Sealed lead-acid cell

EUROPOWER®

Model: EXL 300N

EXL-N Series

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 engeneering (the battery system **capacity even up to 12000 Ah**). They have a very high repeatibility of parameters and long designed life. EXL-N cells can withstand **1200 discharge/charge cycles at 80% DOD.**

TECHNICAL DATA

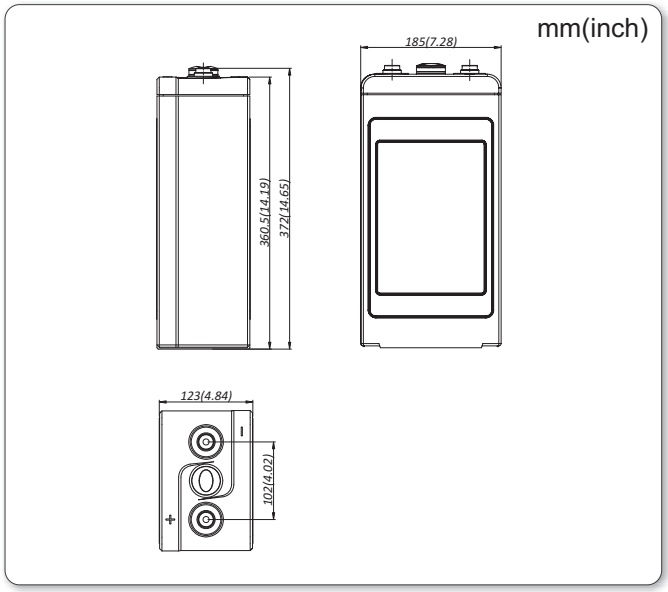
Nominal voltage		2 V
Nominal capacity		300 Ah / C_{10}
Cell per unit		1
Technology		AGM
Design life		over 12 years @ 20°C* 15 years @ 25°C
Dimensions	height	372,0 mm
	length	123,0 mm
	width	185,0 mm
Weight		~18,5 kg
Capacity @ 25°C	10h 30,8A @1,80V/cell.	308,0 Ah
	3h 75,4A @1,80V/cell.	226,2 Ah
	1h 169A @1,75V/cell.	169,0 Ah
	30 min 254A @1,75V/cell.	127,0 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	≤0,47 mΩ
Charging voltage @ 20°C	standby use	2,25 V (-3 mV/°C)
	cycle use	2,35 V (-4 mV/°C)
Charging current	recommended	30 A
	maximum	75 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

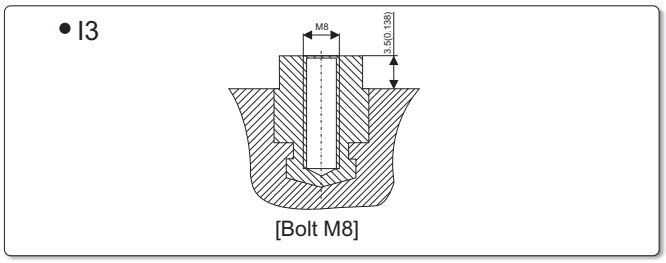
APPLICATIONS

- 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	301	245	182	149	127	67,1	49,1	43,2	34,7	29,0	13,2
1,85	350	290	212	172	143	71,6	51,0	44,8	36,1	30,0	13,6
1,83	368	307	226	181	149	73,0	51,6	45,5	36,5	30,2	13,7
1,80	396	327	238	190	159	75,4	52,8	46,3	37,1	30,8	14,0
1,75	411	347	254	204	169	77,8	54,1	47,5	37,8	31,5	14,3
1,70	432	366	273	214	178	80,3	55,6	48,3	38,3	32,0	14,4

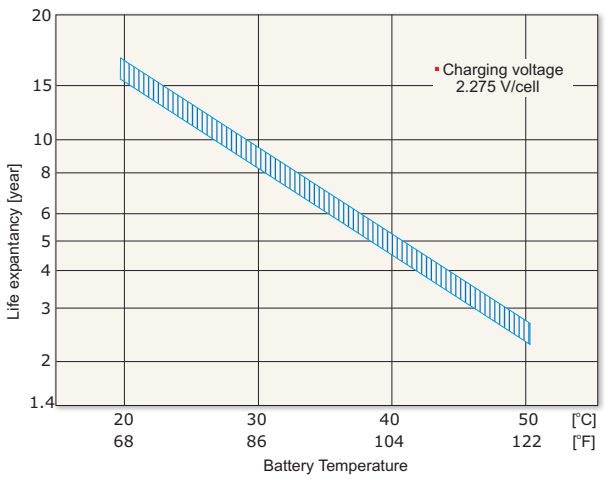
• Constant power (Power [W/cell], 25[°C] / 77[°F])

F.V. V/cell	Discharge time 5 min	15 min	30 min	45 min	1h	3h	5h	6h	8h	10h	24h
1,90	588	478	365	299	261	143	102	86,7	68,1	56,9	27,0
1,85	666	550	433	357	303	154	109	92,8	72,8	61,4	28,1
1,83	692	577	459	377	322	158	112	95,0	73,8	62,6	28,7
1,80	732	604	487	393	334	162	114	98,0	75,2	63,9	29,3
1,75	753	634	505	405	342	168	117	101	77,2	64,8	29,7
1,70	777	659	523	420	355	175	120	103	80,2	65,8	30,2

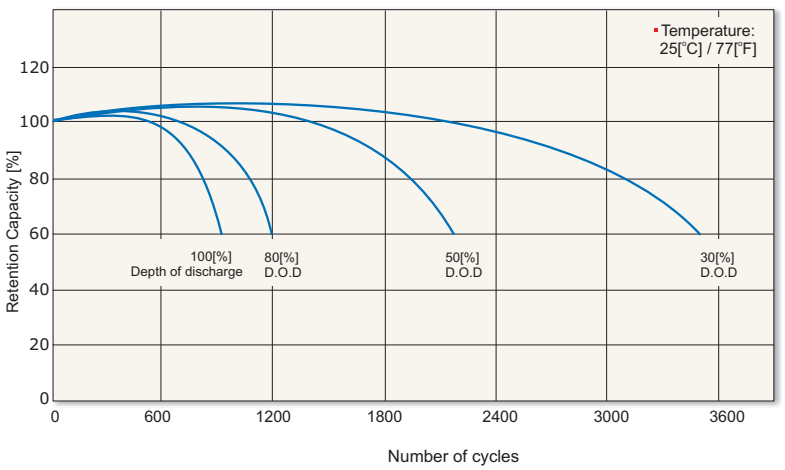
F.V. - Final voltage

EXL 300N

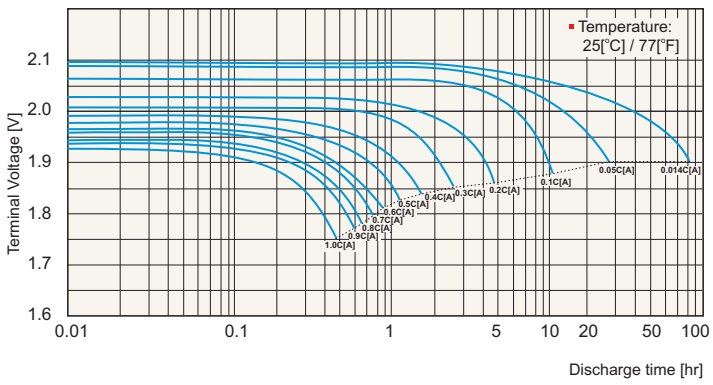
Cell life characteristics of standby use



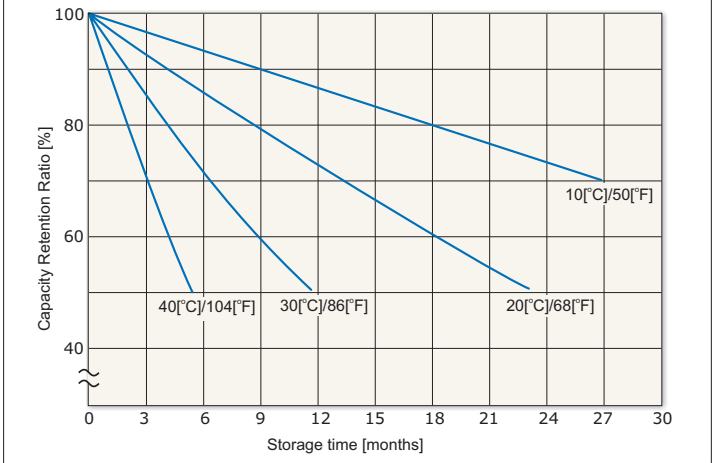
Cell life characteristics of cycle use



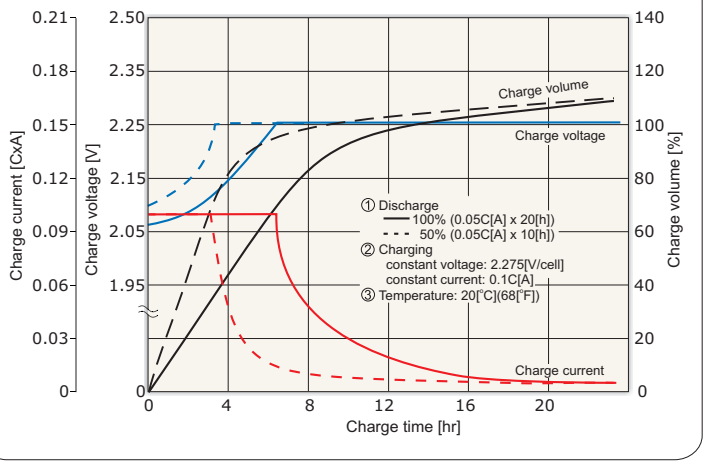
Cell discharge characteristics



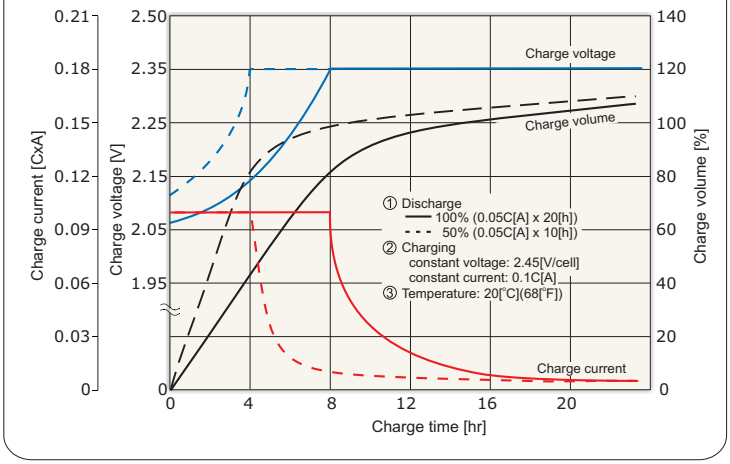
Cell self discharge characteristics



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

Date of issue: 16.03.2010; change number: 1; date of change: 05.11.2014