



VM series is a general purpose battery with 10 years design life in float service. It meets with IEC, JIS, BS and YDT standards. With advanced AGM valve regulated technology and high purity raw material, the VM series battery maintains high consistency for better performance and reliable standby service life. It is suitable for UPS/EPS, Telecom, power grid, medical equipment, emergency light and security system applications.



Specification

Cells Per Unit	1
Voltage Per Unit	12
Nominal Capacity	100Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 27.5 Kg (Tolerance ±2%)
Internal Resistance	Approx. 5.5 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1000A (5 sec)
Short Circuit Current	1850A
Design Life	10 years (Float charging)
Recommended Maximum Charging Current	30 A
Reference Capacity	C3 75.0AH C5 85.0AH C10 100.0AH C20 105.8AH
Standby Use Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: -0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging be stored for up to 6 months at 25°C and then recharging than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions

Length	328±2mm (12.9 inches)
Width	172±2mm (6.77 inches)
Height	215±2mm (8.46 inches)
Total Height	220±2mm (8.66 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

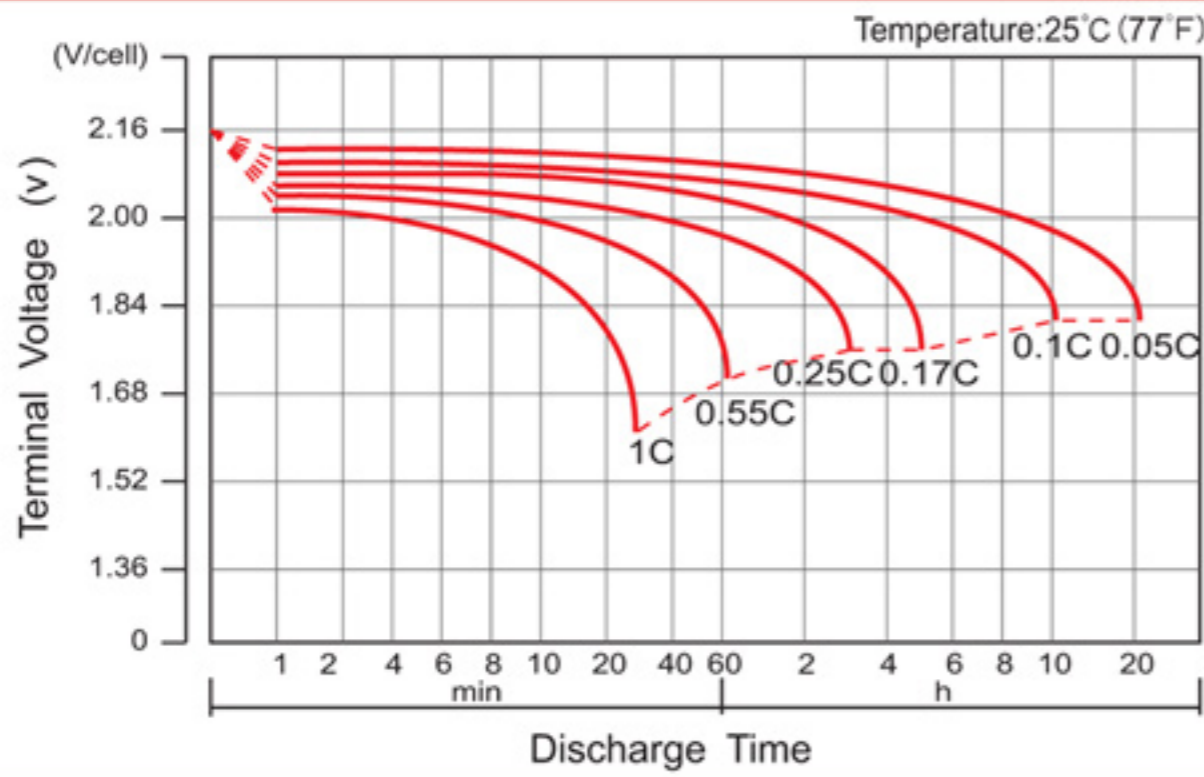
Constant Current Discharge Characteristics : A (25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	231.2	175.0	102.8	61.9	36.7	26.4	21.3	17.8	12.8	10.7	5.47
1.65V	224.3	170.4	100.6	60.7	36.2	26.1	21.1	17.6	12.7	10.6	5.42
1.70V	215.3	164.4	97.6	59.2	35.4	25.6	20.7	17.4	12.5	10.4	5.36
1.75V	203.6	156.5	93.7	57.2	34.5	25.0	20.2	17.0	12.3	10.2	5.29
1.80V	188.6	146.4	88.6	54.6	33.3	24.2	19.6	16.5	12.0	10.0	5.18
1.85V	169.9	133.7	82.1	51.3	31.6	23.1	18.8	15.9	11.6	9.69	5.05

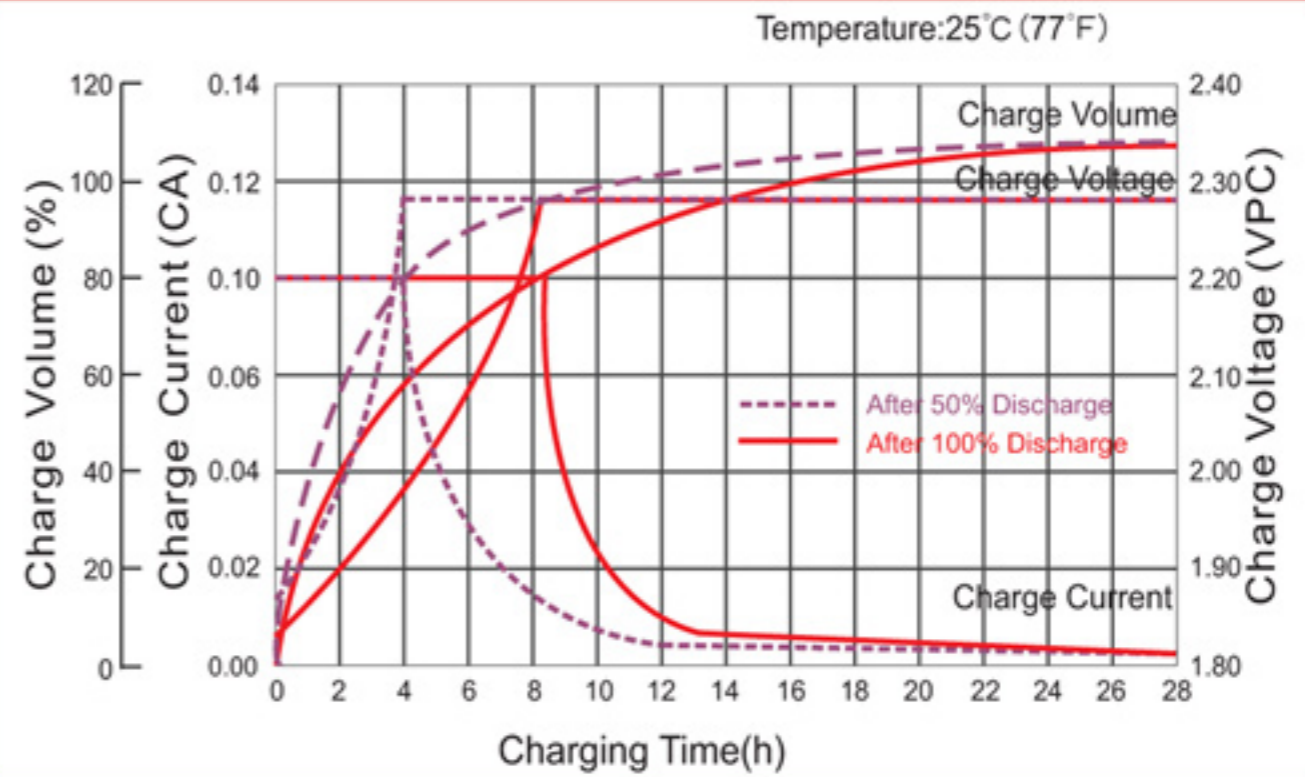
Constant Power Discharge Characteristics : WPC (25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	398.9	310.5	189.6	117.4	70.6	51.3	41.6	34.9	25.3	21.3	10.93
1.65V	397.3	308.7	188.2	116.5	70.1	50.9	41.3	34.7	25.2	21.1	10.86
1.70V	385.5	300.4	183.6	114.0	68.9	50.1	40.7	34.2	24.9	20.9	10.75
1.75V	371.1	290.2	178.1	110.7	67.4	49.1	39.9	33.6	24.4	20.5	10.61
1.80V	349.9	275.4	170.2	106.1	65.3	47.7	38.8	32.8	23.9	20.1	10.41
1.85V	320.8	255.0	159.3	100.3	62.4	45.8	37.4	31.6	23.2	19.5	10.15

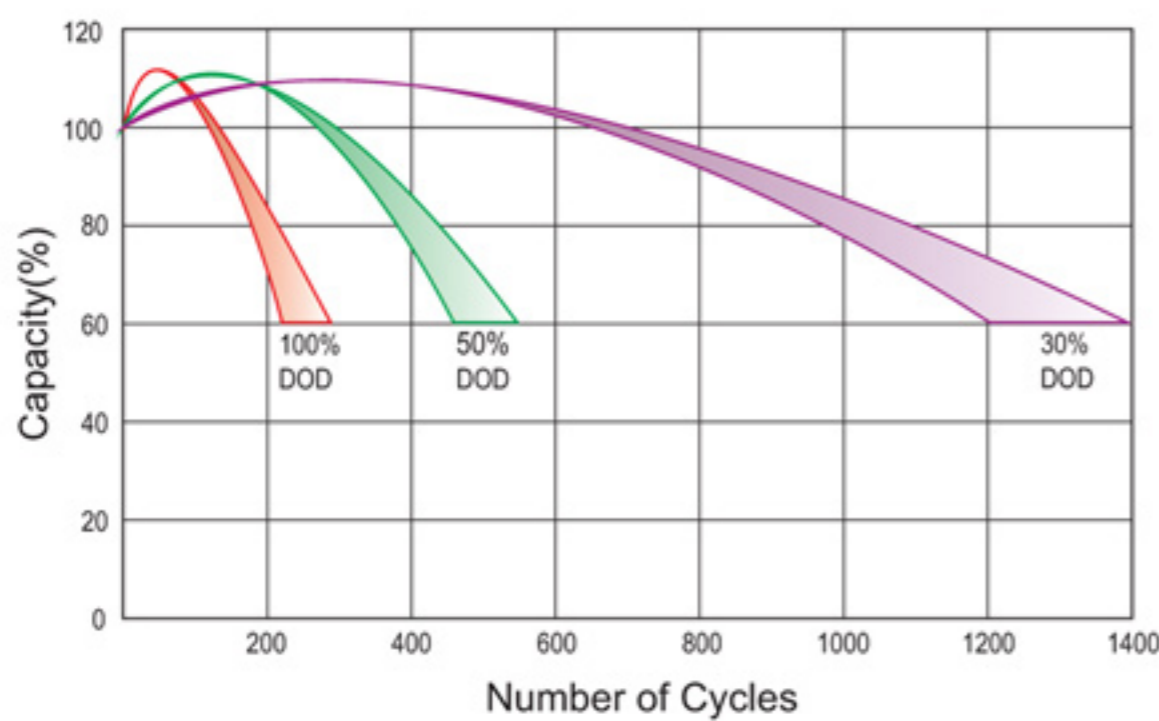
Discharge Characteristics Curve



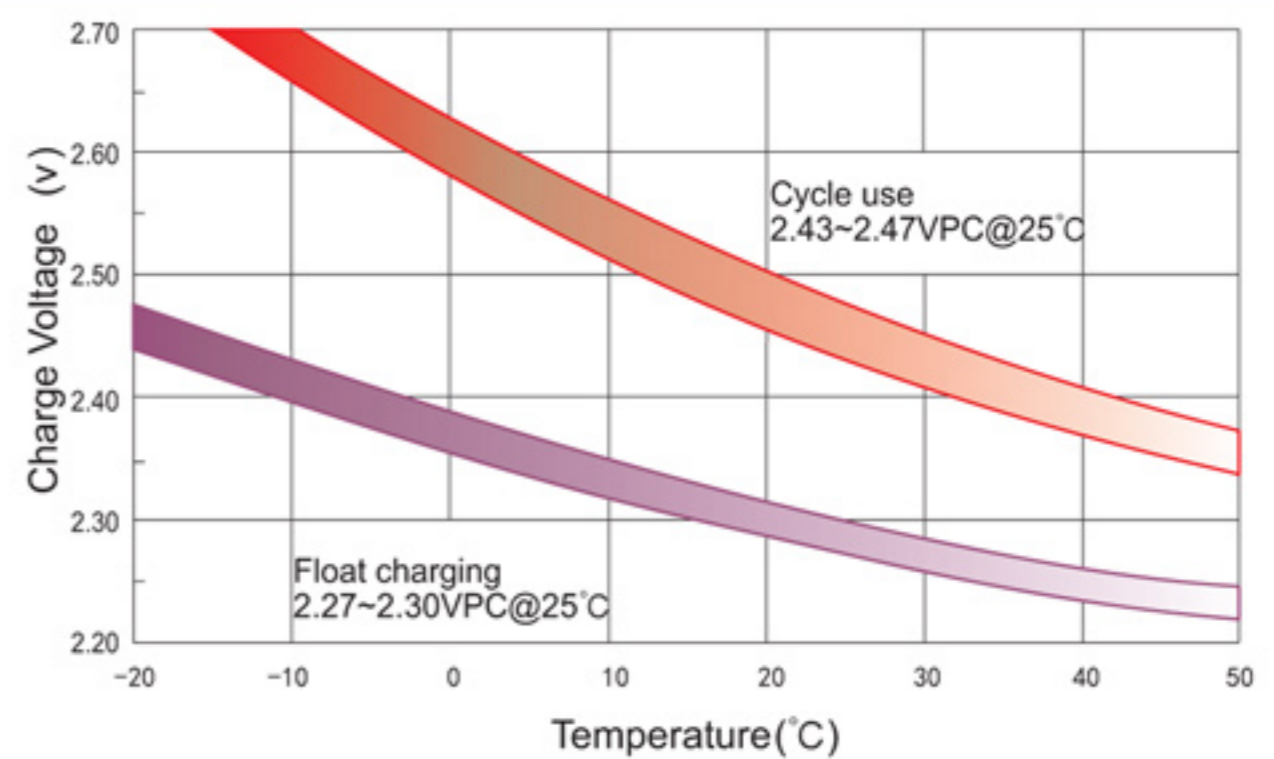
Charge Characteristic Curve For Standby Use



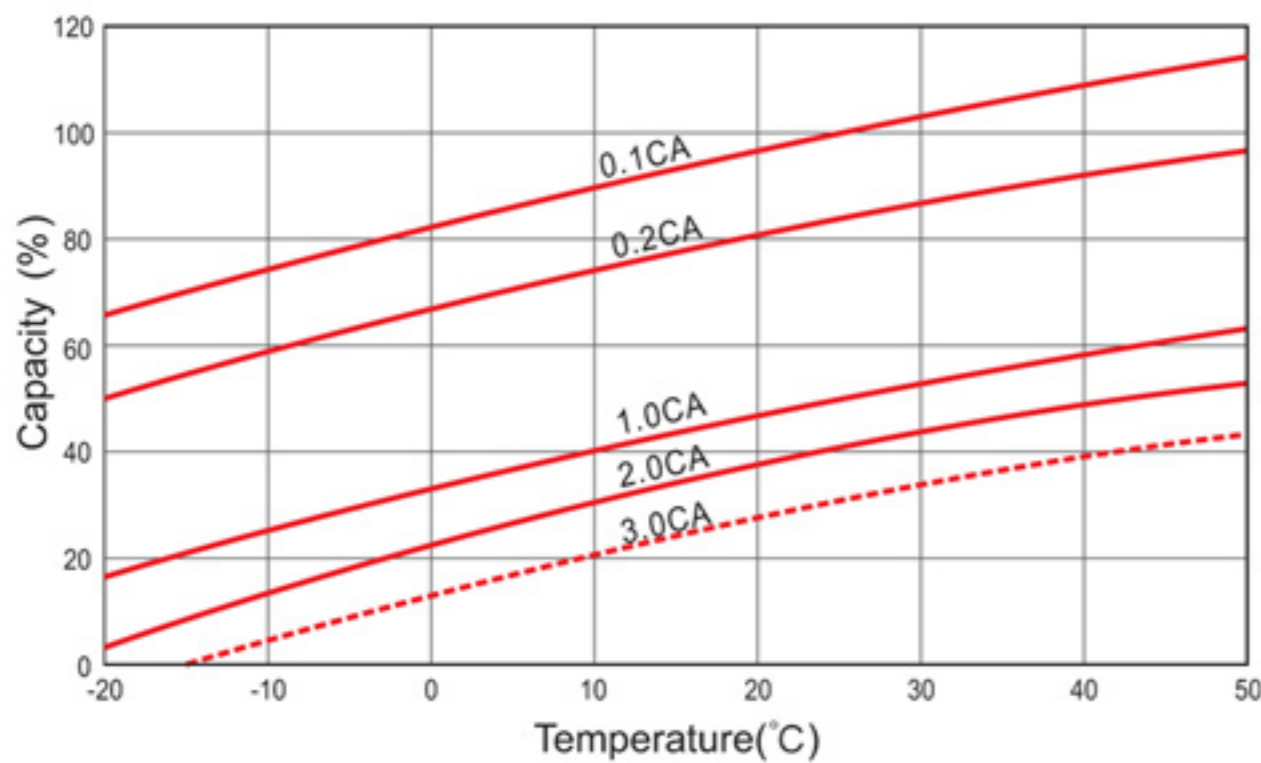
Cycle Life In Relation To Depth Of Discharge



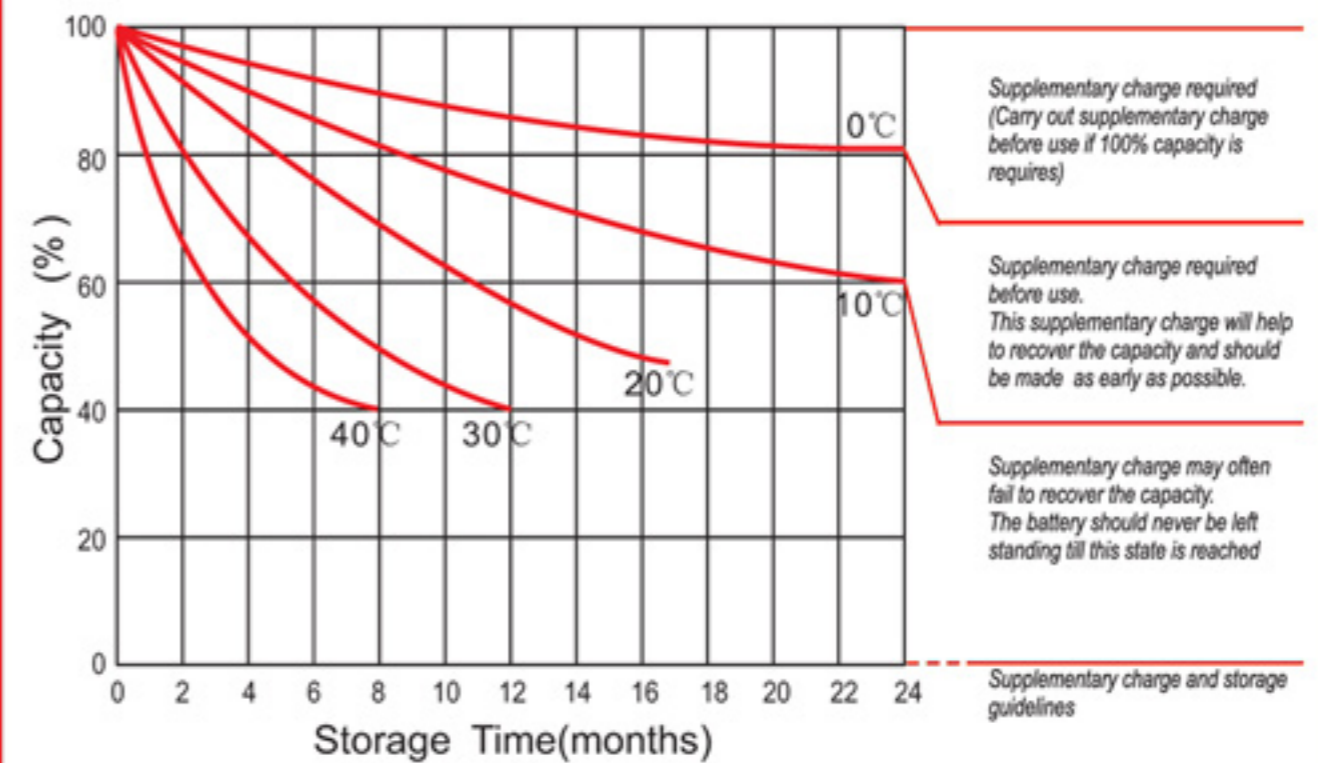
Relationship Between Charging Voltage And Temperature



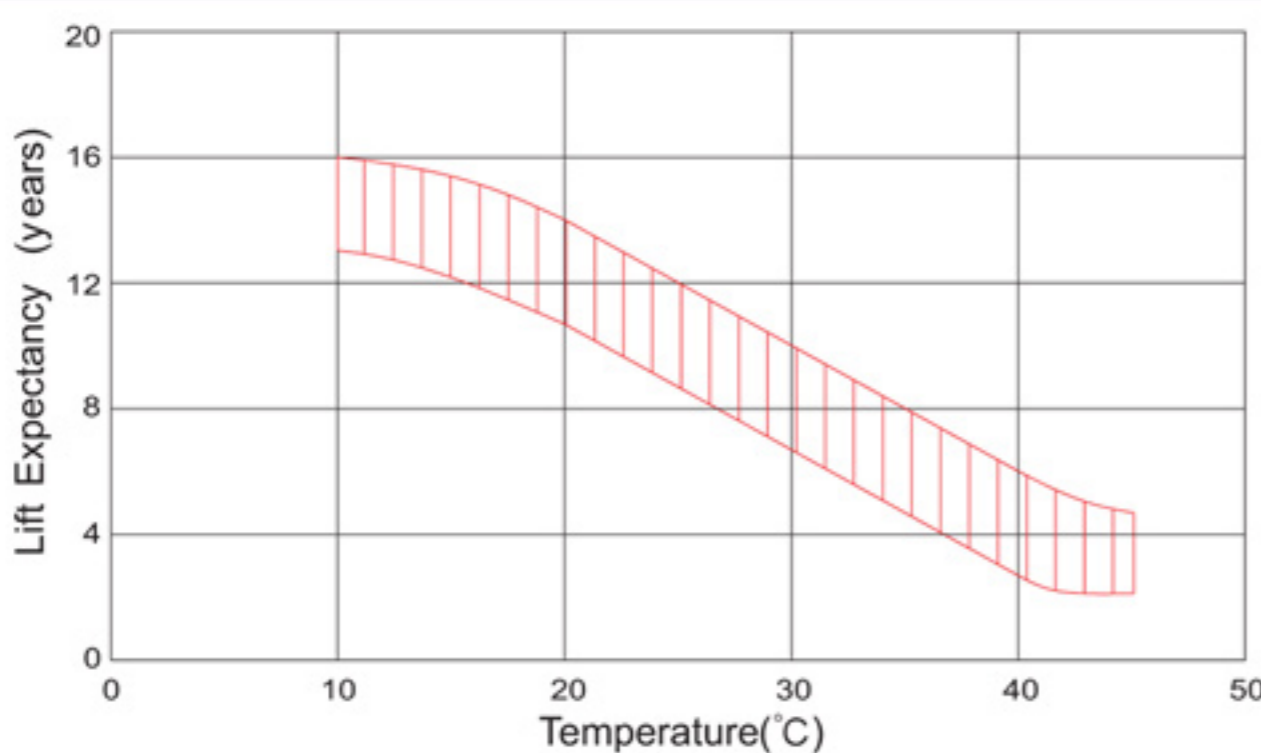
Temperature Effects On Capacity



Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use

