MICROLYTE + Plus Range

Maintenance-Free Rechargeable
Sealed Lead Acid Batteries
6 volt 1.3 Ah to 12 volt 275 Ah

MH25280

Features

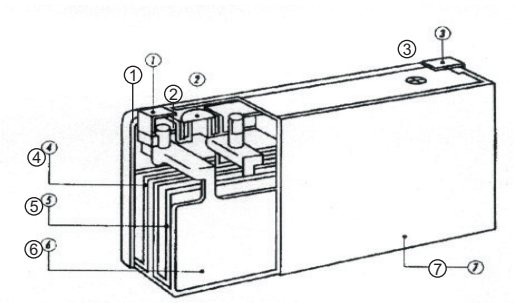
* Maintenance free
* Leak proof / spill proof
* Gas recombination
* Absorbed electrolyte
* Float / cycle use
* Low self discharge rate
* Safety valve
* Lead calcium alloy
* Useable in any position
* Rugged design
* Available in flame retardant ABS material (optional)

Application

* UPS system DC & AC
* Telecommunication PABX etc.
* Emergency lighting
* Fire & security alarm system
* Portable VTR/TV
* Power tools
* Computer
* Toys - cars
* Fans
* Electronic torch
* Window washer

Battery Construction

1. Negative Terminal
2. Safety valve
3. Positive Terminal
4. Positive Electrode
5. Separator
6. Negative Electrode
7. Plastic Case



***MICROLYTE* + Plus** Valve regulated batteries are of the absorbed electrolyte type. The cells are designed so that a controlled amount of electrolyte is contained within an absorbent non woven separator material that separates the battery plates. This type of separator construction allows full wetting of the plates with the available electrolyte and also allows the passage of oxygen generated during charging. This construction is generally referred to as absorbed glass mat (AGM) type

***MICROLYTE* + Plus** Valve regulated batteries are sealed with the exception of a one way valve that opens when excess pressure builds up inside the battery, the valve automatically reseals itself. The recombination of gases is accomplished by allowing oxygen produced at the positive plate during charging to pass through the separator material to the negative plate where the recombination reaction occurs The valve controls the internal pressure of the battery to optimize the efficiency of the recombination reaction and minimize the quantity of electrolyte released as gas.

Introduction

SEC Industrial Battery Co. is a large producer of modern technology, valve regulated (sealed) batteries. In its new battery manufacturing facility it has been able to draw on a wealth of international experience and knowledge to produce a high quality, reliable lead acid battery. The continuing installation of the most modern production equipment makes continuous product improvement possible.

General Features

* **Valve Regulated Construction (sealed)**

  The **SEC** valve regulated AGM rechargeable lead acid battery allows safe, trouble free operation in any position. There is never any requirement to top up electrolyte because over 99% of all Gases generated in normal operation are recombined inside the battery.

* **Immobilized Electrolyte**

  Due to the type of construction, the batteries can be shipped by sea, road or air without special handling and packaging precautions. Terminals are protected from the possibility of short circuit at all times.

* **Low Self Discharge**

  Because of the use of Lead Calcium grids batteries can be stored for long periods of time without recharge.

* **Cycle or Stand-By Service**

  Batteries are suitable for either cycling or standby Float service.

* **Tough Construction**

  SEC *MICROLYTE* + Plus batteries utilize tough, high impact resistant and non-conductive ABS plastic for cases and lids. Batteries are also available in Flame Retardant ABS cover and case as an option.

* **Compact Design**

  SEC *MICROLYTE* + Plus batteries utilize virgin lead and the best possible raw materials to build a high energy density battery. The International design team has a policy of continuous product improvement.

MICROLYTE+Plus - Ampere Hour Discharge Data @ 20 C.

SEC M+P AGM TYPE	END Volts / CELL	DISCHARGE DATA AMPS @ 20 C. DISCHARGE TIME IN MINUTES						END Volts / CELL	DISCHARGE DATA AMPERE HOURS @ 20 C DISCHARGE TIME IN HOURS											
		5	10	15	20	30	45		1	1.5	2	3	4	5	6	8	10	12	20	24
SEC 6MP-1.3	**1.67**	3.63	2.85	2.15	1.70	1.36	1.03	**1.75**	0.78	0.90	0.95	1.02	1.06	1.10	1.14	1.16	1.20	1.23	1.30	1.33
SEC 6MP-3.2	**1.67**	8.42	6.61	4.98	3.95	3.15	2.39	**1.75**	1.81	2.10	2.31	2.48	2.71	2.81	2.91	3.01	3.10	3.18	3.30	3.37
SEC 6MP-4.5	**1.67**	12.1	9.49	7.15	5.67	4.52	3.43	**1.75**	2.60	3.02	3.07	3.30	3.57	3.70	3.83	4.07	4.20	4.31	4.50	4.59
SEC 6MP-4.5SP	**1.67**	12.3	9.67	7.29	5.78	4.61	3.50	**1.75**	2.65	3.07	3.16	3.40	3.70	3.83	3.96	4.17	4.30	4.41	4.70	4.79
SEC 6MP-7.0	**1.67**	18.6	14.6	11.0	8.72	6.96	5.28	**1.75**	4.00	4.64	4.93	5.30	5.11	5.30	5.49	6.60	6.80	6.97	7.00	7.14
SEC 6MP-7.5	**1.67**	19.1	15.0	11.3	8.94	7.13	5.41	**1.75**	4.10	4.76	5.21	5.60	5.40	5.60	5.80	6.98	7.20	7.38	7.50	7.65
SEC 6MP-10	**1.67**	26.0	20.4	15.4	12.2	9.74	7.39	**1.75**	5.60	6.50	7.07	7.60	7.33	7.60	7.87	9.22	9.50	9.74	10.00	10.2
SEC 6MP-12	**1.67**	32.6	25.6	19.3	15.3	12.2	9.24	**1.75**	7.00	8.12	8.46	9.10	10.1	10.5	10.9	10.7	11.00	11.3	12.00	12.2
SEC 6MP-130	**1.67**	326	256	193	153	122	92.4	**1.75**	70.0	81.2	88.4	95.1	99.4	103	107	113	117	120	128	131
SEC 6MP-200	**1.67**	488	383	289	229	183	139	**1.75**	105	122	133	143	150	155	160	170	175	179	192	196
SEC 6MP-220	**1.67**	535	420	316	251	200	152	**1.75**	115	133	148	159	166	172	178	189	195	200	214	218
SEC 6MP-230	**1.67**	563	442	333	264	211	160	**1.75**	121	140	154	166	174	180	186	199	205	210	224	228
SEC 12MP-1.3	**1.67**	3.63	2.85	2.15	1.70	1.36	1.03	**1.75**	0.78	0.90	0.95	1.02	1.06	1.10	1.14	1.16	1.20	1.23	1.30	1.33
SEC 12MP-2.2	**1.67**	5.81	4.56	3.44	2.73	2.18	1.65	**1.75**	1.25	1.45	1.53	1.65	1.79	1.85	1.91	1.94	2.00	2.05	2.20	2.24
SEC 12MP-3.3	**1.67**	8.42	6.61	4.98	3.95	3.15	2.39	**1.75**	1.81	2.10	2.31	2.48	2.70	2.80	2.90	2.91	3.00	3.08	3.30	3.37
SEC 12MP-4.5	**1.67**	12.3	9.7	7.29	5.78	4.61	3.50	**1.75**	2.65	3.07	3.16	3.40	3.70	3.83	3.96	4.07	4.20	4.31	4.50	4.59
SEC 12MP-5.0	**1.67**	14.0	11.0	8.25	6.54	5.22	3.96	**1.75**	3.00	3.48	3.53	3.80	4.15	4.30	4.45	4.66	4.80	4.92	5.00	5.10
SEC 12MP-5SP	**1.67**	14.0	11.0	8.25	6.54	5.22	3.96	**1.75**	3.00	3.48	3.53	3.80	4.15	4.30	4.45	4.66	4.80	4.92	5.00	5.10
SEC 12MP-6.0	**1.67**	15.3	12.0	9.08	7.19	5.74	4.36	**1.75**	3.30	3.83	4.19	4.50	4.92	5.10	5.28	5.53	5.70	5.84	6.00	6.12
SEC 12MP-7.2	**1.67**	19.5	15.3	11.6	9.16	7.31	5.54	**1.75**	4.20	4.87	5.02	5.40	5.89	6.10	6.31	6.60	6.80	6.97	7.20	7.34
SEC 12MP-7.5	**1.67**	20.9	16.4	12.4	9.8	7.83	5.94	**1.75**	4.50	5.22	5.30	5.70	6.27	6.50	6.73	6.98	7.20	7.38	7.50	7.65
SEC 12MP-8.0	**1.67**	21.4	16.8	12.7	10.0	8.00	6.07	**1.75**	4.60	5.34	5.58	6.0	6.56	6.80	7.04	7.28	7.50	7.69	8.00	8.16
SEC 12MP-9.0	**1.67**	23.3	18.3	13.8	10.9	8.70	6.60	**1.75**	5.00	5.80	6.32	6.8	7.43	7.70	7.97	8.25	8.50	8.71	9.00	9.18
SEC 12MP-12	**1.67**	32.6	25.6	19.3	15.3	12.2	9.2	**1.75**	7.00	8.12	8.46	9.1	10.1	10.5	10.9	10.7	11.0	11.3	12.0	12.2
SEC 12MP-14	**1.67**	37.2	29.2	22.0	17.4	13.9	10.6	**1.75**	8.00	9.28	9.86	10.6	11.6	12.0	12.4	12.6	13.0	13.3	14.0	14.3
SEC 12MP-18	**1.67**	46.0	36.1	27.2	21.6	17.2	13.1	**1.75**	9.90	11.5	12.6	13.5	14.8	15.3	15.8	16.5	17.0	17.4	18.0	18.4
SEC 12MP-20	**1.67**	55.8	43.8	33.0	26.2	20.9	15.8	**1.75**	12.0	13.9	14.2	15.3	16.9	17.5	18.1	17.9	18.5	19.0	20.0	20.4
SEC 12MP-24B	**1.67**	62.8	49.3	37.1	29.4	23.5	17.8	**1.75**	13.5	15.7	17.2	18.5	20.3	21.0	21.7	21.8	22.5	23.1	24.0	24.5
SEC 12MP-26A	**1.67**	68.8	54.0	40.7	32.3	25.8	19.5	**1.75**	14.8	17.2	18.1	19.5	21.2	22.0	22.8	23.3	24.0	24.6	26.0	26.5
SEC 12MP-28A	**1.67**	72.1	56.6	42.6	33.8	27.0	20.5	**1.75**	15.5	18.0	19.5	21.0	23.2	24.0	24.8	25.2	26.0	26.7	28.0	28.6
SEC 12MP-35	**1.67**	85.1	66.8	50.3	39.9	31.8	24.2	**1.75**	18.3	21.2	23.3	25.0	27.2	28.2	29.2	31.0	32.0	32.8	35.0	35.7
SEC 12MP-40	**1.67**	102	80	60.5	48.0	38.3	29.0	**1.75**	22.0	25.5	27.0	29.0	31.8	33.0	34.2	36.9	38.0	39.0	40.0	40.8
SEC 12MP-44	**1.67**	113	88	66.6	52.8	42.1	31.9	**1.75**	24.2	28.1	32.6	35.0	38.1	39.5	40.9	42.7	44.0	45.1	46.0	46.9
SEC 12MP-55	**1.67**	149	117	88.0	69.8	55.7	42.2	**1.75**	32.0	37.1	40.0	43.0	45.8	47.5	49.2	53.4	55.0	56.4	58.0	59.2
SEC 12MP-70J	**1.67**	177	139	105	82.8	66.1	50.2	**1.75**	38.0	44.1	46.5	50.0	55.0	57.0	59.0	63.1	65.0	66.6	68.0	69.4
SEC 12MP-80	**1.67**	191	150	113	89.4	71.3	54.1	**1.75**	41.0	47.6	50.2	54.0	58.9	61.0	63.1	67.9	70.0	71.8	73.0	74.5
SEC 12MP-90	**1.67**	209	164	124	98.1	78.3	59.4	**1.75**	45.0	52.2	56.7	61.0	66.6	69.0	71.4	77.6	80.0	82.0	85.0	86.7
SEC 12MP-100	**1.67**	237	186	140	111	88.7	67.3	**1.75**	51.0	59.2	64.2	69.0	75.3	78.0	80.7	87.3	90.0	92.3	100	102
SEC 12MP-110	**1.67**	274	215	162	129	103	77.9	**1.75**	59.0	68.4	72.5	78.0	84.9	88.0	91.1	97.0	100	103	110	112
SEC 12MP-120	**1.67**	284	223	168	133	106	80.5	**1.75**	61.0	70.8	73.5	79.0	86.9	90.0	93.2	107	110	113	120	122
SEC 12MP-130	**1.67**	326	256	193	153	122	92.4	**1.75**	70.0	81.2	85.6	92.0	101	105	109	116	120	123	130	133
SEC 12MP-150	**1.67**	349	274	206	164	131	99.0	**1.75**	75.0	87.0	94.9	102	111	115	119	131	135	138	148	151
SEC 12MP-160	**1.67**	405	318	239	190	151	115	**1.75**	87.0	101	107	115	125	130	135	146	150	154	165	168
SEC 12MP-175	**1.67**	419	329	248	196	157	119	**1.75**	90.0	104	113	122	135	140	145	155	160	164	176	180
SEC 12MP-200	**1.67**	488	383	289	229	183	139	**1.75**	105	122	130	140	150	155	160	175	180	185	200	204
SEC 12MP-220	**1.67**	535	420	316	251	200	152	**1.75**	115	133	141	152	166	172	178	194	200	205	220	224
SEC 12MP-250	**1.67**	591	464	349	277	221	168	**1.75**	127	147	160	173	189	196	203	223	230	236	250	255
SEC 12MP-275	**1.67**	651	511	385	305	244	185	**1.75**	140	162	177	190	207	215	223	243	250	256	270	275

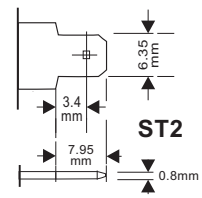
Actual Battery Discharge Data may be +/-5% of figures shown.

Dimensions and Weights - *MICROLYTE + Plus*

SEC MICROLYTE TYPE	Capacity Nom C/20 to 1.75 vpc	Capacity Nom C/10 to 1.75 vpc	Internal Resistance Milliohms	Maximum Charging Amps	Maximum Discharge 5 Sec	Battery Terminal Type	Battery Weight KG	BATTERY DIMENSIONS Length mm	Width mm	Height mm H	Height mm H1	Units Per Box
SEC 6MP-1.3	1.3	1.2	70	0.22	36	ST1	0.31	98.0	25.0	51.0	59.0	40
SEC 6MP-3.2	3.2	3.0	30	0.55	70	ST1	0.64	124	34.0	60.0	65.0	20
SEC 6MP-4.5	4.5	3.85	18	0.7	75	ST1	0.78	71.0	48.0	102	106	20
SEC 6MP-4.5SP	4.7	3.95	20	0.7	75	ST7	0.82	67.5	67.5	97.5	112	20
SEC 6MP-7.0	7.0	6.5	13	1.2	105	ST1	1.18	151	34.0	93.5	99.0	16
SEC 6MP-7.5	7.5	6.75	13	1.2	105	ST1	1.18	151	34.0	93.5	99.0	16
SEC 6MP-10	10	9.0	10	2.0	120	ST1	1.70	151	50.0	94.0	98.0	10
SEC 6MP-12	12	10.8	10	2.0	180	ST1	1.87	151	50.0	94.0	98.0	10
SEC 6MP-130	130	120	3.0	19	1400	FT4	17.0	196	170	214	214	1
SEC 6MP-200	200	180	2.4	29	2200	FT5	28.7	306	168	220	220	1
SEC 6MP-220	220	200	1.1	32	2600	FT5	30.2	323	178	224	224	1
SEC 6MP-230	230	210	1.0	36	3100	FT5	33.0	243	188	275	275	1
SEC 12MP-1.3	1.30	1.20	130	0.22	36	ST1	0.61	97.0	43.5	52.0	57.0	20
SEC 12MP-2.2	2.20	2.00	90	0.36	60	ST1	1.00	179	35.0	60.0	65.0	20
SEC 12MP-3.3	3.20	3.05	60	0.55	60	ST1	1.30	134	67.0	61.0	67.0	10
SEC 12MP-4.5	4.50	3.85	50	0.70	70	ST1	1.70	90.0	70.0	102	106	10
SEC 12MP-5.0	5.00	4.40	40	0.80	75	ST1	1.90	91.0	71.0	102	105	10
SEC 12MP-5SP	5.00	4.40	40	0.80	80	ST1&2	2.00	151	51.0	93.0	98.0	10
SEC 12MP-6.0	6.00	5.45	35	1.00	95	ST1&2	2.15	151	66.5	95.0	99.0	8
SEC 12MP-7.2	7.20	6.60	33	1.10	100	ST1&2	2.30	151	66.5	95.0	99.0	8
SEC 12MP-7.5	7.50	6.90	30	1.20	105	ST1&2	2.40	151	66.5	95.0	99.0	8
SEC 12MP-8.0	8.00	7.60	29	1.30	110	ST1&2	2.50	151	66.5	95.0	99.0	8
SEC 12MP-9.0	9.00	8.10	28	1.40	115	ST1&2	2.60	151	66.5	95.0	99.0	8
SEC 12MP-12	12	10.8	30	2.00	180	ST2	3.80	152	99.0	98.0	102	4
SEC 12MP-14	14	12.6	27	2.30	200	ST2	4.10	152	99.0	98.0	102	4
SEC 12MP-18	18	16.7	14	2.80	250	FT2	5.88	181	76.0	167	167	2
SEC 12MP-20	20	18.0	11	2.70	265	FT2	6.00	181	76.0	167	167	2
SEC 12MP-24B	24	22.5	9.2	4.00	270	FT2	8.00	166	126	176	176	1
SEC 12MP-26A	26	24.0	8.0	4.50	288	FT2	8.10	166	126	176	176	1
SEC 12MP-26B	25	23.0	8.2	4.50	288	FT2	8.10	175	166	126	126	1
SEC 12MP-28A	28	25.2	7.9	4.70	300	FT2	9.70	166	126	176	176	1
SEC 12MP-35	35	29.0	7.3	5.60	330	FT3	10.5	196	131	155	180	1
SEC 12MP-40	40	37.0	6.8	7.00	470	FT3	13.2	197	165	170	170	1
SEC 12MP-44	46	37.8	6.0	7.40	500	FT3	14.7	197	165	170	170	1
SEC 12MP-55	58	49.5	5.6	9.60	700	FT3	18.5	230	138	210	210	1
SEC 12MP-70J	70	64.0	5.5	11.4	800	FT3/Flag	23.0	350	166	174	174	1
SEC 12MP-80	77	69.0	5.4	12.3	850	FT3	25.7	259	169	208	208	1
SEC 12MP-90	88	79.0	4.5	14.0	900	FT3	25.7	259	169	208	208	1
SEC 12MP-100	100	89.0	4.3	15.8	950	FT3	28.0	307	170	215	215	1
SEC 12MP-110	110	99.0	3.9	17.5	1000	FT3	31.0	328	172	215	215	1
SEC 12MP-120	120	109	3.4	19.0	1050	FT3	31.5	339	173	215	215	1
SEC 12MP-130	130	119	3.1	21.0	1100	FT4	32.5	405	175	227	227	1
SEC 12MP-150	148	134	2.9	23.4	1200	FT5	42.0	342	173	285	285	1
SEC 12MP-160	165	150	2.8	26.2	1600	FT5	47.0	483	170	242	242	1
SEC 12MP-175	176	160	2.6	27.8	1800	FT5	52.0	530	209	225	225	1
SEC 12MP-200	200	180	2.3	31.4	2400	FT5	56.7	530	209	225	225	1
SEC 12MP-220	220	200	2.2	34.8	2700	FT5	63.0	524	240	225	225	1
SEC 12MP-250	253	230	2.0	40.0	3200	FT5	66.0	524	269	215	220	1
SEC 12MP-275	270	250	1.9	44.0	3400	FT5	76.0	524	269	215	225	1

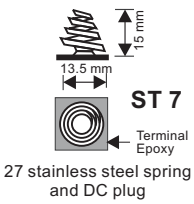
Actual Battery Dimensions may vary by +1% and capacity +/- 5%

Terminal Type and Details



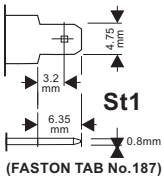
ST2

(FASTON TAB No. 250)



ST 7

27 stainless steel spring and DC plug



St1

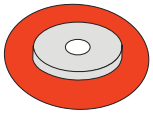
(FASTON TAB No.187)

Type FT 2
12mm Ø Brass Insert Terminal for M5 Bolt.

Type FT 3
14mm Ø Brass Insert Terminal for M6 Bolt.

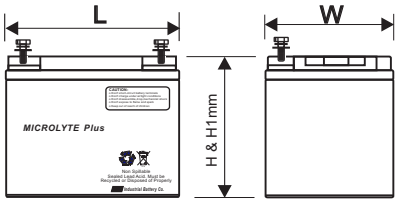
Type FT 4
16mm Ø Brass Insert Terminal for M6 Bolt.

Type FT 5
16mm Ø Brass Insert Terminal for M8 Bolt.

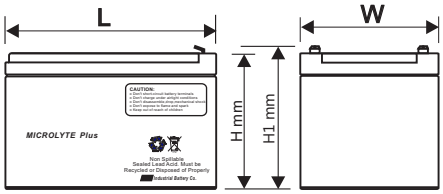


Typical View of Female insert Terminal.

Case Dimensions



FT 2,3,4&5 Female Terminal



ST 1 & 2 Faston Tab

MICROLYTE+Plus - Amps Discharge Data @ 20 C.

SEC M+P AGM TYPE	END Volts / CELL	DISCHARGE DATA AMPS @ 20 C. DISCHARGE TIME IN MINUTES						END Volts / CELL	DISCHARGE DATA AMPS @ 20 C. DISCHARGE TIME IN HOURS											
		5	10	15	20	30	45		1	1.5	2	3	4	5	6	8	10	12	20	24
SEC 6MP-1.3	**1.67**	3.63	2.85	2.15	1.70	1.36	1.03	**1.75**	0.78	0.60	0.47	0.34	0.27	0.22	0.19	0.15	0.12	0.10	0.07	0.06
SEC 6MP-3.2	**1.67**	8.42	6.61	4.98	3.95	3.15	2.39	**1.75**	1.81	1.40	1.15	0.83	0.68	0.56	0.48	0.38	0.31	0.26	0.17	0.14
SEC 6MP-4.5	**1.67**	12.1	9.49	7.15	5.67	4.52	3.43	**1.75**	2.60	2.01	1.53	1.10	0.89	0.74	0.64	0.51	0.42	0.36	0.23	0.19
SEC 6MP-4.5SP	**1.67**	12.3	9.7	7.29	5.78	4.61	3.50	**1.75**	2.65	2.05	1.58	1.13	0.92	0.77	0.66	0.52	0.43	0.37	0.24	0.20
SEC 6MP-7.0	**1.67**	18.6	14.6	11.0	8.72	6.96	5.28	**1.75**	4.00	3.09	2.46	1.77	1.28	1.06	0.91	0.82	0.68	0.58	0.35	0.30
SEC 6MP-7.5	**1.67**	19.1	15.0	11.3	8.94	7.13	5.41	**1.75**	4.10	3.17	2.60	1.87	1.35	1.12	0.97	0.87	0.72	0.62	0.38	0.32
SEC 6MP-10	**1.67**	26.0	20.4	15.4	12.2	9.74	7.39	**1.75**	5.60	4.33	3.53	2.53	1.83	1.52	1.31	1.15	0.95	0.81	0.50	0.43
SEC 6MP-12	**1.67**	32.6	25.6	19.3	15.3	12.2	9.24	**1.75**	7.00	5.41	4.23	3.03	2.53	2.10	1.81	1.33	1.10	0.94	0.60	0.51
SEC 6MP-130	**1.67**	332	260	196	155	124	94.1	**1.75**	70.0	54.1	44.2	31.7	24.8	20.6	17.8	14.2	11.7	10.0	6.40	5.44
SEC 6MP-200	**1.67**	488	383	289	229	183	139	**1.75**	105	81.2	66.5	47.7	37.4	31.0	26.7	21.2	17.5	14.9	9.60	8.16
SEC 6MP-220	**1.67**	544	427	322	255	204	154	**1.75**	115	88.9	73.9	53.0	41.5	34.4	29.7	23.6	19.5	16.7	10.7	9.10
SEC 6MP-230	**1.67**	563	442	333	264	211	160	**1.75**	121	93.6	77.2	55.3	43.4	36.0	31.1	24.9	20.5	17.5	11.2	9.52
SEC 12MP-1.3	**1.67**	3.63	2.85	2.15	1.70	1.36	1.03	**1.75**	0.78	0.60	0.47	0.34	0.27	0.22	0.19	0.15	0.12	0.10	0.07	0.06
SEC 12MP-2.2	**1.67**	5.81	4.56	3.44	2.73	2.18	1.65	**1.75**	1.25	0.97	0.77	0.55	0.45	0.37	0.32	0.24	0.20	0.17	0.11	0.09
SEC 12MP-3.3	**1.67**	8.42	6.61	4.98	3.95	3.15	2.39	**1.75**	1.81	1.40	1.15	0.83	0.68	0.56	0.48	0.36	0.30	0.26	0.17	0.14
SEC 12MP-4.5	**1.67**	12.3	9.67	7.29	5.78	4.61	3.50	**1.75**	2.65	2.05	1.58	1.13	0.92	0.77	0.66	0.51	0.42	0.36	0.23	0.19
SEC 12MP-5.0	**1.67**	14.0	11.0	8.25	6.54	5.22	3.96	**1.75**	3.00	2.32	1.77	1.27	1.04	0.86	0.74	0.58	0.48	0.41	0.25	0.21
SEC 12MP-5SP	**1.67**	14.0	11.0	8.25	6.54	5.22	3.96	**1.75**	3.00	2.32	1.77	1.27	1.04	0.86	0.74	0.58	0.48	0.41	0.25	0.21
SEC 12MP-6.0	**1.67**	15.3	12.0	9.08	7.19	5.74	4.36	**1.75**	3.30	2.55	2.09	1.50	1.23	1.02	0.88	0.69	0.57	0.49	0.30	0.26
SEC 12MP-7.2	**1.67**	19.5	15.3	11.6	9.16	7.31	5.54	**1.75**	4.20	3.25	2.51	1.80	1.47	1.22	1.05	0.82	0.68	0.58	0.36	0.31
SEC 12MP-7.5	**1.67**	20.9	16.4	12.4	9.81	7.83	5.94	**1.75**	4.50	3.48	2.65	1.90	1.57	1.30	1.12	0.87	0.72	0.62	0.38	0.32
SEC 12MP-8.0	**1.67**	21.4	16.8	12.7	10.0	8.00	6.07	**1.75**	4.60	3.56	2.79	2.00	1.64	1.36	1.17	0.91	0.75	0.64	0.40	0.34
SEC 12MP-9.0	**1.67**	23.3	18.3	13.8	10.9	8.70	6.60	**1.75**	5.00	3.87	3.16	2.27	1.86	1.54	1.33	1.03	0.85	0.73	0.45	0.38
SEC 12MP-12	**1.67**	32.6	25.6	19.3	15.3	12.2	9.24	**1.75**	7.00	5.41	4.23	3.03	2.53	2.10	1.81	1.33	1.10	0.94	0.60	0.51
SEC 12MP-14	**1.67**	37.2	29.2	22.0	17.4	13.9	10.6	**1.75**	8.00	6.19	4.93	3.53	2.90	2.40	2.07	1.58	1.30	1.11	0.70	0.60
SEC 12MP-18	**1.67**	46.0	36.1	27.2	21.6	17.2	13.1	**1.75**	9.90	7.66	6.28	4.50	3.69	3.06	2.64	2.06	1.70	1.45	0.90	0.77
SEC 12MP-20	**1.67**	55.8	43.8	33.0	26.2	20.9	15.8	**1.75**	12.0	9.28	7.11	5.10	4.22	3.50	3.02	2.24	1.85	1.58	1.00	0.85
SEC 12MP-24B	**1.67**	62.8	49.3	37.1	29.4	23.5	17.8	**1.75**	13.5	10.4	8.60	6.17	5.07	4.20	3.62	2.73	2.25	1.92	1.20	1.02
SEC 12MP-26A	**1.67**	68.8	54.0	40.7	32.3	25.8	19.5	**1.75**	14.8	11.4	9.07	6.50	5.31	4.40	3.80	2.91	2.40	2.05	1.30	1.11
SEC 12MP-28A	**1.67**	72.1	56.6	42.6	33.8	27.0	20.5	**1.75**	15.5	12.0	9.77	7.00	5.79	4.80	4.14	3.15	2.60	2.22	1.40	1.19
SEC 12MP-35	**1.67**	85.1	66.8	50.3	39.9	31.8	24.2	**1.75**	18.3	14.2	11.6	8.33	6.80	5.64	4.86	3.88	3.20	2.73	1.75	1.49
SEC 12MP-40	**1.67**	102	80.3	60.5	48.0	38.3	29.0	**1.75**	22.0	17.0	13.5	9.67	7.96	6.60	5.69	4.61	3.80	3.25	2.00	1.70
SEC 12MP-44	**1.67**	113	88.3	66.6	52.8	42.1	31.9	**1.75**	24.2	18.7	16.3	11.7	9.53	7.90	6.81	5.34	4.40	3.76	2.30	1.96
SEC 12MP-55	**1.67**	149	117	88.0	69.8	55.7	42.2	**1.75**	32.0	24.7	20.0	14.3	11.5	9.50	8.19	6.67	5.50	4.70	2.90	2.47
SEC 12MP-70J	**1.67**	177	139	105	82.8	66.1	50.2	**1.75**	38.0	29.4	23.3	16.7	13.8	11.4	9.83	7.88	6.50	5.55	3.40	2.89
SEC 12MP-80	**1.67**	191	150	113	89.4	71.3	54.1	**1.75**	41.0	31.7	25.1	18.0	14.7	12.2	10.5	8.49	7.00	5.98	3.65	3.10
SEC 12MP-90	**1.67**	209	164	124	98.1	78.3	59.4	**1.75**	45.0	34.8	28.4	20.3	16.6	13.8	11.9	9.70	8.00	6.83	4.25	3.61
SEC 12MP-100	**1.67**	237	186	140	111	88.7	67.3	**1.75**	51.0	39.4	32.1	23.0	18.8	15.6	13.5	10.9	9.00	7.69	5.00	4.25
SEC 12MP-110	**1.67**	274	215	162	129	103	77.9	**1.75**	59.0	45.6	36.3	26.0	21.2	17.6	15.2	12.1	10.0	8.54	5.50	4.68
SEC 12MP-120	**1.67**	284	223	168	133	106	80.5	**1.75**	61.0	47.2	36.7	26.3	21.7	18.0	15.5	13.3	11.0	9.40	6.00	5.10
SEC 12MP-130	**1.67**	326	256	193	153	122	92.4	**1.75**	70.0	54.1	42.8	30.7	25.3	21.0	18.1	14.6	12.0	10.3	6.50	5.53
SEC 12MP-150	**1.67**	349	274	206	164	131	99.0	**1.75**	75.0	58.0	47.4	34.0	27.7	23.0	19.8	16.4	13.5	11.5	7.40	6.29
SEC 12MP-160	**1.67**	405	318	239	190	151	115	**1.75**	87.0	67.3	53.5	38.3	31.4	26.0	22.4	18.2	15.0	12.8	8.25	7.01
SEC 12MP-175	**1.67**	419	329	248	196	157	119	**1.75**	90.0	69.6	56.7	40.7	33.8	28.0	24.2	19.4	16.0	13.7	8.80	7.48
SEC 12MP-200	**1.67**	488	383	289	229	183	139	**1.75**	105	81.2	65.1	46.7	37.4	31.0	26.7	21.8	18.0	15.4	10.0	8.50
SEC 12MP-220	**1.67**	535	420	316	251	200	152	**1.75**	115	88.9	70.7	50.7	41.5	34.4	29.7	24.3	20.0	17.1	11.0	9.35
SEC 12MP-250	**1.67**	591	464	349	277	221	168	**1.75**	127	98.2	80.2	57.5	47.3	39.2	33.8	27.9	23.0	19.6	12.5	10.6
SEC 12MP-275	**1.67**	651	511	385	305	244	185	**1.75**	140	108	88.4	63.3	51.9	43.0	37.1	30.3	25.0	21.4	13.5	11.5

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

MICROLYTE+Plus - Watts per Cell @ 20 C.

SEC M+P AGM TYPE	END Volts / CELL	DISCHARGE DATA Watts @ 20 C. DISCHARGE TIME IN MINUTES						END Volts / CELL	DISCHARGE DATA Watts Per Cell @ 20 C. DISCHARGE TIME IN HOURS											
		5	10	15	20	30	45		1	1.5	2	3	4	5	6	8	10	12	20	24
SEC 6MP-1.3	**1.67**	7.33	6.13	4.78	3.59	2.50	1.90	**1.75**	1.50	1.02	0.83	0.60	0.47	0.40	0.34	0.27	0.22	0.19	0.12	0.10
SEC 6MP-3.2	**1.67**	18.6	15.6	12.1	9.11	6.34	4.82	**1.75**	3.80	2.59	2.11	1.53	1.19	1.01	0.86	0.69	0.56	0.48	0.31	0.26
SEC 6MP-4.5	**1.67**	25.4	21.2	16.6	12.4	8.64	6.57	**1.75**	5.18	3.53	2.88	2.09	1.62	1.37	1.17	0.95	0.77	0.65	0.43	0.36
SEC 6MP-4.5SP	**1.67**	26.5	22.2	17.3	13.0	9.03	6.86	**1.75**	5.41	3.69	3.01	2.19	1.69	1.43	1.22	0.99	0.80	0.68	0.45	0.38
SEC 6MP-7.0	**1.67**	39.4	33.0	25.8	19.3	13.4	10.2	**1.75**	8.05	5.50	4.48	3.26	2.52	2.14	1.82	1.47	1.19	1.02	0.67	0.56
SEC 6MP-7.5	**1.67**	40.2	33.6	26.2	19.7	13.7	10.4	**1.75**	8.20	5.89	4.80	3.49	2.70	2.29	1.95	1.58	1.28	1.09	0.71	0.60
SEC 6MP-10	**1.67**	53.4	44.7	34.9	26.2	18.2	13.8	**1.75**	10.9	7.85	6.40	4.65	3.60	3.05	2.60	2.10	1.70	1.45	0.95	0.80
SEC 6MP-12	**1.67**	63.2	52.9	41.3	31.0	21.5	16.4	**1.75**	12.9	9.42	7.68	5.58	4.32	3.66	3.12	2.52	2.04	1.74	1.14	0.96
SEC 6MP-130	**1.67**	657	549	429	322	224	170	**1.75**	134	100	81.9	59.5	46.1	39.0	33.3	26.9	21.8	18.6	12.2	10.2
SEC 6MP-200	**1.67**	990	828	646	485	337	257	**1.75**	202	151	123	89.3	69.1	58.6	49.9	40.3	32.6	27.8	18.2	15.4
SEC 6MP-220	**1.67**	1000	918	717	538	374	284	**1.75**	224	168	137	100	77.0	65.3	55.6	44.9	36.4	31.0	20.3	17.1
SEC 6MP-230	**1.67**	1000	1000	746	559	389	296	**1.75**	233	176	143	104	80.6	68.3	58.2	47.0	38.1	32.5	21.3	17.9
SEC 12MP-1.3	**1.67**	7.33	6.13	4.78	3.59	2.50	1.90	**1.75**	1.50	1.02	0.83	0.60	0.47	0.40	0.34	0.27	0.22	0.19	0.12	0.10
SEC 12MP-2.2	**1.67**	11.76	9.84	7.68	5.76	4.01	3.05	**1.75**	2.40	1.73	1.41	1.02	0.79	0.67	0.57	0.46	0.37	0.32	0.21	0.18
SEC 12MP-3.3	**1.67**	16.7	13.9	10.88	8.16	5.68	4.32	**1.75**	3.40	2.59	2.11	1.53	1.19	1.01	0.86	0.69	0.56	0.48	0.31	0.26
SEC 12MP-4.5	**1.67**	25.4	21.2	16.6	12.4	8.64	6.57	**1.75**	5.18	3.53	2.88	2.09	1.62	1.37	1.17	0.95	0.77	0.65	0.43	0.36
SEC 12MP-5.0	**1.67**	28.2	23.6	18.4	13.8	9.60	7.30	**1.75**	5.75	3.93	3.20	2.33	1.80	1.53	1.30	1.05	0.85	0.73	0.48	0.40
SEC 12MP-5SP	**1.67**	28.2	23.6	18.4	13.8	9.60	7.30	**1.75**	5.75	3.93	3.20	2.33	1.80	1.53	1.30	1.05	0.85	0.73	0.48	0.40
SEC 12MP-6.0	**1.67**	33.8	28.3	22.1	16.6	11.5	8.76	**1.75**	6.90	4.71	3.84	2.79	2.16	1.83	1.56	1.26	1.02	0.87	0.57	0.48
SEC 12MP-7.2	**1.67**	38.2	32.0	25.0	18.7	13.0	9.91	**1.75**	7.80	5.65	4.61	3.35	2.59	2.20	1.87	1.51	1.22	1.04	0.68	0.58
SEC 12MP-7.5	**1.67**	40.2	33.6	26.2	19.7	13.7	10.4	**1.75**	8.20	5.89	4.80	3.49	2.70	2.29	1.95	1.58	1.28	1.09	0.71	0.60
SEC 12MP-8.0	**1.67**	42.6	35.7	27.8	20.9	14.5	11.0	**1.75**	8.70	6.28	5.12	3.72	2.88	2.44	2.08	1.68	1.36	1.16	0.76	0.64
SEC 12MP-9.0	**1.67**	50.7	42.4	33.1	24.8	17.3	13.1	**1.75**	10.4	7.07	5.76	4.19	3.24	2.75	2.34	1.89	1.53	1.31	0.86	0.72
SEC 12MP-12	**1.67**	64.7	54.1	42.2	31.7	22.0	16.8	**1.75**	13.2	9.42	7.68	5.58	4.32	3.66	3.12	2.52	2.04	1.74	1.14	0.96
SEC 12MP-14	**1.67**	76.9	64.4	50.2	37.7	26.2	19.9	**1.75**	15.7	11.0	8.96	6.51	5.04	4.27	3.64	2.94	2.38	2.03	1.33	1.12
SEC 12MP-18	**1.67**	82.8	69.3	54.1	40.6	28.2	21.5	**1.75**	16.9	14.1	11.5	8.37	6.48	5.49	4.68	3.78	3.06	2.61	1.71	1.44
SEC 12MP-20	**1.67**	113	94.3	73.6	55.2	38.4	29.2	**1.75**	23.0	15.7	12.8	9.30	7.20	6.10	5.20	4.20	3.40	2.90	1.90	1.60
SEC 12MP-24B	**1.67**	124	104.1	81.3	61.0	42.4	32.3	**1.75**	25.4	18.8	15.4	11.2	8.64	7.32	6.24	5.04	4.08	3.48	2.28	1.92
SEC 12MP-26A	**1.67**	143	119.3	93.1	69.8	48.6	37.0	**1.75**	29.1	20.4	16.6	12.1	9.36	7.93	6.76	5.46	4.42	3.77	2.47	2.08
SEC 12MP-28A	**1.67**	158	132.0	103.0	77.3	53.8	40.9	**1.75**	32.2	22.0	17.9	13.0	10.1	8.54	7.28	5.88	4.76	4.06	2.66	2.24
SEC 12MP-35	**1.67**	177	148	116	86.9	60.5	46.0	**1.75**	36.2	27.5	22.4	16.3	12.6	10.7	9.10	7.35	5.95	5.08	3.33	2.80
SEC 12MP-40	**1.67**	216	180	141	105.6	73.5	55.9	**1.75**	44.0	31.4	25.6	18.6	14.4	12.2	10.4	8.40	6.80	5.80	3.80	3.20
SEC 12MP-44	**1.67**	234	196	153	114	79.7	60.6	**1.75**	47.7	36.1	29.4	21.4	16.6	14.0	12.0	9.66	7.82	6.67	4.37	3.68
SEC 12MP-55	**1.67**	299	251	196	147	102	77.6	**1.75**	61.1	45.5	37.1	27.0	20.9	17.7	15.1	12.2	9.86	8.41	5.51	4.64
SEC 12MP-70J	**1.67**	356	298	232	174	121	92.2	**1.75**	72.6	53.4	43.5	31.6	24.5	20.7	17.7	14.3	11.6	9.86	6.46	5.44
SEC 12MP-80	**1.67**	384	321	251	188	131	99.4	**1.75**	78.3	57.3	46.7	33.9	26.3	22.3	19.0	15.3	12.4	10.6	6.94	5.84
SEC 12MP-90	**1.67**	438	366	286	214	149	113	**1.75**	89.3	66.7	54.4	39.5	30.6	25.9	22.1	17.9	14.5	12.3	8.08	6.80
SEC 12MP-100	**1.67**	495	414	323	242	169	128	**1.75**	101	78.5	64.0	46.5	36.0	30.5	26.0	21.0	17.0	14.5	9.50	8.00
SEC 12MP-110	**1.67**	559	467	365	274	190	145	**1.75**	114	86.4	70.4	51.2	39.6	33.6	28.6	23.1	18.7	16.0	10.5	8.80
SEC 12MP-120	**1.67**	608	508	397	298	207	157	**1.75**	124	94.2	76.8	55.8	43.2	36.6	31.2	25.2	20.4	17.4	11.4	9.60
SEC 12MP-130	**1.67**	657	549	429	322	224	170	**1.75**	134	102	83.2	60.5	46.8	39.7	33.8	27.3	22.1	18.9	12.4	10.4
SEC 12MP-150	**1.67**	740	619	483	362	252	192	**1.75**	151	116	94.7	68.8	53.3	45.1	38.5	31.1	25.2	21.5	14.1	11.8
SEC 12MP-160	**1.67**	823	689	538	403	281	213	**1.75**	168	130	106	76.7	59.4	50.3	42.9	34.7	28.1	23.9	15.7	13.2
SEC 12MP-175	**1.67**	877	734	573	430	299	227	**1.75**	179	138	113	81.8	63.4	53.7	45.8	37.0	29.9	25.5	16.7	14.1
SEC 12MP-200	**1.67**	985	824	643	482	336	255	**1.75**	201	157	128	93.0	72.0	61.0	52.0	42.0	34.0	29.0	19.0	16.0
SEC 12MP-220	**1.67**	1000	918	717	538	374	284	**1.75**	224	173	141	102	79.2	67.1	57.2	46.2	37.4	31.9	20.9	17.6
SEC 12MP-250	**1.67**	1000	1037	810	607	423	321	**1.75**	253	196	160	116	90.0	76.3	65.0	52.5	42.5	36.3	23.8	20.0
SEC 12MP-275	**1.67**	1000	1000	880	660	459	349	**1.75**	275	212	173	126	97.2	82.4	70.2	56.7	45.9	39.2	25.7	21.6

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

Battery Storage

SEC *MICROLYTE* + Plus batteries have excellent charge retention characteristics, meaning that the self-discharge rate is low, less than 2% per month at 20 Deg C. To ensure the battery does not over discharge during storage, or when not in use, it is necessary to understand what is meant by fully discharged. A discharged battery can be determined by the open circuit voltage of the battery. Typically a battery is fully discharged when the open circuit voltage reaches 1.92 Vpc (11.5V) in a 12V battery.

Final Acceptable Discharge

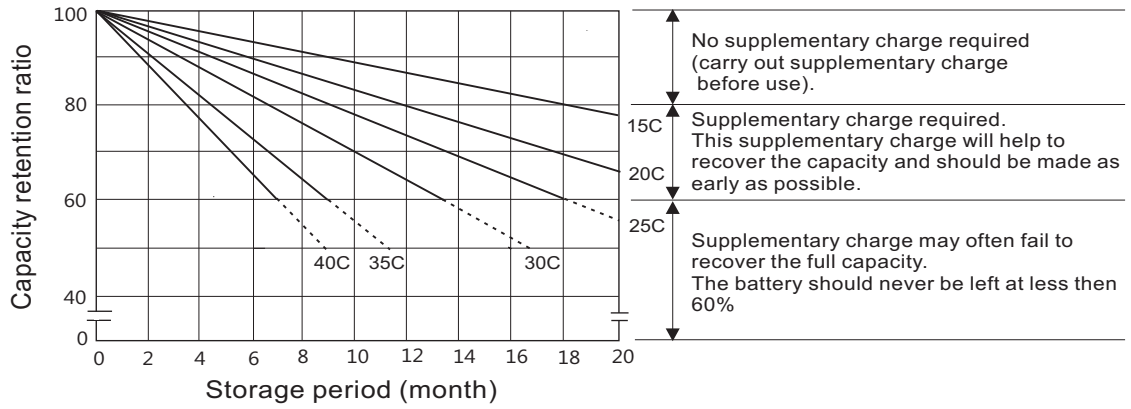
Discharge Current	Final Discharge Voltage
Up to 0.1 A	1.75
0.11 to 0.17 CA	1.70
0.18 to 0.25 CA	1.67
0.26 to 0.6 CA	1.60

In discharging a battery, lead sulphate (sulphation) is formed. If the battery is recharged as soon as discharge is completed then the lead sulphate is converted back into active material and electrolyte. However, on self discharge the lead sulphate that is formed may become non recoverable. That is, it cannot be recharged. The lower the voltage that a battery is allowed to fall to under self discharge, the more likely it is that the sulphate formation will not be reversible and the battery will be damaged beyond recovery.

Precautions against over Self Discharge

* **The batteries should be stored in a cool, dry place 25C or below**
* **The batteries should not be stored in direct sunlight.**
* **The batteries should not be subjected to an external heat source.**
* **An adequate stock control system should be introduced - first in first out basis.**

Capacity Retention Characteristic



Supplementary Charge

It may be necessary to give the batteries a refreshing charge during the period the batteries are being stored. Maximum recommended storage times are detailed below, if storage exceeds these times or the open circuit voltage of a battery being stored falls below 12.40 Vpc (6.2 Vpc) then it is recommended the batteries be given a 12 to 24 hour boost charge immediately at 2.33 - 2.43 Vpc.at 20-25C

Storage Temperature	Charging Interval
20 Deg C or less	Every 9 months
25 Deg C - 30 Deg C	Every 6 months
30 Deg C - 40 Deg C	Every 3 months

SEC Industrial Bettery Co. range of products

CELLYTE 2CMT/G
Modular Steel Rack

CELLYTE 2TLAM/G
Tubular Steel Rack

CELLYTE 2CMT/G,CELLYTE 2TLAM/G with Catalyst

CELLYTE 12PLF & 12PLT Range

CELLYTE 12FTA/G Range

CELLYTE 6-12TUA Range

CELLYTE 6-12TSG Range

CELLYTE 6-12TLA Range

CELLYTE 6-12TLG Range

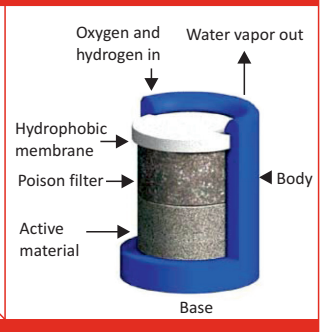
MICROLYTE +Plus Range

MICROLYTE Red Top Range

CELLYTE 2ETG OPzV Range
Tubular Steel Rack

SEC Tubular OPzS Range

Nickel Cadmium Range
Pocket Plate flooded and Valve Regulated



Typical VRLA catalyst

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