

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	800 Ah / C ₁₀		
Cell per unit	1		
Technology	AGM		
Design life	over 17 years @ 20°C* over 15 years @ 25°C		
Dimensions	height	566,0 mm	
	length	154,0 mm	
	width	229,0 mm	
Weight	~52,0 kg		
Capacity @ 25°C	10h	82,4A @1,80V/cell.	824,0 Ah
	3h	209A @1,80V/cell.	627,0 Ah
	1h	442A @1,75V/cell.	442,0 Ah
	30 min	609A @1,75V/cell.	10,69 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	≤0,21 mΩ	
Charging voltage @ 20°C	standby use	2,25 V (-3 mV/°C)	
	cycle use	2,35 V (-4 mV/°C)	
Charging current	recommended	80 A	
	maximum	200 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	

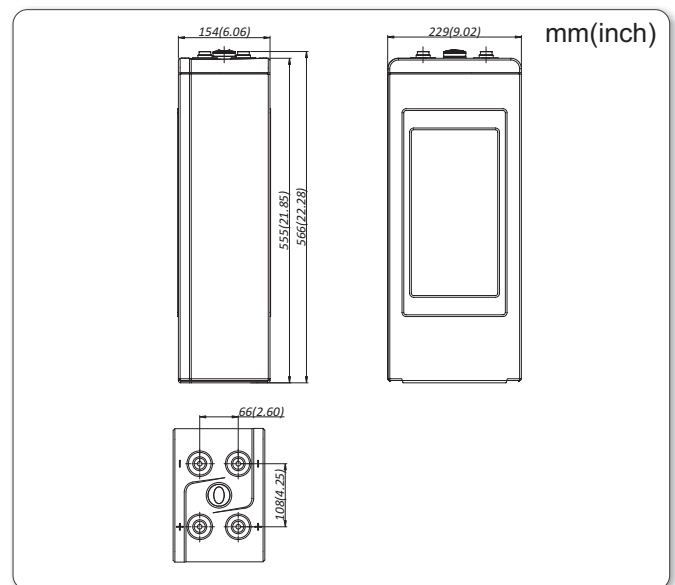
*-) - According to Eurobat (Long Life group)

**-) - Flame-retardant

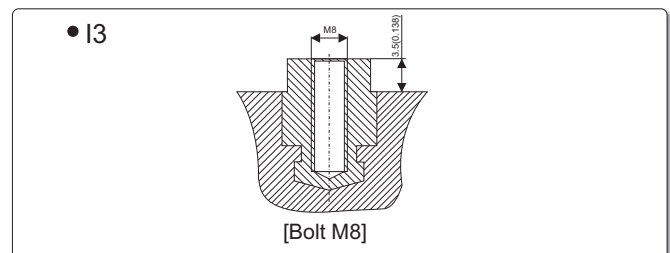
APPLICATIONS

- 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)

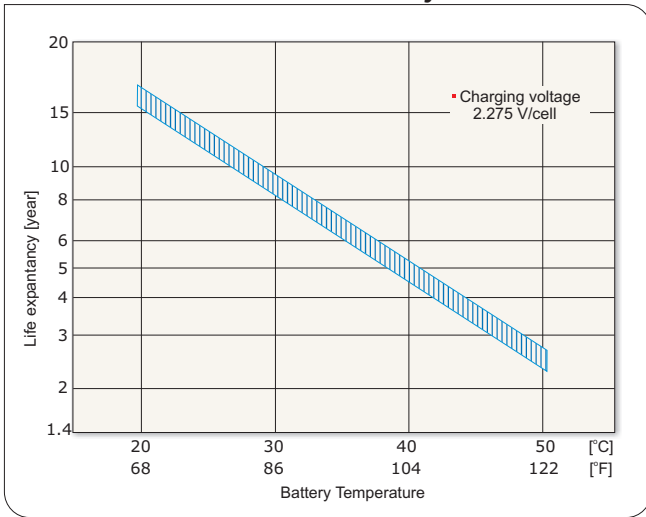
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	640	512	417	355	307	171	121	106	85,4	72,0	34,4
1,85	781	648	501	425	371	192	133	117	94,2	79,0	36,9
1,83	843	701	532	457	396	203	140	122	97,6	82,0	38,0
1,80	910	762	570	483	420	209	142	124	98,2	82,4	38,0
1,75	963	817	609	511	442	214	146	126	100	83,5	38,8
1,70	1021	868	661	543	468	219	148	128	101	84,2	39,1

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

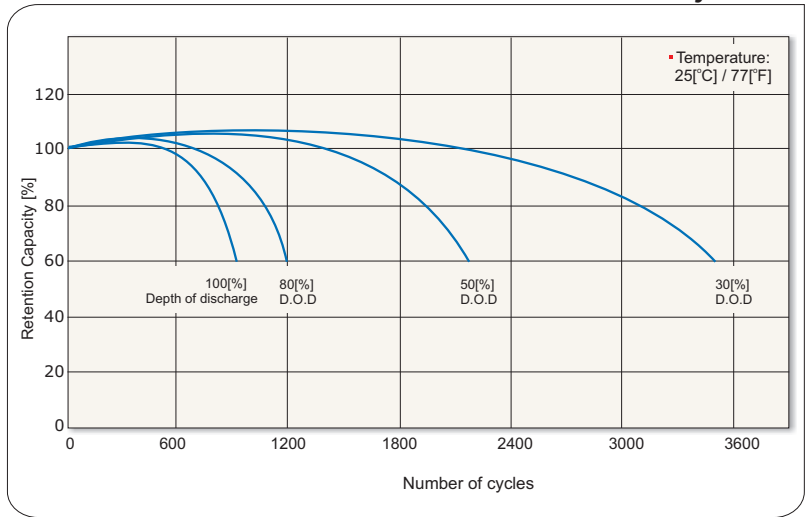
F.V. V/cell	Discharge time										
	5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	1247	998	790	656	587	368	259	228	187	160	71,8
1,85	1484	1232	966	800	692	404	277	242	199	169	76,3
1,83	1584	1319	1045	873	756	418	285	249	206	176	79,1
1,80	1683	1410	1119	937	808	428	293	256	211	179	80,5
1,75	1762	1495	1197	1005	878	441	301	261	216	182	82,0
1,70	1837	1563	1273	1072	931	450	307	269	221	184	82,7

F.V. - Final voltage

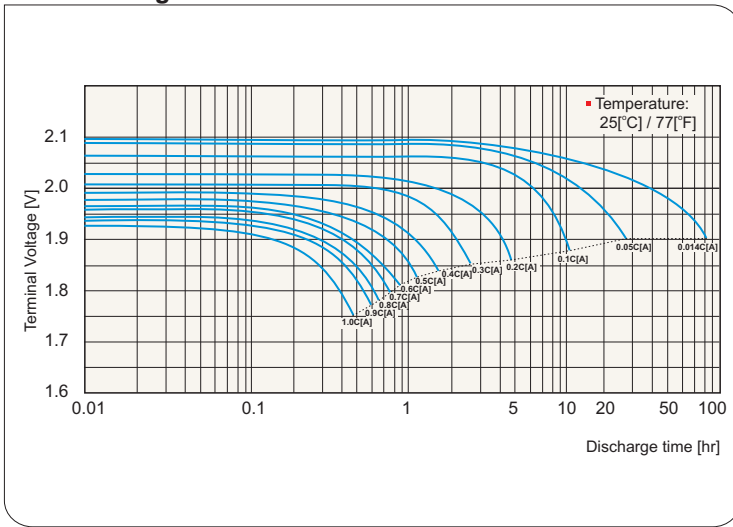
Cell life characteristics of standby use



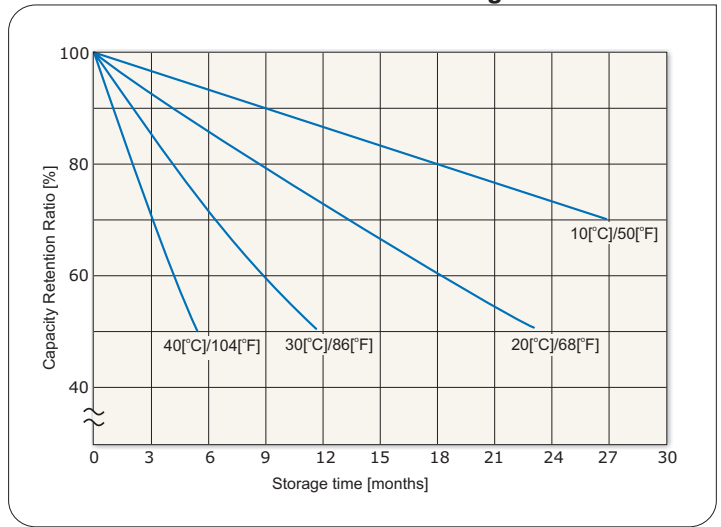
Cell life characteristics of cycle use



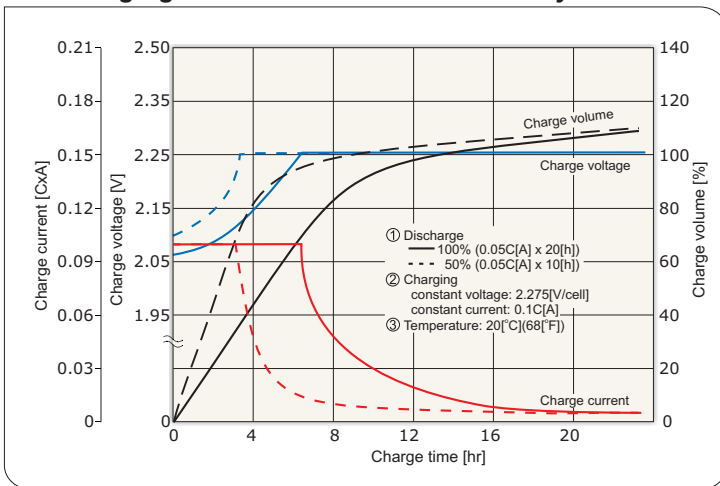
Cell discharge characteristics



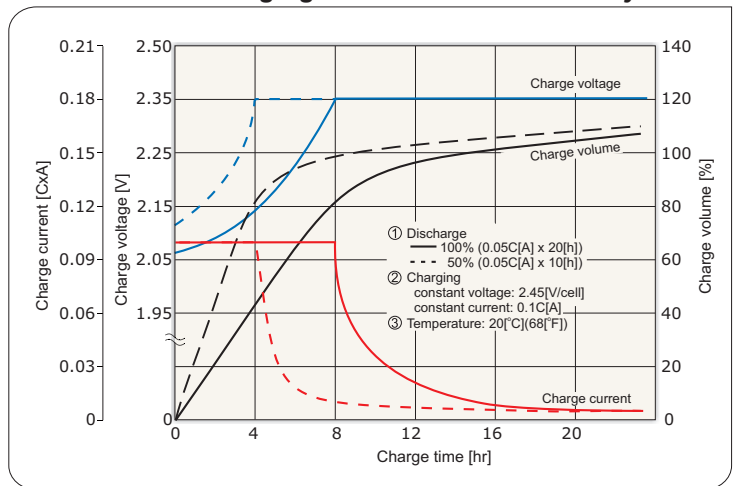
Cell self discharge characteristics



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