

Battery with over 12 years of the design life at 20°C - according to Eurobat (10 years at 25°C), made in the AGM technology. It has front terminal, and a special case construction that allows mounting in 19" and 23" cabinets. The EPL FTN series are equipped with Central Degassing System, which can lead the small amount of gas liberated during operation outside the sealed cabinet in which the batteries are installed. Battery has repeatable parameters and excellent discharge characteristics and this is why they are very often and readily used for the standby use in important telecommunication systems.



### TECHNICAL DATA

Nominal voltage	12 V	
Nominal capacity	85 Ah / C <sub>10</sub>	
Cell per unit	6	
Technology	AGM	
Design life	over 12 years @ 20°C* 10 years @ 25°C	
Dimensions	height	270,0 mm
	length	390,0 mm
	width	105,0 mm
Weight	~31 kg	
Capacity @ 25°C	20h 4,52A @1,80V/cell.	90,4 Ah
	10h 8,50A @1,80V/cell.	85,0 Ah
	5h 15,7A @1,75V/cell.	78,5 Ah
	1h 58,6A @1,60V/cell.	58,6 Ah
Ambient nominal temperature range	charge	0°C ~ 40°C
	discharge	-20°C ~ 50°C
	storage	-20°C ~ 40°C
Internal resistance	@ fully charge battery	≤8,87 mΩ
Charging voltage @ 20°C	standby use	13,4V do 13,6V (-18 mV/°C)
	cycle use	14,1 V do 14,4V (-24 mV/°C)
Charging current	recommended	8,50 A
	maximum	21,25 A
Capacity retention during storage @ 20°C (self discharge)	after 1 month	98 %
	after 6 months	86 %
	after 12 months	73 %
Container material	standard	ABS UL 94-HB
	optional	ABS UL 94-V0**
Terminal	insert terminal	I2
Terminal hardware initial torque	8,0 Nm	

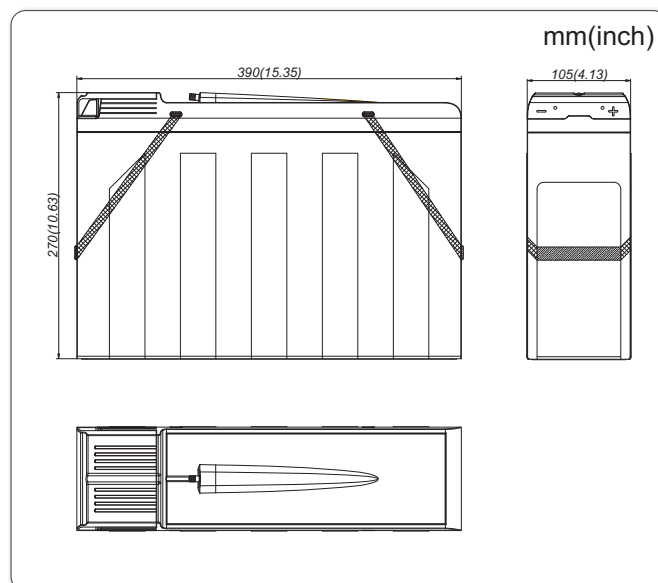
\*)- According to Eurobat (Long Life group)

\*\*)- Flame-retardant

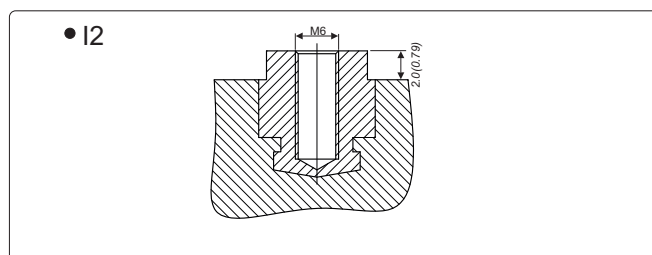
### APPLICATIONS

- uninterruptible power supplies (UPS)
- emergency lighting systems
- telecommunication power plants
- telecommunication PABX
- GSM base stations
- server rooms

### DIMENSIONS



### TERMINALS



### NO TRANSPORT RESTRICTED

Not restricted for air, surface and water transport. Classified as non-hazardous material (IATA/ICAO Special Provision A67, DOT-CFR Title 49 parts 171-189, IMDG amendment 27)

### DISCHARGE CHARACTERISTICS

#### • Constant current (Current [A], 25°C / 77°F)

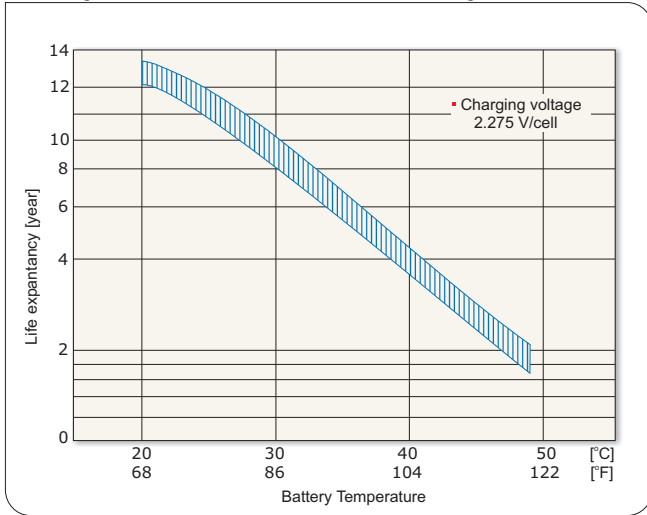
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	20h
1,85	210	125	83,8	63,1	51,4	22,0	14,5	12,5	9,78	8,12	4,42
1,80	235	141	91,9	68,0	55,5	23,4	15,4	13,3	10,4	8,50	4,52
1,75	262	151	96,0	70,9	57,0	23,5	15,7	13,5	10,4	8,58	4,56
1,70	286	156	96,9	71,4	57,8	23,8	15,8	13,6	10,5	8,63	4,57
1,67	288	159	98,3	71,9	58,2	23,9	16,1	13,7	10,6	8,67	4,58
1,60	307	165	100	72,5	58,6	24,4	16,2	13,9	10,6	8,76	4,62

#### • Constant power (Power [W/cell], 25°C / 77°F)

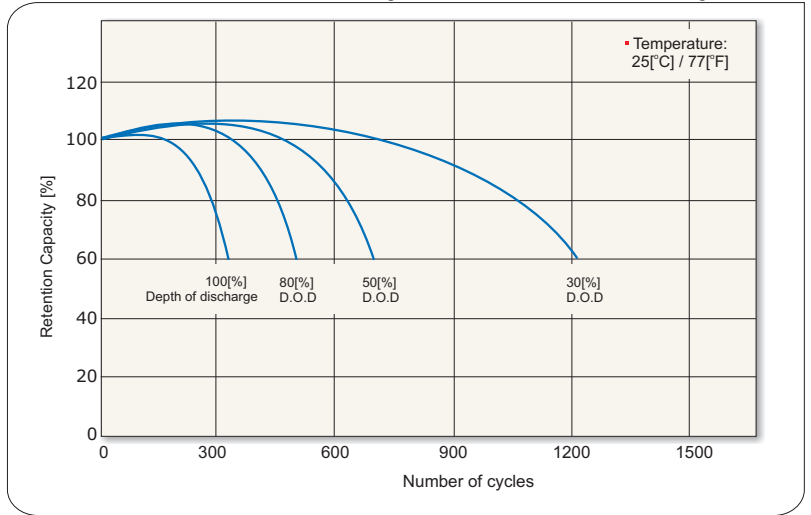
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	20h
1,85	391	236	160	122	100	42,9	28,6	24,7	19,4	16,1	8,88
1,80	426	264	174	131	107	45,1	30,0	26,0	20,2	16,6	9,08
1,75	464	279	179	135	108	45,2	30,5	26,2	20,2	16,7	9,08
1,70	491	282	179	135	109	45,7	30,5	26,3	20,4	16,7	9,10
1,67	494	285	179	135	109	45,7	31,0	26,5	20,5	16,9	9,12
1,60	513	290	181	136	110	46,3	31,0	26,7	20,7	17,0	9,15

F.V. - Final voltage

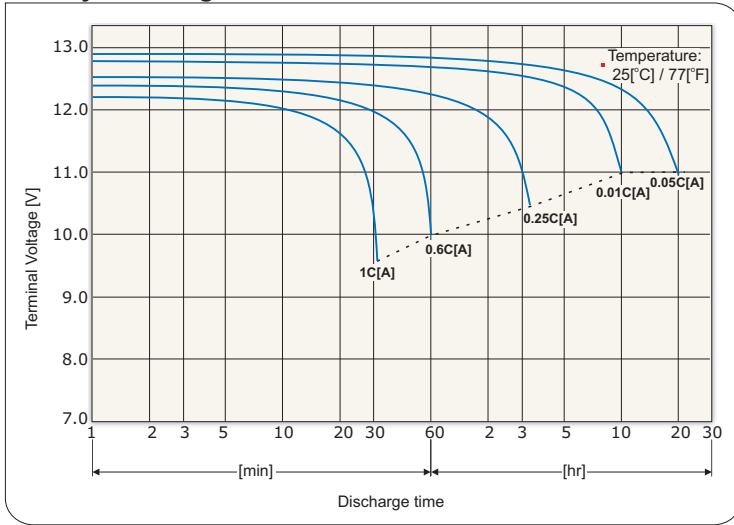
## Battery life characteristics of standby use



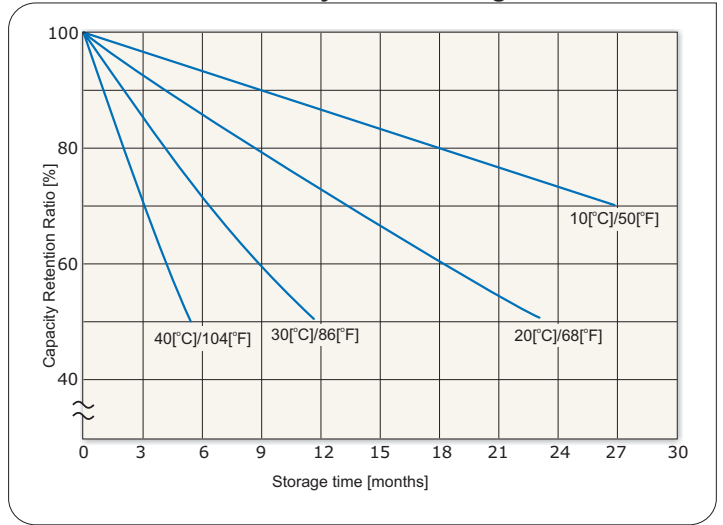
## Battery life characteristics of cycle use



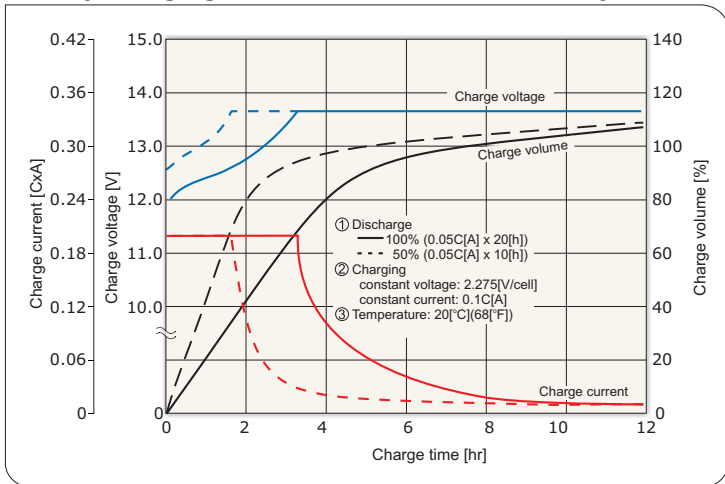
## Battery discharge characteristics



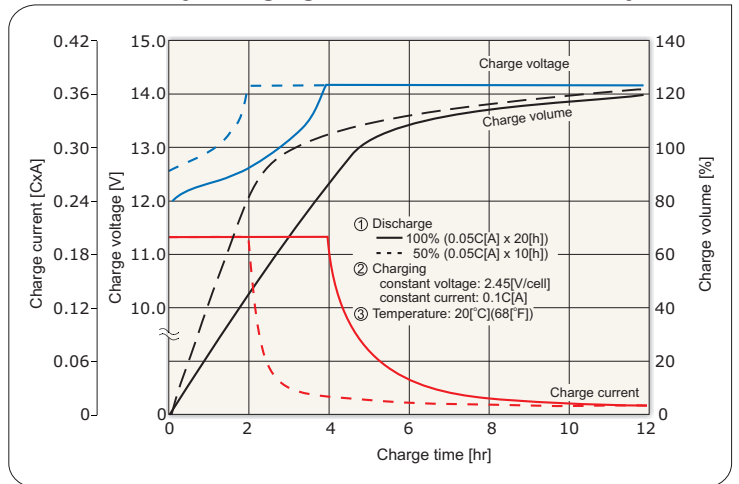
## Battery self discharge characteristics



## Battery charging characteristics for the standby use



## Battery charging characteristics for the cycle use



## Battery discharge current and final discharge voltage

Discharge current [A]	$0.2C > I$	$0.2C \leq I < 0.5C$	$0.5C \leq I < 1.0C$	$1.0C \leq I$
Final discharge voltage [V/cell]	1.75	1.70	1.67	1.60



\*) C - Capacity