



## GEL BATTERIES

### CONSTRUCTION



### BENEFITS

- Absolutely maintenance free. No water addition required, no acid spilling and no release of acid vapors
- Non-hazardous material allows to be transported easily by air, sea or rail transportation.
- Gelled electrolyte with excellent thermal capabilities.
- Electrolyte will not stratify, allows efficient recharge.
- Long durability and cycle life for deep discharged applications.
- Low discharge-resistant.
- Low self-discharge.
- Tank formed plates ensure the equalization of battery.
- Sealed gel battery ensures safety and reliability.

### APPLICATIONS

- Golf Carts
- Wheelchairs
- Electric bicycles
- Solar Energy station
- Aids to Navigation
- Lighting
- Remote Monitoring
- Residential
- Communications
- UPS
- Medical Equipment
- Many others



### SPECIFICATIONS

BATTERY TYPE	NOMINAL VOLTAGE (V)	NOMINAL CAPACITY (20HR) (Ah)	DIMENSIONS						HT OVER TERMINAL		WEIGHT (APPROX.)		ASSEMBLY FIGURE *	
			L in (± 0.04)	M in (± 0.04)	H in (± 0.04)	L mm (± 1)	M mm (± 1)	H mm (± 1)	in (± 0.04)	mm (± 1)	lbs	kg	TERMINAL POSITION	TERMINAL TYPE
LG3-8	8	3	5.26	1.44	2.50	133.5	36.5	63.5	2.68	68	1.83	0.82	4	F1
LG2.6-12	12	2.6	7.01	1.34	2.36	178	34	60	2.60	66	2.38	1.08	2	F1
LG7-12	12	7	5.94	2.56	3.70	151	65	94	4.02	102	5.90	2.68	5	F2
LG9-12S	12	9	5.94	2.56	4.40	151	65	112	4.67	118.5	7.33	3.33	5	F2
LG12-12	12	12	5.94	3.86	3.74	151	98	95	3.94	100	9.99	4.54	5	F2
LG17-12	12	17	7.13	2.99	6.57	181	76	167	6.57	167	13.82	6.28	33	F3
LG20-12N	12	20	7.13	2.99	6.57	181	76	167	6.57	167	14.30	6.50	26	F8
LG24-12	12	24	6.54	6.89	4.92	166	175	125	4.92	125	20.90	9.50	33	F3
LG28-12	12	28	6.54	6.89	4.92	166	175	125	4.92	125	23.54	10.70	26	F9
LG28-12N	12	28	6.54	6.89	4.92	166	175	125	4.92	125	23.54	10.70	26	F8
LG30-12TN	12	30	6.54	4.96	6.93	166	126	176	6.93	176	21.30	9.68	26	F8
LG32-12	12	32	7.76	5.16	6.26	197	131	159	7.09	180	24.42	11.10	20	F4
LG40-12	12	40	7.79	6.54	6.73	198	166	171	6.73	171	31.04	14.11	25	F4
LG45-12	12	45	7.79	6.54	6.73	198	166	171	6.73	171	32.50	14.70	25	F4
LG45-12N	12	45	7.79	6.54	6.73	198	166	171	6.73	171	32.50	14.70	26	F8
LG22NF245	12	50	9.69	5.31	8.15	246	135	207	9.17	233	39.71	18.05	25	F15
LG22NF305	12	62	9.69	5.31	8.15	246	135	207	9.17	233	40.26	18.30	25	F15
LG65-12	12	65	13.78	6.54	6.85	350	166	174	6.85	174	51.81	23.55	25	F4
LG12280W	12	75	10.24	6.69	7.95	260	170	202	8.15	207	57.40	26.00	27	F8
LG12280WU	12	75	10.24	6.69	7.95	260	170	202	9.06	230	57.40	26.00	20	F14
LG12280WF	12	75	10.24	6.69	7.95	260	170	202	8.66	220	57.40	26.00	27	F19
LG100-12	12	100	16.06	6.81	8.27	408	173	210	9.69	246	82.52	37.51	20	F5
LG12390W	12	100	13.31	6.69	8.35	338	170	212	8.66	220	75.48	34.23	27	F8
LG12390WU	12	100	13.31	6.69	8.35	338	170	212	9.45	240	75.48	34.23	20	F14
LG12390WF	12	100	13.31	6.69	8.35	338	170	212	9.06	230	75.48	34.23	27	F19
LG12475W	12	135	13.58	6.69	10.82	345	170	275	11.30	287	103.57	46.97	27	F8
LG12475WU	12	135	13.58	6.69	10.75	345	170	273	11.85	301	103.57	46.97	20	F14
LG12475WF	12	135	13.58	6.69	10.75	345	170	273	11.46	291	103.57	46.97	27	F19

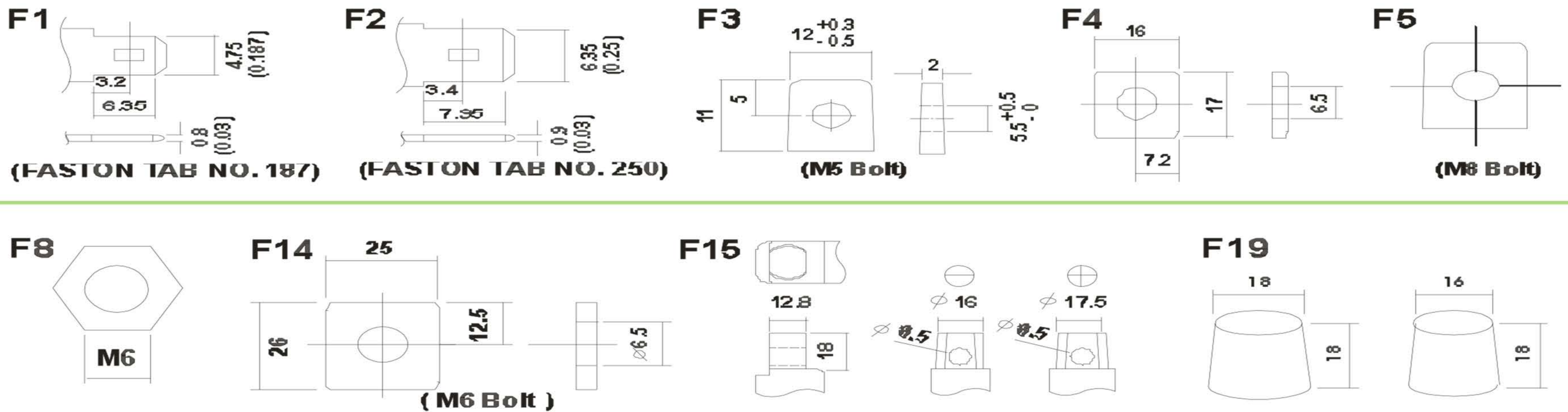
\* The terminal type can be changed to meet with customer's request.

### DEFINITION OF MODEL NAME

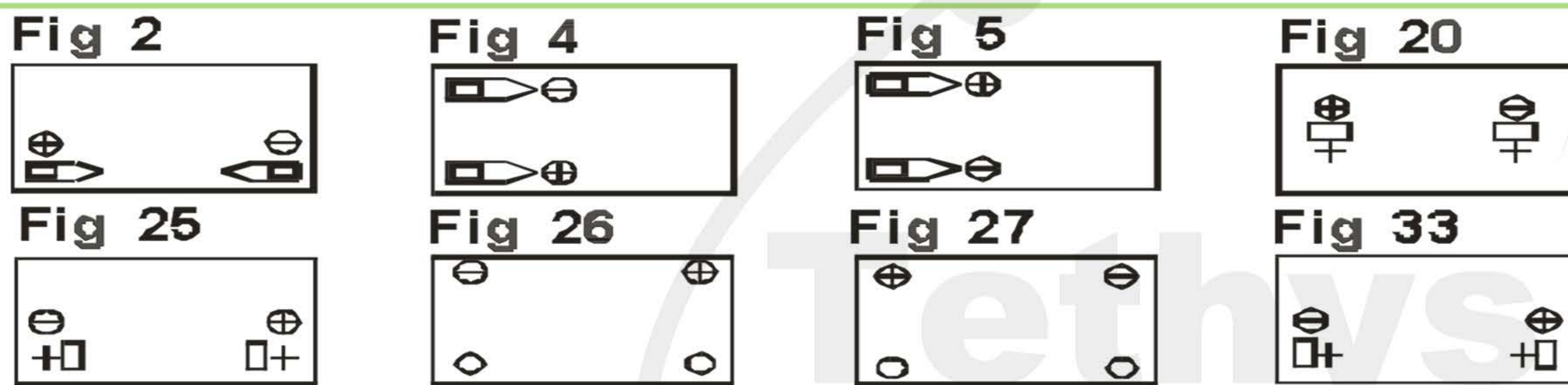
LG	Model name	30-12	Capacity in Ah - Voltage
		12280W	12V and 280W per cell (high rate type)
S	Same dimension but different capacity with the other type.		
T	Same capacity with tall dimension with the other type		
N	Type of terminal (B: Bolt / N: Nut)		

### TERMINAL TYPE

size: mm (inch)



### TERMINAL POSITION



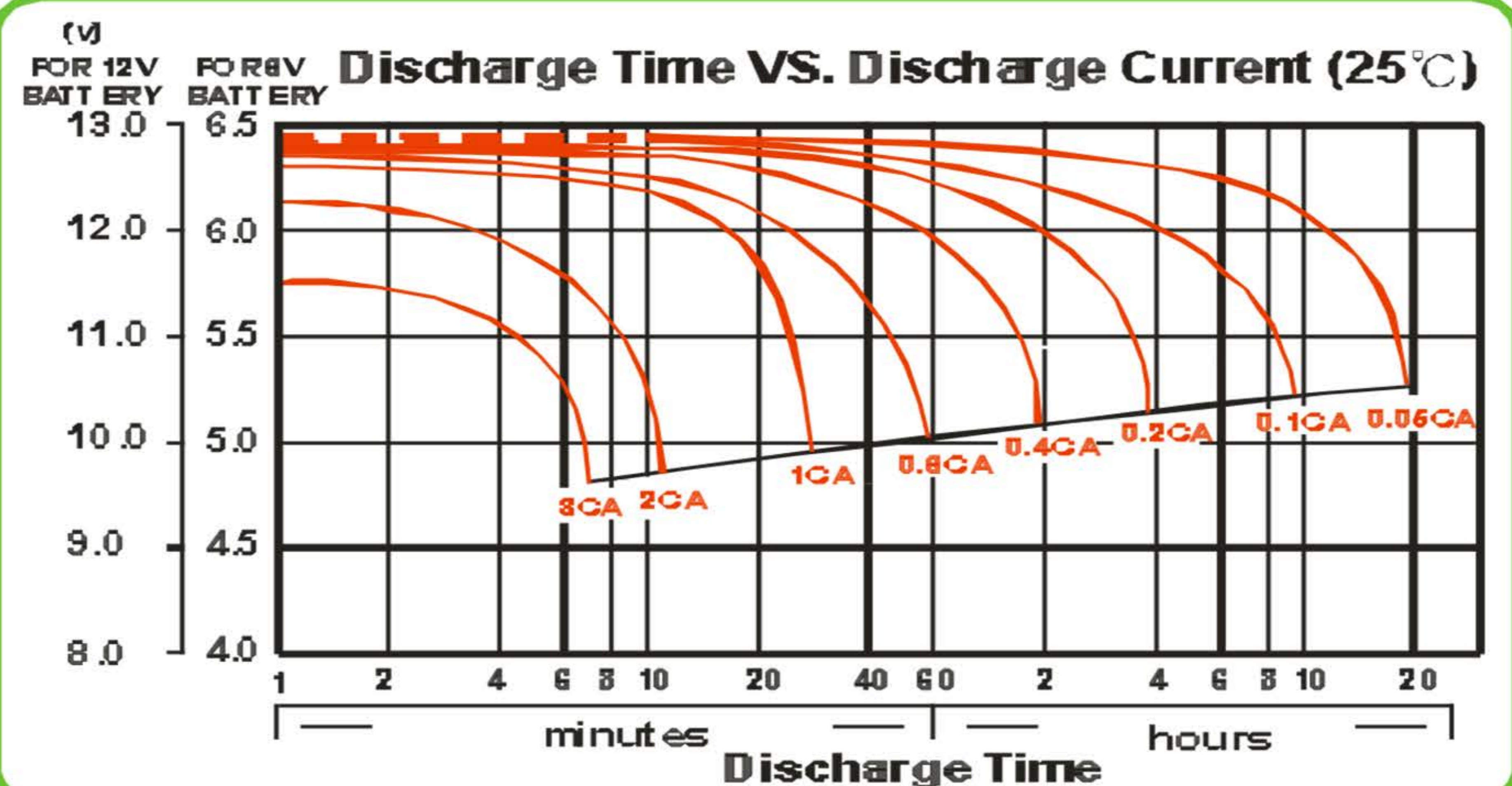
	Terminal
	Bolt and Nut type
	Terminal post type
	Positive
	Negative
	Nut type

### CHARGE METHOD

APPLICATION	STANDBY USE	CYCLE USE
Charge method	Constant voltage	
Setting voltage (v/cell)	2.25~2.30	2.30~2.35
Temperature factor	-3.3mV/°C/cell	-5.0mV/°C/cell
Max. charge current (CA)	0.3	0.3
Charge Time	Discharge 100%	24h
	Discharge 50%	20h
Temperature (°C)	0~40	

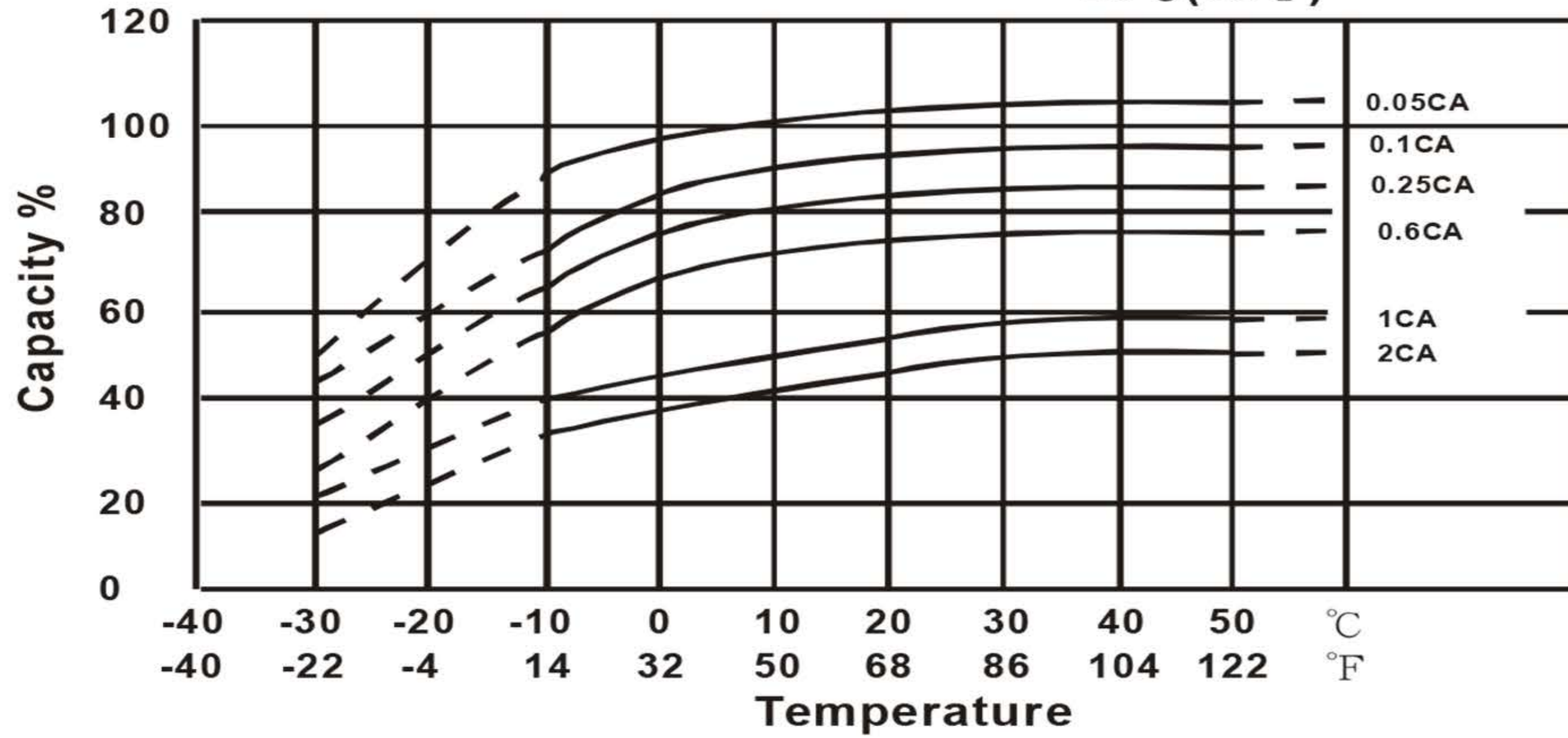
### Discharge current and final discharge voltage

Discharge current (A)	Final discharge Voltage(V/cell)
$(A) \leq 0.2C$	1.75
$0.2C \leq (A) < 0.5C$	1.70
$0.5C \leq (A) < 1.0C$	1.60
$(A) \geq 1.0C$	1.40

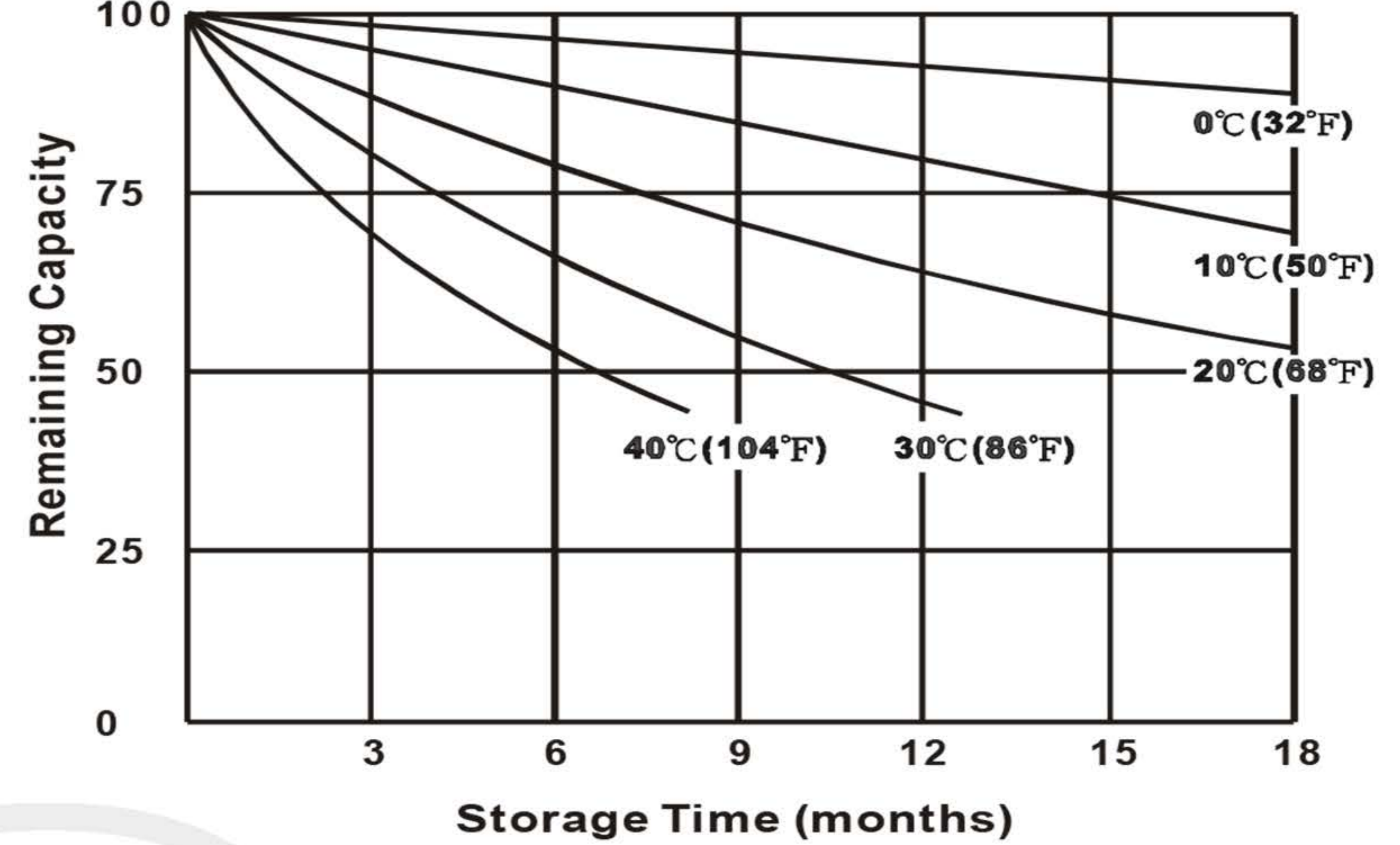


### CHARACTERISTICS

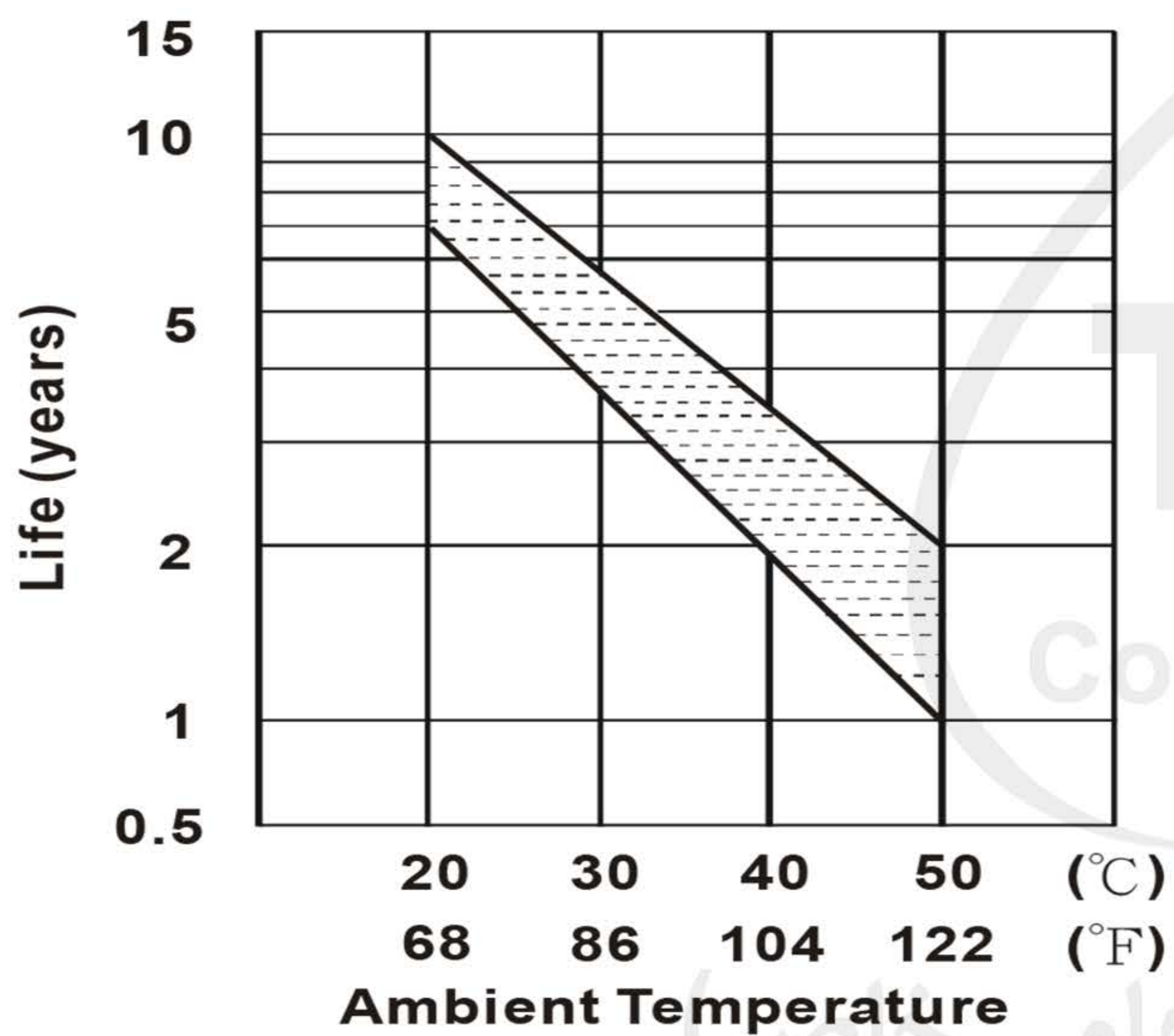
Effect of Temperature on Capacity  
20°C (68°F)



Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life

