

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		600 Ah / C ₁₀
Cell per unit		1
Technology		AGM
Design life		over 12 years @ 20°C* 15 years @ 25°C
Dimensions	height	372,0 mm
	length	223,0 mm
	width	185,0 mm
Weight		~35,0 kg
Capacity @ 25°C	10h 61,7A @1,80V/cell.	617,0 Ah
	3h 151A @1,80V/cell.	453,0 Ah
	1h 339A @1,75V/cell.	339,0 Ah
	30 min 508A @1,75V/cell.	254,0 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	≤0,28 mΩ
Charging voltage @ 20°C	standby use	2,25 V (-3 mV/°C)
	cycle use	2,35 V (-4 mV/°C)
Charging current	recommended	60 A
	maximum	150 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

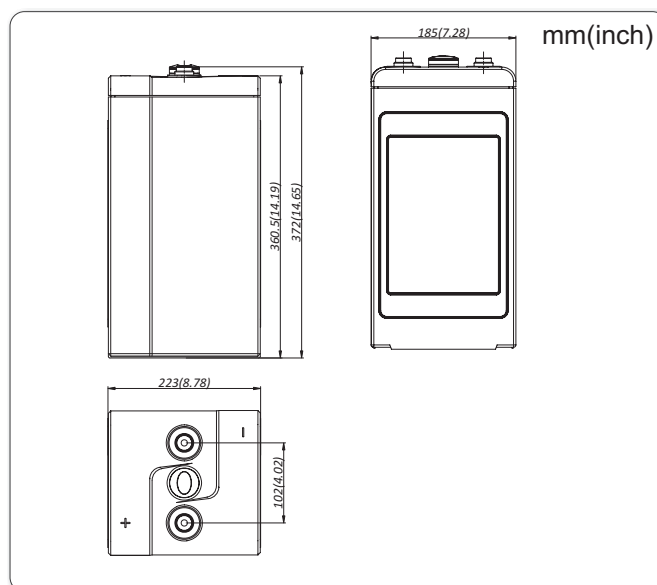
*) - According to Eurobat (Long Life group)

**) - Flame-retardant

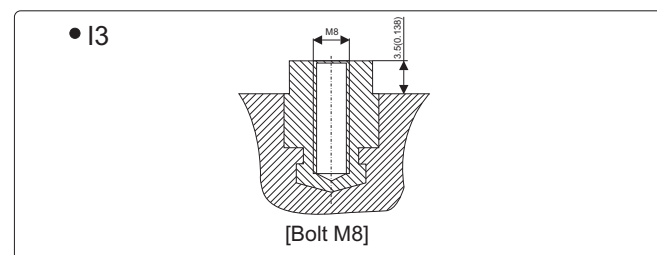
APPLICATIONS

- 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)

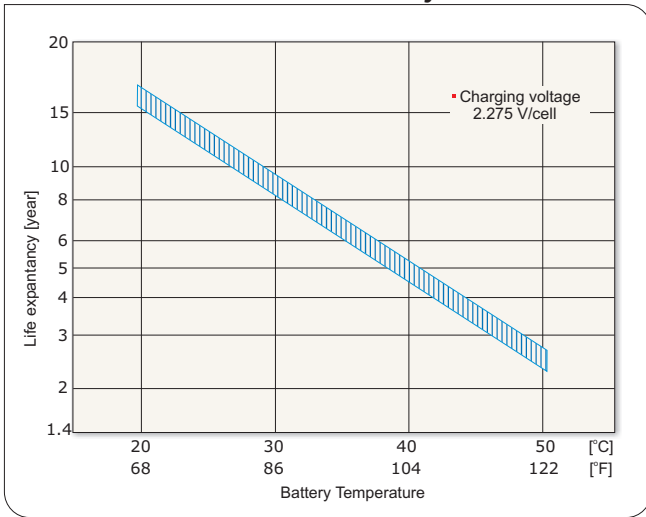
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	603	490	364	297	254	134	98,2	86,4	69,4	58,0	26,5
1,85	701	579	424	344	286	143	102	89,7	72,1	60,0	27,1
1,83	736	613	452	362	297	146	103	91,0	72,9	60,4	27,4
1,80	791	653	475	380	317	151	106	92,7	74,3	61,7	28,0
1,75	823	693	508	409	339	156	108	95,0	75,7	63,1	28,5
1,70	864	732	546	428	355	161	111	96,6	76,6	64,0	28,9

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

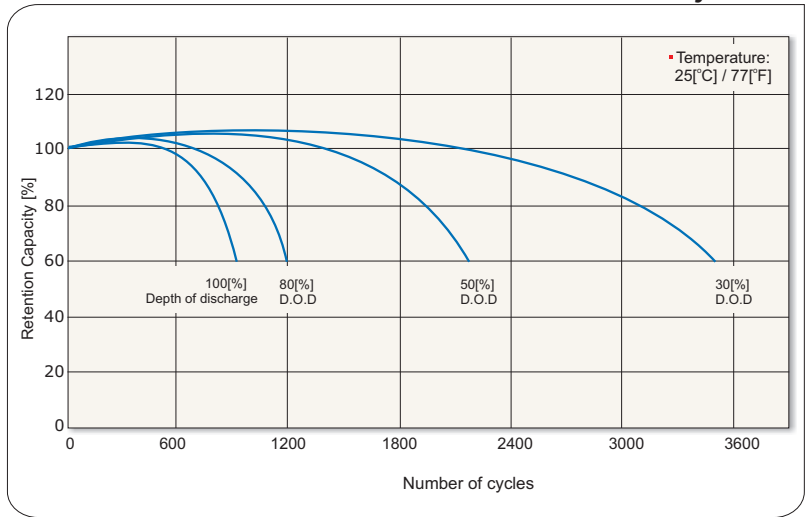
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	1175	955	731	599	523	285	203	173	136	114	54,0
1,85	1332	1101	866	714	607	307	217	186	146	123	56,3
1,83	1384	1153	919	754	644	317	223	190	148	125	57,4
1,80	1464	1209	974	786	667	325	228	196	150	128	58,5
1,75	1506	1268	1010	810	683	337	235	202	154	130	59,4
1,70	1554	1318	1045	840	711	349	241	207	160	132	60,3

F.V. - Final voltage

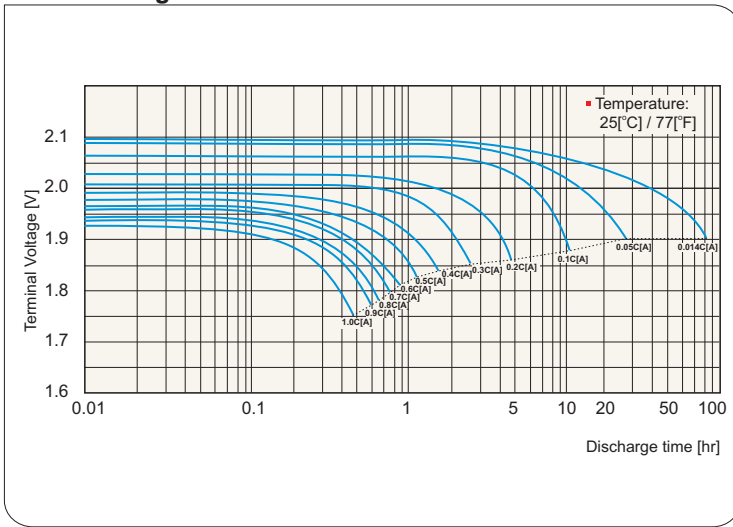
Cell life characteristics of standby use



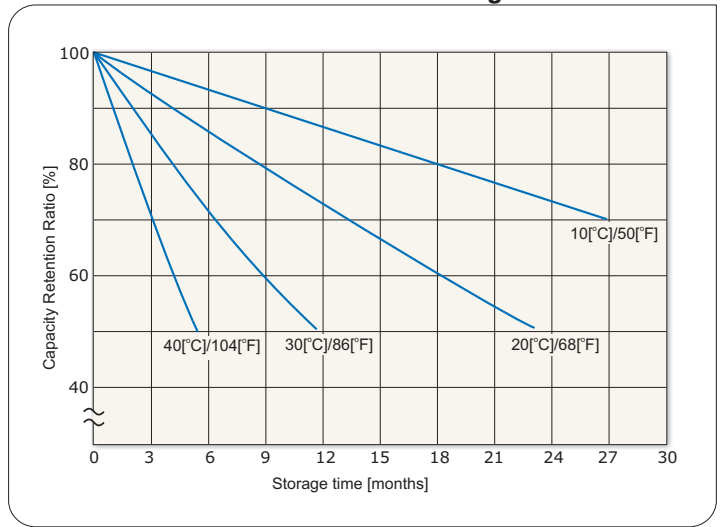
Cell life characteristics of cycle use



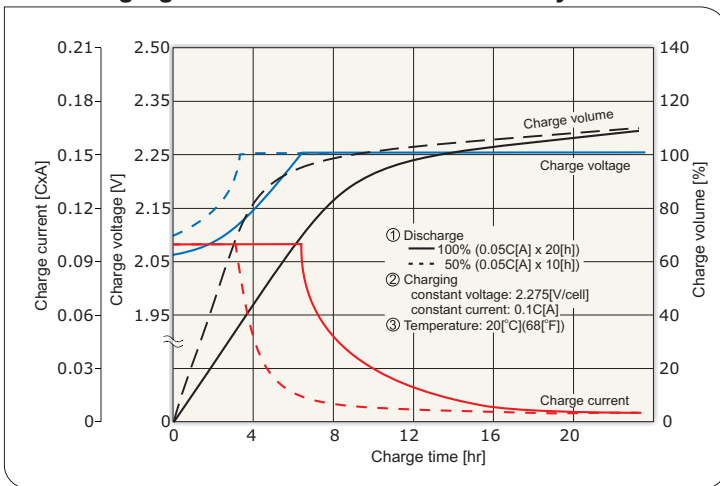
Cell discharge characteristics



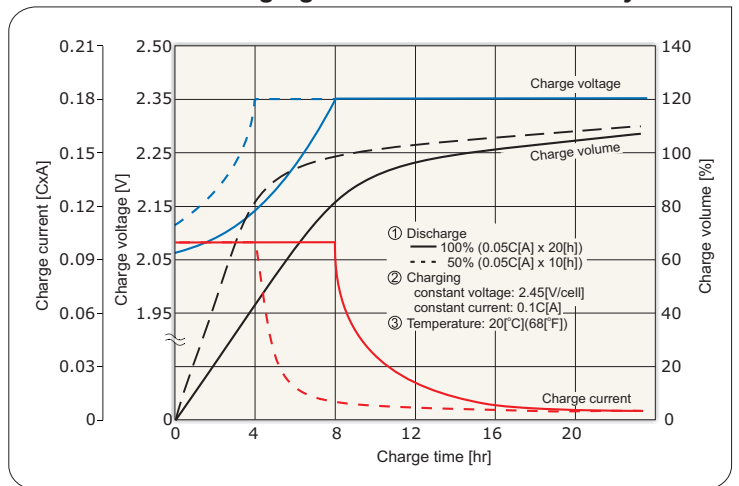
Cell self discharge characteristics



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