

battery type: Alkaline Manganese Dioxide (mercury free)
battery size: IEC: LR1; JIS: AM-5; ANSI: N; Lady
chemical system: Zn / KOH-H₂O / MnO₂

Conditions

nominal voltage: 1.5 V
open circuit voltage: 1.56... 1.63 V new battery
 1.54... 1.63 V after 1 year storage at 20°C

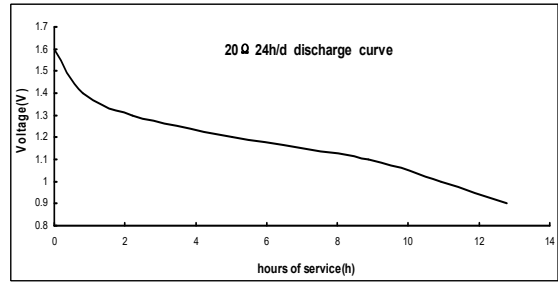
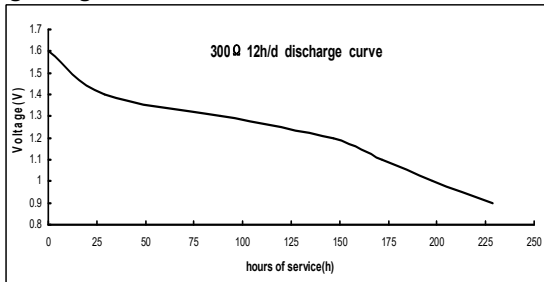
all measurements at 22 ± 2°C ambient

capacity
 rated: 940 mAh discharge under 300Ω load; 12hours/day
 End Voltage (E.V.): 0.9V
 minimum: 750 mAh at 5mA constant current discharge; E.V.: 0.8V (for QC measurement)
 550 mAh at 60mA constant current discharge; E.V.: 0.8V

typical service output

new battery:	norm.	12.5 h	at 20Ω load; discharge 24h/d; E.V.: 0.9V
	min.	10.5 h	
after 1 year storage:	norm.	10.0 h	at 20Ω load; discharge 24h/d; E.V.: 0.9V
	min.	8.5 h	
new battery:	norm.	140 min	at 5.1Ω load; discharge 5min/d; E.V.: 0.9V
	min.	110 min	
after 1 year storage:	norm.	110 min	at 5.1Ω load; discharge 5min/d; E.V.: 0.9V
	min.	80 min	
new battery:	norm.	215 h	at 300Ω load; discharge 12h/d; E.V.: 0.9V
	min.	208 h	
after 1 year storage:	norm.	200 h	at 300Ω load; discharge 12h/d; E.V.: 0.9V
	min.	185 h	

Discharge diagrams:



internal resistance: ≤ 0.3 Ω at 1kHz, sine wave measurement according to IEC 896-2

shelf life: 5 years under proper storage conditions (ta: ≤ 22°C; RH: 60 ± 15%)

leakage resistance

over discharge: no leakage 20Ω continuous discharge for 48h; ta: 20°C; RH: 60±15%
 high temperature: no leakage store 20days at ta: 60°C; RH:90±5%

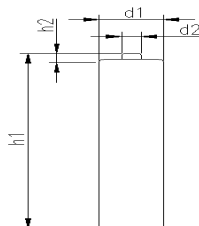
operating temperature

range: - 20...60 °C

mechanical specifications:

cell dimensions

diameter d1: 12.0 - 1.1 mm
 diameter d2: 3.7 - 0.4 mm
 height h1: 30.2 - 1.1 mm
 height h2: 1.3 - 0.4 mm
 weight: 9 ± 1 g



	ANSMANN Specifications for model:	Alkaline Battery
	data sheet no. / part no.	LR1 (N, AM-5) "Hg free"
	s.n.	701381
	author / date	TG / 03.01.2020