# Technical specifications

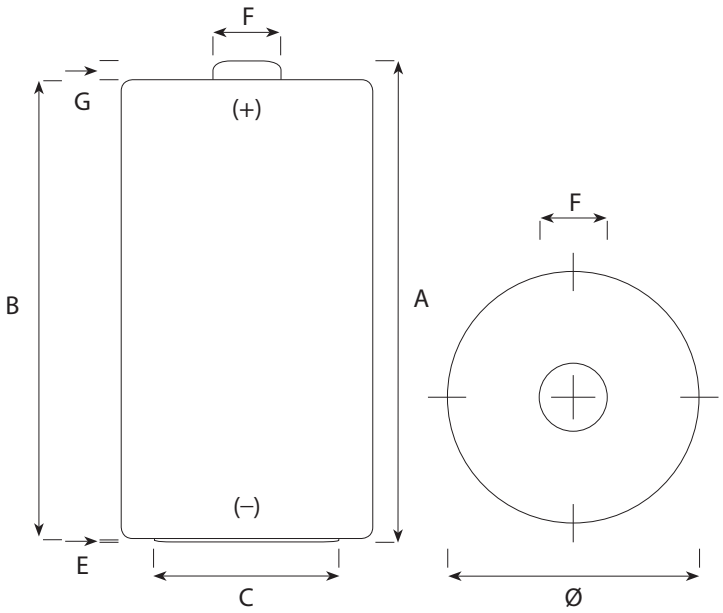
## Alkaline

*Powerline*




*LR20AD*

*Panasonic Typical Dimensions*




| IEC Dimensions (mm) | | | Panasonic Dimensions (mm) |
|---|---|---|---|
| **Dimension** | **Maximum** | **Minimum** | **Typical** |
| A | 61,5 | | 60,6 |
| B | | 59,5 | 60,1 |
| C | | 18,0 | 24,2 |
| E | 1,0 | | 0,5 |
| F | 9,5 | | 9,0 |
| G | | 1,5 | 2,5 |
| Ø | 34,2 | 32,3 | 33,0 |

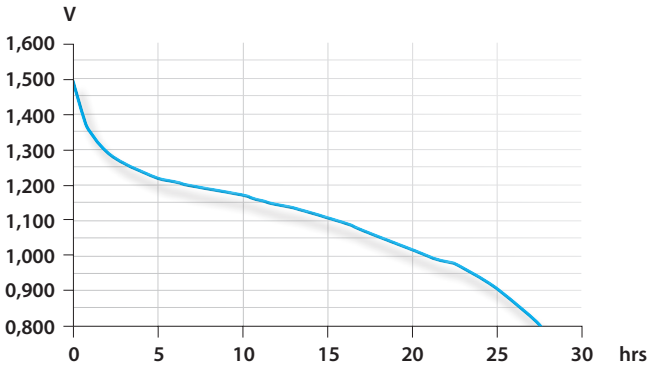
*Specifications*

| | |
|---|---|
| **Name** | LR20 / XL / D / AM1 / MONO / MN1300 / 13A / 13AC |
| **Made in** | Belgium |
| **Type** | Alkaline Foil |
| **Nominal Voltage** | 1,5 Volt |
| **Electrolyte** | Potassium Hydroxide |
| **Average weight** | 142,7 g |
| **Storage temp. range** | +10°C ~ + 25°C |
| **Operating temp. range** | -20°C ~ + 45°C |
| **Average Impedance** | +/- 90 m-Ohm @ 1kHz fresh |
| **Heavy metals** | No added mercury (Hg), Cadmium (Cd) or Lead (Pb) |
| **Compliant to** | IEC 60086<br>non dangerous goods regulation<br>Nordic ecolabeling (white Swan)<br>EC directive 91/157EC & 98/101EC |
| **Recommended cut off voltage** | 0,8V per cell |

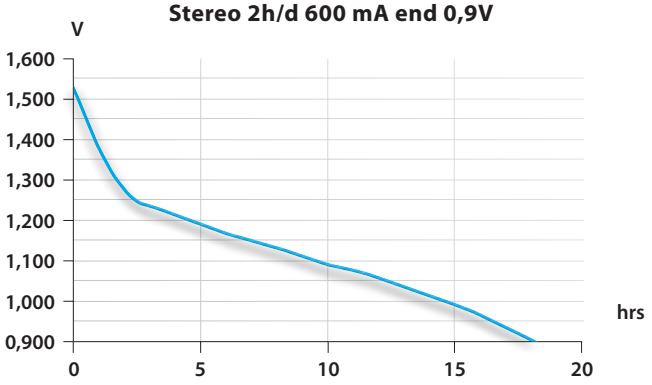
# Typical discharge values

## LR20AD

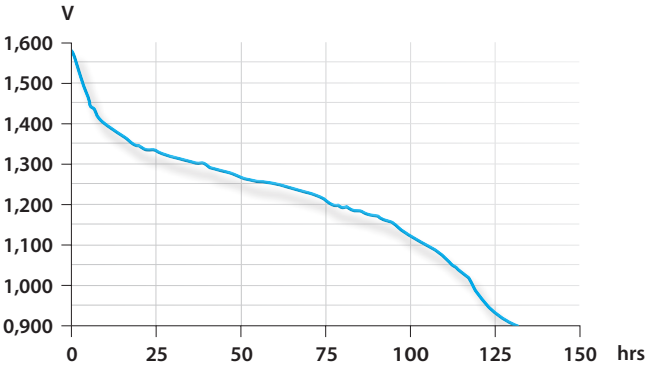
**Motor 1h/d 2,2 ohm end 0,8V**



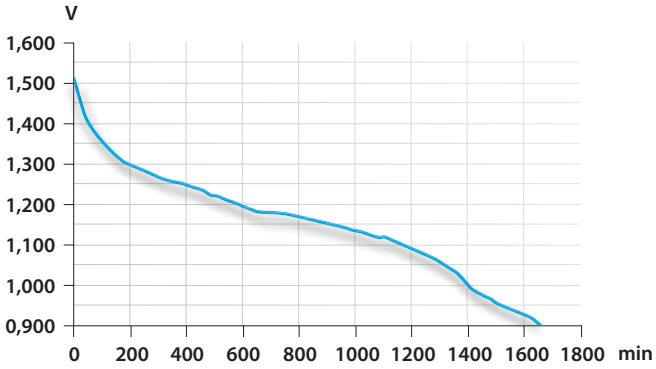

**Stereo 2h/d 600 mA end 0,9V**



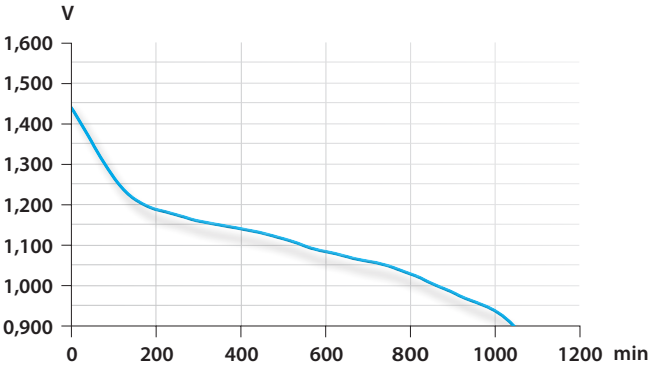

**Radio 4h/d 10 ohm end 0,9V**




**LIF 4m/h 24h/d 2,2 ohm end 0,9V**




**HIF 4m/15m 8h/d 1,5 ohm end 0,9V**




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For more information: **www.panasonic-industrial.com**