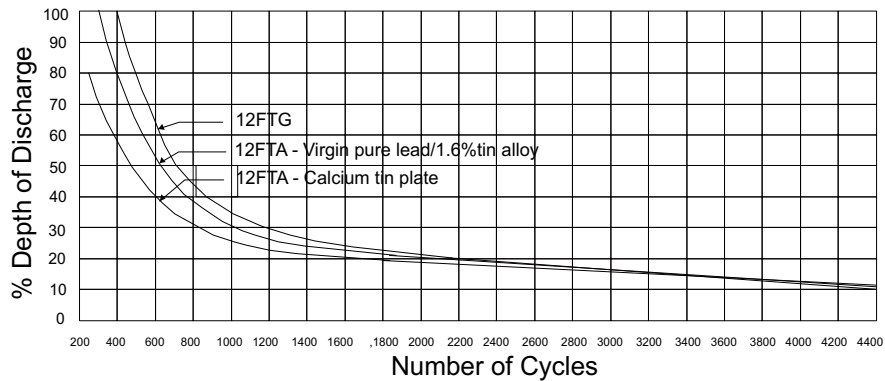


Typical Layout and wiring of 12FTA & G 80 to 175 in a 19" rack

Constant Voltage Charge

It is recommended that **CELLYTE** 12FTA & G batteries use the constant voltage method of charging. The setting of the charge voltage must be regularly checked, to optimized the battery performance & life it is necessary to ensure that the voltage is kept within the following limits:

Float Service Voltage 2.25 Vpc \pm 0.01 Vpc at 20C.



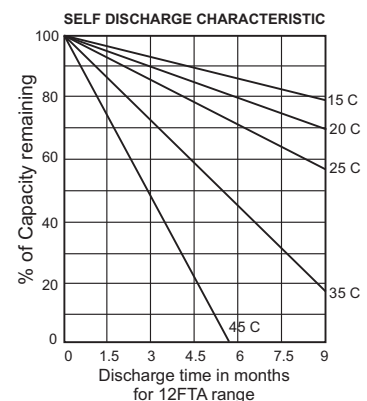
Battery Deep Cycling Capability - 12FTA

This range of front terminal batteries has been designed to achieve maximum life when used in float service at 20C. However when batteries are used in location of unreliable power supplies and are subject to frequent power outages the batteries are infact being deep cycled. If the power outage is longer than the designed battery support time then the batteries are being 80% deep cycled, often daily. For this application we recommend that the deep cycle 12FTG batteries are used. There are other applications where the power supply is more reliable but still subject to some power outages. For these applications we have designed the Virgin Pure Lead Tin (1.6%) positive plate 12FTA AGM batteries, which can be supplied at a considerably lower cost than the gelled electrolyte batteries. At lower cost a Calcium Tin plate is available.

Battery Float Charging (Temperature compensation)	
Temp. 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. However the catalyst/vent reduces the need for temperature compensation up to 30°C

For higher or lower temperatures outside the table range use temperature correction factor of 0.004 \pm 0.01 per cell, per deg.C



Benefits of Catalyst in SEC VRLA Batteries

Catalyst Reduces Float Current

One of the most immediate, observable effects of installing a catalyst in a VRLA cell is a sudden drop in the float current. Typically float currents are one half or less when a catalyst is installed. Adding a catalyst to the cell prevents some of the oxygen reaching the negative plate and allows the negative plate to stay polarised. This means that less current needs to be supplied to the cell from the charging system, manifesting itself as lower float current, leading to the following benefit :-

* Minimize water loss

Gasses are recombined into water inside the cell rather than exiting the cell. Too much gas leaving the cell can lead to premature dry-out and cell failure. Cell dry is a major cause of VRLA cell failure

* Increased life

There are many potential failure modes of VRLA cells. A number of these failure modes can be mitigated by the catalyst technology such as: Cell dry out, positive plate corrosion, thermal runaway, capacity loss due to negative plate depolarization

* Minimize positive plate corrosion

A reduction in float current reduces the amount of over-charge on the positive plate which directly impacts the corrosion rate. The design life of a lead acid cell is based on the corrosion of the plate barring any other unforeseen failure modes.

* Maintain cell capacity

Many VRLA cells in service are failing capacity tests because their negative plates are depolarized. In fact significant capacity increases have been seen on some cells just by installing a catalyst.

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>

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

SEC European Sales Office
42 rue de la Rochette
77000 Melun
France
Tel 33 6 75 59 06 92
christian.dhainaut@secbattery.com

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

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

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