

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		1600 Ah / C ₁₀
Cell per unit		1
Technology		AGM
Design life		over 12 years @ 20°C* 15 years @ 25°C
Dimensions	height	566,0 mm
	length	291,0 mm
	width	229,0 mm
Weight		~6,15 kg
Capacity @ 25°C	10h 166A @1,80V/cell.	1660,0 Ah
	3h 422A @1,80V/cell.	1266,0 Ah
	1h 893A @1,75V/cell.	893,0 Ah
	30 min 1230A @1,75V/cell.	615,0 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	≤0,13 mΩ
Charging voltage @ 20°C	standby use	2,25 V (-3 mV/°C)
	cycle use	2,35 V (-4 mV/°C)
Charging current	recommended	160 A
	maximum	400 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

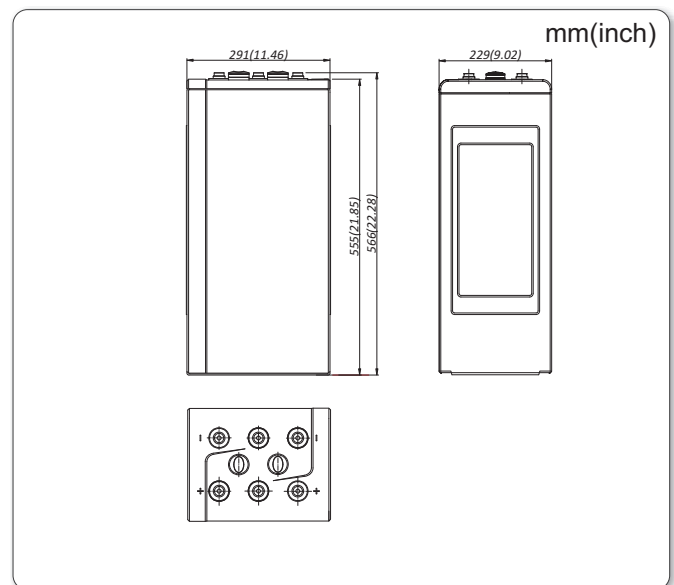
* - According to Eurobat (Long Life group)

** - Flame-retardant

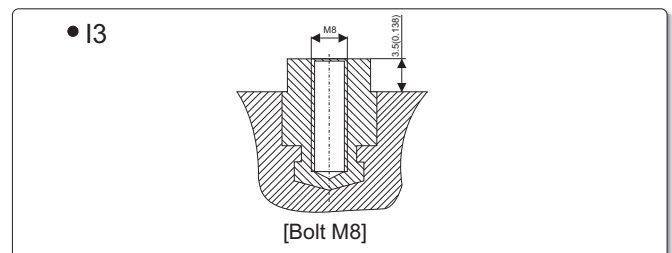
APPLICATIONS

- 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)

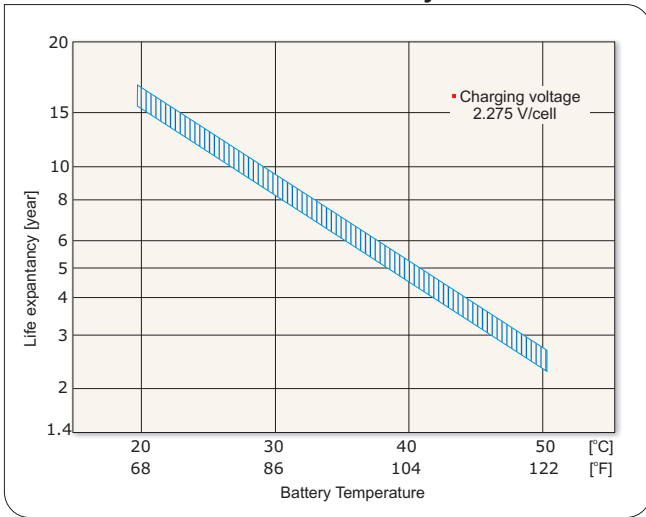
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	1292	1034	842	717	619	346	244	214	173	145	69,5
1,85	1578	1309	1013	859	749	387	270	236	190	160	74,5
1,83	1702	1417	1075	923	800	410	283	246	197	166	76,7
1,80	1838	1539	1152	975	848	422	288	250	198	166	76,7
1,75	1945	1651	1230	1033	893	432	294	255	202	169	78,3
1,70	2062	1754	1334	1096	946	442	300	258	205	170	79,0

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

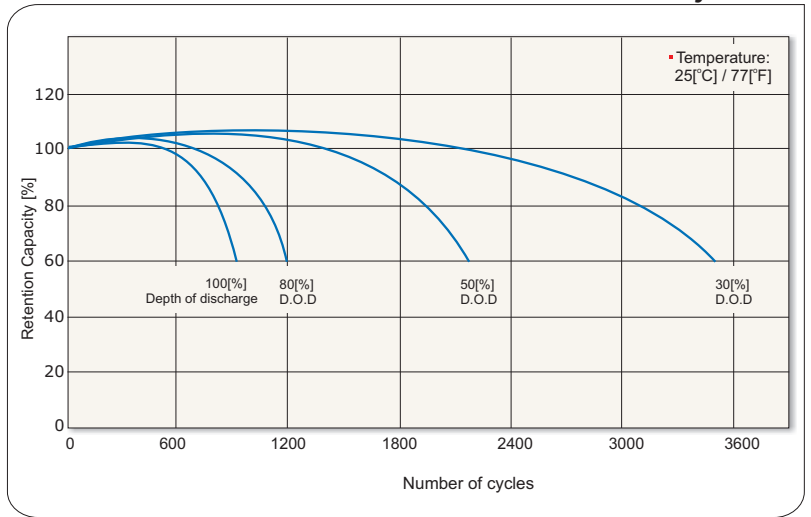
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	2520	2016	1596	1325	1186	744	523	461	378	322	145,0
1,85	2998	2488	1952	1616	1398	816	560	488	403	342	154,1
1,83	3200	2664	2112	1763	1526	845	576	502	416	355	159,8
1,80	3400	2848	2260	1892	1632	864	592	517	427	362	162,7
1,75	3560	3021	2418	2030	1773	891	608	528	437	368	165,6
1,70	3712	3157	2572	2165	1880	909	619	544	446	371	167,0

F.V. - Final voltage

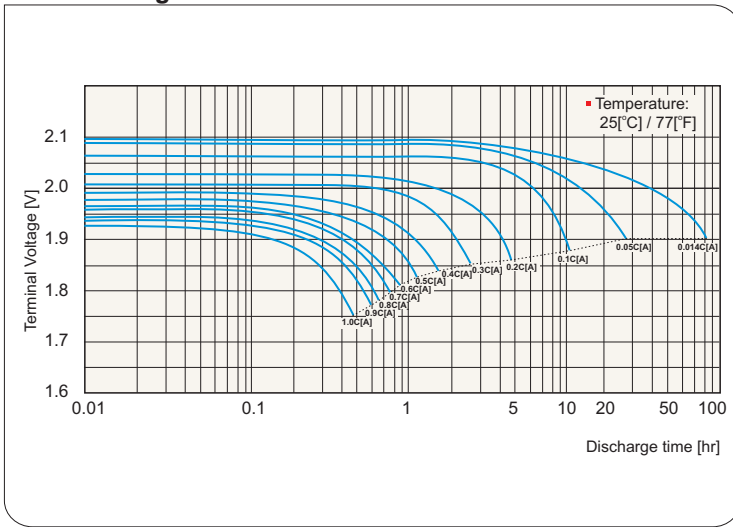
Cell life characteristics of standby use



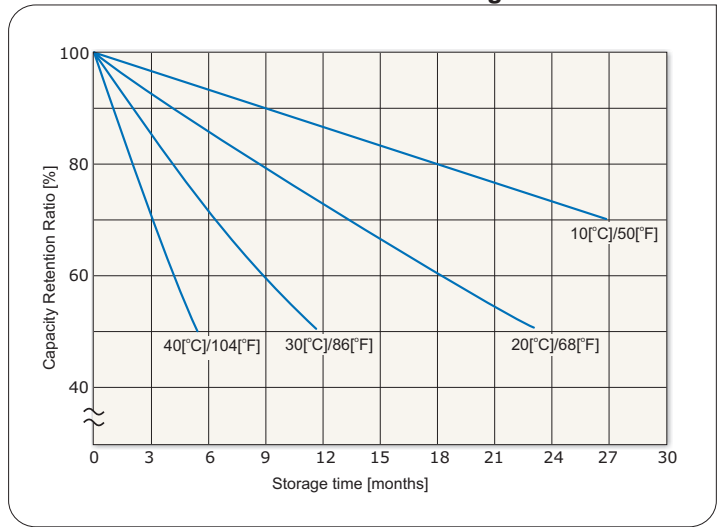
Cell life characteristics of cycle use



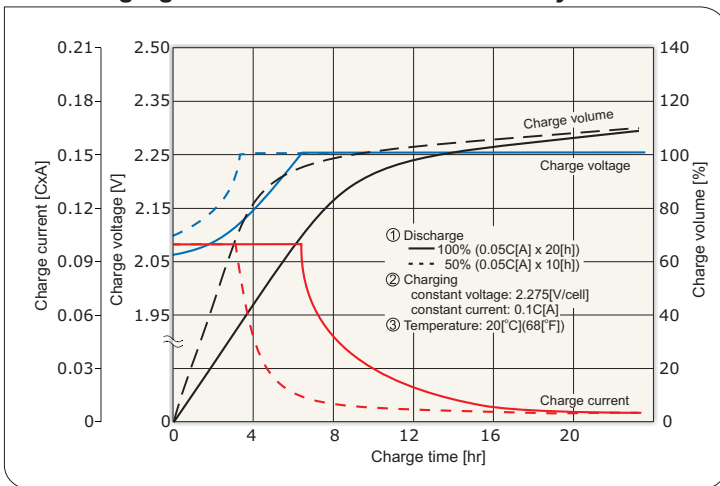
Cell discharge characteristics



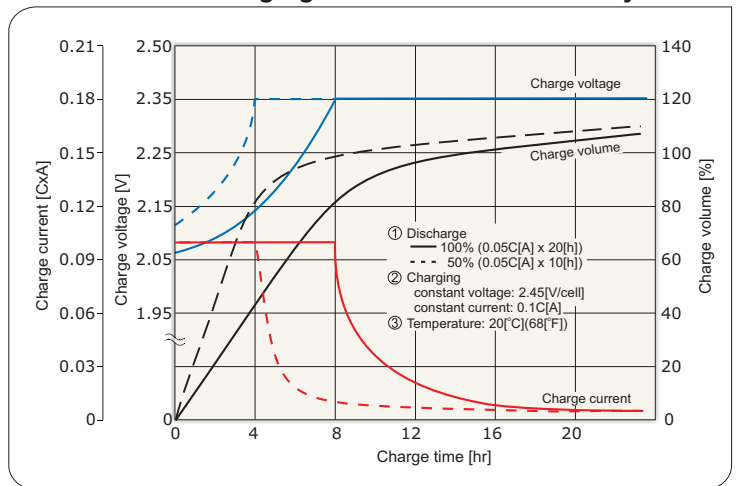
Cell self discharge characteristics



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