

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		1200 Ah / C <sub>10</sub>	
Cell per unit		1	
Technology		AGM	
Design life		over 12 years @ 20°C* 15 years @ 25°C	
Dimensions	height	566,0 mm	
	length	225,0 mm	
	width	229,0 mm	
Weight		~75,0 kg	
Capacity @ 25°C	10h	124A @1,80V/cell.	1240,0 Ah
	3h	314A @1,80V/cell.	942,0 Ah
	1h	663A @1,75V/cell.	663,0 Ah
	30 min	914A @1,75V/cell.	457,0 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	≤0,17 mΩ	
Charging voltage @ 20°C	standby use	2,25 V (-3 mV/°C)	
	cycle use	2,35 V (-4 mV/°C)	
Charging current	recommended	120 A	
	maximum	300 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	

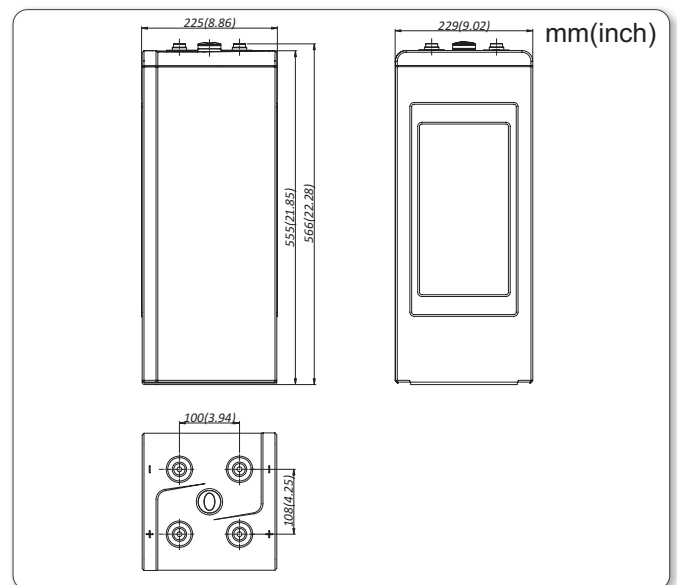
\* - According to Eurobat (Long Life group)

\*\* - Flame-retardant

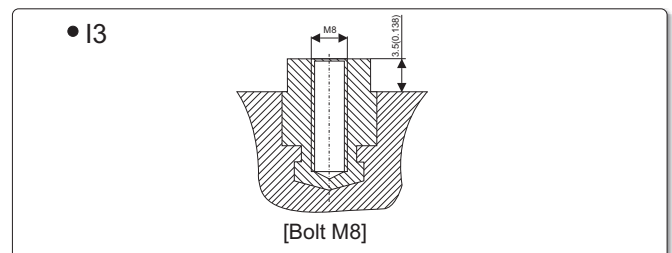
### APPLICATIONS

- 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)

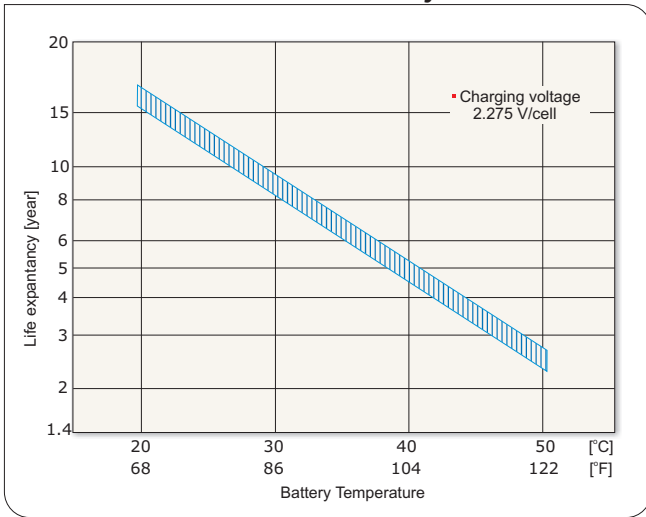
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
<b>1,90</b>	960	768	625	533	460	257	181	159	128	108	51,6
<b>1,85</b>	1172	972	752	638	556	288	200	175	141	119	55,3
<b>1,83</b>	1264	1052	798	685	594	304	210	183	146	123	56,9
<b>1,80</b>	1365	1143	855	724	630	314	214	185	147	124	56,9
<b>1,75</b>	1444	1226	914	767	663	321	219	189	150	125	58,2
<b>1,70</b>	1531	1302	991	814	702	328	222	192	152	126	58,7

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

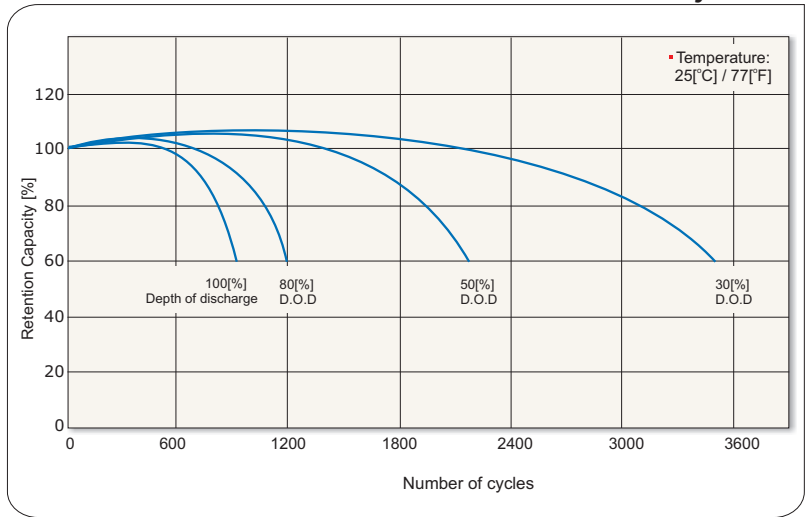
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
<b>1,90</b>	1890	1512	1197	984	889	558	392	346	283	242	107
<b>1,85</b>	2249	1866	1464	1200	1049	612	420	366	302	257	114
<b>1,83</b>	2400	1998	1584	1309	1145	634	432	377	312	266	117
<b>1,80</b>	2550	2136	1695	1405	1224	648	444	388	320	271	119
<b>1,75</b>	2670	2266	1814	1507	1330	668	456	396	328	276	121
<b>1,70</b>	2784	2368	1929	1608	1410	682	464	408	335	278	122

F.V. - Final voltage

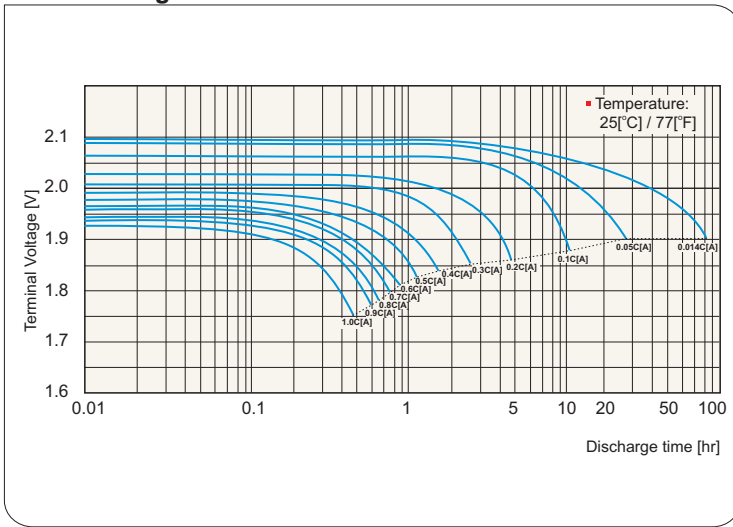
## Cell life characteristics of standby use



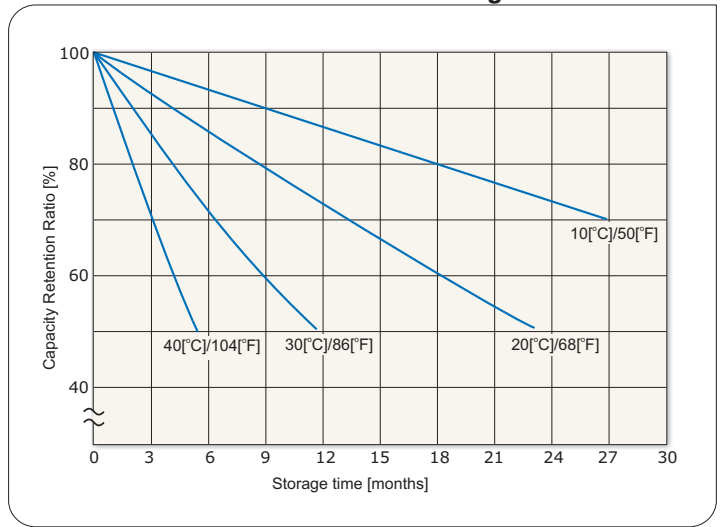
## Cell life characteristics of cycle use



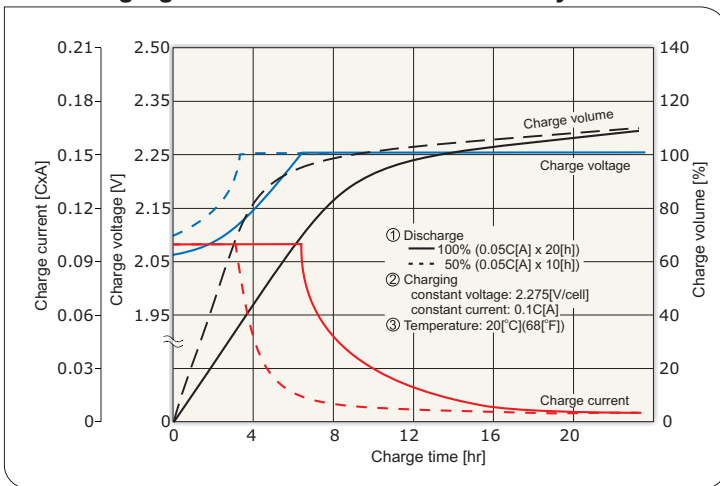
## Cell discharge characteristics



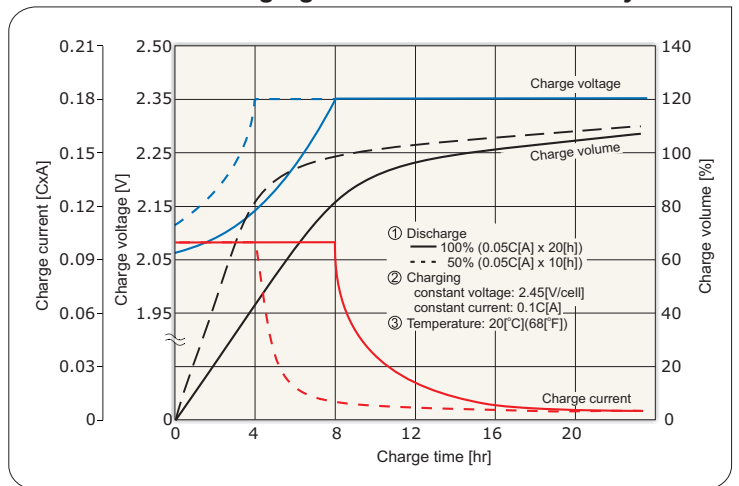
## Cell self discharge characteristics



## 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