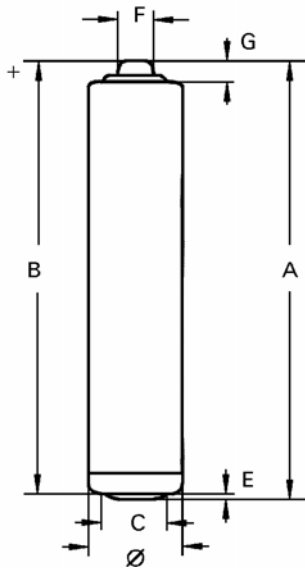


Type Designation	4003
Designation IEC	LR03
System	Zn-MnO <sub>2</sub> (Alkaline)
Shelf Life (Coding)*	5 years
Nominal Voltage [V]	1.5
Typical Capacity C [mAh]	1200 (discharge with high-resistance)
Permissible Temperature Range	- 10 °C ... 50 °C
Weight, approx. [g]	11
Volume [ccm]	3.8



Dimensions [mm]

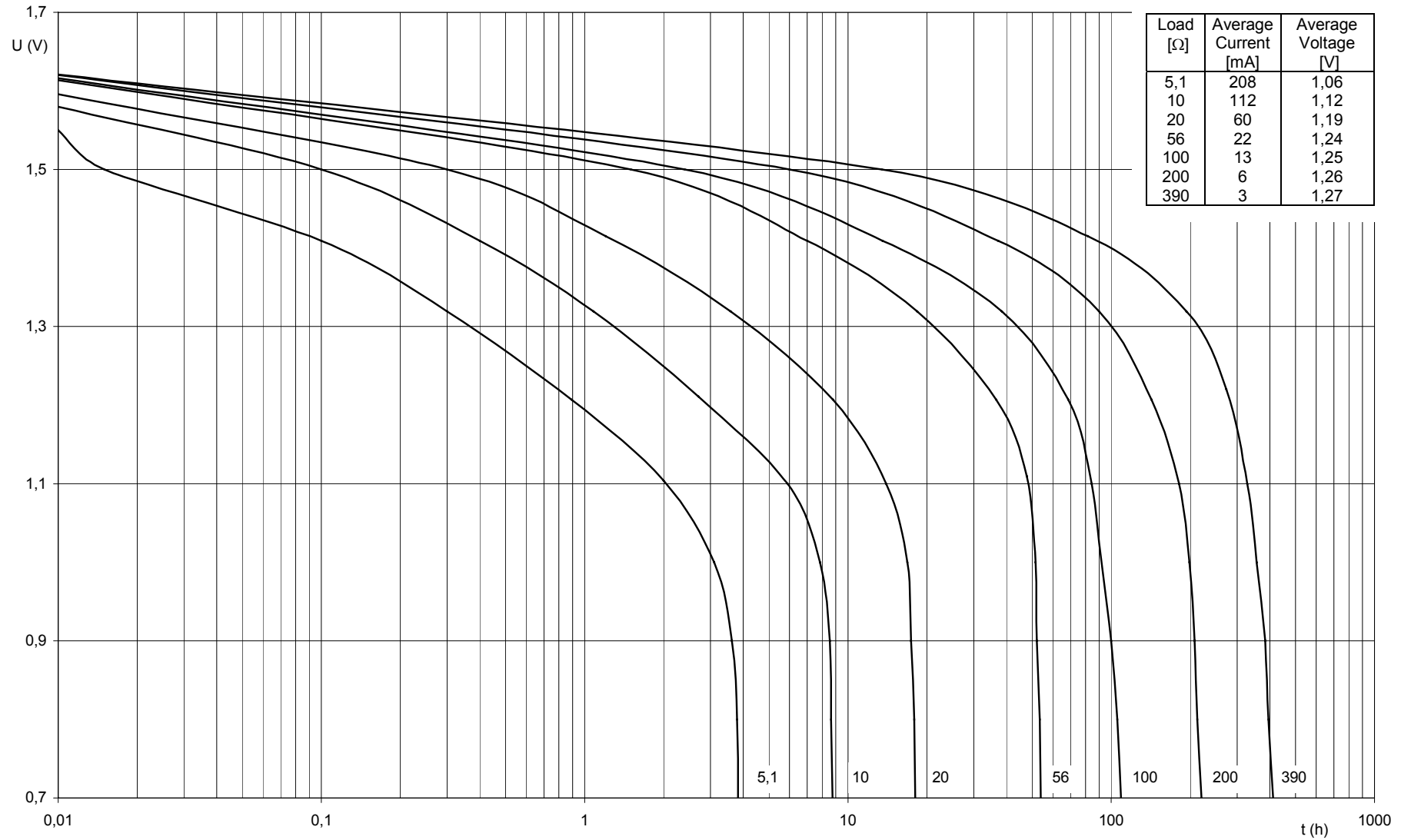
	min:	max:
∅	9.5	10.5
A	-	44.5
B	43.3	-
C	4.3	-
E	-	0.5
F	-	3.8
G	0.8	-

Typical Capacities (at 20°C):

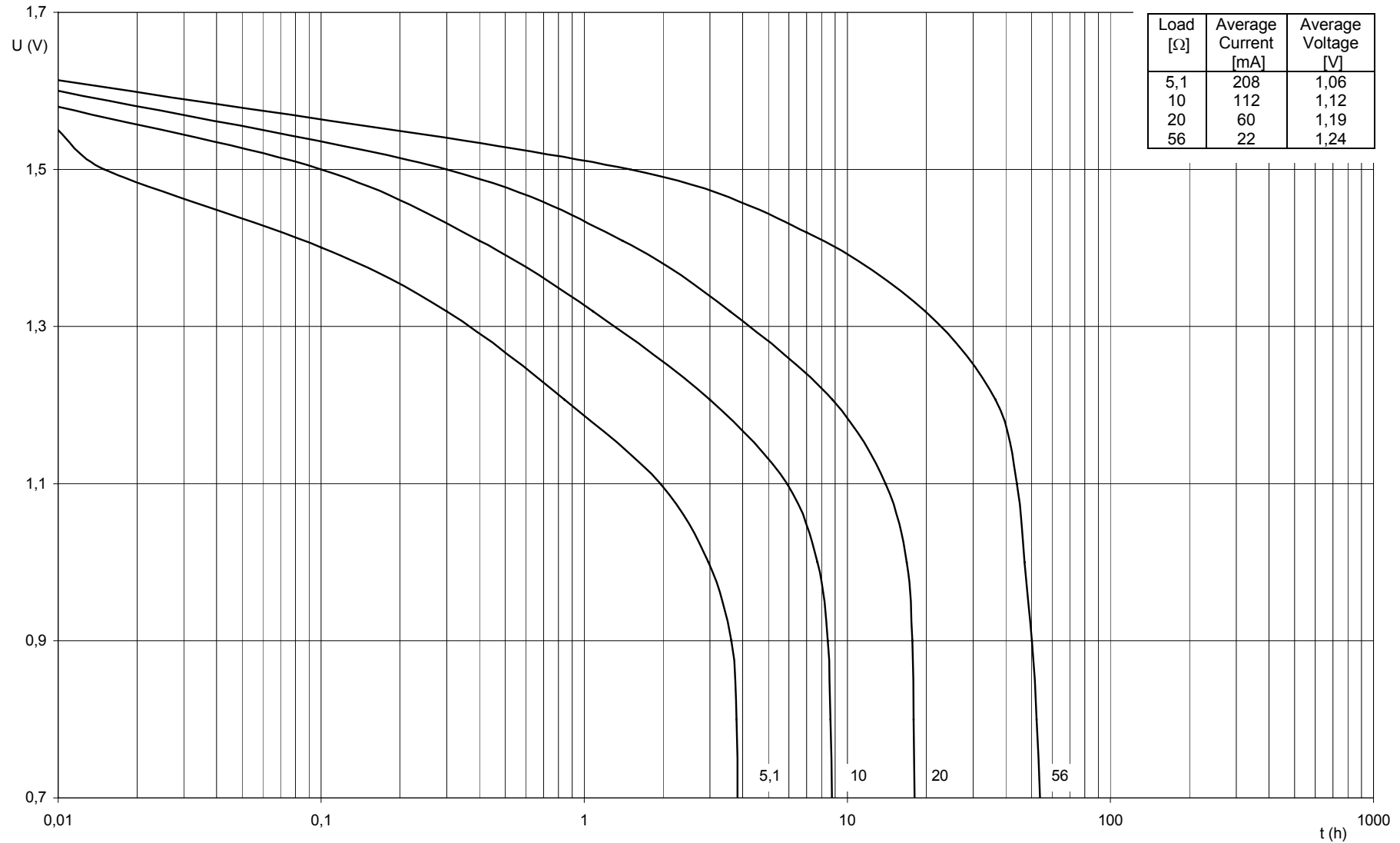
Discharge Type	Load	End Voltage[V]	1.0	0.9
10S/M,1H/D,7D/W	600 mA	Cycles [c]	220	380
Photo Flash		Capacity [mAh]	370	630
		Energy [mWh]	470	765
Discharge Type	Load	End Voltage[V]	1.0	0.9
4M/H,8H/D,7D/W	5.1 Ω	Time [m]	210	243
Portable Lighting		Capacity [mAh]	840	950
		Energy [mWh]	1040	1150
Discharge Type	Load	End Voltage[V]	1.0	0.9
1H/D,7D/W	10 Ω	Time [h]	7.70	8.70
Personal Cassette Players / Tape Recorders		Capacity [Ah]	0.94	1.03
		Energy [Wh]	1.14	1.24
Discharge Type	Load	End Voltage[V]	1.0	0.9
4H/D,7D/W	75 Ω	Time [h]	66.00	72.00
Transistor Radios		Capacity [Ah]	1.13	1.20
		Energy [Wh]	1.46	1.52

\* In consideration of typical loss of capacity at storage and application.

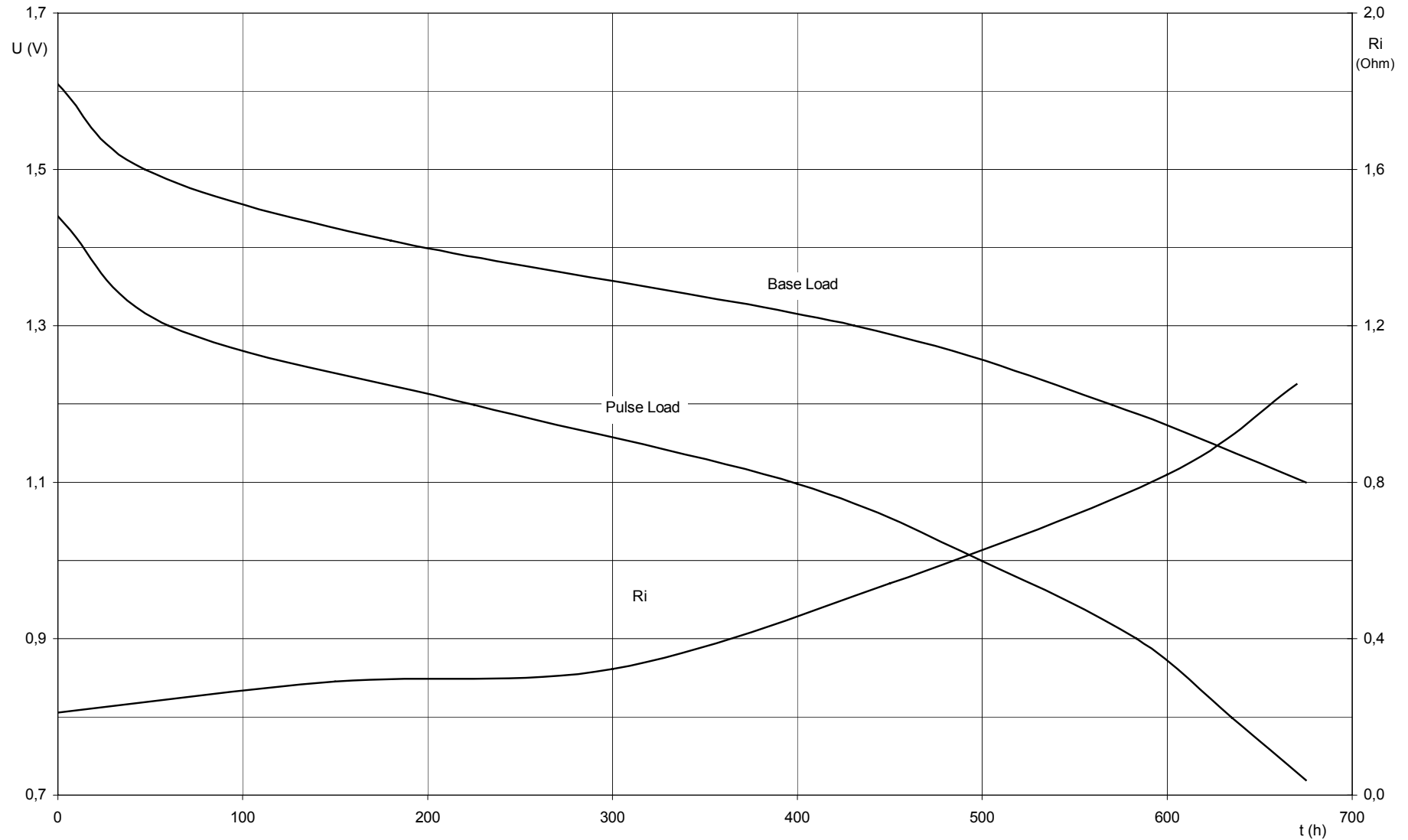
## Continuous 24h/d



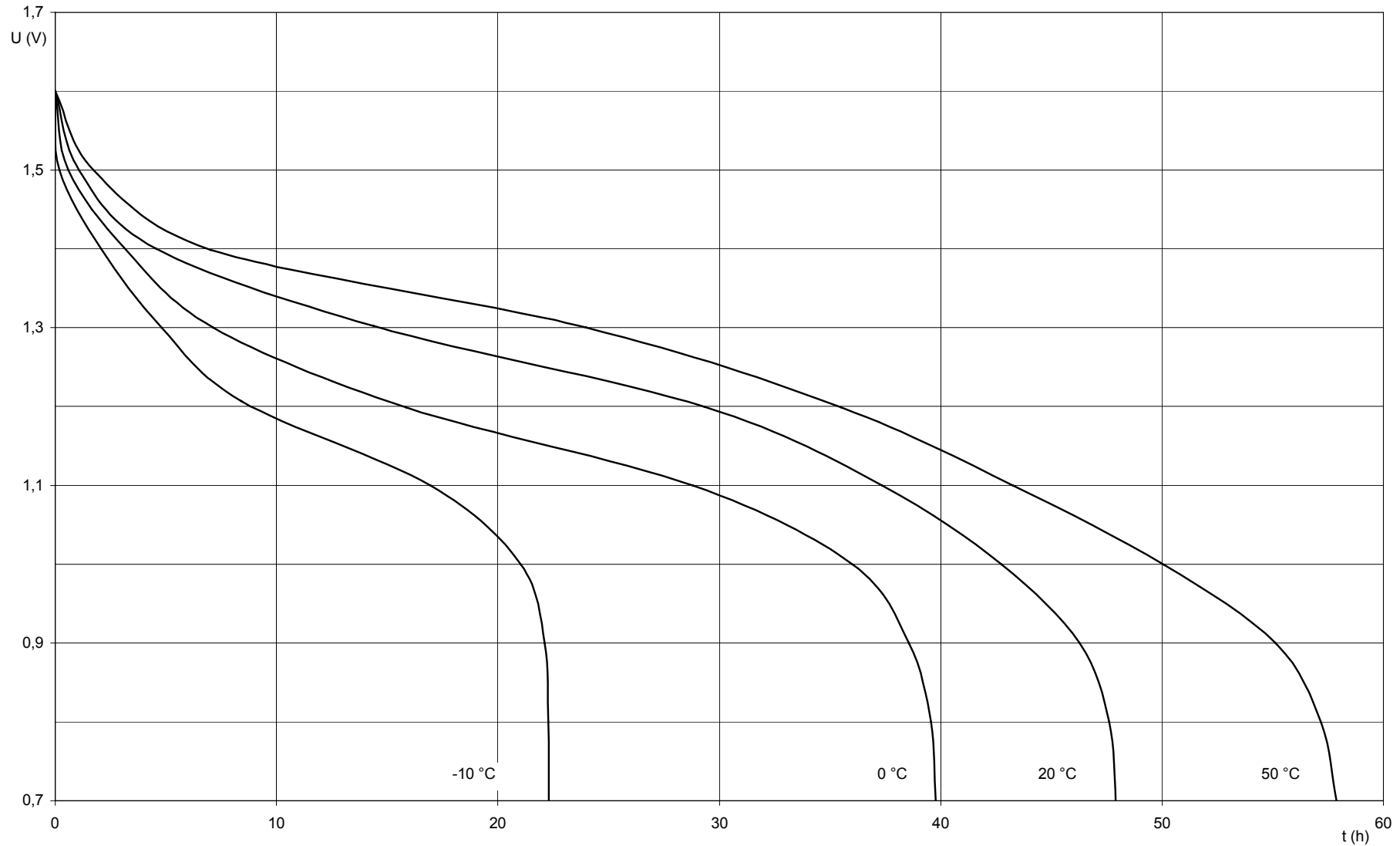
## Discontinuous 2h/d



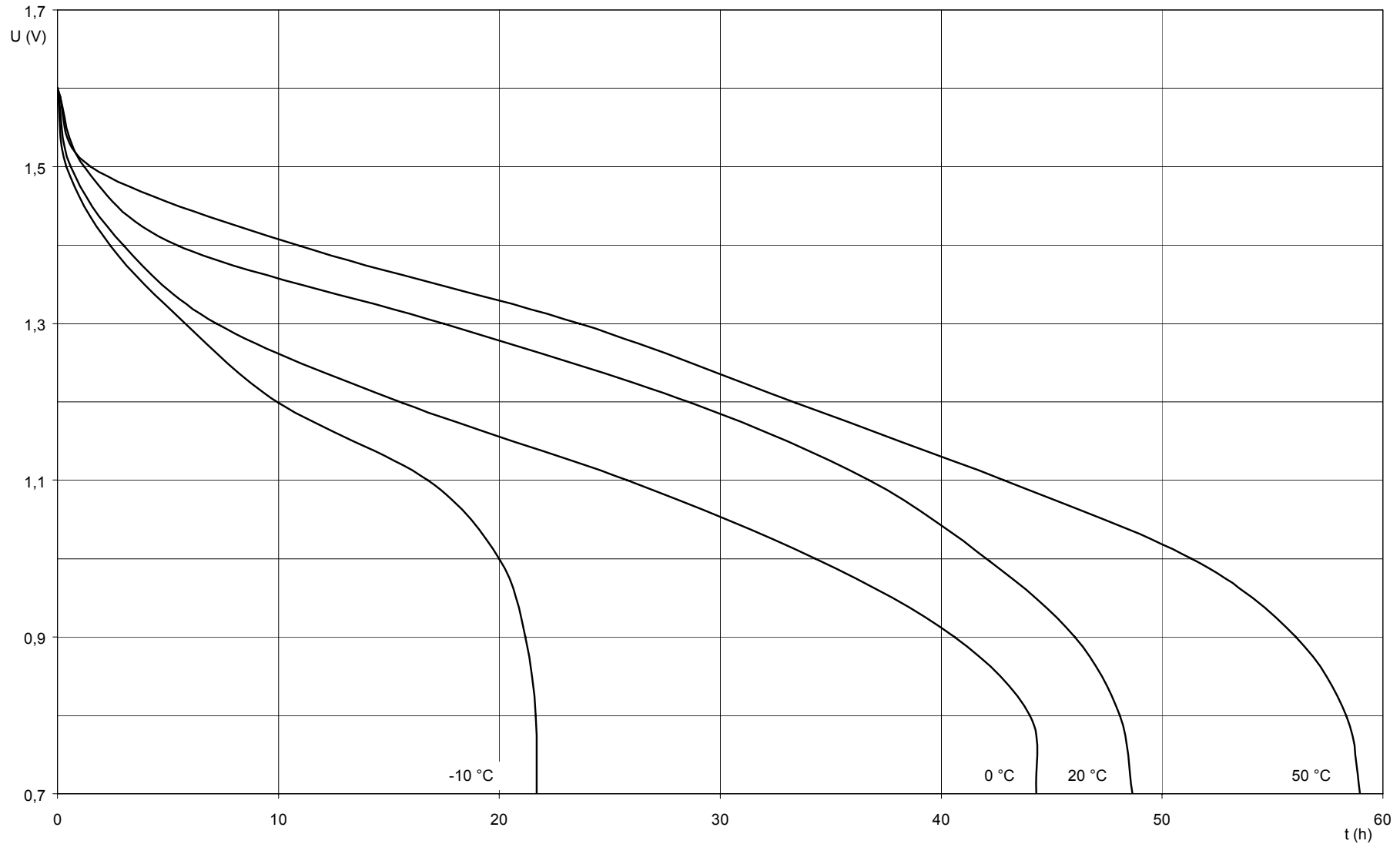
**Internal Resistance at Continuous 1000 Ω, 1s/1h 2Ω**



## Temperature Characteristic Continuous 51Ω



## Temperature Characteristic Discontinuous 4h/d 51Ω



## Short Circuit (Current and Temp. versus Time)

