

EUROPOWER cells are made in **AGM technology**. Owing their excellent power and current capability these batteries are designed for both large and important central battery UPS systems as well as for applications in telecommunications and renewable energy engineering (the battery system **capacity even up to 12000 Ah**). They have a very high repeatability of parameters and long designed life. EXL-N cells can withstand **1200 discharge/charge cycles at 80% DOD**.



### TECHNICAL DATA

Nominal voltage	2 V		
Nominal capacity	3000 Ah / C <sub>10</sub>		
Cell per unit	1		
Technology	AGM		
Design life	over 17 years @ 20°C* over 15 years @ 25°C		
Dimensions	height	374,0 mm	
	length	496,0 mm	
	width	363,0 mm	
Weight	~175,0 kg		
Capacity @ 25°C	10h	310A @1,80V/cell.	3100,0 Ah
	3h	786A @1,80V/cell.	2358,0 Ah
	1h	1661A @1,75V/cell.	1661,0 Ah
	30 min	2289A @1,75V/cell.	1144,5 Ah
Ambient nominal temperature range	charge	0°C ~ 40°C	
	discharge	-40°C ~ 55°C	
	storage	-20°C ~ 40°C	
Internal resistance	@ fully charge battery	≤0,10 mΩ	
Charging voltage @ 20°C	standby use	2,25 V (-3 mV/°C)	
	cycle use	2,35 V (-4 mV/°C)	
Charging current	recommended	300 A	
	maximum	750 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	I3	
Terminal hardware initial torque		10,0 Nm	

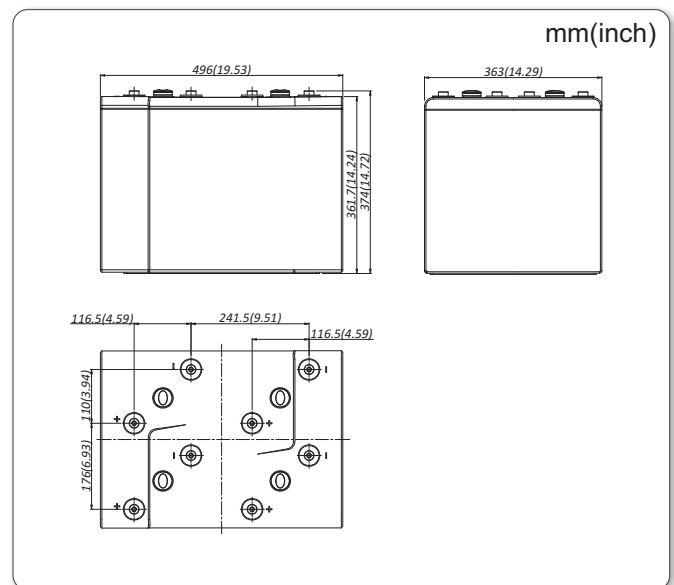
\* - According to Eurobat (Long Life group)

\*\* - Flame-retardant

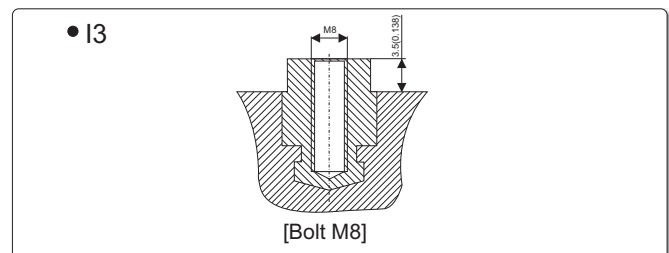
### APPLICATIONS

- high power Uninterruptible Power Supplies (UPS)
- substations
- emergency lighting systems
- telecommunication power plants
- renewable power sources
- GSM base stations

### 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)

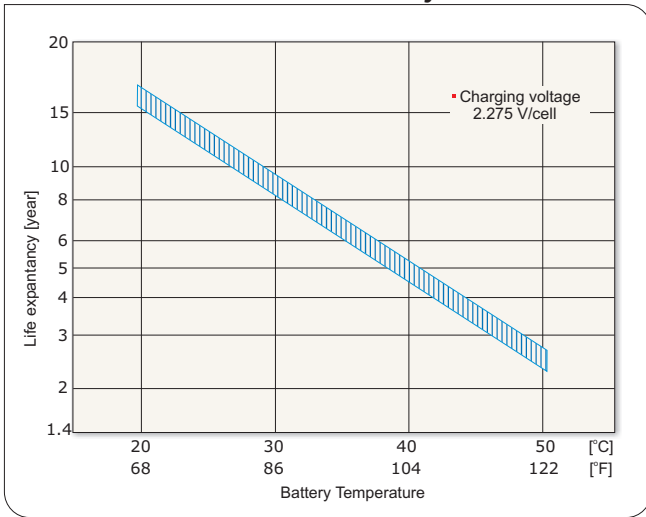
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	2404	1923	1565	1338	1152	644	454	398	321	271	129
1,85	2935	2435	1884	1602	1393	721	501	439	354	297	139
1,83	3209	2671	2000	1721	1488	762	527	458	367	308	143
1,80	3419	2863	2143	1819	1577	786	535	464	369	310	143
1,75	3618	3070	2289	1928	1661	804	548	474	376	314	146
1,70	3836	3262	2482	2045	1759	822	557	481	381	316	147

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

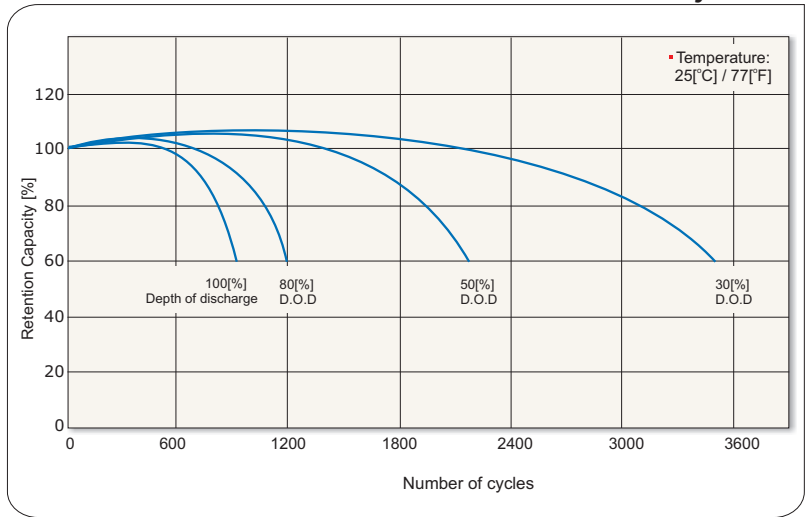
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	4678	3743	2963	2468	2201	1381	971	855	701	598	269
1,85	5566	4619	3624	3009	2596	1515	1040	906	748	636	286
1,83	5941	4946	3921	3283	2834	1568	1069	933	772	659	297
1,80	6312	5287	4196	3523	3030	1604	1099	959	793	671	302
1,75	6609	5608	4489	3780	3291	1654	1129	980	811	683	307
1,70	6891	5860	4775	4032	3490	1687	1150	1010	829	689	310

F.V. - Final voltage

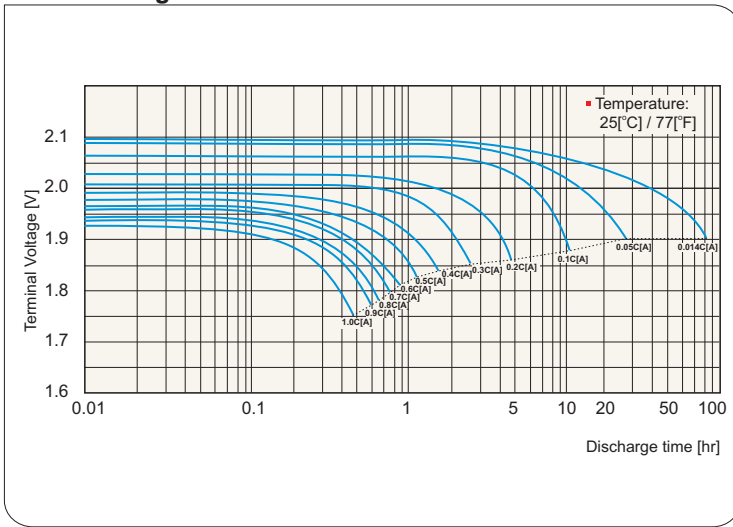
## Cell life characteristics of standby use



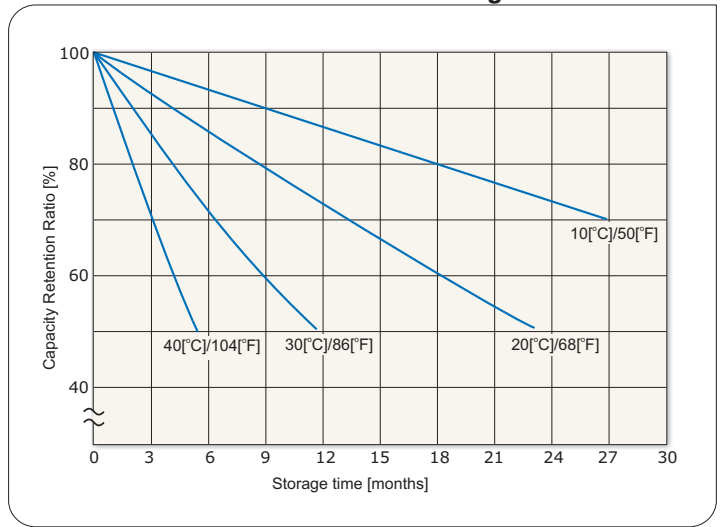
## Cell life characteristics of cycle use



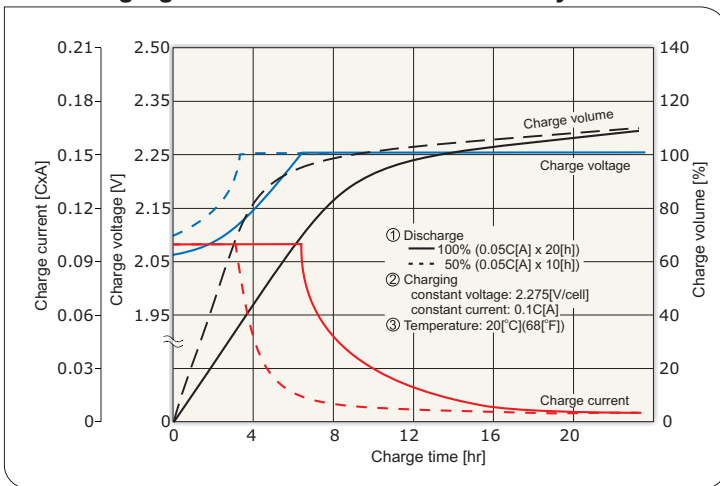
## Cell discharge characteristics



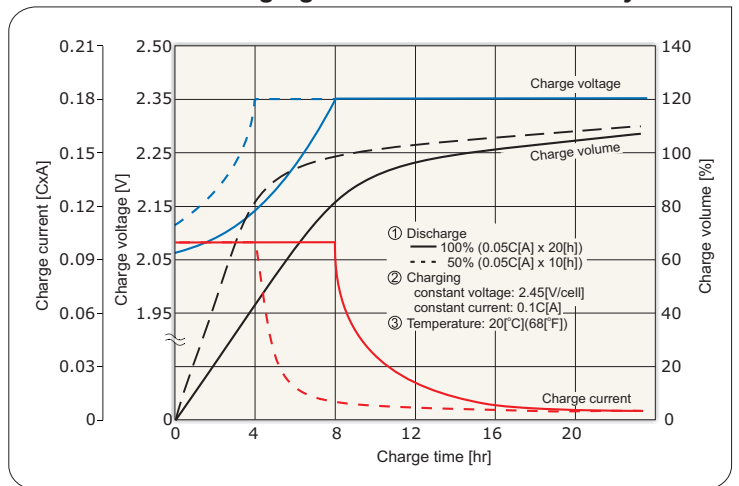
## Cell self discharge characteristics



## Cell charging characteristics for the standby use



## Cell charging characteristics for the cycle use



## Cell discharge current and final discharge voltage

Discharge current [A]	0.2C > I	0.2C ≤ I < 0.5C	0.5C ≤ I < 1.0C	1.0C ≤ I
Final discharge voltage [V/cell]	1.85	1.83	1.75	1.70



\*) C - Capacity