

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		1000 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	186,0 mm	
	width	229,0 mm	
Weight		~62,0 kg	
Capacity @ 25°C	10h	103A @1,80V/cell.	1030,0 Ah
	3h	261A @1,80V/cell.	783,0 Ah
	1h	552A @1,75V/cell.	552,0 Ah
	30 min	761A @1,75V/cell.	380,5 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	≤0,18 mΩ	
Charging voltage @ 20°C	standby use	2,25 V (-3 mV/°C)	
	cycle use	2,35 V (-4 mV/°C)	
Charging current	recommended	100 A	
	maximum	250 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	

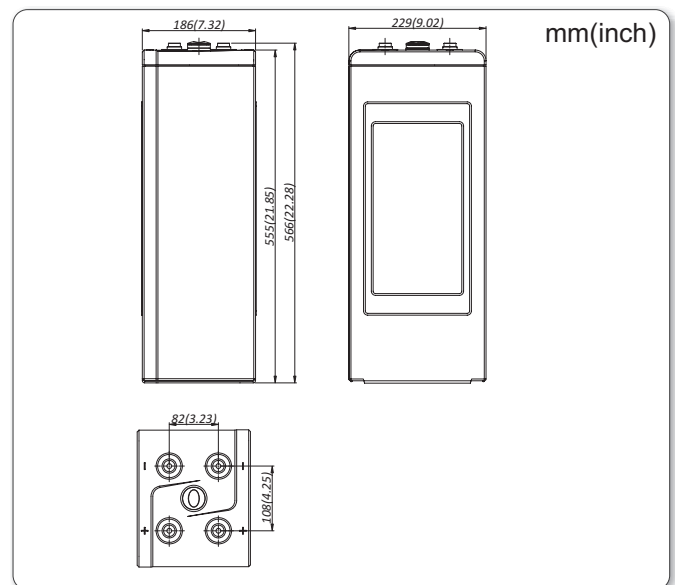
\* ) - According to Eurobat (Long Life group)

\*\* ) - Flame-retardant

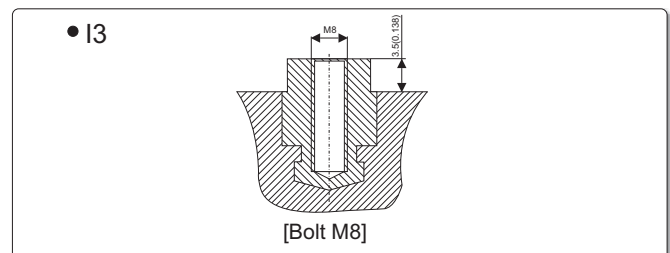
### APPLICATIONS

- 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)

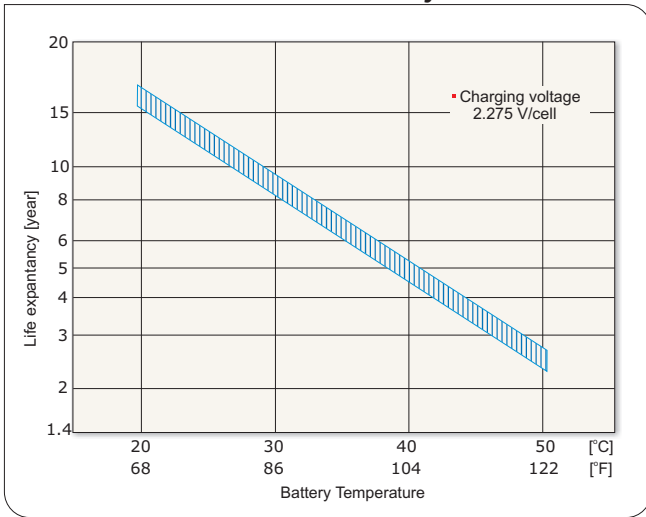
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	800	640	521	444	383	214	151	132	107	90,0	43,0
1,85	976	810	627	531	463	240	167	146	118	98,8	46,1
1,83	1053	877	665	571	495	253	175	152	122	102	47,4
1,80	1137	953	713	603	525	261	178	154	123	103	47,4
1,75	1204	1021	761	639	552	267	182	158	125	104	48,5
1,70	1276	1085	826	678	585	274	185	160	127	105	48,9

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

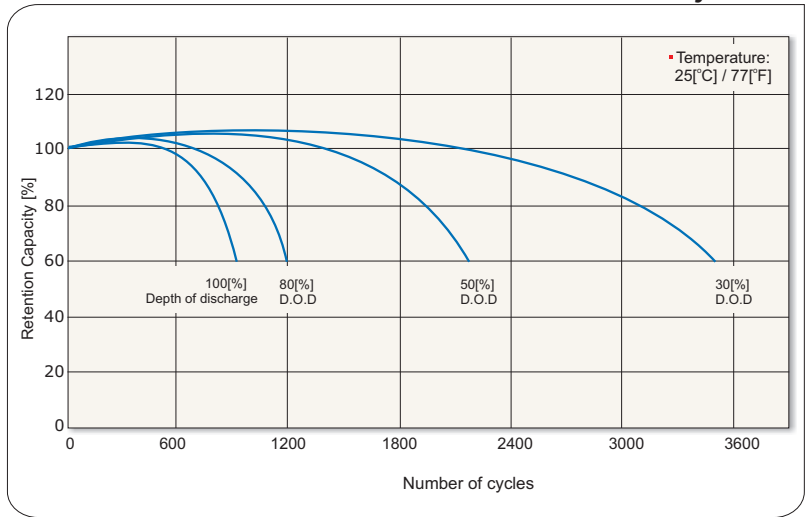
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	1559	1247	988	820	734	460	324	285	234	199	89,7
1,85	1855	1539	1208	1000	865	505	347	302	249	212	95,3
1,83	1980	1648	1307	1091	944	523	356	311	257	220	98,9
1,80	2104	1762	1398	1171	1010	535	366	320	264	224	101
1,75	2203	1869	1496	1256	1097	551	376	327	270	228	102
1,70	2297	1953	1591	1340	1163	562	383	337	276	230	103

F.V. - Final voltage

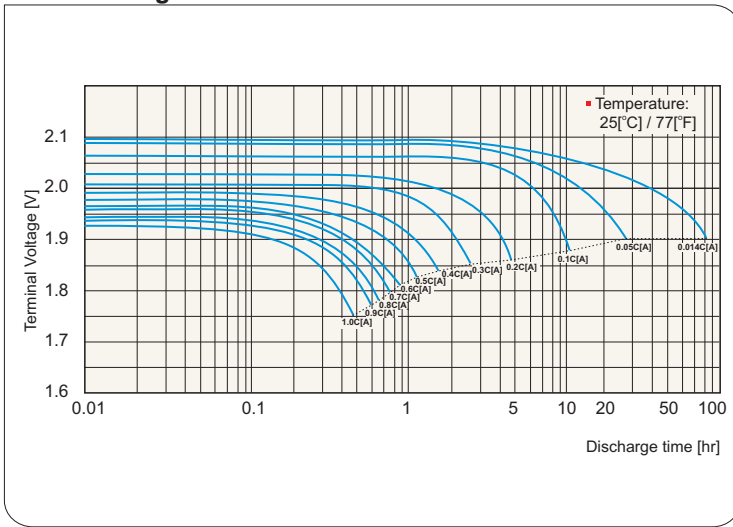
## Cell life characteristics of standby use



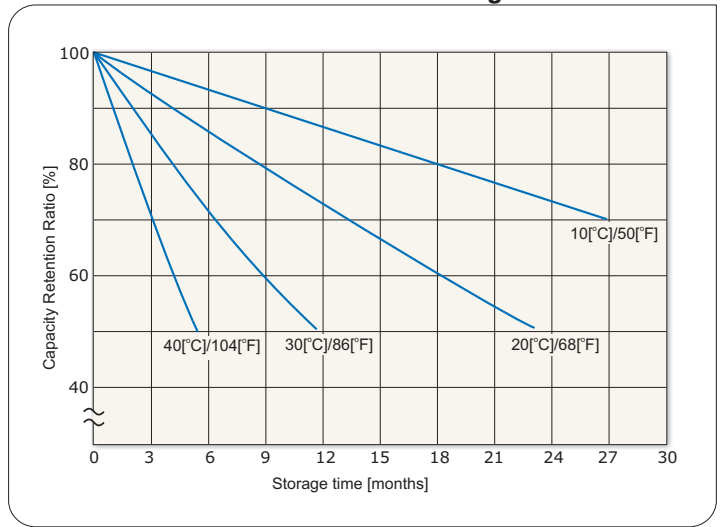
## Cell life characteristics of cycle use



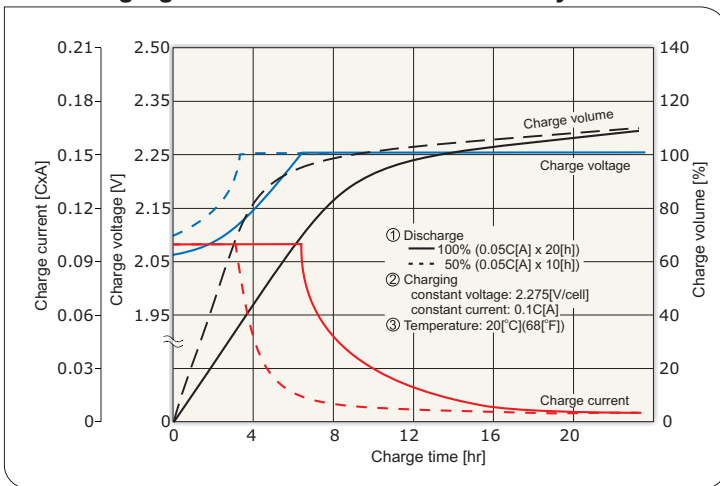
## Cell discharge characteristics



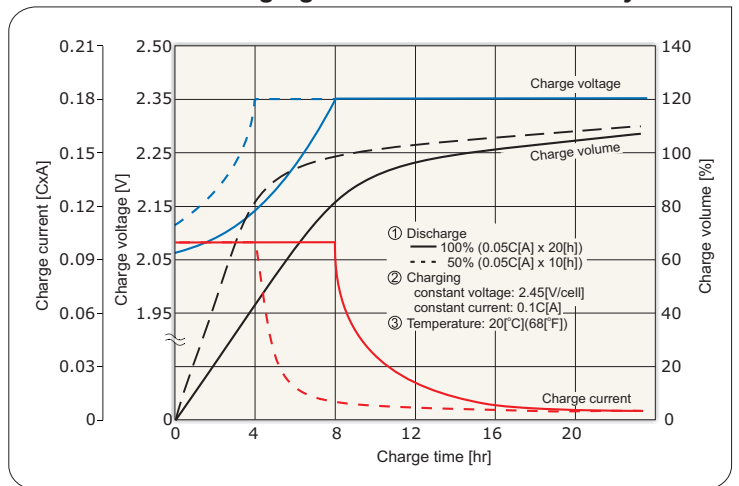
## Cell self discharge characteristics



## 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